

COMPETENCY BASED ASSESSMENT

MODEL QUESTION PAPERS

Key Stages 5



Department of Curriculum & Professional Development

Ministry of Education

Bhutan Council for School Examinations & Assessment

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FOREWORD

The COVID 19 pandemic has been both ravaging to the lives of people and springboard for numerous ramification of changes in the thinking culture and of doing things differently across face of the earth. The education system is under immense pressure for change in terms of rethinking of meaning and purposes of education for the 21st century learners and the society. This entailed the vigorous rethinking and reformation in education in aligning the curricular initiatives to realizing the aspiration of the Royal Kasho 17th December 2020. The reformation attends to the diverse needs of learners and the society. The prominent school of thought in education that makes educational process dynamic and versatile is competency-based education. Through its experiential learning approach, teachers facilitate learners to generate new knowledge, create new ideas and innovate new things to solve individual's life and society related problems and issues.

The shift in the purpose of education from the knowledge-based learning to competency based education warrants the need for change in the concepts and practices of gauging the learning outcomes of learners. The fundamental areas of competency include intellectual, social, emotional, and physical, informed by the conceptual knowledge and understanding of the learning content. This complex learning outcome is generally manifested during the course of learning; the summative assessment cannot do justice in assessing the holistic learning and development of learners. Therefore, the competency-based education commensurate with the competency based assessment with competency based test items.

As a joint effort of Department of Curriculum and Professional Development (DCPD), and the Bhutan Council for School Examinations and Assessment (BCSEA), sample competency based assessment (CBA) model question papers are developed for all subjects for key stages 2, 3, 4 and 5 for classes 6, 8, 10 and 12. This is mainly to set clarity among teachers on the understanding and practices of competency-based education and competency based assessment implementers, so that the quality of education is ensured by reliable and authentic assessment practices.

This sample CBA booklet provides suggestive use of skills for setting competency based test items across all subjects. Being mindful of assessment to provide equity for learners to demonstrate their capabilities and potentials, diversity in question types and question context is one of the key features. Drawing lessons from how the sample question types are written, it is envisaged that teachers are empowered to develop CBT in their respective subjects for testing their students.

We wish all the teachers and learners an enriching journey of learning.



(Kinga Dakpa)

DIRECTOR GENERAL

INTRODUCTION

The new curriculum grounded on the competency-based education has been implemented from the 2021 academic session. It empowers learners with the intellectual, social, emotional and behavioural competencies and transversal skills for holistic development as nationally rooted and globally competent individuals. It is an attempt to transform the “product” based education to “process” based learning through the pedagogy that emphasizes on learning of “how” than on the teaching of “what”.

The Instructional Guide (IG) for the new curriculum is a transformative instruction that facilitates competency-based learning through experiential learning approaches. Learners are engaged in diverse learning experiences of exploration, investigation, analysis, and synthesis to generate new knowledge and create innovative ideas of solving problems and of doing things differently. This approach driven by digital technologies is vital towards bridging the gap between the “classroom” teachings and learning with the “life realities” outside the classroom. It narrows the gap between the taught and learnt knowledge and skills with the immediate challenges and opportunities in their immediate environment and in the world. This makes learners aware and sensitive to the social, political, economic, spiritual and global opportunities and challenges. Concurrently, assessment practices should ensure that learners’ performance is assessed objectively with appropriate tools, and gauge the quality of education and relevancy of educational resources. Inevitably, the competency based learning approach necessitates the review and revision of assessment practices and grading system and justify the elements of assessment in practice.

Assessment in our school system consists of formative and summative assessment. While the Continuous Formative Assessment (CFA) is to help learners improve their learning through rigorous authentic assessment and feedback and interventions, examinations are a summative assessment process, where candidates can showcase their in-depth knowledge and proficiency in a given subject or topic. The goal of a summative examination is to evaluate the learner learning at the end of the course, and they could be the end of semester examinations or annual examinations. Other types include, preparatory examination, targeted to those who are scheduled to sit for high stakes examinations.

In order to align the examinations policies and practices with the new curriculum, the examinations practices in terms of weighting and duration of examinations for all key stages are reviewed taking into consideration of learner’s age group and individual differences. The common concern and issue of coverage of syllabus due to the decrease in examination writing time is addressed through the CBT items. By the genesis of competency-based assessment, a few competency based test items can gauge wide range of conceptual knowledge, social and physical competencies of students.

Weighting and duration of examinations

Numerous studies reveal that the:

- i. lengthy test time may cause subjective fatigue that generally inhibits students in performing well in test, consequently less accurate assessment outcomes.
- ii. average number of test, test items, and time are progressive from lower to higher grades.
- iii. average international test time for lower grades is equivalent to one instructional time, and one and half hours for higher grades. Internationally, there is an evolving practice of reducing the current test time of maximum three hours to ninety minutes.
- iv. international emphasis is on “shorter and fewer” number of test and test items, which can yield equally accurate and quicker test results.
- v. average international test questions is five to ten for undergraduate students.

Based on the above premises, the weighting and duration of examinations for key stages 2 and 3 were amended based on the proportion of CFA with the Summative examinations (SA) for the respective key stages. Unit tests or class tests shall be used for diagnostic assessment, and it shall not be deemed as part of the CFA. The paper weighting and duration for key stages 4 and 5, however, remain status quo owing to the mandatory highstakes examinations at the end of these key stages.

Weighting and duration of examinations shall be as the following

Key Stage	Subjects	Written Examination full marks)	Time (Hr)	Conversion Term I (in %)	Conversion Term II (in %)
II	Dzongkha	60	1.5	20	20
	English	60	1.5	20	20
	Mathematics	60	1.5	10	30
	Science	50	1	15	15
	Social Studies	50	1	15	15
	ICT	40	1	10	10
III	Dzongkha I	80	2	30	30
	Dzongkha II	80	2	30	30
	English	80	2	30	30
	Mathematics	80	2	25	35
	Science	70	1.5	20	20
	ICT	50	1.5	10	20
	History	70	1.5	15	25
	Geography	70	1.5	20	20
IV	Dzongkha I	100	3	35	35
	Dzongkha II	100	3	35	35

	English I	100	3	35	35
	English II	100	3	35	35
	Mathematics	100	3	35	35
	ICT	100	2	20	20
	Physics	100	2	30	30
	Chemistry	100	2	30	30
	Biology	100	2	30	30
	History	100	2	25	35
	Geography	100	2	30	30
	Environmental Science	100	2	30	30
	AgFS	100	2	20	20
	Economics	100	2	30	30
	LCSC	100	3	25	45
	TVET Paper I	50	1	5	5
	TVET Paper II	100	3	25	45
V	Dzongkha I	100	3	40	40
	Dzongkha II	100	3	40	40
	English I	100	3	40	40
	English II	100	3	40	40
	Mathematics	100	3	40	40
	ICT	100	3	20	30
	Physics	100	3	35	35
	Chemistry	100	3	35	35
	Biology	100	3	35	35
	History	100	3	30	40
	Geography	100	3	35	35
	Commerce	100	3	30	30
	Accountancy	100	3	35	35
	Media Studies	100	3	30	30
	Environmental Science	100	3	35	35
	AgFS	100	3	25	25
	Economics	100	3	35	35
	Rigzhung (LCSC)	100	3	30	50
	Rigzhung	100	3	40	40
	TVET Paper I	50	1	5	5
	TVET Paper II	100	3	25	45

Examination Test Items

With the main objective of helping teachers in the design and writing of CBT items, subject specialists from the BCSEA and DCPD through consultation developed the CBT items for all subjects for each key stages terminal classes.

The development of sample CBT papers in all subject is informed by the curriculum frameworks and following broad underlying principles:

- i. All the test items are CBT based on the concepts and principles of competency based curriculum and assessment.
- ii. Question pattern differs across the subjects as informed by the subject nature and the corresponding characteristics.
- iii. Understanding that assessment is giving students the opportunity to display their abilities and potential, not as punishment, and that each of them have individual differences in learning style, diversity in question types is emphasized. This is also to uphold the inclusive education principles and the philosophy of education for all.
- iv. The development of the CBT items initiate with the drawing up of test blueprint followed by the writing of sample papers aligned with the paper format commonly used by the examination body, e.g. BCSEA.
- v. The weighting and duration for writing examination paper are informed by changes made in the above table.
- vi. The test items or tasks in the paper are generally contextualized to a wide range of settings.
- vii. The CBT items are designed to deploy multiple intellectual, social and physical skills in solving the challenging tasks.
- viii. Adopt a thematic approach to writing test items so that maximum conceptual knowledge, skills and values judgment in the subjects are assessed with less number of test items.

**MODEL QUESTIONS FOR ALL SUBJECTS FOR
THE KEY STAGE 5**

DZONGKHA I

༼ རྒྱུ་ལ་ རྩི་ཤོག་དང་པའི་བཀོད་རིས༽

བེ་ནི་དང་སྐད་ཡིག།
སྒྲིབ་རིམ་བརྒྱ་གཉིས་པ།

རྩམ་ཡུན་ཚུ་ཚྩོད་༩ །
སྐྱགས་བསྐྱོམས་༡༠༠ །

འོག་གི་བཀོད་ཀྱི་ཚུ་ ལེགས་ཤོམ་སྟེ་ ལྷག་སྟེ་བཟ།

༡. རྩི་མ་ རྒྱུ་ལ་༡༥ གི་རིང་ལུ་ ཡི་གུ་མ་བྲི་བར་རྩི་ཤོག་འདི་ ལེགས་ཤོམ་སྟེ་ལྷག།
༢. རྩི་བ་ལྷག་ཚར་ཞེན་མ་ལས་ ལན་བྲི་ནི་དོན་ལུ་ རྩམ་ཡུན་ཚུ་ཚྩོད་༩ ཐོབ།
༣. རྩི་ཤོག་འདི་ནང་ལུ་ རྩི་བ་སྟེ་ཚན་གཉིས་སྟེ་ཡོད། སྟེ་ཚན་ ཀ་ བེ་ནི་དང་ སྟེ་ཚན་ ལ་ རྒྱུ་ལིག་ཨིན།
༤. སྟེ་ཚན་ ཀ་ ལུ་ནང་གསེས་གཉིས་ཡོད། དང་པ་འབྲི་ཚྩོམ། གཉིས་པ་ཡི་གུ་འབྲི་ལ།
༥. སྟེ་ཚན་ ལ་ ལུ་ནང་གསེས་གཉིས་ཡོད། དང་པ་རྒྱུ་ལིག་གི་ཁྱད་ནམ། གཉིས་པ་ཡི་གུ་འབྲི་སྦྱར་བ།
༦. རྩི་བ་སོ་སོའི་སྐྱགས་དེ་ཚུ་ ལ་གསལ་སྟེ་ གྲག་ཤད་ནང་ལུ་བཀོད་དེ་ཡོད།
༧. རྩི་བ་རེ་རེ་བཞིན་གྱི་ བཀོད་ཀྱི་ལ་གསལ་སྟེ་ བཀོད་ཡོད་མི་ཚུ་ ལེགས་ཤོམ་སྟེ་ལྷག་སྟེ་ ལན་མ་འཛོལ་བར་བྲིས།
༨. རྩི་བའི་ལན་ཚུ་ མཐོགས་སུ་ཅིག་སྟེ་བྲིས། དེ་འབད་མ་ད་ ཡིག་བཟོ་བཏོན་ཏེ་ རྩི་མངས་ས་སྤྱེ་བྲི་དགོ།
༩. རྩི་ཤོག་སོ་སོར་ ལ་ཕུལ་གཏང་ནི་དང་ ཤོག་ལེབ་སྟེ་ནི་ཚུ་འབད་མི་ཚོགས།
༡༠. རྩི་ཤོག་འདི་ བྱ་ཆེ་ཆེ་བཟོ་ནི་གི་དོན་ལུ་ ཐིག་འཐེན་ནི་དང་ ཚོན་སྐྱུག་གིས་བྲི་ནི་ དེ་ལས་ བཀོད་ཀྱི་དང་མ་འཁྲིལ་བའི་
པར་དང་རྟུགས་ཚུ་ ག་ནི་ཡང་བྲི་མི་ཚོགས།
༡༡. ཚོས་རྒྱགས་ཁང་ནང་ལས་ འཐོན་མ་འབྱོར་བའི་རྩི་མ་ རྩི་བ་ཚུ་གི་ལན་ཚང་མ་ཚང་ཚུ་ བཟླ་ཞིབ་འབད་དེ་བཟ།

དབྱེ་ཞིབ་པ་ཚུ་གིས་ སྐྱགས་བཀོད་ནི་དེ་ ཤོག་ཁྲམ།

	ཕྱི་ཚན་ཀ། གྲི་མི།		ཕྱི་ཚན་ལ། རྒྱུ་ཡིག་དང་ ཡི་གུ་འབྲི་སྦྱར་བ།								
ཁྲི་བ།	འབྲི་ཚུལ།	ཡིག་གྲུལ།	རྒྱུ་ཡིག་གི་འབྲུག་པ།		ཡི་གུ་འབྲི་སྦྱར་དང་སྦྱོར་བ།						བསྐྱོམས།
			(ཀ)	(ཁ)	(ག)	(ང)	(ག)	(ཅ)	(ཆ)		
སྐྱགས་ཚད།	༩༠	༡༠	༤	༥	༡༥	༡༥	༥	༥	༥	༡༥	༡༠༠
སྐྱུ་ཐོབ་པ།											

༼སྡེ་ཚན་ ༡༽ བི་ནི། སྐྱགས་ ༩༠ །༽

དྲི་བ་དང་པ།

འབྲི་ཚུམ།

[༩༠]

འོག་གི་ རོན་ཚན་བཞི་ལས་ གཅིག་གདམ་ཁ་རྒྱབ་སྟེ་ དགག་སྐྱབ་ཀྱི་ཐོག་ལས་ ཚུད་གྲོང་འབྲི་ཚུམ་ ཆོག་འབྲུ་༩༠༠ ལས་ ༩༥༠ གི་ནང་འཁོད་འབད་མི་ཅིག་བྲིས།

(སློབ་རིམ་གྱི་གནས་ཚད་དང་འཁྲིལ་བའི་ འབྲི་ཚུམ་གྱི་དབྱེ་བ་རྩུ་ལས་ དྲི་བ་༩ བཀོད་ཞེན་ལས་ འབྲི་ཚུམ་གཅིག་ གདམ་ཁ་རྒྱབ་སྟེ་ བྲི་ནི་དེ་ དྲི་བ་བཀོད་དགོ།)

དྲི་བ་གཉིས་པ།

ཡིག་འགྲུལ།

[༡༠]

(གནས་རིམ་དང་འཁྲིལ་བའི་ ཡིག་འགྲུལ་གྱི་དབྱེ་བ་རྩུ་ལས་ དྲི་བ་གདམ་ཁ་ ༩ བྲི་ནི་ཞེན་ལས་ གཅིག་གདམ་ཁ་རྒྱབ་སྟེ་ བྲི་ནི་དེ་ དྲི་བ་བཀོད་དགོ།)

༼སྡེ་ཚན་ ༢༽ ལ་ སྐད་ཡིག་དང་ ཡི་གུ་འོ་སྦྱོར་བ། སྐྱགས་ ༡༠ །༽

དྲི་བ་གསུམ་པ།

སྐད་ཡིག་གི་ཁྱད་ནུམ།

[༡༠]

༡༽ འོག་གི་ལན་བྱུང་གི་དྲི་བ་ ༩ ག་རའི་ ལན་བྲིས།

(༩X༩=༨)

(སྐད་ཡིག་སྤྱི་འཁྲུལ་དང་དགོས་པ། ལྷག་པར་དུ་ རྫོང་ཁའི་སྐད་ཡིག་གི་ཁྱད་ནུམ་དང་དགོས་པ། རྫོང་ཁའི་སྐད་ཡིག་ནང་ལུ་ མིང་ཆོག་གི་ སྦྱོར་བ་ འཛོལ་ཏེ་སྐབ་ནི་དང་ མ་དགལ་སྟེ་སྐབ་ནི། ཞེ་ས་ལག་ལེན་འཐབ་ཐངས་ཀྱི་འཛོལ་བ། ཁྱད་ཆོག་ལག་ལེན་འཐབ་ཐངས་ཀྱི་འཛོལ་བ། མིང་ཆོག་ལག་ལེན་འཐབ་ཐངས་ཀྱི་འཛོལ་བ་རྩུ་ དབྱེ་དབྱུད་འབད་དེ་ ལེགས་བཅོས་འབད་ནི་དེ་ སྐྱགས་གཉིས་རེ་འབད་མི་ དྲི་བ་ ༩ བཀོད་དགོ།)

ཁ) ལན་གདམ་ཁ་ཅན་གྱི་དྲི་བ།

(༡X༩=༩)

འོག་གི་དྲི་བ་རེ་ལུ་ལན་ ༡༡ ཁ་ག་ང་༩ ཡོད་ས་ལས་ལན་རོམ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ག་རྟགས་གྲུ་སྒྲོར་ཐིག་། འོ་དེ་བཟུམ་ བཀལ།

(སྐད་ཡིག་སྤྱི་འཁྲུལ་དང་དགོས་པ། ལྷག་པར་དུ་ རྫོང་ཁའི་སྐད་ཡིག་གི་ཁྱད་ནུམ་དང་དགོས་པ། རྫོང་ཁའི་སྐད་ཡིག་ནང་ལུ་ མིང་ཆོག་གི་སྦྱོར་བ་ འཛོལ་ཏེ་མ་དགལ་སྟེ་སྐབ་ནི། ཞེ་ས་ལག་ལེན་འཐབ་ཐངས་ཀྱི་འཛོལ་བ། ཁྱད་ཆོག་ལག་ལེན་འཐབ་ཐངས་ཀྱི་འཛོལ་བ་རྩུ་ མ་འཛོལ་བར་ལག་ལེན་འཐབ་རྩུགས་མི་རྩུགས་ དབྱེ་དབྱུད་འབད་ནི་དོན་ལུ་ ལན་གདམ་ཁ་ཅན་གྱི་དྲི་བ་རེ་ལུ་ སྐྱགས་རེ་འབད་མི་དྲི་བ་༩ བཀོད་དགོ།)

ཀ) ལན་སྒྱུར་གི་དྲི་བ།

(༡༥)

(ཡི་གཱའི་སྒྱུར་བ་དང་འབྲེལ་བའི་ དྲི་བ་བཏོད་ནི། དཔེར་ན། ཡིང་སྐད་ལས་རྫོང་ཁའི་ནང་སྐད་སྒྱུར་འབད་ནི་གི་དྲི་བ། བན་སྒྱུར་འབད་ནི་ལ་
སྐགས་པ་ཚུ་བཏོད་ནི། དྲི་བའི་བྱངས་ཁ་དང་ དྲི་བ་རེ་ལུ་ སྐྱགས་འོས་འབབ་ རང་གིས་བལྟ་སྟེ་ བཞོ་བཤའ་རྒྱབ་པ་གིས་འབྲུས། སྐྱགས་
བསྐྱེམས་)༡༥ ཡོད།

ཁ) འོག་གི་ དཔེར་བཞེད་ཀྱི་དྲི་བ་ཚུ་གི་ ལན་བྲིས།

(༣x༥=༡༥)

(ཕྱད་ལག་ལེན་དང་འབྲེལ་བའི་ དཔེར་བཞེད་རྒྱབ་ནིའི་ དྲི་བ་ལྔ བཏོད་དགོ། དྲི་བ་རེ་ ལུ་སྐྱགས་ ༣ རེ་སྟེ་བསྐྱེམས་སྐྱགས་)༡༥ ཡོད།

ག) ལན་གདམ་ཁ་ཅན་གྱི་དྲི་བ།

(༡x༥=༥)

འོག་གི་དྲི་བ་རེ་ལུ་ལན་ ཀ་ཁ་ག་ང་༩ ཡོད་ས་ལས་ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་ཏྲགས་གུ་སྒྲོར་ཐིག་༠ དེ་བཟུམ་
བཀལ།

(ཡི་གཱའི་སྒྱུར་བ་ཚུ་གི་ཐོག་ལུ་ དྲི་བ་རེ་ལུ་ལན་བཞི་རེ་འབད་མི་ དྲི་བ་ལྔ བཏོད་དགོ། སྐྱགས་བསྐྱེམས་)༥།

ང) འོག་གི་ སྟེ་ཚན་ ཀ་དང་ཁ་ བསྐྱེམས་ཀྱི་འབད་ད།

(༡x༥=༥)

(དེའི་སྐབས་ ཡི་གཱའི་སྒྱུར་བ་གི་དོན་ཚན་ཚུ་གི་ཐོག་ལུ་ སྐྱགས་ ༥ འབད་མི་ བསྐྱེམས་ཀྱི་འབད་ནིའི་དྲི་བ་བཏོད་དགོ།)

ཅ) འོག་གི་ དོན་མཚམས་ནང་ལས་ བྱ་ཚོག་ལྔ ཕྱི་སེལ་རྒྱབ་སྟེ་བྲིས།

(༡x༥=༥)

(དེའི་སྐབས་ དོན་མཚམས་ལྟག་སྟེ་ མིང་དང་བྱ་ཚོག་ཁྱད་ཚོག་ ཕྱད་ནམ་དབྱེ་ མིང་མཐའ་ བདག་སྐྱེལ་སྐགས་པའི་ འཇུག་པ་ཚུ་ ཕྱི་
སེལ་རྒྱབ་ནི་དང་ དབྱེ་བ་དབྱུད་ནི་ ཐོ་བཏོད་འབད་ནི་ སོ་སོར་བཏོན་ནིའི་དྲི་བ་ཚུ་བཏོད་དགོ།)

ཆ) འོག་གི་དྲི་བ་ཚུ་གི་ལན་བྲིས།

(༡༥)

(བན་གསོ། གནས་ཚད་དང་འབྲེལ་བའི་ ཏུས་གསུམ་གྱི་ཡིག་སྟེབ། རྫོད་སྒྲ་ཕྱོགས་མཚུངས་ཀྱི་ཡིག་སྟེབ། སྟེབ་དང་འབྲེལ་བའི་གོ་དོན་གྱི་
ནི། ཡིག་སྟེབ་ནོར་བཙོས། ཞེ་ས་དང་ཕལ་སྐད། ཚོག་མཛོད་ལག་ལེན་དང་འབྲེལ་བའི་ དྲི་བ་ཚུ་བཏོད་དགོ། འདི་གི་དོན་ལུ་སྐྱགས་
བསྐྱེམས་)༡༥ ཡོད། སྐྱགས་ཀྱི་བཞོ་བཤའ་དང་ དྲི་བའི་མང་ཉུང་གི་འོས་འབབ་རང་གིས་བལྟ་སྟེ་ བཞོ་བཤའ་འབྲུས།)

བཀའ་དྲིན་ཆེ།

ཁྲིའམ་ཆེན་ཀ་བེ་ནི། སྐུགས་༣༠ །

ཨི་བ་དང་པ།

འབྲི་ཕྱོམ།

[३०]

འོག་གི་ རོན་ཚན་བཞི་ལས་ གཅིག་གཤམ་ཁ་རྒྱབ་སྟེ་ དགག་སྐྱབ་ཀྱི་ཐོག་ལས་ རྩོད་སློང་འབྲི་རྩོམ་ ཚིག་འབྲུ་༤༠༠
ལས་༤༥༠ གི་ནང་འཁོད་ འབད་མི་ཅིག་གིས།

དན་གསོ། འཕྲི་ཚུམ་འདྲི་ནང་ལུ་ནང་དོན་ བཀའ་ཁྲི་དང་ བསྐྱབ་ནི་གཉིས་ཆར་ བྱངས་བཀའ་ཏེ་ བྲི་དགོ། ལྷོད་ཀྱི་འཕྲི་
 ཚུམ་འདྲི་ གྲི་བ་དང་འབྲིལ་ཏེ་ བྲང་དོན་ཕོག་ཏིང་དང་ ཆོག་གོ་རིམ་སྒྲིག་ཐངས་ ཆོག་གི་སྒྲུབ་ཆ་ ཡིག་སྒྲེབ་དང་ འཕྲི་
 བཀོད་ཚུ་ལུ་ གཞི་བཞག་སྟེ་ སྐྱགས་ཕྱིན་ནི་ཡིན། བྲང་དོན་མ་ཕོག་པ་ཅིན་ སྐྱགས་མི་ཐོབ།

- ༡) རང་གི་མི་ཆོ་ནང་ལུ་ མིང་གཏམ་འཐོབ་དགོ་པ་ཅིན་རྒྱ་ནེ་ར་ལས་འདི་ རང་བཞིན་བཟང་པོ་ཡོད་མི་འདི་ར་དག།
 ༢) དེང་སང་གི་དུས་ལུ་ ཅ་གཞོན་སློབ་ཕྲུག་ཚུ་གིས་ མཐོ་རིམ་ཤེས་ཡོན་ལྷན་ཁྲིམ་འདི་ ཆོང་འབྲེལ་གྱི་ལྷ་གཡོག་
 ཅིག་ འགོ་བརྩམས་པ་ཅིན་དག།
 ༣) སློབ་ཕྲུག་ཚུ་ལུ་ ལུས་ཐོག་གི་ཉེས་ཁྲིམས་བཀལ་ནི་ལས་ བསྐྱབ་སྟོན་བྱིན་ནི་འདི་ར་དག།
 ༤) ཆོས་རྒྱལ་གི་རྒྱབ་འབྲས་ ལེགས་ཤོམ་འཐོན་དགོ་པ་ཅིན་ རིག་པ་ཡོད་མི་ལས་འདི་ རང་སོའི་སློབ་ཡོད་པ་འདི་
 ཆོས་ཚན་ གདམ་ཁ་རྒྱབ་ནི་འདི་དག།

དྲི་བ་གཉིས་པ།

ཡིག་རྒྱུ།

[20]

འོག་གི་ རོན་ཚན་གསུམ་ལས་ གཅིག་གདམ་ཁ་རྒྱབ་སྟེ་ བྲིས།

- ག) ཁྱོད་བདུན་སྟག་འདི་ནང་ གཞུང་གི་ཆོས་རྒྱུགས་སྤུལ་ནི་ཡིན་མ་ལས་ རྒྱུན་དང་བར་ཆད་ཚུ་ག་ནི་ཡང་ མི་འབྱུང་
ནི་འདོན་ལུ་ ཆོས་སྤྱང་ལུ་གསལ་ཁ་སྤུལ་གནང་ ཟེར་གཡུས་དགའ་བ་ཟེར་ས་ལུ་ཡོད་པའི་ ཁྱོད་རའི་ཕམ་
གཉིས་ལུ་ ཆོག་ས་བཅད་ཀྱི་ཐོག་ལས་ གཏང་ཡིག་ཤོ་ལོ་ག་⁴ འབད་མི་ཅིག་གིས།

གཏང་ཡིག་ནང་ལུ་ འོག་གི་གནད་དོན་ཚུ་ ཚུད་དགོ།

- རང་དང་གཞན་གྱི་གནས་ཚུལ།
- ཡི་གུ་བསྐྱེད་དགོ་པའི་གནད་དོན།

- ཆོགས་བཅད་འབྲི་ཐངས་ཀྱི་ཁྱད་ཆོས་ཚུ་ཚང་དགོ།

ཁ) ཁྱད་མེ་ཉླ་གྲིང་ལས་ སློབ་ཕྲུག་ཀྱན་དགའ་ཡིན་མ་བཟེ་སྟེ་ ཤེས་ཡོན་ལྷན་ཞི་དོན་ལུ་ བཟང་ལྷན་འབྲིང་རིམ་
སློབ་གྲོང་མའི་ནང་ལུ་ བཅུགས་གནང་དགོ་པའི་སྐོར་ལས་ སློབ་དབུ་འཛིན་ལུ་ དེང་སང་གི་ལམ་ལུགས་ནང་
ཁྱ་ཡིག་ཅིག་བྲིས།

ཁྱ་ཡིག་ནང་ལུ་ འོག་གི་གནད་དོན་ཚུ་ ཚུང་དགོ།

- བཟང་ལྷན་སློབ་གྲོང་འོང་དགོ་པའི་དོན་དག།
- སློབ་རིམ་ག་ཅི་ནང་ལྷན་ཞི་ཡིན་ནེ་
- གཞུང་སྒྲེར་ག་ཅི་ནང་འཇུག་ཞི་ཡིན་ནེ་ ཁ་གསལ།
- སློབ་གྲུ་འབྲི་སྒྲིག་ཁྲིམས་ལུ་གནས་ཞི་ཡིན་པའི་ཁས་བྲལ།

ག) ཁྱད་ར་ རྣམ་ལྷན་གྲིང་སློབ་གྲོང་ལའི་ དབུ་འཛིན་བསོད་ནམས་ཡིན་མ་བཟེ་སྟེ་ སློབ་གྲོང་ལུ་ སློག་རིག་
(ཀམ་པེུ་ཌར) ཆ་ཚང་ཅིག་ མཁོ་སྐྱབ་འབད་ནི་དོན་ལུ་ ཤེས་རིག་མདོ་ཆེན་མཆོག་ལུ་ སྐྱན་གསལ་ཅིག་
བྲིས།

སྐྱན་གསལ་ནང་ འོག་གི་གནད་དོན་ཚུ་ ཚུང་དགོ།

- མཁོ་སྐྱབ་འབད་དགོ་པའི་དམིགས་ཡུལ།
- སློག་རིག་གི་གྲངས་ཁ།
- བཅུ་ལྷན་དགོང་ཡིན་ནེ་

༼སྤྱི་ཚན་ ཁ་ རྒྱ་ཡིག་དང་ ཡི་གུ་འབྲི་སྐྱོར་བ། སྐྱགས་ ༡༠ ༼༽

རི་བ་གསུམ་པ། རྒྱ་ཡིག་གི་འཇུག་པ། [༡༠]

ཀ) འོག་གི་ རི་བ་ཚུ་གི་ ལན་བྲིས། [༦]

༡. རྒྱ་ཡིགས་ཀྱི་འགྱུར་བ་ ག་ཅི་ལས་བརྟེན་འཐོན་སྟེ་ གཉིས་ཐོ་བཞོད་འབད། [༩]

༡. ཡི་གུའི་སྐྱེ་གནས་ ཟེར་བའི་དོན་དག་བྲིས། [༢]

༢. རྫོང་སྐྱེའི་ཁྱད་ནམ་ཚུ་ ཤེས་པ་ཅིན་པན་པ་ ག་ཅི་ར་འདུག་གོ? དོན་མཚམས་ག་ཅིག་བྲིས། [༢]

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ཁ) འོག་གི་ གྲི་བ་རེ་ལུ་ལན་ ཀ་ཁ་ག་ང་༤ རེ་ཡོད་ས་ལས་ ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་རྟགས་གུ་ [༡x༤=༤]
སྒྲིབ་ཐིག་ ○ དེ་བཟུམ་བཀལ།

༡. སྐད་ཡིག་གི་ ཁྱད་ནམ་འདི་
 ཀ རྒྱ་གར་གྱི་སྐད་ཡིག་ལུ་ཡོད་པ་ཨིན།
 ཁ རྫོང་ཁའི་སྐད་ཡིག་ལུ་ཡོད་པ་ཨིན།
 ག བོད་གྱི་སྐད་ཡིག་ལུ་ཡོད་པ་ཨིན།
 ང སྐད་ཡིག་ག་ར་ལུ་ཡོད་པ་ཨིན།

༢. “ག་ང་ད་ན་བ་མ་འ། ར་ལ་ས་རྣམས་རྩེས་འཇུག་བཟུ།” ཟེར་བའི་སྐབས་ རྩེས་འཇུག་གི་ཡི་གུ་ ག་ང་ད་ན་བ་
 མ་འ་ར་ལ་ས་ བཟུ་ཐམ་ཡོད་ས་ལས་ ག་ ད་ བ་ ས་ བཞིཔོ་འདི་
 ཀ མའི་ཡི་གུ་ཨིན།
 ཁ བའི་ཡི་གུ་ཨིན།
 ག ཤིན་ཏུ་མའི་ཡི་གུ་ཨིན།
 ང མོ་གཤམ་གྱི་ཡི་གུ་ཨིན།

༣. ལྷ་ ཟེར་དོ་བཟུམ་མའི་མིང་དང་། བུམ་པའི་བཟོ་ནམ་ ཟེར་དོ་བཟུམ་མའི་ཆོག་དེ་ཚུ་ གསར་བཟོའི་ཐ་སྟངས་
 ཟེར་མི་འདི་
 ཀ ཁ་སྐད་གཞན་ལས་བརྟེན་ཏེ་བྱུང་ཡོད་མི་ལུ་གོ་ནི་ཨིན།
 ཁ ཆོས་སྐད་ལས་རྟ་ངངས་ཏེ་རྫོང་ཁའི་མིང་ཆོག་བཟོ་ཡོད་མི་ཚུ་ལུ་གོ་ནི་ཨིན།
 ག ང་བཅས་རའི་རྒྱལ་ཁབ་ནང་ལས་ར་བྱུང་ཡོད་པའི་སྐད་ཡིག་ཚུ་ལུ་གོ་ནི་ཨིན།
 ང རྒྱལ་ཁབ་ཡར་རྒྱས་ཀྱི་འགྲུར་བ་དང་འཁྲུག་ཞིན་ན་བཟོ་ཡོད་མི་ལུ་གོ་ནི་ཨིན།

གྲི་བ་བཞི་པ། ཡི་གུའི་སྐྱེར་བ། [༦༠]

ཀ) འོག་གི་ གྲི་བ་ཚུ་གི་ ལན་བྲིས། [༡༥]

“བའི་ཆ་རོགས་འདི་ མིག་ཏོ་ཨའི་བཟུམ་ཡོད་རུང་ རྣམ་ཅོ་འདི་ཨ་པ་དང་འབྲ་བས། དེ་འབདཝ་ད་ གཟུགས་
 འདི་ དར་ཤིང་ཅོག་འཐད་པའི་ཁར་ གཟུགས་གཞི་འདི་ཡང་ ཤམ་ལྟ་བུ་ཡོད་སྟེ་རེ།”

༡. གོང་གི་ རོན་མཚམས་ནང་ལས་ མཚུངས་པ་གསལ་བྱེད་ཀྱི་ སླ་བཞི་ངོས་འཛིན་འབད་དེ་བྲིས། [༡]

༢. “ཆེ་རིང་ཞབས་ཁྲ་ལྟ་བུ་དེས།” ཟེར་མི་འདི་ བཟོད་པ་རྩ་ལས་ ག་ཅི་གི་བཟོད་པ་ཨིན་མས་གོ? [༡]

༣. ལྷ་སྐྱབ་མི། བསྐྱབ་ནི་འཇུག་ ཟེར་མི་གཉིས་ཀྱི་བྱ་བ་ལས་བྲིས། [༡]

༤. རྒྱ་ཡིག་འདི་ཤེས་པ་ཅིན་ བན་པ་ཡོད་པའི་སྐོར་ལས་ རོན་མཚམས་གཅིག་བྲིས། [༤]

༥. ཆོག་པུད་ འབད་དང་སྤེ་གཉིས་ ཡིག་སྤེ་བ་མ་འདྲཱ་ལྷམ་པ་གཉིས་འབད་ བཞག་དགོཔ་འདུག་ག་? ག་ ཅི་འབད? [༥]

ཁ) འོག་གི་ གྲི་བ་རྩ་གི་ ལན་བྲིས། [༡༥]

༡. བེ་ཆོམ་གསལ་བྱེད་ཀྱི་སླ་ སོང། ག། ལ། གསུམ་ལག་ལེན་འཐབ་སྟེ་ དཔེར་བཟོད་ལྟ་ བྲིས། [༣]

༢. མིང་གི་རྣམ་གཞག་ལས་ སྤྱི་མིང། ཆོག་མ་མིང། རྟག་མ་མིང། གསུམ་གྱི་ དཔེར་བཟོད་རེ་བྲིས། [༣]

༣. དུས་འདས་པ། མ་འོངས་པ། ད་ལྟ་བ། གསུམ་གྱི་ དཔེར་བཟོད་རེ་བྲིས། [༣]

༤. ནྐམ་དབྱེ་དྲུག་པ་འབྲེལ་སྒྲིའི་ ནང་གསེས་ལས་ གང་ཟག་དང་དངོས་པོ་ལུ་འཇུག་པའི་ དཔེར་བཞིན་༩ བྲིས། [༩]

༥. དང་སྟུ་ འབྲེལ་པ་ལུ་འཇུག་པའི་ དཔེར་བཞིན་༩ བྲིས། [༩]

ག) འོག་གི་ ཅི་བ་རེ་ལུ་ལན་ ཀ་ཁ་ག་ང་༤ རེ་ཡོད་ས་ལས་ ལན་ངོམ་འདི་ གང་མ་ཁ་རྒྱབ་སྟེ་ ཀ་རྟགས་གུ་ [༡༥=༥]

སྒྲིའི་ཐིག་༠ དེ་བཟུམ་བཀལ།

༡. ལཱ་ག་ཅི་ར་ཨིན་རུང་འབད་མ་བཅུག་པར་ བཀག་དགོ་པའི་སྐབས་སུ་ ལག་ལེན་འཐབ་དགོ་པའི་ཕྱད་འདི།

ཀ མ་མི་མེན་ གསུམ་ཨིན།

ཁ པ་པོ་མ་མོ་ བཞི་ཨིན།

ག ན་ར་ལུ་གུ་བཞི་ ཨིན།

ང སྟེ་ཏེ་དེ་ གསུམ་ཨིན།

༢. མཐུན་པའི་རྒྱན་དང་ མི་མཐུན་པའི་རྒྱན་ སྤྱད་པའི་རྒྱན་ཚུ་གི་དཔེར་བཞིན་ རྒྱབ་པའི་སྐབས་སུ་ཕྱད་

ཀ སུ་ ར་ རུ་ ལག་ལེན་འཐབ་དགོ།

ཁ ཡང་ རང་ རུང་ ལག་ལེན་འཐབ་དགོ།

ག གོ་དོ་ རོ་འོ་ ལོ་སོ་ ལག་ལེན་འཐབ་དགོ།

ང གམ་ དམ་ ནམ་ འམ་ ལག་ལེན་འཐབ་དགོ།

༣. “མ་ནིང་གཉིས་ཀ་ད་ལྟ་ཆེད།” ཟེར་བའི་སྐབས་ སྟོན་འཇུག་གི་མ་ནིང་ཚུ་གིས་

ཀ དངོས་པོ་བདག་གཞན་གཉིས་དང་རྒྱས་ད་ལྟ་བ་ལུ་འཇུག་ཟེར་བའི་དོན་ཨིན།

ཁ དངོས་པོ་གཞན་དང་རྒྱས་ད་ལྟ་བ་གཉིས་ལུ་འཇུག་ཟེར་བའི་དོན་ཨིན།

ག དངོས་པོ་བདག་དང་ད་ལྟ་བ་གཉིས་ལུ་འཇུག་ཟེར་བའི་དོན་ཨིན།

ང མ་ནིང་ག་ད་གཉིས་རྒྱས་ད་ལྟ་བ་ལུ་འཇུག་ཟེར་བའི་དོན་ཨིན།

- ང) རོག་གི་སྤེལ་ཆོན་ ཀ་དང་ཁ་ མཐུན་སྒྲིག་འབད་དེ་ ཐིག་ཁམ་གི་ས་སྤྱོད་ནང་ ཀ་རྟགས་དང་སྐྱུགས་ཏེ་བྲིས། [ཡ]

(ཀ)	(ཁ)
༡- གནས་གཞིའི་དཔེར་བཟོད་ནི།	ཀ) སྤོའ་ལེགས་པས།
༢- མིང་གི་ཁྱད་ཆོག་གི་དཔེར་བཟོད་ནི།	ཁ) མི་ལས་ལྟ་ལེགས།
༣- བདག་སྐྱེའི་ཕྱད་ནི།	ག) མགིན་པ། ཀན། སོ། མཚུ།
༤- སེམས་ཚོར་སྟོན་པའི་སྐྱ་ནི།	ང) རྒྱ་བསེལ་ཏྲེང་ཏྲེ།
༥- ཡི་གའི་སྟེ་གནས་གཙོ་བོ་ནི།	ཅ) སྟོབ་ཁང་ནང་ན་སྟོབ་ཕྱག་མིན་འདུག།
	ཆ) ཅན། ལྷན། མཁན།

(ཀ)	(ཁ)
༡- གནས་གཞིའི་དཔེ་བཟོས་ནི།	
༢- མིང་གི་ཁྱད་ཚིག་གི་དཔེ་བཟོས་ནི།	

ལན།	༣- བདག་སྐྱེའི་ཕྱད་ནི།	
	༤- སེམས་ཚོར་སྟོན་པའི་སྐྱེ་ནི།	
	༥- ཡི་གུའི་སྐྱེ་གནས་གཙོ་བོ་ནི།	

ཅ) འོག་གི་དོན་མཚམས་འདི་ ལེགས་ཤོམ་འབད་ལྷག་ཞིན་ན་ ཐིག་ཁམ་ནང་བཀོད་ཡོད་མི་ མིང་དང་འཁྲིལ་ཏེ་ [ལ]

དོན་མཚམས་འདི་ནང་ལས་ ཕད་དང་རྒྱུན་སྦྱར་ཏེ་ཡོད་མི་ མིང་ཚིག་ལྔ་ རོས་འཛིན་འབད་དེ་བྲིས།

“མོང་སྐར་ ས་གླིང་ཆེད་འོག་གི་ རེ་ས་གཡུས་ཚན་ནང་ གློག་མེ་སྟོད་ནི་འདི་གིས་ མི་སེར་ཚུ་ ཨ་རྟག་བརྩམ་འབད་ གནག་བྱང་ནང་ སྟོད་མི་དགོ་ནི་ཨིན་པས། དེ་ཡང་ སྤྱི་ལོ་ ༢༠༡༥ ཟླ་ ༥ པའི་ཚེས་ ༡༥ ལུ་ མི་དབང་རྒྱལ་ཚབ་ འཛིགས་མེད་རྩི་ཆེད་བང་ཕུག་མཚོག་གིས་ རེ་ས་གཡུས་ཚན་གྱི་ གློག་མེ་བཀའ་སྤྱོད་ འགོ་འབྱེད་མཛེད་གནང་མི་ལུ་བརྟེན་ཨིན།”

མིང།	ཕད་རྒྱུན།	
༡- ལ་དོན་ནི།		
༢- འབྲེལ་སྐྱེ་ནི།		
༣- རྒྱ་མཚན་གྱི་སྐྱེ་ནི།		
༤- ཕྱེད་སྐྱེ་ནི།		
༥- རྒྱུན་སྦྱར་ནི།		

ཆ) འོག་གི་ ཅི་བ་ཚུ་གི་ ལན་བྲིས། [༡༥]

༡. འོག་གི་ མིང་ཚིག་ཚུ་གི་ གོ་དོན་བྲིས། [ལ]

༡- འབྲུངས། ༢- མཁམ། ༣- བསྐྱོར། ༤- བསྟོ། ༥- བསྐྱམས།

༢. འོག་གི་ ཡིག་སྐད་འཛོལ་བ་ཡོད་མི་ཚུ་ བཙོལ་རྒྱབ་སྟེ་བྲིས། [ལ]

༡- མངའ་དག་རིན་པོ་ཆེ། ༢- གསར་རྒྱགས། ༣- སྟོ་འབྱེད། ༤- འབོབ་རིལ། ༥- འབྱུར་མ།	
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3. འོག་གི་ ཐིག་སྒྲོམ་ནང་གི་མིང་ཚིག་ཚུ་ ཏུས་ག་ཅི་ནང་ཚུད་ནི་ཨིན་ནེ། ཐིག་ཞིན་ན་ ཁྱངས་བཀལ། [4]

བསྐྱབས།	གཙང་ནི།	བསྒྲོམ།	སྒྲུ་ག་དོ།	དགའ་ཡི།
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བཀལ་ཐིག་བདེ་ལེགས།

སློབ་རིམ་ ༡༩ བ།
 རྫོང་ཁ་, བའི་རྩི་བཀོད་འཆར་གཞིའི་རེ་ལུ་མིག་གི་དབྱེ།
 (༢༠༢༡)

རྩིག་ཅུལ་ དོན་ཚན་ → ↓	སྐྱག་ས་ཀྱི་ལྗོངས་ཚད།	རྩི་བ།	བློན་ཤེས།	གོ་རྟོགས།	ལག་ལེན།	དབྱེ་དཔྱད།	དབྱེ་ཞིབ།	གསལ་རྩྭ་མ།	སྐྱག་ས་བསྟོར་མཚན།
སྡེ་ཚན་ ཀ། བྱི་ཞི་འེ་རིག་ཅུལ། སྐྱག་ས་ ༣༠ །	འབྲི་རྩྭ་མ། (༢༠)	རྩི་བ་༡པ། ལན་རིང་། (༢༠)						༡-༤ (༢༠)	༤ (༢༠)
	ཡིག་འགྲུལ། (༡༠)	རྩི་བ་༢པ། ལན་རིང་། (༡༠)			༡-༣ (༡༠)				༣ (༡༠)
སྡེ་ཚན་ ཁ། སྐད་ཡིག་དང་ཡི་ གྲུའི་སྐྱོར་བ། སྐྱག་ས་ ༡༠ །	སྐད་ཡིག་གི་ཁྱད་ ནཱ། (༡༠)	རྩི་བ་༣པ། ཀ། ལན་ཐུང་། (༤)	༡ (༢)	༢ (༢)		༣ (༢)			༣ (༤)
		རྩི་བ་༣པ། ཁ། ལན་གདམ་ཁ་ཅན། (༤)	༡,༢ (༡+༡)	༣ (༡)		༤ (༡)			༤ (༤)
	ཡི་གྲུའི་སྐྱོར་བ། (༤༠)	རྩི་བ་༤པ། ཀ། ལན་ཐུང་། (༡༥)	༡ (༢)	༢ (༢)		༣,༤ (༢+༤)	༥ (༥)		༥ (༡༥)
		རྩི་བ་༤པ། ཁ། དཔེར་བཞེད། (༡༥)			༡-༥ (༡༥)				༥ (༡༥)
		རྩི་བ་༤པ། ག། ལན་གདམ་ཁ་ཅན། (༥)	༡,༢ (༡+༡)	༣,༤ (༡+༡)		༥ (༡)			༥ (༥)
		རྩི་བ་༤པ། ང། མཐུན་སྦྲིག། (༥)				༡-༥ (༥)			༥ (༥)
		རྩི་བ་༤པ། ཅ། ཡིག་སྐྱོར་དབྱེ་དཔྱད། (༥)				༡ (༥)			༡ (༥)
		རྩི་བ་༤པ། ཆ། ཡིག་སྟེན། (༡༥)		༡ (༥)	༢ (༥)	༣ (༥)			༣ (༡༥)
བསྟོར་མཚན་→			༤ (༢)	༡ (༡༢)	༩ (༣༠)	༤ (༢༥)	༢ (༥)	༤ (༢༠)	༣༤ (༡༠༠)

བློན་གསོ། གྲུག་ཤད་ནང་ཡོད་མི་ཨང་ཡིག་ཚུ་ སྐྱག་ས་དང་ བྱི་ཁ་གི་ཚུ་རྩི་བའི་ཨང་ཨིན།

DZONGKHA II

(ལན་ཐུང་གི་དོན་ལུ་ གོང་གི་ཡིག་བྲིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བྲིས་མ་ (ཡིག་རྒྱལ་མ་) མོ་མོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་ བཀོད་ཞིན་མ་ལས་ འདི་ཉི་ཐོག་ལུ་ ཅི་བ་བཟོ་ནི་དང་ ཡང་ན་ ཡིག་བྲིས་མེད་པར་ སྤྱིར་བཏང་ འབྲི་ཚུ་དང་འབྲེལ་བའི་ཅི་བ་ཚུ་བཀོད་ རུང་བཏུབ།

ཅི་བའི་ལན་ཚུ་ ཡིག་བྲིས་མ་ནང་ལས་ འབྲ་བཤུས་རྒྱུ་ནི་ཚུ་ལས་སྟག་སྟེ་ ལས་དོན་དང་འབྲེལ་བའི་ ལྷོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་ཕྱེ་ ཞིབ་འབད་ཚུགས་པའི་ ལྷོགས་གྲུབ་གཞི་བཞག་གི་ ཅི་བ་ཚུ་བཀོད་དགོ།)

ཅི་བ་གསུམ་པ།

ལན་རིང།

(སྐྱགས་ ༡༠x༡=༡༠)

འོག་གི་ ཅི་བ་^༡ ལས་^༡ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་ བྲིས།

(ལན་རིང་གི་དོན་ལུ་ གོང་གི་ཡིག་བྲིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བྲིས་མ་ (ཡིག་རྒྱལ་མ་) མོ་མོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་བཀོད་ཞིན་མ་ལས་ འདི་ཉི་ཐོག་ལུ་ ཅི་བ་བཀོད་ནི་དང་ ཡང་ན་ ཡིག་བྲིས་མེད་པར་ སྤྱིར་བཏང་ འབྲི་ཚུ་དང་འབྲེལ་བའི་ ཅི་བ་ཚུ་བཀོད་རུང་བཏུབ།

ཅི་བའི་ལན་ཚུ་ ཡིག་བྲིས་མ་ནང་ལས་ འབྲ་བཤུས་རྒྱུ་ནི་ཚུ་མེན་པར་ ལས་དོན་དང་འབྲེལ་བའི་ ལྷོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་ཕྱེ་ཞིབ་འབད་ཚུགས་ པའི་ གནས་ཚད་མཐོ་བའི་ ཅི་བ་ཚུ་བཀོད་དགོ།)

སྟེ་ཚན་ལ།

སྟན་ཚུ་མ།

སྐྱགས་ ༢༥ |

ཅི་བའི་ལས་སྟོན།

(སྟན་ཚུ་མ་གྱི་ཅི་བ་འདི་ནང་ སྟན་ཚུ་མ་གྱི་དེ་ཕྱེ་བ་ གློ་བཟེ། དེ་ཕྱེ་གཏམ། ཚུ་མ། གསལ་བཤད་ཚུ་ལས་ གང་རུང་ཅིག་བཀོད་ཞིན་མ་ལས་ འདི་ཉི་ཐོག་ལུ་ ལན་གདམ་ཁ་དང་ ལན་ཐུང་ ལན་རིང་གི་ཅི་བ་ཚུ་ འོག་ལུ་བཀོད་ཡོད་པའི་ ལས་སྟོན་དང་འབྲེལ་ཏེ་བཀོད་དགོ་པ་ཡིན།

ཅི་བ་ཚུ་ནང་ ཚུ་མ་རིག་ཚུ་ ཆོག་གི་སྟན་ཆ་(ཆོག་གི་སྟོན། དཔེ་དོན། སྤྱི་གཏམ་)བཙུགས་ཏེ་ འབྲི་ཐངས་གྱི་རིག་ཅུལ་ཐོབ་སྟེ་ཡོད་མེད་དང་ ཆོགས་བཅད་ དང་ཆོག་ལྷག་ སྟེལ་མ་ཚུ་བཀོད་ཐངས་གྱི་རིག་ཅུལ་དེ་ཕྱེ་དཔེ་དཔྱད་གྱི་ཅི་བ་ཚུ་བཀོད་དགོ། སྟན་ཚུ་མ་ཚུ་ གནས་སྤངས་མ་འབྲེལ་ཚུ་ནང་བཙུགས་ཏེ་ ལག་ལེན་ འཐབ་ཚུགས་མི་ཚུགས་བལྟ་ནི་ཅི་བ་ཚུ་བཀོད་དགོ།

སྟན་ཚུ་མ་གྱི་ཅི་བ་འདི་ སྟོབ་དེབ་ལུ་གཞི་བཞག་སྟེ་མེན་པར་ རྩོད་ཁའི་ཅ་གཞུང་གི་ ལྷག་རིག་དང་ཚུ་མ་རིག་ནང་ལུ་ སྟན་ཚུ་མ་དང་འབྲེལ་བའི་ ལྷོགས་ གྲུབ་དང་ལས་དོན་ཚུ་ལུ་གཞི་བཞག་སྟེ་ དེ་དང་འབྲེལ་བའི་ ལྷོགས་གྲུབ་ཚུ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་ཕྱེ་ཞིབ་འབད་ནི་ཅི་བ་ཚུ་བཀོད་དགོ་པ་ཡིན།)

བཀོད་རྒྱ། འོག་གི་ སྟན་ཚུ་མ་འདི་ ལྷག་ཞིན་མ་ལས་ ཅི་བ་ཚུ་འཛིན་བྲིས།

(སྟན་ཚུ་མ་གྱི་དེ་ཕྱེ་བ་ གློ་བཟེ། དེ་ཕྱེ་གཏམ། ཚུ་མ། གསལ་བཤད་ཚུ་ལས་ གང་རུང་གི་ཡིག་བྲིས་མ་ (ཡིག་རྒྱལ་མ་) ཅིག་ བཀོད། ཡང་ཅིན་ ཡིག་བྲིས་མ་ མེད་པར་ ཅི་བ་དང་པ་ལས་ གསུམ་པ་ཚུན་ སྤྱིར་བཏང་སྟན་ཚུ་མ་དང་འབྲེལ་བའི་ ཅི་བ་བཀོད་རུང་བཏུབ།)

ཅི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

(སྐྱགས་ ༡x༥=༥)

འོག་གི་ཅི་བ་རེ་ལུ་ལན་ ཀ་ཁ་ག་ང་༩ ཡོད་ས་ལས་ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་རྟགས་གྲུ་སྒྲོར་ཐིག་༠ དེ་བཟུམ་བཀལ།

(ལན་གདམ་གདམ་ཁའི་ཅི་བ་ཚུ་བཀོད་པ་ འཇམ་ཏོང་ཏོ་སྟེ་ གདམ་ཁ་རྒྱབ་ནི་མེན་པར་ དེ་ཕྱེ་བ་དཔྱད་དེ་ ལན་རྒྱབ་བཙུག་ནི་དོན་ལུ་ ལན་ངོ་མ་དང་ གཅིག་ཁར་ ལན་ཡིན་དོ་བཟུམ་ཆོར་ཚུགས་པའི་ ཡེངས་བྱེད་གྱི་གདམ་ཁ་ཚུ་བཀོད་དགོ།)

ཅི་བ་གཉིས་པ།

ལན་ཐུང་།

(སྐྱགས་ ༢x༥=༡༠)

འོག་གི་ ཇི་བ་ ༥ ག་རའི་ལན་བློས།

(ལན་བྱུང་གི་དོན་ལུ་ གོང་གི་ཡིག་བློས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བློས་མ་ (ཡིག་རྒྱལ་ས) མོ་མོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་
བཀོད་ཞིན་ལས་ འདི་འོག་ལུ་ ཇི་བ་བཟོ་རུང་བཟུལ།
ཇི་བའི་ལན་ཚུ་ ཡིག་བློས་མ་ནང་ལས་ འད་བཤུས་རྒྱུ་ནི་ཚུ་ལས་སྟག་སྟེ་ ལས་དོན་དང་འབྲེལ་བའི་ རྩོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་བུ་
ཞིབ་འབད་རྩོགས་པའི་ རྩོགས་གྲུབ་གཞི་བཞག་གི་ ཇི་བ་ཚུ་བཀོད་དགོ།)

ཇི་བ་གསུམ་པ།

ལན་རིང།

(སྐགས་ ༡༠x༡=༡༠)

འོག་གི་ ཇི་བ་ ༩ ལས་ ༡ ག་དམ་ཁ་རྒྱུ་སྟེ་ ལན་ བློས།

(ལན་རིང་གི་དོན་ལུ་ གོང་གི་ཡིག་བློས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བློས་མ་ (ཡིག་རྒྱལ་ས) མོ་མོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་
བཀོད་ཞིན་ལས་ འདི་འོག་ལུ་ ཇི་བ་བཟོ་རུང་བཟུལ།
ཇི་བའི་ལན་ཚུ་ ཡིག་བློས་མ་ནང་ལས་ འད་བཤུས་རྒྱུ་ནི་ཚུ་མེན་པར་ ལས་དོན་དང་འབྲེལ་བའི་ རྩོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་བུ་ཞིབ་
འབད་རྩོགས་པའི་ གནས་ཚད་མཐོ་བའི་ ཇི་བ་ཚུ་བཀོད་དགོ།)

སྟེ་ཚན་ག།

སྤྱད་དང་གཏམ་རྒྱུ།

(སྐགས་ ༣༥)

བཀོད་རྒྱ། འོག་གི་སྤྱད་འདི་ རྩོག་ཞིན་ལས་ ཇི་བ་ཚུ་གི་ལན་བློས།

(སྤྱད་གི་ཇི་བ་འདི་ནང་ སྤྱད་གང་རུང་ཅིག་བཀོད་ནི་དང་ ཡང་ན་ སྤྱད་གཅིག་ནང་ལས་ འབྱུང་མི་སྤྱད་ཀྱི་ཅིག་བཏོན་ཏེ་བཀོད་ཞིན་ལས་
འདི་འོག་ལུ་ ལན་གདམ་ཁ་དང་ ལན་སྤྱད་ ལན་རིང་གི་ཇི་བ་ཚུ་ བཀོད་དགོ་པ་ཡིན།
འཕྲལ་འཕྲལ་ སྤྱད་མ་བཀོད་པར་ ཇི་བ་གསུམ་ཆ་རའི་ནང་ལུ་ སྤྱིར་བཏང་ སྤྱད་དང་འབྲེལ་བའི་ ཇི་བ་ཚུ་བཀོད་རུང་བཟུལ།
ཇི་བ་བཀོད་པ་ད་ སྤྱད་གསར་ཚུ་འབད་དེ་བློ་ནི། སྤྱད་འཕྲོ་མཐུད་དེ་བློ་ནི། གཞན་གྱིས་བློས་ཡོད་པའི་སྤྱད་སྟག་སྟེ་གོ་བ་ལེན་ནི། གཞན་གྱིས་
བློས་ཡོད་པའི་སྤྱད་བསྐྱར་ཞིབ་འབད་ནི། གནས་སྤངས་བཟོ་ཡོད་མི་གྱ་ གཞི་བཞག་སྟེ་ སྤྱད་བློ་ནི། སྤྱོད་དང་སྤྱོད་བཏགས་ཐོག་ལས་བློ་ནི།
བཟུད་སྤྱད་དང་རྒྱུ་བཤད་རྒྱུ་སྟེ་བློ་ནི། སྤྱད་གི་གཞི་གཅིག་གྱ་ དག་འཕྱོད་ཉམས་བཟུགས་ཏེ་ འབྱུང་མི་ཅིག་བློ་བཟུགས་ནི།) ལ་སོགས་
པའི་ ཇི་བ་ཚུ་བཀོད་དགོ།

སྤྱད་གི་ཇི་བ་འདི་ སྤྱོད་དེ་བ་ལུ་གཞི་བཞག་སྟེ་མེན་པར་ རྫོང་ཁའི་རྩ་གཞུང་གི་ གནས་འཕྲུ་པ་ སྤྱོད་མི་ ༡༩ པའི་ རྩོག་ཅིག་དང་ཚུ་
ཅིག་ནང་ལུ་ སྤྱད་དང་འབྲེལ་བའི་ རྩོགས་གྲུབ་དང་ལས་དོན་ཚུ་ལུ་གཞི་བཞག་སྟེ་ དེ་དང་འབྲེལ་བའི་ རྩོགས་གྲུབ་ཚུ་ཐོབ་སྟེ་ཡོད་མེད་ དེ་བུ་
ཞིབ་འབད་ནི་ཇི་བ་ཚུ་བཀོད་དགོ་པ་ཡིན།

ཇི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

(སྐགས་ ༡x༥=༥)

འོག་གི་ཇི་བ་རེ་ལུ་ལན་ ༡ ག་ཁ་ག་ང་ ༥ ཡོད་ས་ལས་ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱུ་སྟེ་ ༡ རྩོགས་གྲུབ་སྤྱོད་ཐོག་། འདི་བཟུམ་བཀལ།

། ལན་གདམ་གདམ་ཁའི་དྲི་བ་རྩ་བོད་པ་ འཇམ་རྟེན་རྟེ་སྟེ་ གདམ་ཁ་རྩ་བ་ཞི་མེན་པར་ དབྱེ་བ་དཔུང་དེ་ ལན་རྩ་བ་བཅུག་ཞིའི་དོན་ལུ་ ལན་རྩ་བ་དང་
གཅིག་ཁར་ ལན་ཨིན་དོ་བཟུམ་ཚོར་རྩ་བ་ལའི་ ཡེངས་བྱེད་ཀྱི་གདམ་ཁ་རྩ་བ་བོད་དགོ། །

དྲི་བ་གཉིས་པ།

ལན་ཐུང་།

(སྐྱགས་ ༢༥༥=༡༠)

འོག་གི་ དྲི་བ་ ༥ ག་རའི་ལན་གྱིས།

(ལན་ཐུང་གི་དོན་ལུ་ གོང་གི་ཡིག་གྱིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་གྱིས་མ་ (ཡིག་རྒྱགས་) སོ་སོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་
བོད་ཞིན་མ་ལས་ འདིའི་ཐོག་ལུ་ དྲི་བ་བཟོ་རུང་བཟུབ།

དྲི་བའི་ལན་རྩ་བ་ ཡིག་གྱིས་མ་ནང་ལས་ འདྲ་བཤུས་རྩ་བ་ཞི་མེན་ལས་སྟག་སྟེ་ ལས་དོན་དང་འཁྲིལ་བའི་ ལྷོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དབྱེ་
ཞིབ་འབད་རྩ་བ་ལའི་ ལྷོགས་གྲུབ་གཞི་བཞག་གི་ དྲི་བ་རྩ་བ་བོད་དགོ།)

དྲི་བ་གསུམ་པ།

ལན་རིང་།

(སྐྱགས་ ༡༠༥༡=༡༠)

འོག་གི་ དྲི་བ་ ༩ ལས་ ༡ གདམ་ཁ་རྩ་བ་སྟེ་ ལན་ གྱིས།

(ལན་རིང་གི་དོན་ལུ་ གོང་གི་ཡིག་གྱིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་གྱིས་མ་ (ཡིག་རྒྱགས་) སོ་སོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་བོད་ཞིན་མ་ལས་
འདིའི་ཐོག་ལུ་ དྲི་བ་བཟོ་རུང་བཟུབ།

དྲི་བའི་ལན་རྩ་བ་ ཡིག་གྱིས་མ་ནང་ལས་ འདྲ་བཤུས་རྩ་བ་ཞི་མེན་ལས་ ལས་དོན་དང་འཁྲིལ་བའི་ ལྷོགས་གྲུབ་ཐོབ་སྟེ་ཡོད་མེད་ དབྱེ་ཞིབ་འབད་རྩ་བ་
ལའི་ གནས་ཚད་མཐོ་བའི་ དྲི་བ་རྩ་བ་བོད་དགོ།)

སྟེ་ཚན་ད།

ནང་ཚོས་བཟྱི་མཐོང་།

སྐྱགས་ ༢༥ །

། རང་ཚོས་བཟྱི་མཐོང་གི་དྲི་བ་འདི་ རྩ་བ་འདི་རྩ་བ་ལའི་རྩ་བ་ལུ་ སྟོབ་རིམ་ ༡༢ པའི་ ལྷོགས་རིག་དང་ཚུམ་རིག་ནང་ལུ་ རང་ཚོས་བཟྱི་མཐོང་
(བཞེས་སྤངས་)དང་འཁྲིལ་བའི་ ལྷོགས་གྲུབ་དང་ལས་དོན་ དོན་ཚན་རྩ་བ་ལུ་གཞི་བཞག་སྟེ་ དེ་དང་འཁྲིལ་བའི་ ལྷོགས་གྲུབ་རྩ་བ་ཐོབ་སྟེ་ཡོད་
མེད་ དབྱེ་ཞིབ་འབད་ཞིའི་དྲི་བ་རྩ་བ་བོད་དགོཔ་ཨིན། །

དྲི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

(སྐྱགས་ ༡༥༥=༥)

འོག་གི་དྲི་བ་རེ་ལུ་ལན་ ༡༡ ཁ་ག་དང་ ཡོད་ས་ལས་ལན་རྩ་བ་འདི་ གདམ་ཁ་རྩ་བ་སྟེ་ ག་རྒྱགས་གྲུ་སྟོར་ཐིག་༠ དེ་བཟུམ་བཀལ།

། ལན་གདམ་གདམ་ཁའི་དྲི་བ་རྩ་བ་བོད་པ་ འཇམ་རྟེན་རྟེ་སྟེ་ གདམ་ཁ་རྩ་བ་ཞི་མེན་པར་ དབྱེ་བ་དཔུང་དེ་ ལན་རྩ་བ་བཅུག་ཞིའི་དོན་ལུ་
ལན་རྩ་བ་དང་གཅིག་ཁར་ ལན་ཨིན་དོ་བཟུམ་ཚོར་རྩ་བ་ལའི་ ཡེངས་བྱེད་ཀྱི་གདམ་ཁ་རྩ་བ་བོད་དགོ། །

དྲི་བ་གཉིས་པ།

ལན་ཐུང་།

(སྐྱགས་ ༢༥༥=༡༠)

འོག་གི་ དྲི་བ་ ༥ ག་རའི་ ལན་གྱིས།

(ལན་ཐུང་གི་དོན་ལུ་ གོང་གི་ཡིག་བྲིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བྲིས་མ་ (ཡིག་རྒྱལ་མ་) སོ་སོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་
བཀོད་ཞིན་མ་ལས་ འདི་ཉི་ཐོག་ལུ་ ཅི་བ་བཟོ་རུང་བརྟུབ་ནི་དང་ ཡང་ན་ འབྲི་ཚུམ་སྤྱོད་བཟང་དང་འབྲེལ་བའི་ ཅི་བ་ཚུ་བཀོད་རུང་བརྟུབ་
ཅི་བའི་ལན་ཚུ་ ཡིག་བྲིས་མ་ནང་ལས་ འབྲེལ་བཟུང་ནི་ཚུ་ལས་སྟག་སྟེ་ ལས་དོན་དང་འབྲེལ་བའི་ ལྷོགས་སྤྱོད་ཐོབ་སྟེ་ཡོད་མེད་ དེ་བུ་
ཞིབ་འབད་ཚུགས་པའི་ ལྷོགས་སྤྱོད་གཞི་བཞག་གི་ ཅི་བ་ཚུ་བཀོད་དགོ།)

ཅི་བ་གསུམ་པ།

ལན་ཅིང་།

(སྤྱི་ལོ་༢༠༢༡-༢༠)

འོག་གི་ ཅི་བ་^༡ ལས་^༢ གནས་ཁ་རྒྱབ་སྟེ་ ལན་ བྲིས།

(ལན་ཅིང་གི་དོན་ལུ་ གོང་གི་ཡིག་བྲིས་མ་འབད་རུང་ ཡང་ན་ ཡིག་བྲིས་མ་ (ཡིག་རྒྱལ་མ་) སོ་སོ་ཅིག་དང་ ཡང་ན་ གནས་སྤངས་ཅིག་བཀོད་ཞིན་མ་ལས་
འདི་ཉི་ཐོག་ལུ་ ཅི་བ་བཟོ་རུང་བརྟུབ་
ཅི་བའི་ལན་ཚུ་ ཡིག་བྲིས་མ་ནང་ལས་ འབྲེལ་བཟུང་ནི་ཚུ་མེན་པར་ ལས་དོན་དང་འབྲེལ་བའི་ ལྷོགས་སྤྱོད་ཐོབ་སྟེ་ཡོད་མེད་ དེ་བུ་ཞིབ་འབད་ཚུགས་
པའི་ གནས་ཚད་མཐོ་བའི་ ཅི་བ་ཚུ་བཀོད་དགོ།)

བཀའ་ཅིན་ཆེ།

༼ རྒྱུ་ལ་ རྒྱུ་ལ་གཉིས་པའི་དབྱེ༽

ལྷག་ཤིག་དང་ཚུམ་རིག།
སྒྲོབ་རིམ་༡༩ པ།

དུས་ཡུན་ཚུ་ཚད་༩ །
སྐྱགས་བསྐྱེམ་༡༠༠ །

འོག་གི་བཀོད་རྒྱ་ཚུ་ ལེགས་ཤོམ་སྟེ་ ལྷག་སྟེ་བཟ།

- ཉེ་མ་ ལྷ་མ་༡༥ གི་རིང་ལུ་ ཡི་གུ་མ་གྱི་བར་ནི་ཤོག་འདི་ ལེགས་ཤོམ་སྟེ་ལྷག།
- དི་བ་ལྷག་ཚར་ཞིན་མ་ལས་ ལན་གྱི་ནི་འདི་དོན་ལུ་ དུས་ཡུན་ཚུ་ཚད་༩ འཐོབ།
- དི་ཤོག་འདི་ནང་ལུ་ དི་བ་སྟེ་ཚན་ བཞི་ཡོད་མི་འདི་ཡང་ ཀ་ འབྲི་ཚུམ། ཁ་ ལྷན་ཚུམ། ག་ སྤང་དང་གཏམ་རྒྱུད། ང་ ནང་ཚུམ་ཚུམ་རིག་ཚུ་ཨིན། སྟེ་ཚན་རེ་རེ་འདི་ནང་ལུ་ ལན་གདམ་ཁ་ཅན་དང་ ལན་བྱང་ ལན་རིང་གི་དི་བ་ཚུ་བཀོད་དེ་ཡོད།
- སྟེ་ཚན་དང་འབྲེལ་བའི་ དི་བ་རེ་རེ་བཞིན་གྱི་ **བཀོད་རྒྱ་** ཁ་གསལ་སྟེ་ བཀོད་ཡོད་མི་ཚུ་ ལེགས་ཤོམ་སྟེ་ལྷག་སྟེ་ ལན་མ་ འཛོལ་བར་བྲིས། དེ་འབད་མ་ད་ ལན་འཐོབ་བྲི་མི་ཚོགས། གལ་སྲིད་ལན་འཐོབ་བྲིས་ཡོད་པ་ཅིན་ གོ་རིམ་བཞིན་ དབྱེ་ཞིབ་ འབད་ཞིན་མ་ལས་ མཚུག་གི་ལན་འདི་ ཆམེད་གཏང་འོང།
- དི་བ་སོ་སོའི་སྐྱགས་དེ་ཚུ་ ཁ་གསལ་སྟེ་ **གྲག་ཤད་ནང་ལུ་** བཀོད་དེ་ཡོད།
- ཆོས་རྒྱལ་ལཱ་འགོ་བཙུགས་ཞིན་མ་ལས་ **སྒོ་སྤྲོད་ནི་དང་ དི་བ་དི་ནི་ འབ་བཤུས་རྒྱུ་ནི་ ཡར་རྒྱར་འབྱོར་ནི་** ཚུ་ལས་ འབད་མི་ཚོགས།
- དི་བའི་ལན་ཚུ་ **མཐོགས་སུ་**ཅིག་སྟེ་བྲིས། དེ་འབད་མ་ད་ ཡིག་བཟོ་བཏོན་ཏེ་ **ཉིང་སངས་མ་སྟེ་བྲི་དགོ།**
- དི་ཤོག་སོ་སོར་ **ཁ་ཕུལ་གཏང་ནི་དང་** ཤོག་ལེབ་སྟེད་ནི་ཚུ་ འབད་མི་ཚོགས།
- དི་ཤོག་འདི་ བྱ་ཆེ་ཆེ་བཟོ་ནི་འདི་དོན་ལུ་ **ཐིག་འཐོན་ནི་དང་ ཚོན་སྐྱུག་གིས་བྲི་ནི་** དེ་ལས་བཀོད་རྒྱ་དང་ མ་འབྲེལ་བའི་བར་དང་ **རྩྭ་གསལ་ཚུ་** ག་ནི་ཡང་བྲི་མི་ཚོགས།
- གལ་སྲིད་ དུས་ཚོད་མ་ཚང་མ་ལས་ དི་བའི་ལན་ཚུ་ བྲིས་ཚར་བ་ཅིན་ ལན་ཤོག་ཁ་**བསྐྱམས་**ཞིན་མ་ལས་ **ཁྲ་སིམ་སིམ་སྟེ་** སྟོན་དགོ།
- ཆོས་རྒྱལ་ལཱ་ཁང་ནང་ལས་ བྱི་ཁར་འཐོན་མ་འབྱོར་བའི་ཉེ་མ་ དི་བ་ཚུ་གི་ལན་ ཚང་མ་ཚང་དང་ འཛོལ་མ་འཛོལ་ཚུ་ བརྟག་ ཞིབ་འབད་དེ་བཟ།

དབྱེ་ཞིབ་འབད་མི་ཚུ་གིས་ སྐྱགས་བཀོད་ནི་འདི་ ཤོག་ཁྲུམ།

	འབྲི་ཚུམ། ༩༥			སྐྱན་ཚུམ། ༩༥			སྤང་དང་གཏམ་རྒྱུད། ༩༥			ནང་ཚུམ་ཚུམ་རིག་ ༩༥			ཕྱོགས།
སྐྱགས་ཚད།	ལན་གདམ།	ལན་བྱང།	ལན་རིང།	ལན་གདམ།	ལན་བྱང།	ལན་རིང།	ལན་གདམ།	ལན་བྱང།	ལན་རིང།	ལན་གདམ།	ལན་བྱང།	ལན་རིང།	
	༥	༡༠	༡༠	༥	༡༠	༡༠	༥	༡༠	༡༠	༥	༡༠	༡༠	༡༠༠
སྐྱགས་ཐོབ་པ།													

འོག་གི་ འབྲི་ཕྱི་མ་འདི་ ལྷག་ཞིན་མ་ལས་ ངི་བ་རྩ་གི་ལན་གྱིས།

དེངསང་ རྒྱལ་ཁབ་ཡར་རྒྱས་འགྲེམ་དང་བསྟུན་ འབྲུག་པའི་ན་གཞོན་ཚུ་གིས་ ཕྱི་རྒྱུད་ཡིག་
དང་ལམ་སྲོལ་ལུ་ དང་འདྲོད་བསྐྱེད་མི་ལུ་ལྷན་ད་ རབ་ཅས་ར་ཚ་བྱང་ལང་དགོ་པའི་ གཞི་གནད་ཅིག་ཡིན་
མས། དེ་ཡང་ག་འཆར་པ་ཟེར་བ་ཅིན་ རྒྱལ་ཁབ་ནང་འཁོད་ཀྱི་ ཁྲོམ་སྡེ་ཚུ་ནང་ མཐོང་གསལ་བྱུང་མི་དང་
འཁྲུལ་མ་ད་ ན་གཞོན་ཚུ་གིས་མ་ཆད་ ཐ་ན་རྒྱ་མོས་ཚུ་གིས་ཡང་ ཕྱི་རྒྱུད་དང་ ལམ་སྲོལ་མ་འདྲམ་
ཚུ་ལུ་ བརྩི་མཐོང་སློམ་འབད་ར་ བསྐྱེད་སར་མཐོང་མ་ཡིན་མས།

ང་པཅས་འདི་ ལམ་སྟོལ་བཟང་པོ་འདི་ སྤྱིང་སྤྱིང་སྟེ་ བདག་འཛིན་མ་འཐབ་པ་ཅིན་ སྐུལ་ཁབ་ཀྱི་རོ་རྟགས་
འབྲང་ནིའི་ ཉེན་ཁ་སྟོམ་ཡོད་པ་ལས་ འབྲུག་མི་རེ་རེ་བཞིན་རྒྱ་གིས་ ལམ་སྟོལ་བདག་འཛིན་འཐབ་ནི་ལུ་
བརྩོན་ཤུགས་བསྐྱོད་གོ་པའི་ཁར་ འགན་འཁུལ་འབག་ནི་དེ་ཡང་ ག་ནི་བ་གལ་ཆེ་བླགས་ཅིག་ཨིན།

དཔྱེ་འབད་བ་ཅིན་ ཐིམ་ཕུག་ལུ་ གཞི་བརྩུགས་འབད་དེ་ཡོད་པའི་ ཁྲོང་གསེབ་ཤེས་ཡོན་ གཞི་ཚོགས་
ཀྱིས་ དཔལ་ལྷན་འབྲུག་པའི་ སྐད་ཡིག་དང་ལམ་སྲོལ་ ཉམས་སྲུང་འབད་ནིའི་དོན་ལུ་ དུས་ཅི་ཐིམ་ཕུག་
མེ་མིང་ སློབ་གྲྭ་ཆེ་བ་ནང་ སློབ་ཕྲུག་ ༡༠༠ ལུ་ ལོ་ ༢ གྱི་རིང་སློབ་གཉེར་གྲོགས་རམ་ ཟུང་ཀའམ་སློབ་
འབྲས་བརྒྱུ་ཆ་ ༥༠ བྱིན་ནི་ཨིན་པའི་ ལོ་རྒྱུས་གོ་མི་དེ་ གནས་ཚུལ་བཟང་པོ་ཅིག་ ཨིན་མས།

གཞི་ཚགས་ཀྱིས་ འབྲུག་པའི་སྐད་ཡིག་དང་ལམ་སྟོལ་ ཉམས་སྲུང་འབད་ནི་འོན་ལས་ ཁོང་ར་ལུ་ མ་
དཱལ་མེད་དེ་འབད་རུང་ ཐབས་ཤེས་གནས་སྐབས་ཐོག་ གཞན་ཁར་ལས་ འཛོལ་སྒྲུབ་འབད་དེ་ སློབ་
ཕྱག་ཚུ་ལུ་ འདི་བཟུམ་མའི་ སློབ་གཉེར་གྲོགས་རམ་ བྱིན་མི་དེ་ལུ་ ཡིད་ཆེས་དང་ དལ་རངས་ཡོད་པའི་
ཁར་ མིག་དཔེ་བཟང་པོ་ཅིག་ ཡིན་མས།

དེ་ཡང་གཙོ་བོ་ར་ད་ལྟོ་ཚུན་གཞུང་དང་སྒྲེང་གི་ཐོག་ལས་སློབ་གཉེར་གྲོགས་རམ་བྱིན་མི་ཚུ་ཆ་མཉམ་
ར་བྱི་བའི་ཚོས་ཆན་ཚུ་གི་དོན་ལུ་ཨིན་མ་མ་གཏོགས་ང་བཅས་པའི་སྐད་ཡིག་དང་ལམ་སྲོལ་ཉམས་
སྦྲང་ལབ་དན་འི་དོན་ལུ་དམིགས་ཏེ་སློབ་གཉེར་གྲོགས་རམ་བྱིན་པར་མ་མཐོང་ནི་དགོས་ཨིན།

སློབ་གཉེར་གྲོགས་རམ་གྱི་ མ་དདུལ་རྒྱལ་སྐྱེར་དེ་ཡང་ ཞེ་མི་རི་ཀ་ལུ་ཡོད་མི་ མོ་དེ་མི་གཞི་ཚ྆གས་དང་
གཞན་ཚ྆གས་ འབད་ཡོད་པ་བཞིན་དུ་ གཞི་ཚ྆གས་དེ་གིས་ སློབ་གཉེར་གྲོགས་རམ་འབད་མི་དེ་ ལྷོ་ཞེ་
ཉི་ཡ་ལུང་ཚ྆གས་ནང་ འགོ་དང་པ་ཨིན་མས།

ཁྲིང་གསེབ་ཤེས་ཡོན་ གཞི་ཚོགས་ཀྱིས་འབད་བཅིན་ ད་ཅེས་ནངས་པ་ རང་གི་སྐད་ཡིག་དང་ལམ་སྲོལ་
ལུ་ དང་འདྲོད་བསྐྱེད་མི་ ལེ་ཤ་མེད་པ་ལས་བརྟེན་ སྲོལ་ཕྱག་ཨ་ལུ་ཚུ་གིས་ སྲོལ་བསྐྱེད་བཙུག་ནིའི་དོན་
ལུ་དང་ ལྷག་པར་དུ་ ཅ་གཞོན་ག་ར་ལུ་ ཤེས་ཡོན་སྲོད་དགོ། ཟེང་མི་འདི་ ཤེས་རིག་གི་དམིགས་ལུ་

འབྲུག་ཐབས་ལུ་ཡང་ཡིན་མས།

གཞི་ཚགས་ཀྱིས་ གློབ་གཉེར་གྲོགས་རམ་གྱི་དོན་ལུ་ སུམ་ཡ་འབྲུལ་འབྱོར་མི་ཨ་ལུ་ཚུ་དང་ ཟད་འབྲོ་
གཏང་མ་ཚུགས་མི་ སུམ་ཉམ་ཚུང་ཚུ་གི་ ཨ་ལུ་གདམ་འབྲུ་འབད་ནི་ཨིན་པའི་ བྱད་ཚད་བཟོ་ཡོད་མི་དེ་ཡང་
ཐབས་བྱས་ལེགས་ལྷན་ཅིག་ཨིན་མས།

ད་ལྟོ་ཚུན་ གཞི་ཚགས་ཀྱིས་ གློབ་ཕྱག་བསྐྱམས་^{༢༡} ལུ་ ཤེས་རིག་གི་རྒྱབ་སྐྱོར་ འབད་ཡོད་པ་མ་ཚད་
རྒྱ་གར་དང་ འབྲུག་རྒྱལ་ཁབ་ནང་འཁོད་ཀྱི་ མཐོ་རིམ་གློབ་གྲྭ་ཚུ་ནང་ ཤེས་ཡོན་སྦྱང་མི་ གློབ་ཕྱག་ ལུ་
ལུ་ གློབ་གཉེར་གྲོགས་རམ་ཚུ་ལྷན་ འབད་ཡོད་པ་ཨིན་པས།

ད་ལས་ཕར་ སྐར་གྱི་ གཞི་ཚགས་གཞན་ཚུ་གིས་འབད་རུང་ ང་བཅས་རའི་ རྒྱལ་ཡོངས་སྐད་ཡིག་དང་
ལམ་སྲོལ་ མི་ཉམས་གོང་འཕེལ་ གཏང་ནི་དོན་ལུ་ འདི་བཟུམ་མའི་ གློབ་གཉེར་གྲོགས་རམ་ ལ་
སོགས་པའི་ཐབས་རིག་ཚུ་ བཏོན་གནང་པ་ཅིན་ ལྷག་པར་དུ་རྒྱལ་ཁབ་ཀྱི་ རང་བཅོན་སྲུང་ཐབས་ལུ་
ཕན་བྱེད་སྒྲིམ་འབད་ར་ འབྲུང་ཚུགས་ནི་མས་ ཟེར་ཞུ་ནི་ཨིན། (ཁྲུང་མ་གཏུགས་ སྤྱི་ལོ་༢༠༡༥ ཟླ་༩ པའི་ཚེས་༢༧
གནའ་སྟེན་པ་གི་ཀུན་གསལ་ནང་ལས།)

བྱི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[ཡ]

འོག་གི་བྱི་བ་རེ་ལུ་ ལན་ཀ་ཁ་ག་ང་^༤ ཡོད་ས་ལས་ལན་རོམ་འདི་ གདམ་ཁ་རྒྱབ་སྐྱོར་ ཀ་རྟགས་གྲུ་སྒྲོར་ [༡x4=4]

ཐེག་ ○ དེ་བཟུམ་བཀལ།

༡. གློབ་ཕྱག་༡༠༠ ལུ་ ལོ་ངོ་^༢ གྱི་རིང་ལུ་ གློབ་གཉེར་གྲོགས་རམ་འཐོབ་མི་འདི་ སྤྱི་ལོ་

ཀ ༢༠༡༧ ལུ་ཨིན།

ཁ ༢༠༡༨ ལུ་ཨིན།

ག ༢༠༡༩ ལུ་ཨིན།

ང ༢༠༢༠ ལུ་ཨིན།

༢. ལམ་སྲོལ་ བདག་འཛིན་འཐབ་ནི་དེ་ འགན་ཁི་འདི་

ཀ མི་རོམ་རང་རྒྱུ་ལུ་ཐོག་པ་ཨིན།

ཁ འབྲུག་པའི་མི་རེ་རེ་བཞིན་ལུ་ཐོག་པ་ཨིན།

ག རྫོང་ཁའི་ཤེས་ཡོན་སྦྱང་མི་ཚུ་ལུ་ཐོག་པ་ཨིན།

ང འབྲུག་མི་ཤེས་ཡོན་སྦྱང་མི་ཚུ་ལུ་ཐོག་པ་ཨིན།

3. གོང་གི་ འབྲི་ཚུལ་གྱི་བཅུད་དོན་འདི་

- ཀ རྒྱུད་ཡིག་དང་ལམ་སྲོལ་བདག་འཛིན་འཐབ་ནིའི་སྐོར་ལས་ཨིན་པས།
- ཁ རྒྱལ་ཁབ་ཀྱི་ཡི་གུ་བདག་འཛིན་འཐབ་ནིའི་སྐོར་ལས་ཨིན་པས།
- ག ལམ་སྲོལ་བདག་འཛིན་འཐབ་ནིའི་སྐོར་ལས་ཨིན་པས།
- ང ཁ་རྒྱུད་བདག་འཛིན་འཐབ་ནིའི་སྐོར་ལས་ཨིན་པས།

4. སློབ་གཉེན་ ཟེར་བའི་དོན་དག་འདི་

- ཀ ཟད་འགོ་ལུ་གོམ་ཨིན།
- ཁ ཤེས་ཡོན་ལུ་གོམ་ཨིན།
- ག གོགས་རམ་ལུ་གོམ་ཨིན།
- ང ཤེས་ཡོན་སྤང་མི་ལུ་གོམ་ཨིན།

5. གཞན་དོན་ཅིག་གི་ཐོག་ལུ་ ཁྲངས་དང་རྒྱ་མཚན་བཀོད་དེ་ གཞན་སེམས་འགྱུར་ཚུགས་པ་སྟེ་གི་
དགོ་པ་ཅིན་

- ཀ རྒྱུས་བཤད་འབྲི་ཚུལ་གྱི་རིག་ཅུལ་ལག་ལེན་འཐབ་དགོ།
- ཁ ཚུད་སྟེང་འབྲི་ཚུལ་གྱི་རིག་ཅུལ་ལག་ལེན་འཐབ་དགོ།
- ག རྒྱུད་སྤྱུལ་འབྲི་ཚུལ་གྱི་རིག་ཅུལ་ལག་ལེན་འཐབ་དགོ།
- ང ལོ་རྒྱུས་འབྲི་ཚུལ་གྱི་རིག་ཅུལ་ལག་ལེན་འཐབ་དགོ།

དྲི་བ་གཉིས་པ།

ལན་བྱུང།

[70]

འོག་གི་ དྲི་བ་ལྔ ག་རའི་ ལན་བྲིས།

[4X5=20]

1. ལོ་རྒྱུས་འབྲི་ཚུལ་ཟེར་བའི་ རྒྱུད་ཚུལ་ཁ་གསལ་བྲིས།

༡. སློབ་གཉེར་གྲགས་རམ་གྱི་ མ་དངུལ་རྒྱབ་སྐྱོར་གནང་མི་ ག་ཡིན་ན?

༢. གོང་གི་འབྲི་ཚུལ་འདི་ འོས་འབབ་ཡོད་པའི་ བཟོད་པ་གཉིས་ནང་ བརྟུང་བསྐྱུས་ཏེ་བྲིས།

༣. སློབ་འཇུག་ འཆོལ་སྐྱབ། ཟེར་མི་ མིང་ཆོག་གཉིས་ཀྱི་ གོ་དོན་བྲིས།

4. འབྲི་ཚུམ་འདི་ ལྷག་གོ་མནོ་སི་སི་ འོང་ནི་དོན་ལུ་ རོ་སྒྲོན་འདི་ ག་དེ་སྒྲེ་ར་ གྲི་བ་ཅིན་
ལེགས་ཤོམ་འོང་ནི་སྒྲོ་

རྩི་བ་གསུམ་པ། ལན་རིང། [70]

འོག་གི་ རྩི་བ་₂ ལས་₂ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་བྲིས།

7. སྐད་ཡིག་དང་ལམ་སྟོལ་ བདག་འཛིན་མ་འབད་བ་ཅིན་ མ་འོངས་པ་ལུ་ ང་བཅས་རའི་ [70]
རྒྱལ་ཁབ་ཀྱི་ གནས་སྤངས་ ག་ཅི་བཟུམ་ཅིག་ལུ་འབྱུང་ནི་བཟུམ་ ཚོར་མ་མས་གོ་ ཁྱོད་རའི་
བསམ་འཆར་ ཚིག་འབྲུ་ 750 འབད་མི་ཅིག་བྲིས།

༡. ཁྱོད་ཀྱིས་འབད་བ་ཅིན་ དེང་སང་གི་གནས་སྐབས་དང་འབྲེལ་ཕྱ་ད་ རྒྱ་ཡིག་དང་ལམ་སྲོལ་ [༡༠]
 ཡར་རྒྱས་གཏང་ནི་འདི་ ལག་ཆེན་འདུག་ག་? ག་ཅི་འབད་? ཆོག་འབྲུ་༡༥༠ ནང་ བྱང་ས་
 བཀའ་ཉེ་བྲིས།

སྒྲིལ་ལྟ་

སྒྲིལ་ལྟ་

[༡༥]

འོག་གི་སྒྲིལ་ལྟ་འདི་ལྷན་ཞུས་ལས་ངེ་བ་ཚུ་གི་ལན་བློས།

<p style="text-align: center;">ཚུམ།</p> <p>༣ དཔལ་མི་དབང་འཇིགས་མེད་གེ་སར་མཆོག། །འབྲུག་བདེ་སྐྱིད་འབྱུང་བའི་མོར་བྱ་ཡིན།། སྐྱེ་མི་འགྱུར་ཞབས་པད་བརྟན་པ་དགའ།། ཐུགས་བདེ་བའི་ངང་ལུ་བཞུགས་པ་སྐྱིད།། སྐྱབས་མཁའ་ཆེན་འཇིགས་མེད་ཆོས་གྲགས་མཆོག། ཆོས་བཀའ་བརྟན་བསྟན་པའི་སྲོག་ཤིང་ཡིན།། སྐྱེ་གཡོ་མེད་ཆོས་འཁོར་བསྐྱོར་བ་དགའ།། ཐུགས་ཞི་བདེའི་ངང་ལུ་བཞུགས་པ་སྐྱིད།། སློ་རྣམ་པར་བཟ་བའི་སློན་ཆོགས་རྣམས།། འབངས་མི་སེར་ཡོངས་ཀྱི་སློ་གཏད་ཡིན།།</p>	
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<p>བཀའ་ཅིག་སྤངས་བསྐྱབས་པ་སེམས་རེདགའ། འབངས་བདེ་སྤྱིད་ལྷན་པ་བསམ་པ་ཚོགས། སྒྲོན་ཚོགས་བསག་ཆེ་བའི་འབངས་འཁོར་རྣམས། ལས་སྒྲོན་ལམ་དབང་གིས་འབྲུག་ཡུལ་སྤྱིས། ཆེ་འདི་བྱི་བསྐྱབས་པའི་མགོན་དང་མཇུག། འབངས་རང་གི་བསམ་པ་འདི་གིས་ཚོགས།</p>	
<p>དཔྱེ་གཏམ།</p> <p>བཟའ་མ་བཟླ་བར་བློ་མི་ཤེས། འབད་མ་བཟླ་བར་འཇམ་ཉིང་མི་ཤེས། ། ཟ་འཕྲོ་འཐུང་འཕྲོ་གྲོན་འཕྲོ་གསུམ། །ཕམ་ལུ་བྱིན་ཆེ་བསོད་བདེ་སྐྱམ། ། མེ་ཆུང་དུས་ལས་བསད། །དམ་ཆུང་དུས་ལས་བརྟུལ། ། དང་ཕྱག་ཡོན་ཏན་སེམས་ཀྱི་ཐོག །ད་རེས་ཡོན་ཏན་ཡོངས་འབྲེལ་ཐོག ། རང་ལེགས་པ་མི་བརྟུབ་ཆ་རོགས་ལེགས་དགོ། ། རོགས་ལུ་གཞོད་པའི་གཏམ་མ་སྒྲབ། །རང་ལུ་གཞོད་པའི་ཟས་མ་ཟ། ། (ཁྱེད་ཀྱི་ལུགས་ རྒྱུ་ལྡན་གོང་འཕེལ་ལྷན་ཚོགས་ཀྱི་ ཡིད་སྐྱོད་དང་རྒྱུ་ལྡན་ཆོག་མཚོད་ལས)</p>	

འི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[ལ]

འོག་གི་འི་བ་རེ་ལུ་ ལན་ཀ་ཁ་ག་ང་ ༤ ཡོད་ས་ལས་ལན་རོམ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་ཏྲགས་གུ་སྟོང་ [༡x༥=༥]
ཐིག་ ○ དེ་བཟུམ་བཀའ།

༡. དཔྱེ་གཏམ་འདི་ མི་སྒྲབ་ཤེས་ཉན་ཤེས་ཀྱི་ གནས་རིམ་ནང་གི་
 - ཀ ཉན་ཐངས་ཀྱི་ཁྱད་ཚུལ་ཅིག་ཡིན།
 - ཁ འབྲི་ཐངས་ཀྱི་ཁྱད་ཚུལ་ཅིག་ཡིན།
 - ག སྒྲབ་ཐངས་ཀྱི་ཁྱད་ཚུལ་ཅིག་ཡིན།
 - ང ལྷག་ཐངས་ཀྱི་ཁྱད་ཚུལ་ཅིག་ཡིན།

༢. ཚུམ་འདི་ ཉན་ཏོང་ཏོང་འབད་འཐོན་དགོ་པ་ཅིན་
 - ཀ སྒྲོ་བ་བསྐྱེད་ནི་ལུ་རག་ལས་ནི་ཡིན།
 - ཁ གོམས་སྤྱང་ཚུད་ནི་ལུ་རག་ལས་ནི་ཡིན།
 - ག ཆོག་གི་གོ་རིམ་བསྒྲིག་ནི་ལུ་རག་ལས་ནི་ཡིན།
 - ང ཐོགས་ཆགས་མེད་པ་བྱི་ནི་ལུ་རག་ལས་ནི་ཡིན།

3. ཞབས་པད་བརྟན། ཟེར་བའི་གོ་དོན་འདི་
 ཀ་ ཞབས་མེ་རྟག་པར་བཟུམ་ཟེར་བའི་དོན་ཡིན།
 ཁ ཀངས་སྒྲིང་སྒྲིལ་ཡོད་པའི་དོན་ཡིན།
 ག ཆེ་རིང་པའི་དོན་ཡིན།
 ཅ བད་མེད་པའི་དོན་ཡིན།

4. རང་གིས་སྒྲུབ་པའི་ཆོག་འདི་ བཅུད་ཆེ་རྟག་རྟོ་འོང་ནིའི་དོན་ལུ་
 ཀ མཉེན་ལུག་བཅུགས་ཏེ་སྒྲུབ་དགོ།
 ཁ དུའུ་གཏམ་བཅུགས་ཏེ་སྒྲུབ་དགོ།
 ག ལུད་ཆོག་བཅུགས་ཏེ་སྒྲུབ་དགོ།
 ཅ སྒོ་ཟེ་བཅུགས་ཏེ་སྒྲུབ་དགོ།

5. ཚུམ་ཆོགས་བཅད་བཞི་པའི་ནང་ལུ་ བསམ་པ་རྫོགས་དགོ་པའི་ དོན་དག་འདི་
 ཀ ཆོགས་བསམ་གས་ནི་དེ་གིས་ཡིན་མས།
 ཁ བཀའ་ཅི་གསུངས་བསྐྱབས་ནི་དེ་གིས་ཡིན་མས།
 ག ལས་སྒྲོན་ལམ་ཡོད་ནི་དེ་གིས་ཡིན་མས།
 ཅ སྒྲུམ་བཟང་པོ་དང་མཇལ་ནི་དེ་གིས་ཡིན་མས།

ཇི་བ་གཉིས་པ།

ལན་བྱང།

[4X4=16]

འོག་གི་ ཇི་བ་ 4 གི་ ལན་བྱིས།

1. ཆོགས་བཅད་ཟེར་བའི་ གོ་དོན་ ག་དེ་སྟེ་ཡིན་ན་ བྲིས།

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༩. ཟ་མ་བལྟ་བར་བློ་མི་ཤེས། །འབད་མ་བལྟ་བར་འཇམ་ཉིང་མི་ཤེས། །ཟེར་བའི་དབྱེ་གཏམ་གྱིས་
བཅུད་དོན་ག་ཅི་སྟོན་མ་སྟོན་?

༩. སྐྱབས་མཁན་ཆེན་འཇིགས་མེད་ཆོས་གྲགས་མཆོག་ །ཆོས་བཀའ་བརྒྱད་བསྟན་པའི་སྟོག་ཤིང་
ཡིན། །སྐྱ་གཡོ་མེད་ཆོས་འཁོར་བསྟོར་བ་དགའ། ། ཐུགས་ནི་བདེའི་རང་ལུ་བཞུགས་པ་སྦྱིད། །
ཟེར་བའི་ཆོགས་ བཅད་ཀྱི་འགྲེལ་བཤད་བྲིས།

༤. ཚུལ་འཁོར་བསྐྱོར། འབངས་འཁོར། ཟེར་བའི་མིང་ཚིག་༡ གྱི་ གོ་དོན་བྲིས།

༥. དང་ཕྱག་ཡོན་ཏན་སེམས་ཀྱི་ཐོག། །ད་རེས་ཡོན་ཏན་ཡོངས་འབྲེལ་ཐོག། །ཟེར་བའི་དབྱེ་གཏམ་
འདི་ གནས་སྤངས་ག་ཅི་བཟུམ་ཅིག་ནང་ ལག་ལེན་འཐབ་ནི་སྟོན་?

རྩི་བ་གསུམ་པ། ལན་རིང། [༡༠]

འོག་གི་ རྩི་བ་༡ ལས་༡ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་བྲིས།

༡. མི་དབང་མངའ་བདག་རིན་པོ་ཆེ་ལུ་ བཀའ་རྒྱུ་དགའ་ཚོར་གྱི་ཚུམ་ ཚིགས་བཅད་ ༣ བྲིས། [༡༠]

༩. གནད་དོན་ག་ཅིར་ཨིན་རུང་ ཆོག་གི་ནུམ་འགྱུར་ སུན་སུམ་ཆོག་ས་ཏྲོག་ཏྲོ་སྟེ་ སྤྲེའི་དང་ མ་ [༡༠]
 སྤྲེའི་ གཉིས་ཀྱི་བར་ན་ བྱད་པར་ག་ཅིར་ འོང་ནི་བརྩམ་འདུག་གོ?

སྒྲིལ་ཆ་ག

སྒྲིལ་དང་གཏམ་རྒྱུད།

[༡༥]

རྩི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[༥]

འོག་གི་རྩི་བ་རེ་ལུ་ ལན་གཏམ་ག་ང་ལྟེ་ ཡོད་ས་ལས་ལན་རྩི་འདི་ གདམ་ཁ་རྒྱལ་སྒྲིལ་ ཀ་རྟགས་གུ་སྒྲིལ་ [༡x༥=༥]
 ཐེག་ ○ དེ་བཟུམ་བཀལ།

༡. སྒྲིལ་གི་ཆ་གས་ནང་ལས་ སྒྲིལ་ས་མ་བདེམ་རྒྱུ་བསལ་བའི་ ཐབས་ཤེས་ལུ་
 - ཀ བཟོ་བཀོད་ཟེར་སྒྲིལ་ཡིན།
 - ཁ བཟོ་དོན་ཟེར་སྒྲིལ་ཡིན།
 - ག རྟོགས་གཞི་ ཟེར་སྒྲིལ་ཡིན།
 - ང ཞི་ཐབས་ ཟེར་སྒྲིལ་ཡིན།
༢. འཆར་སྒྲིལ་ ཟེར་མི་འདི་
 - ཀ སེམས་ཁར་རང་བཞིན་གྱིས་ཤར་འོང་པའི་སྒྲིལ་ལུ་གོམ་ཡིན།

- ཁ ཆར་པ་གི་སྒྲོར་ལས་ཡོད་པའི་སྤང་ལུ་གོམ་ཡིན།
- ག འཆར་གཞི་ཡོད་པའི་སྤང་ལུ་གོམ་ཡིན།
- ང སེམས་ཀྱིས་བཟོ་སྟེ་བྲིས་ཡོད་པའི་སྤང་ལུ་གོམ་ཡིན།

༩. སྤང་གི་ཆ་གས་ནང་ལས་ ས་གོ་དང་དུས་ཚོད་ཀྱི་སྒྲོར་ལས་ ལྷོན་མི་ལུ་
- ༡ སྤང་གི་ བཟོ་བཀོད་ཟེར་སྒྲུབ་ཡིན།
 - ཁ སྤང་གི་ དུས་སྐབས་ཟེར་སྒྲུབ་ཡིན།
 - ག སྤང་གི་ རྟོགས་གཞི་ཟེར་སྒྲུབ་ཡིན།
 - ང སྤང་གི་ ཚོར་བྱ་གས་ཟེར་སྒྲུབ་ཡིན།

༡༠. སྤང་ནང་མི་ལུ་ ལྷོབས་མ་བདེ་བའི་ གནས་སྤངས་བཟོ་ནིའི་དོན་ལུ་
- ༡ རྟོགས་གཞི་བཙུགས་དགོ།
 - ཁ ཚོར་བྱ་གས་བཙུགས་དགོ།
 - ག ཞི་ཐབས་བཙུགས་དགོ།
 - ང གནས་དུས་བཙུགས་དགོ།

༡༡. དགའ་བ་དང་ རྟོ་བ་ འཁྲུལ་བ་ཚུ་ལུ་
- ༡ སྤང་གི་ཉམས་ཟེར་སྒྲུབ་ཡིན།
 - ཁ སྤང་གི་བཟོ་བཀོད་ཟེར་སྒྲུབ་ཡིན།
 - ག སྤང་གི་གནས་སྤངས་ཟེར་སྒྲུབ་ཡིན།
 - ང སྤང་གི་རྟོགས་གཞི་ཟེར་སྒྲུབ་ཡིན།

ཇི་བ་གཉིས་པ། ལན་བྱང། [༡༠]

འོག་གི་ སྤང་གི་འབྱུང་རིམ་འདི་ ལྷག་ཞིན་མ་ལས་ ཇི་བ་ ༥ གི་ལན་བྲིས། [༡x༥=༡༠]

རང་གོ་ལ།

དབྱངས་སྒྲོན་གྱི་གདོང་འདི་ མོ་ར་གི་ལག་པ་གུ་ ག་དེ་སྟེ་ཉེ་ཉེ་སྟོན་ཅུག། ང་འདི་མི་མེན་པར་ མོ་གི་ལག་
 པར་བཙུགས་ཡོད་པའི་ ལག་བྱུབས་འདི་ཡིན་རུང་ དགའ་ནི་མས། ང་ལག་བྱུབས་འདི་ཡིན་པ་ཅིན་
 དབྱངས་སྒྲོན་གྱི་ དཀར་པོ་བལ་ལས་འཇམ་པའི་གདོང་འདི་གུ་ ང་གིས་རེག་པའི་བདེ་བ་ཅིག་ཡིན་རུང་
 འཕྲོ་བ་ཚུ་གས་ནི་མས།

དབྱངས་སྒྲོན།

ཨ་ལོ་སྒོ། མི་ཁྱད་བཟུམ་ཅིག་མཐོང་སྟེ་ ན་རེས་ང་ གཉིད་ཡང་ལོག་མི་ཚུགས་པས། བུ་རང་གོལ་ཁྱད་ག་ཏེ་
 ཡོད་གོ། ཡར་བཙུལ་ལྷན་ཁྱད་ཀྱིས་འབདན་ དེའི་སྤྱིང་དང་འདྲ་བའི་རང་གོལ་འདི་ མཐོང་དོ་ཡོད་པ་འོང།
 ལྷན་ཁྱད་ཀྱིས་ ཁོ་ལུ་ཁ་ཐེན་ཅིག་ འབག་གནང་མས། །རང་གོལ་དང་དབྱངས་སྒྲོན་གྱི་འཁྲབ་སྲུང་།

༡. གོང་གི་འབྱུང་རིམ་ནང་ལུ་ སྲུང་ཅེད་པ་དབྱངས་སྒྲོན་འདི་ སྟོན་ཐངས་ག་དེ་སྟེ་སྟོན་སྟོན་པ་འོང་
 བྱི་མས་?

༢. སྲུང་གི་འབྱུང་རིམ་འདི་དང་འཁྲིལ་བ་ཅིན་ རང་གོལ་གྱིས་ དབྱངས་སྒྲོན་ལུ་ ཆོར་སྤང་ག་ཅི་
 བཟུམ་ཅིག་བསྐྱེད་དེ་ སྟོན་སྟོན་པ་བཟུམ་འདུག་གོ་?

༩. འབྲུང་ཕྱི་མ་འདི་ནང་གི་ རྫོང་ཆེག་དང་འབྲེལ་ཕྱི་དུ་ སྤྱང་ཅེད་པ་གཉིས་ གཅིག་གིས་གཅིག་
 མཐོང་སྟེ་ཡོད་མེད་ བྱངས་དང་བཅས་བྲིས།

༡༠. རྫོང་ རང་གྲོལ་ཡིན་མ་བཟོ་སྟེ་ དབྱངས་སྒྲོན་གྱིས་སྒྲུབ་པའི་ རྫོང་གི་ལན་ཅིག་ ཆོག་གི་རྣམ་
 འགྲུར་བཙུགས་ཏེ་བྲིས།

4. འབྲུང་རིམ་འདི་ནང་གི་ སྤྱང་ཅེད་པའི་ རྫོང་ཆོག་བཀོད་ཐངས་དང་ སྤྱང་གཞན་སྦྱིར་བཏང་གི་ རྫོང་ཆོག་བཀོད་ཐངས་ཀྱི་བར་ན་ མ་འདྲ་བའི་ བྱད་པར་ག་ཅི་ར་འདུག་གོ?

དྲི་བ་གསུམ་པ། ལན་རིང། [10]

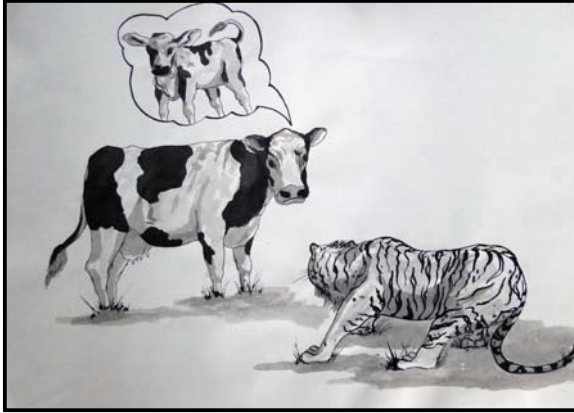
འོག་གི་ དྲི་བ་¹ ལས་² གདམ་ཁ་རྒྱབ་སྟེ་ ལན་བྲིས།

1. རྫོང་ཁའི་ཐོག་ལུ་བཀོད་ཡོད་པའི་སྤྱང་ཚུ་ རྒྱལ་སྤྱིའི་གནས་ཚད་ཀྱི་ སྤྱང་བཟུམ་འགོ་ཚུ་གས་ནིའི་ [10]

དོན་ལུ་ ལེགས་བཅོས་འབད་དགོཔ་ ག་ཅི་ར་ཡོདཔ་བཟུམ་ ཆོརལ་མས་གོ?

༡. འོག་གི་པར་ལུ་བལྟ་ནི་ནམ་ལས་ དེ་དང་འབྲེལ་བའི་སྤྱད་སྤྱང་ཀྱི་ཅིག་ འོག་གི་དྲི་ཤོག་གི་ས་ [༡༠]

སྒོང་ནང་ རྒྱུད་པ་སྟེ་ རྒྱུད་ར་གིས་བཟོ་སྟེ་བྲིས།



༡. གོང་གི་ཚ་ཆོག་གི་ བཅུད་དོན་འདི་

- ༧ དམུལ་བའི་སྤྱག་བསུལ་བཟོད་མ་ཚུགས་པའི་ དཔེ་སྟོན་མ་ཡིན་མས།
- ༨ དམུལ་བའི་སྤྱག་བསུལ་མུང་བཅད་མ་གྱི་ དཔེ་སྟོན་མ་ཡིན་མས།
- ༩ དམུལ་བའི་སྤྱག་བསུལ་མ་འདྲུ་ཚུ་གི་ དཔེ་སྟོན་མ་ཡིན་མས།
- ༡༠ དམུལ་བའི་སྤྱག་བསུལ་གྱི་ རྣམ་སྤྲིན་གྱི་སྐོར་ལ་སྟོན་མ་ཡིན་མས།

༢. འདོད་ཡོན་ལྷ་ལས་ གཞུགས་མཛེས་པ་ལུ་ སེམས་ཆགས་ཏེ་འགྲོ་བའི་སྐབས་ དེ་གི་གཉེན་པོ་

- ༧ དམན་པའི་འདུ་ཤེས་བསྐྱེད་དགོ།
- ༨ བྱམས་པའི་འདུ་ཤེས་བསྐྱེད་དགོ།
- ༩ མི་སྤྱག་པའི་འདུ་ཤེས་བསྐྱེད་དགོ།
- ༡༠ བཏང་སྟོམས་གྱི་འདུ་ཤེས་བསྐྱེད་དགོ།

༣. ཁ་ཅིག་ཁ་ནི་ཁབ་གྱི་མིག་ཅམ་ལ། །ཁྱོ་བ་རི་ཡི་གཏོས་ཅམ་བཀའ་པས་ཉེན། །མི་གཙང་གྱི་ནར་
འཕོར་བ་ཅུང་ཟད་ཀྱང་། །འཆལ་བའི་མཐུ་དང་ལྷན་པ་མ་ལགས་སོ།། ཟེར་བའི་ཆོགས་བཅད་
འདི་ནང་

- ༧ དམུལ་བའི་སྤྱག་བསུལ་གྱི་སྐོར་ལས་སྟོན་མ་ཡིན།
- ༨ ཡི་དུགས་གྱི་སྤྱག་བསུལ་གྱི་སྐོར་ལས་སྟོན་མ་ཡིན།
- ༩ དུད་འགོའི་སྤྱག་བསུལ་གྱི་སྐོར་ལས་སྟོན་མ་ཡིན།
- ༡༠ ལྷ་མིན་གྱི་སྤྱག་བསུལ་གྱི་སྐོར་ལས་སྟོན་མ་ཡིན།

༤. མཐོ་རིས་ལྷ་མིའི་བདེ་བ་ལུ་ སེམས་མ་ཆགས་པར་སྟོད་དགོ་མི་འདི་

- ༧ བདེ་བ་ཆུང་ནི་དེ་གིས་ཡིན།
- ༨ བདེ་བ་ཟད་དེ་འགྲོ་ནི་དེ་གིས་ཡིན།
- ༩ སེམས་རྣམ་གཡེང་གི་ཐོག་ལུ་ ལུས་ནི་དེ་གིས་ཡིན།
- ༡༠ སྤྱག་བསུལ་ཆེན་པོ་དེ་གིས་ཡིན།

དྲི་བ་གཉིས་པ།

ལན་ཐུང་།

[༡༠]

འོག་གི་ དྲི་བ་ ༥ ག་རའི་ ལན་བློས།

[༡X༥=༥༠]

༡. བདེན་པ་བཞི་ཟེར་མི་འདི་ ག་ཅི་ར་ཡིན་ན་ བློས།

༢. འཕགས་པའི་ལམ་ ཡན་ལག་བརྒྱད་ལས་ ཡང་དག་པའི་ལྟ་བ་དང་ ཡང་དག་པའི་འཆོ་བ།
ཟེར་མི་ ༡ གྱི་གོ་དོན་བློས།

3. བཤེས་སྤྲིངས་ནང་ གསུངས་ཏེ་ཡོད་མི་ཚུ་ ག་ར་ང་བཅས་ཀྱིས་ ལག་ལེན་འཐབ་ཚུགས་པར་ལཱ་
ཁག་འདུག། ཡིན་རུང་ རང་གིས་ བཤེས་སྤྲིངས་ལྟ་བུ་ལྟ་བུ་པའི་ བྱལ་ཡོད་པ་ཅིག་འབད་དགོ་
པ་ཅིན་ ག་ཅི་ར་འབད་དགོ་པ་འདུག་གོ?

“མགོ་འཕམ་གོས་ལ་སྒོ་བྱར་མེ་ཤོར་ན། །དེ་དག་ཕྱིར་བསྐྱོག་བགྱི་བ་བཏང་ནས་ཀྱང། །
ཡང་སྤྲིད་མེད་པར་བགྱི་སྤྲད་འབད་འཆལ་ཏེ། །དེ་བས་ཆེས་མཆོག་དགོས་པ་གཞན་མ་མཆིས། །”

4. དམ་པའི་ཆོས་ལུ་བརྩོན་དགོ་པའི་དཔེ་ གོང་གི་ཆོག་བཅད་ནང་འབད་བ་ཅིན་ མགྱུ་ཉོ་དང་གོ་ལ་
གྱ་ མེ་ཤོར་མི་ལས་ བཀག་ཐབས་འབད་དོ་བཟུམ་ལུ་ བཞག་ནུག། དེ་གི་ཆབ་ལུ་ རྩོད་ཀྱིས་
འོས་འབབ་ཡོད་པའི་ དཔེ་གསར་པ་ཅིག་བཀོད།

- ཡ. རང་ཚོས་རྩོམ་རིག་ནང་ལུ་ སེམས་འདི་ ཚོས་ཀྱི་རྩ་བ་དང་ སེམས་ཀྱི་མཐོ་བསམ་གཏང་ཐངས་
 ལུ་བརྟེན་ཏེ་ བྱད་པར་སྤོམ་བཟོ་ཚུགས་ཟེར་ཨིན་མས། བྱད་པར་ག་དེ་སྤེལ་ར་བཟོ་ཚུགས་ག་
 ཁྱོད་རའི་བསམ་འཆར་ཅིག་བཀོད།

འི་བ་གསུམ་པ།

ལན་རིང།

[༡༠]

སྒྲོབ་རིམ་^༡༣ པའི་ཚྷོང་ཁ་^༢ པའི་ངོ་བོ་དེ་འཆར་གཞིའི་རེ་ལུ་མིག་གི་དཔེ།

(၃၀၃၅)

[illegible]

དཔག་གསོ། བྱ་བ་ཤད་ནང་ཡོད་མི་ཨང་ཡིག་རྩེ་ སྐྱུ་གས་དང་ ཕྱི་ཁ་གི་རྩེ་དྲི་བའི་ཨང་ཨིན།

ELECTIVE RIGZHUNG

སྒྲོབ་རིམ་^{༡༩} པའི་ རིག་གཞུང་གདམ་ཁ་ཚུལ་གྱི་ ངི་བའི་བཀོད་རིམ།

སྒྱུགས་བསྐྱེམས་ ༡༠༠ |

ཐི་ནི་འོ་རྟལ་ཡུན་ རྩ་ཆོད་༥ །

ལྷག་ནིའི་དུས་ཡུན་ གླེང་མ་ ༡༥ །

ཕྱི་ལོ་ ༢༠༢༡ |

འོག་གི་བཀོད་རྒྱ་ཚུ་ ལེགས་ཤོམ་སྟེ་ ལྷག་སྟེ་བཟུ།

༡. ཉེ་མ་ སྐར་མ་༥༥ གི་རིང་ལུ་ ཡི་གུ་མ་བྱི་བར་བྱི་ཤོག་འདི་ ལེགས་ཤོམ་སྟེ་ལྷག།
 ༢. དྲི་བ་ལྷག་ཚར་ཞིན་མ་ལས་ ལན་བྱི་ནི་དོན་ལུ་ ཅུས་ལུན་ཚུ་ཆོད་པ་ ཐོབ།
 ༣. དྲི་ཤོག་འདི་ནང་ལུ་ དྲི་བ་སྟེ་ཚན་ གསུམ་ཡོད་མི་འདི་ཡང་ ཀ་ བར་ཚོས་བརྩེ་མ་ཐོང་། ཁ་ ལྷན་ཚུ་མ། ག་ མངོན་བརྗོད་
 ཡིན། སྟེ་ཚན་རེ་རེ་དེ་ནང་ལུ་ ལན་གདམ་ཁ་ཅན་དང་། ལན་བྱུང་། ལན་རིང་གི་དྲི་བ་ཚུ་བཀོད་དེ་ཡོད།
 ༤. སྟེ་ཚན་དང་འབྲེལ་བའི་ དྲི་བ་རེ་རེ་བཞིན་གྱི་ བཀོད་རྒྱ་ ཁ་གསལ་སྟེ་ བཀོད་ཡོད་མི་ཚུ་ ལེགས་ཤོམ་སྟེ་ལྷག་སྟེ་ ལན་མ་
 འཛིལ་བར་བྲིས། དེ་འབད་མ་ད་ དྲི་བ་གདམ་ཁ་ཡོད་མི་ཚུ་གི་ ལན་འཐེབ་བྲི་མི་ཚོགས། གལ་སྲིད་ལན་འཐེབ་བྲིས་ཡོད་པ་ཅིན་
 གོ་རིམ་བཞིན་ དབྱེ་ཞིབ་འབད་ཞིན་མ་ལས་ མཇུག་གི་ལན་འདི་ ཆ་མེད་གཏང་འོང་།
 ༥. དྲི་བ་སོ་སོ་དེ་སྐྱེགས་དེ་ཚུ་ ཁ་གསལ་སྟེ་ གུག་ཤད་ནང་ལུ་ བཀོད་དེ་ཡོད།
 ༦. ཆོས་རྒྱལ་མ་འགོ་བརྩམས་ཞིན་མ་ལས་ རྫོ་སྤྲེལ་ནི་དང་། དྲི་བ་བྱི་ནི་ འདྲ་བལྟས་རྒྱབ་ནི་ སར་རྒྱུར་འཕྱོ་ནི་ཚུ་ ཅུ་ལས་འབད་
 མི་ཚོགས།
 ༧. དྲི་བ་དེ་ལན་ཚུ་ མཐུགས་སུ་ཅིག་སྤྲེལ་བྱིས། དེ་འབད་མ་ད་ ཡིག་བཟོ་བཏོན་ཏེ་ ཉིང་སངས་ས་སྤྲེལ་བྱི་དགོ།
 ༨. དྲི་ཤོག་སོ་སོར་ ཁ་ལྷལ་གཏང་ནི་དང་ ཤོག་ལེབ་སྟེད་ནི་ཚུ་ འབད་མི་ཚོགས།
 ༩. དྲི་ཤོག་འདི་ བྱ་ཆེ་ཆེ་བཟོ་ནི་དོན་ལུ་ ཐིག་འཐེན་ནི་དང་ ཆོན་སྐྱེག་གིས་བྲི་ནི་ དེ་ལས་བཀོད་རྒྱ་དང་ མ་འབྲེལ་བའི་སར་
 དང་རོ་རྟགས་ཚུ་ ག་ནི་ཡང་བྲི་མི་ཚོགས།
 ༡༠. གལ་སྲིད་ ཅུས་ཆོད་མ་ཚང་མ་ལས་ དྲི་བ་དེ་ལན་ཚུ་ བྲིས་ཚར་བ་ཅིན་ ལན་ཤོག་ཁ་བསྐྱམས་ཞིན་མ་ལས་ ལུ་སིམ་སིམ་
 སྤྲེལ་བྱི་དགོ།
 ༡༡. ཆོས་རྒྱལ་མ་འགོ་བརྩམས་ བྱི་ཁར་འཐོན་མ་འཕྱོ་བའི་ཉེ་མ་ དྲི་བ་ཚུ་གི་ལན་ཚང་མ་ཚང་ཚུ་ བརྟག་ཞིབ་འབད་དེ་བཟླ།

དབྱེ་ཞིབ་པ་གིས་ ལྷགས་བཀོད་ཁྲུམ།

[illegible]

སྡེ་ཚན་ཀླ།

ནང་ཚུལ་བཅི་མཐོང་།

[༤༥]

ལམ་སྟོན། ནང་ཚུལ་དང་འབྲེལ་བ་ཡོད་པའི་ ཡིག་བྲིས་མ་ཚིག་ས་བཅད་ཚིག་ལྷུག་གང་རུང་ཚད་ལྡན་ཅིག་ བཙུགས་
ཞིན་མ་ལས་ འདི་ལུ་གཞི་བཞག་སྟེ་ ཇི་བ་རྩ་བ་ཀོད་དགོ། ཡིག་བྲིས་མང་ཉུང་གི་ཐད་ལུ་ ཇི་བ་བཟོ་མི་རང་གིས་ འོས་
འབབ་བལྟ་སྟེ་བཙུགས་དགོ།

འོག་གི་ཡིག་བྲིས་མ་འདི་ ལྷག་ཞིན་མ་ལས་ ཇི་བ་རྩ་བ་གི་ལན་བྲིས།

ཇི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[༡X༥=༥]

འོག་གི་ཇི་བ་རེ་ལུ་ལན་ ཀླ་ཁ་ག་ང་༤ ཡོད་ས་ལས་ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀླ་རྟགས་གུ་སྟོར་ཐིག་༠དེ་
བཟུམ་བཀལ།

ལམ་སྟོན། ལན་གདམ་ཁ་ཅན་གྱི་ཇི་བ་རེ་ལུ་ སྐྱགས་རེ་སྟེ་ ཇི་བ་༥ བཀོད་དགོ། ལན་གདམ་ཁ་ཅན་གྱི་ཇི་བ་ཀོད་པ་ད་
ལན་ངོ་མ་རྩ་གདམ་ཁ་རྒྱབ་པའི་སྐབས་ དབྱེ་བ་དཔྱད་བཙུག་ཞི་འདོན་ལུ་ ལན་ཞིན་དོ་བཟུམ་ཚོར་རྩ་གས་པའི་ ཡངས་
བྱེད་གྱི་གདམ་ཁ་རྩ་བ་ཀོད་དགོ།

ཇི་བ་གཉིས་པ།

ལན་བྱང་།

[༡༠]

འོག་གི་ ཇི་བ་རྩ་བ་གི་ ལན་བྲིས།

[༤X༥=༡༠]

ལམ་སྟོན། ལན་བྱང་གི་ཇི་བ་རེ་ལུ་ སྐྱགས་༩ རེ་འབད་མི་ མཐུན་སྒྲིག་དང་ ས་སྟོང་བསུབ་ནི་ལ་སོགས་པའི་ ཇི་བའི་
རིགས་མ་འདྲམ་༥ བཀོད་དགོ།

ཇི་བ་གསུམ་པ།

ལན་རིང་།

[༣༠]

འོག་གི་ ཇི་བ་༤ ལས་༩ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་ཚིག་འབྲུ་༩༠༠ འི་ནང་འཁོད་བྲིས།

[༡༠X༩=༩༠]

ལམ་སྟོན། ཇི་བ་རེ་ལུ་ སྐྱགས་༡༠ རེ་འབད་མི་ལན་རིང་གི་ཇི་བ་༤ བཀོད་དགོ།

སྡེ་ཚན་ལ།

སྟན་ངག།

[༤༥]

འོག་གི་ཡིག་བྲིས་མ་འདི་ ལྷག་ཞིན་མ་ལས་ ཇི་བ་རྩ་བ་གི་ལན་བྲིས།

འབྲེལ་བ་ཡོད་པའི་ ཡིག་བྲིས་མ་ཚིག་ས་བཅད་ཚིག་ལྷུག་གང་རུང་ཚད་ལྡན་ཅིག་ བཙུགས་ཞིན་མ་ལས་ འདི་ལུ་གཞི་
བཞག་སྟེ་ ཇི་བ་རྩ་བ་ཀོད་དགོ། ཡིག་བྲིས་མང་ཉུང་གི་ཐད་ལུ་ ཇི་བ་བཟོ་མི་རང་གིས་ འོས་འབབ་བལྟ་སྟེ་བཙུགས་དགོ།

ཇི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[༡X༥=༥]

འོག་གི་ཇི་བ་རེ་ལུ་ལན་ ཀླ་ཁ་ག་ང་༤ ཡོད་ས་ལས་ལན་ངོ་མ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀླ་རྟགས་གུ་སྟོར་ཐིག་༠དེ་
བཟུམ་བཀལ།

ལམ་སྟོན། ལན་གདམ་ཁ་ཅན་གྱི་རི་བ་རེ་ལུ་ སྐྱགས་རེ་སྟེ་ རི་བ་^༥ བཀོད་དགོ། ལན་གདམ་ཁ་ཅན་གྱི་རི་བ་བཀོད་པ་ད་
ལན་ངོམ་ཚུ་གདམ་ཁ་རྒྱབ་པའི་སྐབས་ དབྱེ་བ་དཔྱད་བཅུག་ནིའི་དོན་ལུ་ལན་ ཡིན་དོ་བཟུམ་ཚེར་ཚུགས་པའི་ ཡངས་བྱེད་
ཀྱི་གདམ་ཁ་ཚུ་བཀོད་དགོ།

རི་བ་གཉིས་པ།

ལན་བྱང།

[༡༠]

འོག་གི་རི་བ་ཚུ་གི་ ལན་བྲིས།

[༡X4=༡༠]

ལམ་སྟོན། ལན་བྱང་གི་རི་བ་རེ་ལུ་ སྐྱགས་^༩ རེ་འབད་མི་ མཐུན་སྒྲིག་དང་ ས་སྟོང་བསུབ་ནི་ལ་སོགས་པའི་ རི་བའི་
རིགས་མ་འདྲཱ་^༥ བཀོད་དགོ།

རི་བ་གསུམ་པ།

ལན་རིང།

[༡༠]

འོག་གི་ རི་བ་^༩ ལས་^༩ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་ཚིག་འབྲུ་^{༩༠༠} འི་ནང་འཁོད་བྲིས།

[༡0X9=90]

ལམ་སྟོན། རི་བ་རེ་ལུ་ སྐྱགས་^{༡༠} རེ་འབད་མི་ལན་རིང་གི་རི་བ་^༩ བཀོད་དགོ།

སྟེ་ཚན་ག།

མངོན་བརྗོད།

[༡༠]

འོག་གི་ཡིག་བྲིས་མ་འདི་ ལྷག་ཞེན་མ་ལས་ རི་བ་ཚུ་གི་ལན་བྲིས།

འབྲེལ་བ་ཡོད་པའི་ ཡིག་བྲིས་མ་ཚིགས་བཅད་ཚིག་ལྷག་གང་རུང་ཚད་ལྷན་ཅིག་ བཅུགས་ཞེན་མ་ལས་ འདི་ལུ་གཞི་
བཞག་སྟེ་རི་བ་ཚུ་བཀོད་དགོ། ཡིག་བྲིས་མ་མང་ཉུང་གི་ཐད་ལུ་ རི་བ་བཟོ་མི་རང་གིས་ འོས་འབབ་བལྟ་སྟེ་བཅུགས་དགོ།

རི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[༡X4=4]

འོག་གི་རི་བ་རེ་ལུ་ལན་ ཀ་ཁ་ག་ང་^༤ ཡོད་ས་ལས་ལན་ངོམ་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་རྟགས་གུ་སྟོར་ཐིག་༠དེ་
བཟུམ་བཀལ།

ལམ་སྟོན། ལན་གདམ་ཁ་ཅན་གྱི་རི་བ་རེ་ལུ་ སྐྱགས་རེ་སྟེ་ རི་བ་^༥ བཀོད་དགོ། ལན་གདམ་ཁ་ཅན་གྱི་རི་བ་བཀོད་པ་ད་
ལན་ངོམ་ཚུ་གདམ་ཁ་རྒྱབ་པའི་སྐབས་ དབྱེ་བ་དཔྱད་བཅུག་ནིའི་དོན་ལུ་ ལན་ཡིན་དོ་བཟུམ་ཚེར་ཚུགས་པའི་ ཡངས་བྱེད་
ཀྱི་གདམ་ཁ་ཚུ་བཀོད་དགོ།

རི་བ་གཉིས་པ།

ལན་བྱང།

[4]

འོག་གི་ རི་བ་ཚུ་གི་ ལན་བྲིས།

[1X4=4]

ལམ་སྟོན། ལན་བྱང་གི་རི་བ་རེ་ལུ་ སྐྱགས་⁹ རེ་འབད་མི་ མཐུན་སྒྲིག་དང་ ས་སྟོང་བསུབ་ནི་ལ་སོགས་པའི་ རི་བའི་
རིགས་མ་འདྲཱ་⁴ བཀོད་དགོ།

དྲི་བ་གསུམ་པ།

ལན་རིང།

[ཡ]

འོག་གི་ དྲི་བ་^༡ ལས་^༡ གདམ་ཁ་རྒྱབ་སྟེ་ ལན་ཚིག་འབྲུ་^{༡༤༠} འེན་འཁོད་བྲིས།

[ཡ]

ལམ་སྟོན། དྲི་བ་རེ་ལུ་ སྐྱགས་^ཡ རེ་འབད་མི་ལན་རིང་གི་དྲི་བ་^༡ བཀོད་དགོ།

བཞིན་ཆེ།

སྒྲིབ་རིམ་ ༡༩ པའི་ རིག་གཞུང་གདམ་ཁའོས་ཚན་གྱི་ རི་བའི་དབུ་

སྒྲིག་པ་བསྐྱོམས་ ༡༠༠ |

བྱི་ཞིའི་དུས་ལུན་ རྒྱ་ཚོད་ ༣ |

སྒྲིག་ཞིའི་དུས་ལུན་ སྐར་མ་ ༡༥ |

སྤྱི་ལོ་ ༢༠༡༡ |

འོག་གི་བཀོད་རྒྱ་ཚུ་ ལེགས་ཤོམ་སྟེ་ ལྷག་སྟེ་བཟུ།

༡. ཉེ་མ་ སྐར་མ་ ༡༥ གི་རིང་ལུ་ ཡི་གུ་མ་བྱི་བར་བྱི་ཤོག་འདི་ ལེགས་ཤོམ་སྟེ་ལྷག།
༢. རི་བ་ལྷག་ཚར་ཞིན་མ་ལས་ ལན་བྱི་ཞིའི་དོན་ལུ་ དུས་ལུན་རྒྱ་ཚོད་ ༣ ཐོབ།
༣. རི་ཤོག་འདི་ནང་ལུ་ རི་བ་སྟེ་ཚན་ གསུམ་ཡོད་མི་འདི་ཡང་ ཀ་ ནང་ཚོས་བཅི་མཐོང་། ཁ་ ཚིག་རྒྱན་ ག་ མངོན་བཟོང་ ཞིན་། སྟེ་ཚན་རེ་རེའི་ནང་ལུ་ ལན་གདམ་ཁ་ཅན་དང་། ལན་བྱང་། ལན་རིང་གི་རི་བ་ཚུ་བཀོད་དེ་ཡོད།
༤. སྟེ་ཚན་དང་འབྲེལ་བའི་ རི་བ་རེ་རེ་བཞིན་གྱི་ བཀོད་རྒྱ་ ཁ་གསལ་སྟེ་ བཀོད་ཡོད་མི་ཚུ་ ལེགས་ཤོམ་སྟེ་ལྷག་སྟེ་ ལན་མ་ འཛོལ་བར་བྱིས། དེ་འབད་ཕ་ད་ རི་བ་གདམ་ཁ་ཡོད་མི་ཚུ་གི་ ལན་འབྲེལ་བྱི་མི་ཚོགས། གལ་སྲིད་ལན་འབྲེལ་བྱིས་ཡོད་པ་ཅིན་ གོ་རིམ་བཞིན་ དབྱེ་ཞིབ་འབད་ཞིན་མ་ལས་ མཐུག་གི་ལན་འདི་ ཆ་མེད་གཏང་འོང་།
༥. རི་བ་སོ་སོའི་སྒྲིག་པ་དེ་ཚུ་ ཁ་གསལ་སྟེ་ གྲག་ཤད་ནང་ལུ་ བཀོད་དེ་ཡོད།
༦. ཚོས་རྒྱགས་འགོ་བཅུགས་ཞིན་མ་ལས་ རྒྱོ་སྒྲིབ་ནི་དང་། རི་བ་བྱི་ནི་ འད་བཟུས་རྒྱབ་ནི་ ཕར་རྒྱར་འབྱོ་ནི་ཚུ་ ཅུ་ལས་ འབད་མི་ཚོགས།
༧. རི་བའི་ལན་ཚུ་ མཐོག་གསུ་ཅིག་སྟེ་བྱིས། དེ་འབད་ཕ་ད་ ཡིག་བཟོ་བཏོན་ཏེ་ ཉིང་སངས་ས་སྟེ་ བྱི་དགོ།
༨. རི་ཤོག་སོ་སོར་ ཁ་ལུལ་གཏང་ནི་དང་ ཤོག་ལེབ་སྟོད་ནི་ཚུ་ འབད་མི་ཚོགས།
༩. རི་ཤོག་འདི་ བྱ་ཆེ་ཆེ་བཟོ་ནིའི་དོན་ལུ་ ཐིག་འབྲེལ་ནི་དང་ ཚོན་སྒྲིག་གིས་བྱི་ནི་ དེ་ལས་བཀོད་རྒྱ་དང་ མ་འབྲེལ་བའི་ཕར་ དང་རོན་གསུ་ཚུ་ ག་ནི་ཡང་བྱི་མི་ཚོགས།
༡༠. གལ་སྲིད་ དུས་ཚོད་མ་ཚང་མ་ལས་ རི་བའི་ལན་ཚུ་ བྱིས་ཚར་བ་ཅིན་ ལན་ཤོག་ཁ་བསྐྱམས་ཞིན་མ་ལས་ ལུ་སིམ་སིམ་སྟེ་ སྟོན་དགོ།
༡༡. ཚོས་རྒྱགས་ཁང་ནང་ལས་ བྱི་ཁར་འཐོན་མ་འབྱོ་བའི་ཉེ་མ་ རི་བ་ཚུ་གི་ལན་ཚར་མ་ཚང་ཚུ་ བཟུག་ཞིབ་འབད་དེ་བཟུ།

དབྱེ་ཞིབ་པ་གིས་སྒྲིག་པ་བཀོད་ཁམ།

དོན་ཚན།	ནང་ཚོས་བཅི་མཐོང་།			སྟོན་དག།			མངོན་བཟོང་།			དབྱེ་ཞིབ་པའི་རྒྱགས།
རི་བ། →	དང་པ། ༥	གཉིས་པ། ༡༠	གསུམ་པ། ༣༠	བཞི་པ། ༥	ལྔ་པ། ༡༠	དྲུག་པ། ༣༠ ༣༠	བདུན་པ། ༥	རྒྱུད་པ། ༣༠ ༣	དགུ་པ། ༧	
སྒྲིག་པ། →										

༼ཕྱི་ཚན་ ཀ་པ༽ ནང་ཚས་བཅི་མཐོང། སྒྲགས་༥༥ །༽

འོག་གི་ གྲི་བ་རྩ་གི་ལན་ བཀོད་རྒྱ་ལྟར་བྱ་བྱིས།

གྲི་བ་དང་པ།

ལན་གདམ་ཁ་ཅན།

[༡x༥=༥]

འོག་གི་གྲི་བ་རེ་ལ་ ལན་བཞི་རེ་ཡོད་པ་ལས་ ལན་ངོ་མ་གང་ཡིན་པ་དེ་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་ཉགས་གུ་སྒྲོར་ཐིག་ འོ
དེ་བརྒྱུ་མ་བཀལ།

༡. མཚན་བཏགས་རྩལ་ལ་ དཔེ་འོ་སྒྲོ་ནས་བཏགས་པ་དང་ བྱེད་ལས་ཀྱི་སྒྲོ་ནས་བཏགས་པ་ལ་སོགས་པ་ མི་འདྲ་
བ་ནམ་པ་བརྒྱད་ཡོད་པའི་ནང་ནས་ བསྟན་བཅོས་འདི་ཡི་མཚན་ གང་གི་སྒྲོ་ནས་བཏགས་པ་ཡིན་?
ཀ དཔེ་འོ་སྒྲོ་ནས་བཏགས་པ་ཡིན།
ཁ བྱེད་ལས་ཀྱི་སྒྲོ་ནས་བཏགས་པ་ཡིན།
ག བརྗོད་བྱ་དོན་གྱི་སྒྲོ་ནས་བཏགས་པ་ཡིན།
ང རྗོད་བྱེད་ཆིག་གི་སྒྲོ་ནས་བཏགས་པ་ཡིན།
༢. ཆོས་དང་འཇིག་རྟེན་གྱི་བྱ་བ་ ག་ཅི་ར་འབད་རུང་ བཟོད་པ་བསྒྲོམ་ནི་འདི་ ག་ནི་བ་གལ་ཆེན་ཨིན་པས། དེ་ལྟ་
བྱའི་བཟོད་པ་འདི་འདི་ མི་མཐུན་ཚུགས་ནི་
ཀ ལེ་ལོ་ཡིན།
ཁ ཁོང་ཁོ་ཡིན།
ག བག་མེད་ཡིན།
ང གཡེང་བ་ཡིན།
༣. སྤྱོད་འཇུག་གི་གཞུང་འདི་ལ་ སྒྲོ་བ་སྒྲོང་བྱས་ཏེ་དོན་ཏ་གོ་ནས་ ཕྱིན་ཆད་ཁྱོད་ཀྱིས་ བྱང་སེམས་ཀྱི་བསྐྱབ་པ་
ནམས་ཇི་ལྟར་བསྐྱང་རྒྱ་ཡིན་?
ཀ འདོད་ཡོན་ལས་སེམས་བསྐྱང་རྒྱ་ཡིན།
ཁ སེམས་མ་གཡེངས་པར་གནས་རྒྱ་ཡིན།
ག སེམས་ཉོན་མོངས་པ་དག་ལས་བསྐྱང་རྒྱ་ཡིན།
ང རང་དོན་སྤངས་ནས་གཞན་དོན་ཁོ་ན་བསྐྱབ་རྒྱ་ཡིན།

༤. བླ་འོ་མེ་གཞན་སེམས་ལ་བཞག་ཐུབ་པའི་དྲན་པ་དང་ ལུས་སེམས་ལ་ཡང་ཡང་ དབྱེ་བ་དཔུང་ཐུབ་པའི་
ཤེས་བཞིན་གཉིས་ཀྱི་ཁྱད་པར་ནི་
ཀ མི་བརྗེད་པ་དང་བརྟགས་པའི་ཁྱད་པར་ཡོད།
ཁ མཁས་པ་དང་སྐྱབ་པའི་ཁྱད་པར་ཡོད།
ག དུག་པ་དང་རྟོགས་པའི་ཁྱད་པར་ཡོད།
ང བསྐྱབ་པ་དང་སྐྱབ་པའི་ཁྱད་པར་ཡོད།
༥. སྤྱོད་འཇུག་གི་གཞུང་འདི་ལ་ སྤྱོད་སྤྱོད་བྱས་དགོས་པའི་ཁྱད་པར་ནི་ གཙོ་བོ་བྱང་ཆུབ་སེམས་དཔའི་
ཀ ལམ་ལ་འཇུག་པའི་དོན་དུ་ཡིན།
ཁ སྤྱོད་པར་འཇུག་པའི་དོན་དུ་ཡིན།
ག ཐེག་པར་འཇུག་པའི་དོན་དུ་ཡིན།
ང དེགས་ལ་འཇུག་པའི་དོན་དུ་ཡིན།

དབྱི་བ་གཉིས་པ།

ལན་ཐུང་།

[༢༥=༡༠]

འོག་གི་ཡིག་བྲིས་མ་འདི་ ལྷག་ཞིན་མ་ལས་ རི་བ་ཚུ་གི་ ལན་བྲིས།

“བསྐྱབ་པ་བསྐྱབ་པར་འདོད་པ་ཡིས། །རབ་ཏུ་བསྐྱེམས་ནས་སེམས་བསྐྱང་སྟེ།
སེམས་འདི་བསྐྱང་བར་མ་བྱས་ན། །བསྐྱབ་པ་བསྐྱང་བར་ཡོང་མི་རུས།།

ཤེས་བཞིན་མེད་པའི་ཚོམ་རྒྱན་དག །དྲན་པ་ཉམས་པའི་རྗེས་འབྲངས་པས།།
བསོད་ནམས་དག་ནི་ཉེར་བསགས་ཀྱང་། །རྒྱུ་པོས་འཕྲོག་བཞིན་ངན་འགྲོར་འགྲོ།།

ཐོས་དང་དད་པ་ཅན་དང་ནི། །བཙོན་པ་ལྟར་ལེན་དུ་མ་ཡང་། །
ཤེས་བཞིན་མེད་པའི་སྦྱོན་ཆག་པས། །ལྷུང་བའི་རྟོག་དང་བཅས་པར་འཁྱུར། །

ཞེ་སྤང་ལྟ་བུའི་སྤྲིག་པ་མེད། །བཟོད་པ་ལྟ་བུའི་དཀའ་ཐུབ་མེད།།
དེ་བས་བཟོད་ལ་ནན་ཏན་དུ། །སྤྲོ་ཆོགས་ཚུལ་གྱིས་བསྐྱོམ་པར་བྱ།།”

༡. རང་གི་སེམས་འདི་ ཉོན་མོངས་པ་ལས་ མ་བསྐྱང་ན་སྦྱོན་ཅི་ཡོད? གཉིས་བྲིས།

[༢]

༡. གོང་གི་ཡིག་བྲིས་མ་དེ་ ལྷག་ཞེན་ལས་ འོག་གི་མིང་ཚིག་བཞི་པོའི་ གོ་དོན་བྲིས། [༡]

༡- ཆོས་རྒྱལ། ༢- ཡོང་མི་རྒྱས། ༣- དཀའ་ཐུབ། ༤- སྦྱོར་ཆག།	

༢. འོག་གི་ སར་ཕྱིན་དྲུག་ལས་བཞི་གི་མིང་ཚུ་ ས་སྟོང་ནང་འོས་འབབ་དང་བསྟན་ཏེ་ བཅུགས། [༡]

ཚུལ་ཁྲིམས། བརྩོན་འགྲུས། བསམ་གཏན། སྦྱིན་པ། ཤེས་རབ། བཟོད་པ།

༡- དགེ་བའི་ལས་ལ་སྦྱོར་བ་ནི་.....ཡིན། ༢- རང་གི་ཁྲོ་བའི་སེམས་བཙོན་པ་ནི་.....ཡིན། ༣- གཞན་ལ་གཞོད་སེམས་སྦྱོང་བ་ནི་.....ཡིན། ༤- གཏོང་སེམས་གཏོང་བ་དང་བཙས་པ་ནི་.....ཡིན།	
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༣. འོག་གི་ སྡེ་ཚན་ཀ་དང་ཁ་གཉིས་ མཐུན་སྦྲིག་འབད་དེ་ ཀ་རྟགས་ས་སྟོང་ནང་ འཕྲོ་མཐུད་དེ་བྲིས། [༡]

(ཀ)		(ཁ)	
༡- ཆོས་ཕྱིར་དཀའ་སྤྱད་ཀྱི་བཟོད་པ་ནི།		ཀ) དགེ་བའི་ལྷ་ལུ་མཐོ་བསམ་གཏང་ནི་འདི་ཡིན།	
༢- ཆོག་པར་མི་འཛིན་པའི་བརྩོན་འགྲུས་ནི།		ཁ) ཆོས་སྦྱབ་ཆེད་དཀའ་ཆོགས་ཁྱད་ཏུ་བསད་པ་འདི་ཡིན།	
༣- སྦྱོར་བ་ལག་ལེན་གྱི་བརྩོན་འགྲུས་ནི།		ག) དགེ་བའི་ལྷ་འབད་སར་ལྟ་མོ་བཟླ་ནི་འདི་ཡིན།	
༤- བསམ་པ་བགོ་ཆའི་བརྩོན་འགྲུས་ནི།		ང) དགེ་བའི་ལྷ་ལུ་དངོས་སུ་འཇུག་ནི་འདི་ཡིན།	
		ཅ) དགེ་བའི་ལྷ་ཚུ་ལུ་ཚད་མ་བཟུང་མི་འདི་ཡིན།	
ལན།	(ཀ)	(ཁ)	
༡- ཆོས་ཕྱིར་དཀའ་སྤྱད་ཀྱི་བཟོད་པ་ནི།			
༢- ཆོག་པར་མི་འཛིན་པའི་བརྩོན་འགྲུས་ནི།			
༣- སྦྱོར་བ་ལག་ལེན་གྱི་བརྩོན་འགྲུས་ནི།			
༤- བསམ་པ་བགོ་ཆའི་བརྩོན་འགྲུས་ནི།			

4. ཤེས་ཡོན་སྤྱད་པའི་སྐབས་ རིག་པ་ཡོད་མི་དང་ བཙོན་འགྲུས་ཡོད་མི་གཉིས་ལ་ བྱད་པར་ཇི་ལྟར་ཡོད་? [2]

རྩི་བ་གསུམ་པ། ལན་རིང། [30]

འོག་གི་ རྩི་བ་ ༤ ལས་ 3 གདམ་ཁ་རྒྱབ་སྟེ་ ལན་ཚིག་འབྲུ་ 400 འེན་པ་འཁོད་གིས།

1. མི་ལེ་ག་ཅིག་ འཛོམས་པའི་སྤྱུག་ལུ་ མི་གཅིག་གིས་ བྱོད་ལུ་དོན་མེད་ཀྱི་ ཉན་བདགས་འཚོལ་འོང་པ་ཅིན་ [10]
དེ་ལུ་བྱོད་ཀྱིས་ གདོང་ལེན་ག་དེ་སྟེ་ར་ འབད་འོང་གོ?

2. བྱོད་ཀྱིས་ རིག་གཞུང་གི་ཚོས་ཚན་འདི་ གདམ་ཁ་རྒྱབ་སྟེ་ བྱོད་རའི་རྒྱུད་ལུ་ ཁེ་ཕན་ག་དེ་སྟེ་ར་ བྱུང་ཡོད་པ་ [10]
ཨིན་ན? དེ་འོ་སྐོར་ལས་ ཚིག་འབྲུ་ 400 གི་ནང་ བྱངས་བཀལ་ཏེ་གིས།

3. དགེ་བ་དང་སྤྲིག་པ་རྩུ་ག་ར་ སེམས་ལས་བྱུང་མ་ཨིན་ ཟེར་མི་འདི་ལུ་ བྱོད་ཀྱིས་ ཡིད་ཆེས་ཡོད་ག་? ག་ཅི་ [10]
སྒྲེ་? ཚིག་འབྲུ་ 400 ནང་ བྱངས་བཀལ།

4. སྤྱོད་འཇུག་གི་གཞུང་འདི་ རྒྱལ་ཡོངས་དགའ་སྦྱོང་དཔལ་འཛོམས་ཀྱི་ལྟ་བ་ ཀ་ཆེན་བཞི་དང་ འབྲེལ་བ་ཡོད་ [10]
ཟེར་མི་ལུ་ ཆ་བཞག་རྩུགས་ག་? ག་ཅི་སྟེ། ཚིག་འབྲུ་ 400 ནང་བྱངས་བཀལ།

༼ཕྱི་ཚན་ ལ་པ༽ ལྷན་ངག་ ལྷགས་ ༣༥ །༽

འོག་གི་ གྲིབ་ཚུ་གི་ལན་ བཀོད་རྒྱ་ལྟར་དུ་བྲིས།

གྲིབ་དང་པ།

ལན་གདམ་ཁ་ཙན།

[༡x༥=༥]

འོག་གི་གྲིབ་རེ་ལ་ ལན་བཞི་རེ་ཡོད་པ་ལས་ ལན་ངོ་མ་གང་ཡིན་པ་དེ་ གདམ་ཁ་རྒྱབ་སྟེ་ ཀ་ཉླགས་གྲུ་སྒྲོར་ཐིག་ འོ།
དེ་བརྒྱུ་མ་བཀལ།

“དེ་བས་གཞན་དག་ཚར་གཙོད་རྗེས་སུ་བརྒྱུད་ཕྱིར་དང་། བདག་ཉིད་ཀྱན་མཁུན་བྱ་ཕྱིར་དེ་ལ་དེར་བཙོན་བྱ།”
ཞེས་པའི་སྒྲུབས་

༡. ཚིག་དང་དོན་ ཚར་གཙོད་པའི་ རིག་གནས་ནི་

ཀ སྒྲ་རིག་པ། ཚད་མ་རིག་པ། གཉིས་ཡིན།

ཁ སྒྲ་རིག་པ། ཚད་མ་རིག་པ། བཟོ་རིག་པ། གསུམ་ཡིན།

ག སྒྲ་རིག་པ། ཚད་མ་རིག་པ། བཟོ་རིག་པ། གསོ་བ་རིག་པ། བཞི་ཡིན།

ང སྒྲ་རིག་པ། ཚད་མ་རིག་པ། བཟོ་རིག་པ། གསོ་བ་རིག་པ། ནང་དོན་རིག་པ། ལྟ་ཡིན།

༢. “ཐ་དད་སྤང་མིན་གྱུར་པ་ཡི། དཔེ་ཉིད་དག་ནི་གཟུགས་ཙན་འདོད།” ཅེས་པའི་རྒྱན་འདི་ལ་ དབྱེ་བ་

ཀ ༡༩ ཡོད།

ཁ ༣༠ ཡོད།

ག ༣༩ ཡོད།

ང ༣༥ ཡོད།

༣. ལྷན་ངག་ ཅེས་པའི་དོན་ནི་ རྣ་བར་སྤྲོད་ཞིང་

ཀ གཞན་དབང་འཕྲོག་པའི་ངག་ཡིན།

ཁ ལྷན་དབང་འཕྲོག་པའི་ངག་ཡིན།

ག ཡིད་དབང་འཕྲོག་པའི་ངག་ཡིན།

ང ཚིག་དབང་འཕྲོག་པའི་ངག་ཡིན།

༤. རྒྱ་མཚན་གྱི་སྒོ་ནས་ དཔེ་དང་དཔེ་ཅན་ འདྲ་བར་སྟོན་པའི་དཔེར་བཞིན་ནི།
- ཀ རྒྱུ་ལུས་མཚར་སྟག་ངོམས་པས་བསྐྱར་འགྲན།
- ཁ གསུང་དབྱངས་སྟན་པས་སྒྲིབ་པའི་རྩེས་སུ་འགྲོ།
- ག ལུས་པོ་འབྱུག་ཅིང་ལྷེས་པས་བྱང་བར་འགྲན།
- ང སྟན་བྱང་ཀུན་ཏུ་འབྱུལ་བས་སྟོན་གིང་འདྲ།
༥. མ་བསྐྱས་པའི་གཟུགས་ཅན་དང་ བསྐྱས་པའི་གཟུགས་ཅན་གྱི་ཁྱད་པར་ནི། དཔེ་དང་དཔེ་ཅན་གྱི་བར་ན་
- ཀ བྱེད་སྒྲ་ཡོད་མེད་ཀྱི་ཁྱད་པར་ཡོད།
- ཁ འབྲེལ་སྒྲ་ཡོད་མེད་ཀྱི་ཁྱད་པར་ཡོད།
- ག བདག་སྒྲ་ཡོད་མེད་ཀྱི་ཁྱད་པར་ཡོད།
- ང དགག་སྒྲ་ཡོད་མེད་ཀྱི་ཁྱད་པར་ཡོད།

ཁ) འོག་གི་ རྩི་བ་ཚུ་གི་ ལན་གྱིས།

[༡༠]

༡. འོག་གི་ ཕ་ཚིག་མ་ཚང་མི་ཚུ་གི་ ས་སྟོང་སྟབས།

[༩]

ཕུ་ལོ་མ་དགས་.....དང། རྒྱུད་ཀྱིས་.....མེལ་ཆེ་བྱེད། །

དེ་ཡིས་.....ལྷ་མིན་དང། རྒྱུད་ཀྱིས་.....བདག་པོ་འཛོམས། །

༢. འོག་གི་ ཚིགས་བཅད་དེ་ རྩིང་ཁའི་ནང་བསྐྱར་ཏེ་ ཚིགས་བཅད་ཐོག་གིས།

[༩]

མཛེས་མ་རྒྱུད་ཀྱི་དཔལ་ངོམས་ཞལ་རས་དེ། སྟོན་སྒྲ་གསར་པའི་དཀྱིལ་ལས་ཕྱང་བ་བཞིན།

གནག་ཅིང་སྐྱུ་ལྷན་སྐྱུ་བྱང་གཡོ་བ་ནི། ལྷན་ལ་རྒྱས་པའི་འདབ་ལས་སྒྲངས་པ་འདྲ།

༤. འོག་གི་ ཕ་ཚིག་གི་གོ་དོན་ལེན་ཏེ་ རྒྱན་གང་ཡིན་ནམ་ངོས་འཛིན་ཐོག་ ས་སྟོང་ནང་མིང་བཀོད།

[༩]

འདི་ནི་བཞིན་ཉིད་པ་སྒྲ་མིན། འདི་དག་བྱང་བ་མ་ཡིན་མིག །

ཅེས་པ་རྣམ་གསལ་མཚུངས་པ་ལས། རྟེན་གྱི་.....། །

༤. འོག་གི་དཔེ་བཞེད་ནང་གི་ དཔེ་དང་དཔེ་ཅན་གཉིས་ སོ་སོར་བརྟན་ཏེ་བྲིས། [༡]

ཁྱེད་སྤྱི་པ་སྤྱི་སྤྱོད་པོ། །འགྱུར་བ་མེད་པར་བཞུགས་གནང། །

ངའི་སེམས་གཡུ་སྤྱང་འཁོར་ས། །ཁྱེད་ལས་ལྷག་པ་མེད་དོ། །

	དཔེ།	དཔེ་ཅན།	

དྲི་བ་ཚན་གཉིས་པ། [༡༠]

༡. འོག་གི་ ཅུ་ཚིག་ཤོ་ལོ་ཀ་གཉིས་ཀྱི་འགྲེལ་བཤད་ རྫོང་ཁད་ནང་བྲིས། [༡༠]

ཀ) རྒྱལ་པོ་རྣམས་ནི་སྤྱོད་ཀྱི་རྒྱུ་ཡིན། ད་ལྟ་ཁྱེད་ཀྱི་འཕྲིན་གཅིག་ཀྱང་མེད།
ཡོངས་འདུ་དག་ལ་རྒྱུ་འབྱུང་ནི། གཉིས་པ་ངེས་པར་ཡོད་མ་ཡིན།

ཁ) འདི་ནི་གཤོང་མིན་འདི་པ་སྤྱོད། དེ་དག་མིག་མིན་འདི་བྱང་བའོ།
འདི་རྣམས་གེ་སར་ཉིད་ཡིན་ཏེ། ཁྱེད་ཀྱི་སོ་ཡི་འོད་ཟེར་མིན།

༢. འོག་ལུ་བཀོད་དེ་ཡོད་པའི་ དཔེ་དང་དཔེ་ཅན་ ཁྱད་གཞི་དང་ཁྱད་ཚེས་ཚུ་ ལག་ལེན་འཐབ་སྟེ་ རྒྱུ་དཔེ་དང་ བསྐྱེད་པའི་གཞུགས་རྒྱན་གྱི་ ཚུམ་རེ་རེ་བྲིས། [༡༠]

རྒྱུ་དཔེ།

དཔེ་ཅན།

དཔེ་ཅན་གྱི་ཁྱད་ཚེས།

དཔེ།

དཔེ་ཅན་གྱི་ཁྱད་ཚེས།

མཛེས་མའི་གཞུགས། རྒྱ་དབྱངས། ལ་ཆུ།

ལྷེ་མ་ཤིང་ལྷག་པ། རྒྱ་སྟན་པ། ལ་ཆུ་མངར་བ།

པ་སྤྱི་སྤྱོད་པོ། རྒྱ་བ། དཔྱིད་ཀྱི་ཕོ་ཉ། རྒྱ་ཅི།

ལྷེ་མ་ཤིང་ལྷག་པ། རྒྱ་སྟན་པ། རྒྱ་ཅི་མངར་བ།

བསྐྱེད་པའི་གཞུགས་ཅན།

དཔེ།

དཔེ་ཅན།

དཔེ་ཅན་གྱི་ཁྱད་གཞི།

པ་སྤྱི་སྤྱོད་པོ།

མཛེས་མའི་གཞུགས།

མེ་རྟོག། དྲི།

དཔེ་ཅན་གྱི་བྱང་གཞི། བཞིན་རས། སྤྱིང་གཏམ།
 དཔེའི་བྱང་ཆོས། མེ་དྲོག་མཚར་བ། གྲི་བཟང་བ།
 དཔེ་ཅན་གྱི་བྱང་ཆོས།

༣. འོག་གི་ ལྷག་ཅོམ་དེ་ལྷག་ཞེན་མ་ལས་ འོག་ཐིག་འཐེན་མེའི་དཔེ་ཚུ་ ལག་ལེན་འཐབ་སྟེ་ མཐའ་དག་ [༡༠]
 གཟུགས་ཅན་གྱི་ དཔེར་བཞིན་གཅིག་དང་ རྣམ་འགྲུར་གྱི་དཔེའི་ དཔེར་བཞིན་གཅིག་རྒྱབ།

<p>རྒྱལ་ཁབ་གྱི་མཐའ་འཁོར་ ལྷགས་རིའི་ཚུལ་དུ་ <u>གངས་རི་ར་བས་ཡོངས་སུ་བསྐྱོར་བའི་ནང་ལུ་</u> འབད་ཅོལ་ མེད་པར་རང་བཞིན་གྱིས་ སྤྱིས་ཏེ་ཡོད་མི་སྡེ་ལྷང་ གཡུ་མདོག་ལྷན་པའི་ <u>ཕྱོན་ཤིང་སྤྱོད་ཆོགས་ལོ་འདབ་</u> <u>ཕྱོགས་སུ་རྒྱས་པ་དང་</u> ནད་རིགས་འཛོམས་པའི་ སྤྲོལ་ཨ་རུ་བ་རུ་སོགས་སྡེ་སྤྲོལ་གྱི་རིགས་དང་<u>ཅན་དན་དང་</u> འུགས་པ་སྤང་སྤོས་སོགས་ བསངས་རྒྱས་གྱི་རིགས་ཚུ་གིས་ ལ་ལྟང་ཚུ་གང་སྟེ་ཡོད་པ་ཨིན། གངས་རི་ཚུ་ ལས་དལ་གྱིས་འབབ་པའི་ <u>གཙང་རྒྱ་སྤྲོན་མོ་ཚུ་ཡོན་ཆབ་ཕུལ་བའི་ཚུལ་དུ་</u> ཡོད་པ་མ་ཚད། རྒྱལ་ས་བརྟེན་ པའི་སྤྱོད་མེ་ <u>རིན་ཆེན་གཏེར་གྱི་</u> བང་མཛོད་འབྲུག་གི་དཔལ་འབྱོར་ཡར་རྒྱས་ ཆེན་མོ་གཅིག་འབད་གནས་ཏེ་ ཡོད། གཙང་རྒྱའི་གཡས་གཡོན་དང་ <u>སྤང་སྤོས་ལོགས་སུ་</u> ཁ་དོག་མཛོམས་པའི་ <u>མེ་དྲོག་སྤྱོད་ཆོགས་</u> དཀོན་ མཆོག་གསུམ་ལུ་ མཚོད་པ་ཕུལ་བའི་ཚུལ་དུ་གནས་ཤིང་། འ་བ། དགོ་བ། རྣ་ཕ། སོགས་ <u>རི་དགས་ཕོ་མོ་</u> རྣམས་འཆོ་བ་མེད་པའི་གནས་ ནགས་ཚལ་གྱི་ <u>གྲར་ཁྱིམ་དུ་སྤྱོད་གསུམ་བག་ཡངས་སུ་རྒྱ་ཞིང་ཕྱོག་ར་ལོ་ལ་བ་</u> དང་སྤྲད་སྤྲོན་སྤྱོད་པའི་ <u>ཁྱུ་བྱུག་ལ་སོགས་པ་</u> འདབ་ཆགས་རྣམས་གནས་འཕངས་གཙོད་ཅིང་ འཕུར་ལྷིང་ གཡོ་བའི་ཤོག་ཅུལ་རོམས་ཤིང་སྤྲོན་པའི་ <u>སྤྱུ་དབྱངས་ལེན་པ་དེ་ལ་</u> ཤིན་ཏུ་རོམ་ཚར་ཆེན་མོ་ ང་གི་མཁའ་ལ་ འགོ་བའི་ <u>ནམ་མཁའི་ནོར་བུ་དང་།</u> <u>མཚན་མའི་རྒྱ་སྤྲོད་དང་</u> <u>དཀར་གསལ་རྒྱ་བའང་དབྱེས་པའི་བཞིན་གྱིས་</u> མིག་མེ་འཛུམ་པར་དུས་རྒྱུན་ ལྷད་མོ་བལྟ་ཞིང་གནས་ཏེ་ཡོད་དོ།</p>	

སྤྱོད་ཆོན་ ག་པ། མཛོན་བཞིན་ སྤྱགས་༡༠།༽

འོག་གི་ གྲི་བ་ཚུ་གི་ལན་ བཀོད་རྒྱ་ལྷར་དུ་བྲིས།

གྲི་བ་ཚན་དངཔ། [༡༠]

- ཀ) འོག་གི་གྲི་བ་རེ་ལ་ ལན་བཞི་རེ་ཡོད་པ་ལས་ ལན་རོམ་གང་ཡིན་པ་དེ་ གངས་ཁ་རྒྱབ་སྟེ་ ཀ་རྟགས་གུ་སྤྱོད་ [༥]
 ཐིག་ ○ དེ་བཟུམ་བཀལ།

༡. རྒྱལ་པོའི་བཀའ་ལ་ཉན་ནིང་ འབངས་འཁོར་སྐྱོད་བ་ལ་ མཁས་པ་ནི་

ཀ མི་ཡི་དབང་མོ་ཡིན།

ཁ རྒྱལ་པོ་དང་འཛིན་ཡིན།

ག མདུན་ན་འདོན་ཡིན།

ང རྒྱེ་བའི་ལམ་སྟེང་ཡིན།

༢. ཆོ་འདིར་རང་ལ་ རིན་ཆེ་བ་ནི་ ས་དང་མ་གཉིས་པོ་ཡིན། དེའི་མིང་ལ་ སྐྱོད་བྱེད་ ཞེས་བརྗོད་དགོས་པའི་དོན་
ནི་

ཀ གཅེས་སྐྱོད་བྱས་པའི་ཕྱིར་རོ།

ཁ འཛིན་སྐྱོད་བྱས་པའི་ཕྱིར་རོ།

ག རང་སྐྱོད་བྱས་པའི་ཕྱིར་རོ།

ང ཉེ་འཁོར་སྐྱོད་བའི་ཕྱིར་རོ།

༣. བྱ་བྱུག་གི་མིང་ལ་ གཞན་གསུམ་ ཞེས་བཏགས་དགོས་པའི་དོན་ནི་

ཀ བྱ་བྱུག་གིས་བྱ་གཞན་གསུམ་བས་སོ།

ཁ བྱ་བྱུག་བྱ་ཨོ་ལ་གིས་གསུམ་བས་སོ།

ག ཨོ་ལ་གིས་བྱ་གཞན་གསུམ་བས་སོ།

ང ཨོ་ལ་བྱ་བྱུག་གིས་གསུམ་བས་སོ།

༤. ཀླང་པས་རྒྱ་འཕུང་ནིང་ ས་ལ་སྐྱེས་པའི་དངོས་པོ་ཞིག་ཡིན། འདི་ཡི་མིང་ནི་.....ཞེས་བྱའོ།

ཀ ལ་བའི་རྒྱལ་བ་ཕྱེགས།

ཁ བྱིས་བྱི་ཚལ།

ག རྒྱུ་མི་ལྷུང་།

ང བྱ་གས་ལྷུང་།

༥. རོར་བུའི་མིང་ལ་ རིན་ཆེན་ ཞེས་བརྗོད་དགོ་པའི་ རྒྱ་མཚན་ནི་

ཀ གོང་ཚད་ཆེན་འདི་གིས་ཡིན།

ཁ རྒྱུ་ཚད་ཆེན་འདི་གིས་ཡིན།

- ག མིང་གཏམ་ཆེན་པོ་འདི་གིས་ཨོན།
ང གནས་ཚད་ཆེན་པོ་འདི་གིས་ཨོན།

ཁ) འོག་གི་ སྤྱི་བ་ཚུ་གི་ ལན་བློས། [༡]

༡. སྐྱེད་ཚལ་གྱི་ མིང་གི་རྣམ་གྲངས་༤ བློས། [༡]

༢. འོག་གི་ མིང་བཞིའི་གོ་དོན་ ལེགས་ཤོམ་འབད་བློས། [༡]

༡) གསེར་ལྷན་མ།		
༢) ས་འཛིན་དཀར་པོ།		
༣) བ་གམ་ཅན།		
༤) ཀུན་དགའ་ར་བ།		

༣. འོག་གི་ཆོགས་བཅད་ཀྱི་ གྲག་ཤད་ནང་བཀོད་དེ་ ཡོད་མི་ཚུ་གི་རྣམ་གྲངས་ གཞན་བཅུགས་ཏེ་ ས་སྟོང་ནང་ བློས། [༡]

ཡིད་འོང་ཁྱོད་གཟུགས་ཚུ་སྐྱེས་(ཕྱོན་ཤིང་) ༡ལ།
བཞིན་འཛུམ་མཚར་བའི་(འདབ་བརྒྱ) ༢ལེགས་གོལ་ཏེ།
བརྩེ་བའི་བྱུར་མིག་(བེལ་མངར་) ༣ལྷན་པ་ཡིས།
སྐྱེད་ཤར་ཡིད་ཀྱི་(རྒྱ་རྒྱུག་) ༤སྐྱོང་བར་མཛོད།

༤. འོག་གི་མིང་དང་ འགྲེལ་བཤད་ མཐུན་སྒྲིག་ས་འབད་དེ་ ས་སྤྱོད་ནང་བྲིས།

མིང།	འགྲེལ་བཤད།
༡- རྒྱལ་སྤྱོད།	ཀ) རྒྱལ་སྤྱོད་ལུ་སྤྱོད་མི།
༢- གང་ཟག།	ཁ) མེ་ཏོག་ལུ་འཁོར་ཏེ་སྤྱོད་མི།
༣- མཚོར་གནས།	ག) གཅེས་གཅེས་པངས་པངས་འབད་བདག་འཛིན་འབད་མི།
༤- ར་ཡིག་གཉིས་པ།	ང) ཚལ་མ་ནང་གི་བཟའ་འཕྲུང་ཚུ་བཟའ་སྟེ་སྤྱོད་མི།
	ཅ) ལས་ཉོན་དབང་གིས་འཁོར་བར་ལྷུང་མི།

(མིང་)	(འགྲེལ་བཤད་)
༡ རྒྱལ་སྤྱོད།	
༢ གང་ཟག།	
༣ མཚོར་གནས།	
༤ ར་ཡིག་གཉིས་པ།	

དྲི་བ་ཚན་གཉིས་པ།

[ཉ]

༡. འོག་གི་ ཐེག་ཁམ་ནང་གི་མིང་གི་ཐ་སྙད་ཚུ་ ལག་ལེན་འཐབ་སྟེ་ ཚོག་ལྷུག་གི་ཐོག་ལུ་ ཚོག་དོན་ཕུན་སུམ་ ཚོགས་པའི་ ལོ་རྒྱུས་ ཚོག་འབྲུག་ལྷོ་འབད་མི་ཅིག་བྲིས།

[ཏ]

བཞིན་བཟང་། གེ་སར། སྤྱོད་ཚལ། ཀང་དུག་ སྤོན་ཤིང་། བྱ་གཞི། ལོངས་སྤྱོད། དགའ་སྤྱོད། དགའ་སྤྱོད། མངལ།

༡. ལྷན་རག་གི་ ཕྱི་ཆུབ་པའི་སྐབས་སུ་ མངོན་བརྗོད་ཤེས་དགོ་པའི་ཁྱད་སྤངས་ ཆོག་འབྱུག་ལྟ་བུ་ འབད་མི་ཅིག་ [༧]

བྲིས།

སློབ་མི་ ༡༢ པའི་ རིག་གཞུང་གདམ་ཁའི་ དྲི་བཀོད་འཆར་གཞིའི་རེ་ཁུ་མིག་གི་དབྱེ།
(༢༠༢༡)

རིག་ཆུལ་ → དོན་ཚན་ ↓	དྲི་བའི་རིགས་དང་ སྐྱགས་ ཀྱི་ལྗོངས་ཚད།	དབྱ་ཤེས།	གོ་རྟོགས།	ལག་ལེན།	དབྱེ་དཔྱད།	དབྱེ་ཞིབ།	གསར་ཕྱོགས།	སྐྱགས་ བསྟོམས།
ཕྱེ་ཚན་ ༡༡ ནང་ ཚོས་བརྩི་མཐོང་། སྐྱགས་ ༤༥།	དྲི་བ་ ༡ པ། ལན་གདམ་ཁ་ ཅན་ སྐྱགས་ ༥ །	༡ (༡)	༢ (༡)	༣ (༡)	༤,༥ (༡+༡)			༥ (༥)
	དྲི་བ་ ༢ པ། ལན་ཐུང་ སྐྱགས་ ༡༠ །	༡ (༢)	༢ (༢)	༣ (༢)	༤,༥ (༢+༢)			༥ (༡༠)
	དྲི་བ་ ༣ པ། ལན་རིང་མོ་སྐྱགས་ ༤༠ །			༡ (༡༠)	༢ (༡༠)	༣,༤ (༡༠+༡༠)		༤ (༤༠)
ཕྱེ་ཚན་ ༡༢ ནང་ ཚོས་ སྐྱགས་ ༣༥།	དྲི་བ་ ༡ པ། ལན་གདམ་ཁ་ ཅན་ སྐྱགས་ ༥ །	༡,༢ (༡+༡)	༣ (༡)	༤ (༡)	༥ (༡)			༥ (༥)
	དྲི་བ་ ༢ པ། ལན་ཐུང་ སྐྱགས་ ༡༠ །	༡ (༢)		༢,༣ (༢+༢)	༤,༥ (༢+༢)			༥ (༡༠)
	དྲི་བ་ ༣ པ། ལན་རིང་མོ་སྐྱགས་ ༣༠ །		༡ (༡༠)	༢ (༡༠)			༣ (༡༠)	༣ (༣༠)
ཕྱེ་ཚན་ ༡༣ ནང་ བཞོན་ སྐྱགས་ ༣༠།	དྲི་བ་ ༡ པ། ལན་གདམ་ཁ་ ཅན་ སྐྱགས་ ༥ །	༡ (༡)	༢,༣ (༡+༡)	༤ (༡)	༥ (༡)			༥ (༥)
	དྲི་བ་ ༢ པ། ལན་ཐུང་ སྐྱགས་ ༥ །	༡,༢ (༢+༢)	༣ (༢)		༤ (༢)			༤ (༤)
	དྲི་བ་ ༣ པ། ལན་རིང་མོ་སྐྱགས་ ༡༥ །			༡ (༡)	༢ (༡)			༢ (༢)
བསྟོམས་ →		༤ (༡༢)	༡༡ (༢༣)	༡༢ (༣༤)	༡༡ (༢༣)	༢ (༢༠)	༡ (༡༠)	༢༢ (༢༢)

དབྱ་གསོ། གྲུག་ཤད་ནང་གི་ཚུ་ སྐྱགས་དང་ ཕྱི་ལ་གི་ཚུ་དྲི་བའི་ཨང་ཨིན།

RIGZHUNG (TAKTSE)

སྒྲིབ་རིམ་ ༡༩ པ།

ཚུལ་ཚན། སྤྱོད་འཇུག། ལྷོགས་གྲུབ་གཞི་བཞག་གི་དྲི་བ།

སྒྲིགས། ༡༠༠ །

སྒྲིབ་ཚན་གྱི་པ།སྒྲིགས་ ༡༠༡	
བཀོད་ཀྱི། འོག་གི་དྲི་བ་རེ་ལུ་ལན་གྱི་ཁ་ག་ང་བཞི་རེ་ཡོད་ས་ལས་ལན་ངོམ་འདི་གདམ་ཁ་རྒྱབ་སྟེ་གྱུ་རྒྱུ་སྒྲིབ་ཐིག་༠དེ་བཟུང་བཀལ།	[༡༠]
<p>༡ བཙུན་འགྲུས་ཀྱི་སྒྲིབ་ལས་བཙུངས་པའི་ལུ་འདི་</p> <p> ག སོ་ནམ་ཞིང་ལུ་ལྷོ་བ་འདི་ཡིན།</p> <p> ཁ ཕེད་མོ་གི་ལུ་ལྷོ་བ་འདི་ཡིན།</p> <p> ག དགེ་བའི་ལུ་ལྷོ་བ་འདི་ཡིན།</p> <p> ང ཚོང་ལུ་ལྷོ་བ་འདི་ཡིན།</p>	
<p>༢ མི་དང་སེམས་ཅན་ཚུ་གི་ལུས་སྟོབས་འཕེལ་ནིའི་རྒྱ་ཡོད་དོ་བཟུང་ཞེ་སྤང་གི་རུས་པ་རྒྱས་ནིའི་རྒྱ་འདི་ཡང་)CBQ(</p> <p> ག ཁོང་ཁྲོ་བའི་སེམས་འདི་ཡིན།</p> <p> ཁ མི་འདོད་པ་བྱས་པ་འདི་ཡིན།</p> <p> ག སེམས་མི་བདེ་བའི་ཟས་འདི་ཡིན།</p> <p> ང འདོད་པའི་བར་ཆད་བྱས་པ་འདི་ཡིན།</p>	
<p>༣ ཞེ་སྤང་བྱུག་རྒྱའི་སེམས་འཆང་ན།། ཡིད་ནི་ཞི་བ་ཉམས་མི་ཚུང་། ཞེས་པའི་སྐབས་ཀྱི་ཞི་བ་ཟེར་མི་འདི་</p> <p> ག བདེ་བ་ལུ་གོ།</p> <p> ཁ འཇམ་པ་ལུ་གོ།</p> <p> ག ཞིང་ཁམས་ལུ་གོ།</p> <p> ང སངས་རྒྱས་ལུ་གོ།</p>	
<p>གོམས་ན་སྒྲིབ་པར་མི་འགྱུར་བའི།། དངོས་དེ་གང་ཡང་ཡོད་མ་ཡིན།།</p> <p>༤ གོང་གི་ཚིག་རྒྱུ་གཉིས་ཀྱིས་སྟོན་པའི་བརྗོད་དོན་གཙོ་བོ་འདི་</p> <p> ག གོམས་འདིས་ཚུད་དགོས་གཤམ་ཆེ་བའི་སྟོན་མཁུ་ཡིན་མས།</p>	

<p>ཁ དངོས་པོ་ལུ་གོམས་འདིས་རྩྭ་དགོ་ཟེར་སྟོན་མ་ཡིན་མས།</p> <p>ག གོམས་འདིས་རྩྭ་ནི་འཇམ་རྟེན་ཏེ་ཡིན་ཟེར་སྟོན་མ་ཡིན་མས།</p> <p>ང བཟོད་པ་བསྐྱེམ་ནི་ལུ་གོམས་འདིས་རྩྭ་དགོ་ཟེར་སྟོན་མ་ཡིན་མས།</p>	
<p>འཇིག་རྟེན་ཁམས་ན་དཔལ་བ་དག།གང་དག་ཇི་སྟེད་ཡོད་པ་ན་མས།།དེ་དག་ཏུ་ནི་ལུས་ཅན་ན་མས།།བདེ་ནས་བདེ་བས་དགའ་བར་ཤོག།</p> <p>ལ གོང་གི་ཚིག་རྒྱུ་ལས་པའི་བཅུད་དོན་འདི་</p> <p>ག མཐོ་ངེས་ལུ་སྦྱེས་ཏེ་དགའ་སྦྱིད་འཐོབ་བཅུག་ཟེར་བའི་དོན་ཡིན།</p> <p>ཁ དེ་ནང་ལུ་ཡོད་པའི་སེམས་ཅན་རྩྭ་ཟེར་བའི་དོན་ཡིན།</p> <p>ག དཔལ་བའི་གནས་དེ་རྩྭ་ཟེར་བའི་དོན་ཡིན།</p> <p>ང ག་དེམ་ཅིག་ཡོད་མི་རྩྭ་ཟེར་བའི་དོན་ཡིན།</p>	
<p>ལ ཕྱི་ནང་གི་དངོས་པོ་ཐམས་ཅད་ཆགས་པ་མེད་པར་སྦྱོ་བོ་ཀླན་ལ་གཏོང་བའི་སེམས་ཀྱིས་སྦྱིན་པའི་ཡར་ཕྱིན་རྫོགས་པ་ཡིན་ཟེར་བ་ལ་དཔེ་ཅིག་བཀོད་དགོས་ན་)CBQ(</p> <p>ག མགོན་པོ་ལྷ་སྦྱབ་ཀྱི་ཐུགས་རྒྱུད་ལུ་ཡོད་པའི་གཏོང་སེམས་ལྟ་བུ།</p> <p>ཁ རང་སངས་རྒྱལ་གྱི་རྒྱུད་ལུ་ཡོད་པའི་གཏོང་སེམས་ལྟ་བུ།</p> <p>ག འཇིག་རྟེན་པའི་རྒྱུད་ལུ་ཡོད་པའི་གཏོང་སེམས་ལྟ་བུ།</p> <p>ང ཉན་ཐོས་ཀྱི་རྒྱུད་ལུ་ཡོད་པའི་གཏོང་སེམས་ལྟ་བུ།</p>	
<p>ལ སྟོབ་ཕྱག་པར་ཟེར་མི་གིས་ཁོ་ཁང་དང་པ་འཐོབ་ནི་ལུ་འབད་བཙོན་བསྐྱེད་དེ་སྟོད་པ་ད་ཁོའི་ཆ་རོགས་ ཁོར་བུ་གིས་བར་ཆད་རྒྱབ་སྟེ་ཁོ་གི་རེ་འདོད་འགྲུབ་མ་རྩྭགས་པར་བཟོ་བའི་དུས་ལུ་པར་གིས་ བཟོད་ པའི་ཐོག་ལས་དགའ་ངལ་ག་དེ་སྟེ་བསལ་ནི་སྟོ?)CBQ(</p> <p>ག ཚོས་ལ་ངེས་སེམས་ཀྱི་བཟོད་པའི་ཐོག་ལས་དགའ་ངལ་བསལ་ནི།</p> <p>ཁ སྦྱག་བསལ་དང་ལེན་གྱི་བཟོད་པའི་ཐོག་ལས་དགའ་ངལ་བསལ་ནི།</p> <p>ག འདོད་པའི་གོགས་བྱེད་པ་ལ་བཟོད་པའི་ཐོག་ལས་དགའ་ངལ་བསལ་ནི།</p> <p>ང བཤེས་ལ་འདོད་པའི་གོགས་བྱེད་པ་ལ་བཟོད་པའི་ཐོག་ལས་དགའ་ངལ་བསལ་ནི།</p>	
<p>ཏ རྩྭ་ར་ལོ་ན་གཞོན་མ་རིག་པ་རྩྭ་བ་མཐུན་རྩྭ་ཚོགས་པའི་སྐབས་དཔེ་ཆ་བལྟ་དགོ་མ་མནོ་བར་ཅེདམོ་ ཅེ་ནི་དང་</p>	

<p>བཤད་ཐོག་ཏང་ནི་ལུ་དང་འདྲོད་བསྐྱེད་པ་ཅིན་དེ་བཟུམ་གྱི་ལེ་ལོ་འདི། CBQ(</p> <p>ཀ ལྷག་བསྐྱེད་སེམས་ཁར་དྲན་པའི་ཐོག་ལས་སྤང་འོང།</p> <p>ཁ སམ་གྱི་བསྐྱེད་བྱ་སེམས་ཁར་དྲན་པའི་ཐོག་ལས་སྤང་འོང།</p> <p>ག འཆིབ་མི་རྟག་པ་སེམས་ཁར་དྲན་པའི་ཐོག་ལས་སྤང་འོང།</p> <p>ང དཔུང་བཞི་དང་སྟོབས་གཉིས་ཀྱི་གཉེན་པོ་བསྐྱེད་པའི་ཐོག་ལས་སྤང་འོང།</p>	
<p>ཁ སེམས་ལུ་གཞན་ག་ཅི་གིས་ཡང་མ་གཞོད་རུང་ལུས་འདི་ལྷག་བསྐྱེད་གིས་གཞོད་པའི་རྒྱ་མཚན་འདི་ལུས་</p> <p>ཀ ལུ་ཆགས་ཞེན་ཡོད་པ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ཁ གཟུགས་ཅན་འབད་མ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ག ཤུག་ལས་གྲུབ་ཡོད་པ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ང ལྷག་བསྐྱེད་གི་རྒྱ་འབད་མ་ལས་བརྟེན་ཏེ་ཡིན།</p>	
<p>ཏྲ ཁྱོད་ར་ཕྱི་རུ་གི་རང་སྤྱོད་འབད་སྟོད་པའི་བར་ན་ཆོང་རྒྱབ་ནི་དང་སོ་ནམ་གྱི་ལཱ་འབད་དགོ་འབད་ཟེར་ མནོ་ བསམ་བཏང་སྟེ་དེ་ལུ་དང་འདྲོད་བསྐྱེད་དེ་འོང་མ་ཡིན་མས།དེ་རྩེ་བཙོན་འགྱུས་མེན་མི་འདི།)CBQ(</p> <p>ཀ ལྷོ་མ་ལས་འཛིན་པའི་ལེ་ལོ་ཡིན་མ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ཁ ཆོ་འདི་འདྲོན་ལུ་ཡིན་མ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ག ཆོ་ཕྱི་མར་མ་ཕན་པ་ལས་བརྟེན་ཏེ་ཡིན།</p> <p>ང དགོ་བའི་ལཱ་མེན་མ་ལས་བརྟེན་ཏེ་ཡིན།</p>	
<p>སྟེ་ཚན་ཁ་པ།སྒྲིགས་༡༠།</p>	
<p>བཀོད་རྒྱ། འོག་གི་རི་བ་རྩེ་གི་ལན་ རེས་པར་དུ་བྲིས།</p>	
<p>ཏ མི་གཞན་གྱིས་ཁྱོད་ལུ་བསྟོད་པ་རྒྱབ་ད་བསྟོད་པ་ལུ་དགའ་བའི་ཉེས་པ་སེམས་ཁར་དྲན་ཏེ་སྤང་དགོ་ནི་ཡིན་མ་ ལས་ཉེས་པ་ཤེས་དགོ་པ་གལ་ཆེ་བས།དེ་འབད་མ་ལས་ཁྱོད་གྱིས་བསྟོད་པ་ལུ་དགའ་བའི་ཉེས་དམིགས་རྩེ་ལས་ གཉིས་ཐོ་བཀོད།) CBQ(</p>	[༡]
<p>ཨ མི་ཆོ་ནང་བཙོན་འགྱུས་མེད་པ་ཅིན་བྱ་བ་ག་ནི་ཡང་མཐར་འཁྱུལ་མི་རྩེ་གས་ནི་ཡིན་མ་ལས་བཙོན་འགྱུས་བཙུམ་ དགོ་པ་གལ་ཆེ་བས།དེ་འདྲོན་ལུ་བཙོན་འགྱུས་གི་མི་མཐུན་ཕྱགས་ཤེས་དགོ་པ་ལས་ཁྱོད་གྱིས་མི་ མཐུན་ཕྱགས་རྩེ་ལས་གང་ རུང་གཉིས་ཀྱི་མིང་བྲིས།) CBQ(</p>	[༡]

3	སེམས་བསྐྱེད་བརྒྱུད་ལུགས་མ་གཏོགས་པ།།བརྒྱུད་ལུགས་མང་པོས་ཅིག་ཞིག་བྱ།། གོང་གི་ཆོག་ཀླད་གཉིས་ཀྱི་འབྲེལ་བཤད་བྲིས།	[2]
4	ལུས་ཅན་ནམས་ལ་སེམས་ཡོད་དང་།སེམས་མེད་གཉིས་ཀྱིས་གཞོན་བྱས་ན།།སེམས་ཡོད་ཅི་སྟེ་བཀར་ཏེ་བཀོན།།དེ་ བས་གཞོན་པ་བཟོད་པར་གྱིས།།ཟེར་བའི་ཆོགས་བཅད་འདི་གི་བཅུད་དོན་བྲིས།	[2]
5	དེ་བས་སྟོང་ལ་ཀུན་སེལ་བའི།།བྱང་རྒྱལ་སེམས་ཀྱི་རྟ་ཞོན་ནས།།ཟེར་བའི་ཆོག་ཀླད་གཉིས་ཀྱི་དོན་བཅུད་བསྟུ་སྟེ་ བྲིས།	[2]
6	སེམས་ཅན་དོན་བྱེད་ཀྱི་རྒྱལ་ཁྲིམས་སྲུང་རྒྱལ་སྐབས་པ་རོལ་གྱིས་མ་དད་པ་བསྲུང་རྒྱལ་འདི་སྟོབ་གྱའི་གནས་ སྲུངས་ནང་ག་དེ་སྟེ་ལག་ལེན་འཐབ་ནི་སྟོན་?) CBQ([2]
7	བཟོད་པའི་ལེའུ་ལས་བཟོད་ནམས་ཀྱི་ཞིང་དང་རྒྱལ་བ་ཐུགས་དགུས་ནི་ཕན་གཞོན་ཀྱི་འབྲས་བུ་རྩ་ལུ་མནོ་ བསམ་བཏང་སྟེ་སེམས་ཅན་ལུ་གུས་པ་བསྐྱེད་དགོཔ་འབད་གསུངས་ཏེ་འདུག།)CBQ([2]
8	ཁྱེད་ཀྱིས་ཞར་དང་ཞོར་ཁར་བྱ་བ་ངན་ཞེན་གྱི་ལེ་ལོ་ག་དེ་སྟེ་ར་འབད་ནི་ཡོད་?	[2]
9	ངན་པ་དང་ཤེས་བཞིན་གྱི་བྱད་པར་བྲིས།	[2]
10	བསྟོབ་དང་སྟོན་ལམ་གཉིས་དཔའི་ཐོག་ལས་བྱད་པར་བྲི།	[2]
	སྟེ་ཆོན་ག། སྐྱགས་20།	
	བཀོད་བྱ། འོག་གི་བྲི་བ་དགུ་ལས་བདུན་གདམ་ཁ་རྒྱལ་སྟེ་ལན་བྲིས།	
	བྲི་བ་དང་པ།	
11	ཤེས་བཞིན་མེད་པའི་ཉེས་དམིགས་དང་ངན་པ་ཉམས་པའི་རྗེས་སུ་སྤྱར་སྟེ་ནིའི་ཐབས་ཤེས་རྩུ་ལས་4ཐོ་བཏོན།	[4]
12	བཙུན་འགྲུས་ཀྱི་ལེའུ་གི་ནང་དོན་ལུ་གཞི་བཞག་སྟེ་བཙུན་འགྲུས་གལ་ཆེ་བའི་སྟོན་ལས་ཁྱེད་པའི་ཆ་རོགས་རྩུ་ རྒྱུད་བསྐྱེད་འབད་རྒྱུགས་པའི་བསྐྱབ་བྱ་དོན་མཆམས་གཅིག་བྲིས།) CBQ([4]
	བྲི་བ་གཉིས་པ།	
	<div> ས་སྟེང་འདི་དག་གོས་གཡོག་ཏུ། ། དེ་སྟེད་གོ་བས་ག་ལ་ཡང། ། ལྷམ་མཐེལ་ཙམ་གྱི་གོ་བས་ནི། ། ས་སྟེང་ཐམས་ཅད་གཡོགས་དང་འདྲ། ། </div> <div> དེ་བཞིན་བྱི་རོལ་དངོས་པོ་ཡང། ། བདག་གི་བྱིར་སྟོག་མི་ལང་གིས། ། བདག་གི་སེམས་འདི་བྱིར་བསྟོན་བྱའི། ། གཞན་ནམས་བསྟོན་གོ་ཅི་ཞིག་དགོས། ། </div>	[4]

ཀ	གོང་གི་ཐིག་ལྷན་ནང་ཡོད་པའི་ཆོག་མཚན་གཉིས་ཀྱིས་སྟོན་པའི་དཔེ་གཉིས་དང་དོན་གཉིས་ཡོད་མི་འདི་གཅིག་ཁར་སྦྲར་ཏེ་བཤད་པ་རང་ཆོག་ནང་རྒྱབ།																			
ཁ	ཆོག་མཚན་བསལ་གྱི་འདི་དོན་ལུ་སྟོན་པ་གཏང་དགོས་འདི་ཁག་ཆེ་བས། དེ་འབད་མ་ལས་འབྱོར་པ་དང་ལྷན་མི་ཚུ་གིས་རྒྱ་ནུ་ཚུ་ཕང་པ་མེད་པར་གཞན་ལུ་སྟོན་པ་གཏང་ཚུགས་དོ་བཟུམ་སྟེ་སྤྱང་ཀ་ཚུ་ལུ་ཡང་ཆོག་མཚན་བསལ་ཚུགས་པའི་རུས་པ་འདུག་གམ་ག་ཅི་སྟེ་ཁྲུངས་བཀའ།)CBQ([ལ]																		
ཇི་བ་གསུམ་པ།																				
ཀ	སྤྱོད་ཀྱི་ལ་མོག་པ་དང་།བཤེས་ལ་གཞོན་པ་བཟུང་ནམས་ལ་འང་།སྤྱོད་ཀྱི་ལ་མོག་པ་ལས།འབྱུར་བར་མཐོང་ནས་ཁོ་བ་བསྟོན་ཞེས་བའི་ཆོག་མཚན་བཅད་འདི་ཚུ་དང་གིས་ཤེས་པའི་མིང་ཆོག་ཐོག་ལས་བཤད་པ་དོན་མཚན་གཅིག་ནང་བྱིས།	[ལ]																		
ཁ	བདོག་པ་ཐམས་ཅད་འབྲས་བཅས་ཏེ།སྟོ་བོ་ཀྱན་ལ་གཏོང་སེམས་ཀྱིས།སྟོན་པའི་པ་རོལ་བྱིན་གསུངས་ཏེ།དེ་ལྟམ་དེ་ཉིད་སེམས་ཉིད་དོ།ཟེར་གསུངས་པ་ལྟར་སྟོན་པ་གཏང་བའི་ཆོ་དངོས་པོ་ལས་སེམས་གཙོ་ཆེན་འབད་གསུངས་ཏེ་འདུག།དེ་བཟུམ་སྟེ་ཚུ་དྲིན་ཀྱིས་ཡང་སྟོན་པ་གཏང་བའི་སྐབས་སེམས་གཙོ་བོ་བཏོན་ཚུགས་པས་ག་ག་ཅི་འབད་? (CBQ)	[ལ]																		
ཇི་བ་བཞི་པ།																				
ཀ	བཙོན་འགྲུས་ཀྱི་རོ་བོ་དང་ངེས་ཆོག་དེ་འི་མཐུན་ཕྱགས་གསུམ་ཀྱི་གོ་དོན་བྱིས།	[ལ]																		
ཁ	དག་སྟོང་གི་སྟོང་པ་བཞི་ལས་གཤེ་ཡང་སྤྱར་མི་གཤེ་བ།ཁྲོས་ཀྱང་སྤྱར་མི་ཁོ་བ།ཟེར་ཡོད་མི་ལུ་ཚུ་དྲིན་ཀྱིས་ག་བསྟར་འབད་དེ་བཙོན་པ་སྟོན་ཚུགས་པ་བཙོན་པའི་དོན་ལུ་ག་འདི་དག་ག་ཅི་སྟེ་?) CBQ([ལ]																		
ཇི་བ་ལྔ་པ།																				
ཀ	འོག་གི་སྟོན་གསུམ་ཀྱི་སྟོན་པའི་ཆོག་ཆོས་སྐད་ནང་ཡོད་མི་ཚུ་རྫོང་ཁ་ནང་སྐད་སྒྱུར་འབད།	[ལ]																		
<table border="1"> <thead> <tr> <th>ཨང་</th><th>ཆོས་སྐད།</th><th>རྫོང་ཁ།</th></tr> </thead> <tbody> <tr> <td>༡</td><td>ཉེས་སྟོང་།</td><td></td></tr> <tr> <td>༢</td><td>ངག་སྒྲ།</td><td></td></tr> <tr> <td>༣</td><td>མཚང་འབྲུ།</td><td></td></tr> <tr> <td>༤</td><td>གཤེ་བ།</td><td></td></tr> <tr> <td>༥</td><td>བཀྱར་ཉི།</td><td></td></tr> </tbody> </table>		ཨང་	ཆོས་སྐད།	རྫོང་ཁ།	༡	ཉེས་སྟོང་།		༢	ངག་སྒྲ།		༣	མཚང་འབྲུ།		༤	གཤེ་བ།		༥	བཀྱར་ཉི།		
ཨང་	ཆོས་སྐད།	རྫོང་ཁ།																		
༡	ཉེས་སྟོང་།																			
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༤	གཤེ་བ།																			
༥	བཀྱར་ཉི།																			

༣ སྤྱོད་འཇུག་གི་བློ་བཞོན་འཆར་གཞིའི་རེ་འཁུམ་གྱི་སྒྲིལ་བཤུགས་ཀྱི་དང་ལཱ། ༢༠༢༡

<div> <div>རིག་ཅུལ།</div> <div>ལས་དོན།</div> </div>	སྒྲིགས་བཞོ་བཤུགས།		བཟང་ཤེས། ༡-༢	གོ་རྟོགས། ༣-༥	ལག་ལེན། ༤-༦	དབྱེ་དཔྱད། ༧-༡༠	བསྒྲུབ་པ།	
	བརྒྱ་ཆ་ ༡༠༠	བརྒྱ་ཆ་ ༣༠					སྒྲིགས་	བློ་བཞོ་
<p>སེམས་བསྐྱེད་དགོ་པའི་ཁྱད་སྤྱོད་རྟོག་རྟེན་གྱི་སྒྲིལ་བཤུགས་དགོ།</p> <p>ཏེ་གནས་སྤངས་དང་འཁྲིལ་བའི་བློ་སྦྱོར་བའི་སྒྲིལ་བཤུགས་དགོ།</p> <p>ཕར་ཕྱིན་དུག་པོའི་སྒྲིལ་བཤུགས་ཐོས་བསམ་འབད་དེ་ཤེས་རྟོགས་བྱུང་མི་ཆུ་དཔྱད་པའི་ཐོག་ལས་བློ་སྦྱོར་འབད་ཆུགས་དགོ།</p> <p>སེམས་བསྐྱེད་བའི་ཐབས་ལམ་ཆུ་ཤེས་ཏེ་སྒྲིལ་བཤུགས་དང་འཁྲིལ་ལག་ལེན་འཐབ་ཆུགས།</p> <p>བཟང་པ་དང་ཤེས་བཞིན་གྱི་གོ་རྟོག་ལེན་ཏེ་རང་གི་སེམས་འདི་བསྐྱེད་ཆུལ་བློ་སྦྱོར་འབད་ཆུགས་དགོ།</p> <p>སྤྱོད་ལམ་རྣམ་པ་བཞི་བསྐྱེད་ཐངས་ཀྱི་སྒྲིལ་བཤུགས་ཐོས་བསམ་ཐོང་ཐོབ་སྤྱོད་ཐབས་ལམ་ཞིབ་བློ་སྦྱོར་ཆུགས་དགོ།</p> <p>རྒྱུལ་བདུན་དང་རྒྱུལ་པ་ལྔའི་གཞི་ནས་ཉེན་ཆུ་རྟོགས་ཏེ་སྤྱོད་ཆུལ་ཆུ་རྒྱུ་མཚན་དང་བཅས་པ་སྤྱོད་ཆུལ་འབད་ཆུགས་དགོ།</p>	༣༥	༡༠	༡ ལན་བྱུང་།	༣ ལན་བྱུང་།	<p>༤ གདམ།</p> <p>༤ ལན་བྱུང་།</p>	<p>༧ གདམ།</p> <p>༧ ལན་བྱུང་།</p>	༡༠	༧

<p>རངགི་ལུས་ཀྱི་ངོ་བོ་སྤྱིང་པོ་མེད་པར་རྟོགས་ཏེ་ ཆགས་པ་སྤང་ཚུལ་ཚུ་ལུ་དཔུང་པའི་སྒོ་ལས་བྲི་ཚུགས་དགོ།</p> <p>ཚུལ་ཁྲིམས་ནུམ་པ་གསུམ་བསྐྱང་ཚུལ་གྱི་སྒོར་ལས་ གོ་བ་ལེན་ཏེ་ བསམ་སྤྱོད་ལུ་ ལེགས་འགྱུར་འབད་དགོ་པའི་རྒྱབ་ཁྲལ་ཚུ་ བྲི་ཚུགས་དགོ།</p>								
<p>ཁོང་ཁྲོའི་ཉེས་དམིགས་ཚུ་ཚུལ་ཞིན་ཏུ་རྟོགས་ཏེ་ བསམ་ཞིབ་ཀྱི་སྒོ་ལས་བྲི་ཚུགས་དགོ།</p> <p>ཞེ་སྤང་གི་རྒྱ་དང་ཟུང་ཚུ་ངོས་འཛིན་འབད་དེ་ བསམ་འཆར་བཀོད་ཚུགས་དགོ།</p> <p>བཟོད་པའི་དབྱེ་བ་གསུམ་གྱི་སྒོར་ལས་གོམས་སྤྱང་ཚུ་དེ་དཔུང་པ་གཏང་ཚུགས་དགོ།</p> <p>བཟོད་ཡུལ་དང་འཁྲིལ་བསམ་ཞིབ་འབད་དེ་ བཟོད་པ་བསྒོམ་ཚུལ་ཚུ་བཤད་ཚུགས་དགོ།</p> <p>གངས་ཅན་པ་དང་རིགས་པ་ཅན་པའི་ལྟ་བ་ཚུ་ ཐོས་པ་འབད་དེ་ བསམ་ཞིབ་ཀྱི་ཐོག་ལས་བྲི་སྒྲུབ་འབད་ཚུགས་དགོ།</p>	༣༠	༩	༡གདམ།	<p>༣གདམ།</p> <p>༤-༥ལན་སྤྱང་།</p>	<p>༧ གདམ།</p> <p>༨ ལན་སྤྱང་།</p>		༩	༩

བསྟོན་པ་དང་གྲགས་པའི་མི་ལྔའི་བཅུད་དོན་ཚུ་ རྟོགས་ཏེ་ ཞེན་སེམས་སྤང་བྱངས་ཀྱི་ཁྱད་སྤོན་ སྒྲགས་ཚུགས་དགོ།								
བརྩོན་འགྲུས་ཀྱི་མི་མཐུན་ཕྱོགས་ཚུ་ཞིབ་པར་ རྟོགས་ཏེ་ ལེ་ལོ་ཚུ་སྤང་བྱངས་བསམ་ཞིབ་ཀྱི་ ཐོག་ལས་བསམ་བཤད་ཚུགས་དགོ། དཔུང་བཞི་དང་སྟོབས་གཉིས་ཀྱི་གོ་དོན་ཚུ་ རྟོགས་ཏེ་ བསམ་ཞིབ་ཀྱི་སྒྲོ་ལས་བྲིས་སྤྲོད་ཚུགས་ དགོ།	༣༥	༡	༡གདམ། ༡ ལན་བྱུང་།	༤གདམ།	༡ གདམ། ༡ ལན་བྱུང་།	༡༠གདམ།	༡	༤
བསྡོམས་དང་སྟོན་ལས་ཀྱི་གོ་དོན་དང་བྱེད་ལས་རོ་ བོ་ཚུ་ཉམས་ཚུང་གི་ཐོག་ལས་རྟོགས་ཏེ་ སྐབས་ ཐོབ་དང་བསྐྱུན་བྲིས་སྤྲོད་འབད་ཚུགས་དགོ།	༡༠	༣		༥ གདམ།		༡༠ ལན་བྱུང་།	༣	༡
བསྟོམས།	༡༠༠	༣༠	༤	༩	༩	༤	༣༠	༣༠

༣ སྤྱད་འཇུག་གི་ངོ་བོ་དང་འཆར་གཞི་རེ་འུ་མིག། སྡེ་ཚན་ག། ༣༠༣༡

[illegible]

<p>ར་རྒྱལ་བདུན་དང་རྒྱལ་པ་ལྟེ་གཞི་དུ་</p> <p>ཉེན་ཚུ་རྟོགས་ཏེ་སྤོང་ཚུལ་ཚུ་རྒྱུ་མཚན་</p> <p>དང་བཅས་པ་སྤྲེལ་སྤྲེལ་འབད་རྟོགས་</p> <p>དགོ།</p> <p>རང་གི་ལུས་ཀྱི་ངོ་བོ་སྤྲིང་པོ་མེད་པར་</p> <p>རྟོགས་ཏེ་རྒྱལ་པ་སྤོང་ཚུལ་ཚུ་ལུ་</p> <p>དབྱེད་པའི་སྤོང་ལས་བྲི་རྟོགས་དགོ།</p> <p>ཚུལ་ཁྲིམས་ནཱ་པ་གསུམ་བསྐྱར་ཚུལ་གྱི་</p> <p>སྤོང་ལས་གོ་བ་ལེན་ཏེ་བསམ་སྤྱོད་ལུ་</p> <p>ལེགས་འགྱུར་འབད་དགོ་པའི་རྒྱབ་ཁྱུངས་</p> <p>ཚུ་བྲི་རྟོགས་དགོ།</p>										
<p>ཁོང་ཁྲོའི་ཉེས་དཔྱད་ཚུལ་ཞིན་ཏེ་རྟོགས་</p> <p>ཏེ་བསམ་ཞིབ་ཀྱི་སྤོང་ལས་བྲི་རྟོགས་དགོ།</p> <p>ཞེ་སྤང་གི་རྒྱ་དང་བཅས་ཚུ་ངོས་འཛིན་འབད་དེ་</p> <p>བསམ་འཆར་བཀོད་རྟོགས་དགོ།</p> <p>བཟོད་པའི་དབྱེ་བ་གསུམ་གྱི་སྤོང་ལས་གོ་མས་</p> <p>སྤྱར་ཚུད་དེ་དབྱེད་པ་གཏང་རྟོགས་དགོ།</p> <p>བཟོད་ལུལ་དང་འཁྲིལ་བསམ་ཞིབ་འབད་དེ་</p> <p>བཟོད་པ་བསྐྱོམ་ཚུལ་ཚུ་བཤད་རྟོགས་དགོ།</p>	<p>༣༠</p>	<p>༣༥</p>		<p>༡༧</p> <p>༣༧</p>	<p>༥༧།</p>	<p>༡༧།</p>	<p>༤༧།</p>		<p>༣༥</p>	<p>༧</p>

<p>གངས་ཅན་པ་དང་རིགས་པ་ཅན་པའི་ལྟ་བུ་ཚུ་ ཐོས་པ་འབད་དེ་ བསམ་ཞིབ་ཀྱི་ཐོག་ལས་བྱི་ སྐབ་འབད་ཚུགས་དགོ།</p> <p>བསྟོན་པ་དང་གྲགས་པའི་རིམ་གྱི་འཕུལ་དོན་ ཚུ་རྟོགས་ཏེ་ ཞེན་སེམས་སྤང་བཅས་ཀྱི་ ཁུངས་དོན་སྒྲུགས་ཚུགས་དགོ།</p>										
<p>བརྩོན་འགྲུས་ཀྱི་མི་མཐུན་ཕྱོགས་ཚུ་ཞིབ་པར་ རྟོགས་ཏེ་ ལེ་ལོ་ཚུ་སྤང་བཅས་བསམ་ཞིབ་ཀྱི་ ཐོག་ལས་བསམ་བཤད་ཚུགས་དགོ།</p> <p>དཔུང་བཞི་དང་སྟོབས་གཉིས་ཀྱི་གོ་དོན་ཚུ་ རྟོགས་ཏེ་ བསམ་ཞིབ་ཀྱི་སྒོ་ལས་བྱི་སྐབ་ ཚུགས་དགོ།</p>	༡༥	༢༠		༩༥	༡༥	༡༥		༡༥	༢༠	༩
<p>བསྟོན་པ་དང་སྟོན་ལམ་གྱི་གོ་དོན་དང་བྱེད་ལས་ རོབ་ཚུ་ཉམས་ཐུང་གི་ཐོག་ལས་རྟོགས་ཏེ་ སྐབས་ཐོབ་དང་བསྐྱུན་བྱི་སྐབ་འབད་ཚུགས་ དགོ།</p>	༡༠	༡༠			༡༥	༡༥			༡༠	༩
བསྟོན་ལས།	༡༠༠	༢༠	༥	༡༥	༢༠	༢༠	༡༥	༥	༢༠	༡༦

སྒྲིབ་རིམ་ ༡༩ པ།

ཚོས་ཚན། སྒྲན་ངག། ལྷོགས་གྲུབ་གཞི་བཞག་གི་རིམ།

སྒྲིགས། ༡༠༠ །

སྒྲེ་ཚན་ཀ་པ། སྒྲིགས་ ༡༠ །	
བཀོད་རྒྱ། འོག་གི་རིམ་རེ་ལུ་ལན་ཀ་ཁ་ག་ང་བཞི་རེ་ཡོད་ས་ལས་ལན་ངོམ་འདི་གདམ་ཁ་རྒྱབ་སྒྲེ་ཀ་རྟགས་གུ་སྒྲོར་ ཐིག་༠དེ་བཟུམ་བཀལ།	[ཡ]
༡ བེ་ཁང་འཛིན་ཟེར་བའི་མིང་ཆོག་འདི་(བླན་ཤེས) ཀ ར་སྒྲེ་ནང་ལས་འཐོན་མ་ཡིན། ཁ ལ་སྒྲེ་ནང་ལས་འཐོན་མ་ཡིན། ག ར་སྒྲེ་ནང་ལས་འཐོན་མ་ཡིན། ང ང་སྒྲེ་ནང་ལས་འཐོན་ཡིན།	
༢ ཡད་ཅུང་ནང་ལུ་ཅ་ལ་བེ་སི་དང་ཀི་དེབ་འདུག། ཟེར་བའི་ཚྗོད་ཆོག་ནང་གི་མིང་གཞི་ཅ་འདི་ མིང་གཞི་བླན་ཤེས) ཀ རོ་ཡིན། ཁ མོ་ཡིན། ག མ་ནིང་ཡིན། ང མོ་གཤམ་ཡིན།	
༣ ཕྱག་གིས་ཕྱོར་ཟེར་མི་འདི་ཕྱག་གིས་དར་སོགས་གནམ་དུ་འཕྱར་བའི་ ཏུས་ (གོ་རྟོགས) ཀ ད་ལྟ་བ་ཡིན། ཁ འདས་པ་ཡིན། ག སྒྲུལ་ཆོག་ཡིན། ང མ་འོངས་པ་ཡིན།	
༤ འཇུག་ལྷོག་ཟེར་བའི་མིང་ཆོག་ལག་ལེན་འཐབ་ཡོད་པའི་ཚྗོད་ཆོག་བླན་ཤེས་ར་ (གོ་རྟོགས) ཀ སྒྲང་བྱའི་གནས་ལ་འཇུག་ལྷོག་བྱེད་ན་ལྟ་རུ་སྒྲེ་ཟེར་བཀོད་དགོ། ཁ སྒྲང་བྱའི་གནས་ལ་འཇུག་ལྷོག་བྱེད་ན་ངན་སོང་དུ་མི་སྒྲེ་ཟེར་བཀོད་དགོ། ག ཐར་པའི་གོ་འཕང་འདོད་ན་དགེ་མི་དགའི་གནས་ལ་འཇུག་ལྷོག་བྱ་དགོས་ཟེར་བཀོད་དགོ། ང ཐར་པའི་གོ་འཕང་འདོད་ན་བྱ་བ་ངན་པ་དང་བཟང་པོ་ལ་འཇུག་ལྷོག་བྱ་དགོས་ཟེར་བཀོད་དགོ།	
༥ ཚོས་སྐད་ནང་ལུ་དཔའ་རྟགས་བྱབས་ནང་ལས་བཏོན་པའི་བསྐྱང་གི་དོན་སྒྲོན་ནི་འདི་དོན་ལུ་ (ལག་ལེན) ཀ ཕུང་ཟེར་འབྲི་དགོ།	

	<div>ཁ དབྱང་ཟེར་འབྲི་དགོ།</div> <div>ག འབྲིན་ཟེར་འབྲི་དགོ།</div> <div>ང ཕྱངས་ཟེར་འབྲི་དགོ།</div>			
༤	<div>མོ་ཡི་ཁོངས་ནས་རྗེས་འཇུག་དང་། །དེ་ཡི་ནང་ནས་སྡོན་འཇུག་དབྱང་།། ཟེར་བའི་སྐབས་ དེ་སྐྱེ་འདི་.....ལུ་ གོ་དགོ།(གོ་རྟོགས་)</div> <div>ག དབྱངས།</div> <div>ཁ སྡོན་འཇུག།</div> <div>ག རྗེས་འཇུག།</div> <div>ང གསལ་བྱེད།</div>			
༥	<div>འབྲལ་ཟེར་བའི་མིང་ཆོག་འདི་ཡན་ཚུན་མཐུད་པའི་དོན་ལུ་གོ་དགོ་པ་ཅིན་དབྱངས་(གོ་རྟོགས་)CBQ</div> <div>ག ཞབས་ཀྱས་བཏག་དགོ།</div> <div>ཁ འབྲེང་བྱ་བཀལ་དགོ།</div> <div>ག རྩ་བཀལ་དགོ།</div> <div>ང གི་གྲ་འཐེན་དགོ།</div>			
༦	<div>སློབ་ཕྱག་ཆ་རོགས་ཅིག་གིས་སྡོན་འཇུག་མ་ནིང་གིས་མིང་གཞི་མོ་ལུ་འཇུག་པའི་མིང་ཆོག་ ག་ཅི་བཟུམ་ར་ སློ་ཟེར་དྲི་བ་ཅིན་ ཁྱོད་ཀྱིས་(ལག་ལེན་)cbq</div> <div>ག འགའ། འཇའ། འདའ། འབའ། འཇའ་བཟུམ་ཚུ་ཨིན་ཟེར་སླབ་དགོ།</div> <div>ཁ བརྟན། བལྟས། བལྟན། བཅུམ། བཟུམ་ཚུ་ཨིན་ཟེར་སླབ་དགོ།</div> <div>ག དབྱེས། དབྱ། དབྱངས། དབྲལ། དབྲལ་བཟུམ་ཚུ་ཨིན་ཟེར་སླབ་དགོ།</div> <div>ང གཅན། གཏན།དཀྱིལ། དགོལ། དཔུད། དཔུལ་བཟུམ་ཚུ་ཨིན་ཟེར་སླབ་དགོ།</div>			
༧	<div>སློབ་དཔོན་ཀྱིས་སྡོན་འཇུག་ཕོ་ག་ཡིག་གིས་མིང་གཞི་ཀ་ལུ་མི་འཇུག་པས།ག་ཅི་འབད་ཨིན་ན་ ཟེར་དྲི་ བའི་ལན་ལུ་སློབ་ཕྱག་ཚུ་གིས་(དབྱེ་དབྱད་)cbq</div> <div>ག རང་སྡེ་འབདཱ་ལས་བརྟེན་ཨིན་པས་ཟེར་བཀོད་རུག།</div> <div>ཁ མིང་གཞི་ཕོ་ཡིག་འབད་ནི་འདི་གིས་ཨིན་པས་ཟེར་ལྷུ་རུག།</div> <div>ག གསལ་བྱེད་དང་ཕོ་འབད་ནི་འདི་གིས་ཨིན་པས་ཟེར་བཀོད་རུག།</div> <div>ང མི་འཇུག་པའི་ཡི་གེ་འབདཱ་ལས་བརྟེན་ཨིན་པས་ཟེར་བཀོད་རུག།</div>			
<table><tr><td>དུས།</td><td>བྱ་ཆོག</td></tr></table>		དུས།	བྱ་ཆོག	
དུས།	བྱ་ཆོག			

	༡ འདས་པ།	ཀ མདོ་སྐྱར་བར་བྱེད།	
	༢ ད་ལྟ་བ།	ཁ གཅད་པར་འགྱུར།	
		ག རྫོགས་པའི་གོ།	
༡༠	གོང་གསལ་ཐིག་སྒྲིམ་ནང་གི་དུས་དང་བྱ་ཆེག་གཉིས་པོ་མཐུན་སྒྲིག་འབད་ཅིན་ (དབྱེད་བྱེད་)		
	ཀ ༡-༡༩-ཁ		
	ཁ ༡-༡༩-ག		
	ག ༡-༡༩-ཁ		
	ང ༡-༡༩-ཀ		
སྡེ་ཚན་ཁ་པ།སྒྲིགས་༡༠།			
བཀོད་སྒྲི། འོག་གི་ངི་བ་ཚུ་གི་ལན་ དེས་པར་དུ་བྲིས།			
༡	ནམ་དཔྱད་རྟོག་དཔྱད་བརྟག་དཔྱད་དང་། རྩེ་དཔོན་སྒོ་བ་དཔོན་སེམས་དཔལ་ཆེ། ཟེར་བའི་དག་སྒྲོན་ཅ་བའི་ ཆེག་རྒྱུ་གཉིས་ལས་མིང་ཆེག་མ་འདྲུལ་བཞི་དོས་འཆོན་འབད་དེ་བྲིས།(དན་ཤེས་)		[༡]
༢	མིང་གཞི་ཡི་གེ་ཚུ་ལུ་སྒྲོན་འཇུག་བཤད་པའི་སྐབས་ མིང་གཞི་མིན་པར་འཇུག་ཡུལ་ཟེར་བཞག་དགོ་པའི་གནད་དོན་ ག་ཅི་སྒྲོ་(གོ་		[༡]
༣	གཤམ་གསལ་མ་འོངས་པའི་བྱ་ཆེག་ཚུ་གིས་དུས་འདས་པ་སྒྲོན་དགོ་པ་ཅིན་ག་དེ་འབད་འབྲི་དགོ་? (ལག་ལེན་)		[༡]
	༡ ཆེབ་གཅིག།		
	༢ མིག་འཇུག།		
	༣ མེས་འཆོག།		
	༤ རྫོགས་འཆོལ།		
༤	འོག་གི་མིང་ཆེག་ཚུ་ལས་གཉིས་གདམ་ཁ་རྒྱབ་སྟེ་རྩོད་ཆེག་རེ་བཟོ། (ལག་ལེན་)		[༡]
	༡ མཛེར་པ།		
	༢ འཛེག།		
	༣ འཇུག་མཛེས་པ།		
	༤ བ་མཛེས།		
༥	སྒྲོན་བ་དང་གཉིས་མིང་གཞི་ལུ་འཇུག་པའི་སྐབས་མ་འདྲུལ་བའི་བྱེད་པར་བྱེ། (དབྱེད་བྱེད་)		
༦	བསྐྱབ་ཟེར་མི་བྱ་ཆེག་འདི་དུས་ད་ལྟ་བ་དང་འདས་པའི་དོན་སྒྲོན་ཐབས་ལུ་ འཕྲི་བསྐྱན་ག་ཅིར་འབད་དགོ་པ་		[༡]

	སྒྲི(དན་ཤེས)							
ཡ	རྟགས་ཀྱི་འཇུག་པ་ཟེར་བའི་གོ་དོན་གྱིས།(གོ་རྟགས)	[༡]						
༤	འཇུག་པོ་སྔོན་འཇུག་པོ་ཡིག་གིས། །འཇུག་ཡུལ་མིང་གཞི་པོ་མོ་ལོ།། ཟེར་བའི་ཆོག་རྟགས་ཀྱིས་བཅུད་ དོན་ག་ཅི་སྔོན་མ་མས?(གོ་རྟགས)	[༡]						
༧	གཤམ་གསལ་སྔོན་འཇུག་པོ་ཡིག་གིས་མིང་གཞི་ཀ་དང་ག་གཉིས་ལུ་འཇུག་ཡོད་པའི་མིང་ཆོག་ཚུ་ འདོགས་ ཕུལ་དང་བཅུགས་འཕུལ་གྱི་སྡེ་ཚན་བཟོ། (ལག་ལེན)	[༡]						
༡༠	སྔོན་འཇུག་པོ་ཡིག་བདག་གཞན་གྱིས་མ་བསྐྱུས་པའི་དུས་ད་ལྟ་བ་དང་མ་འོངས་པ་གཉིས་ལུ་འཇུག་པའི་དཔེར་ བཞིན་གཉིས་རེ་བཀོད།(ལག་ལེན)	[༡]						
	སྡེ་ཚན་ག། སྐྱགས་ ༡༠།							
	བཀོད་རྒྱ། འོག་གི་རྩི་བ་གསུམ་ལས་གཉིས་གདམ་ཁ་རྒྱབ་སྡེ་ལན་གྱིས།							
	རྩི་བ་དང་བ།							
༡༡	<u>ཕུན་ཏྲ་རི་ཀའི་རྒྱན་ཅན་ཁྱོད།</u> །ལག་ཏུ་ <u>པི་ཕང་</u> ་བསྐྱུས་པ་ལས། །དག་དབང་ལྟ་མོའི་ <u>རྣམ་འཕྱུལ་</u> ་འདྲ། །འདྲན་བྱེད་ བྱུང་གིས་ <u>མདའ་འཕེན་</u> ་པས། །སྤྱང་པོའི་ཡིད་དབང་འཕྱུལ་དུ་བཅོམ། །ཟེར་བའི་རྩྭ་འདི་ནང་ལུ་ཞབས་ཐིག་འཐེན་ ཡོད་པའི་མིང་ཆོག་ཚུ་གི་གོ་དོན་གྱིས། CBQ (གོ་རྟགས)	[༥]						
ཁ	ངག་སྒྲོན་ད་སྡེ་དང་ན་སྡེའི་ནང་ལས་ གནམ་རྒྱ་མཐོག་རྒྱང་།གདམ་པ་ཕྱེད་།འདག་ཆལ་སྒྲོ་དོལ་སྒྲ་ བདོལ་བཅུག་ད་ཀ་འདྲུས་བསྐྱར་བས་མཐོག་ལ་སོགས་པའི་མིང་ཆོག་ལྟ་བ་སྤྱངས་འབད་ཡོད་མི་འདི་གིས་ ཁྱོད་ལུ་ཕན་ཐོགས་པས་ག? ག་ཅི་འབད? (དབྱེ་ཞིབ)	[༥]						
	རྩི་བ་གཉིས་པ།							
༡༡	འགྲོ་བ་མིའི་རིགས་ལུ་རྟན་གཞོན་གྱི་སྡེ་ཚན་ཡོད་དོ་བཟུམ་སྡེ་མིང་ཆོག་ལུ་ཡང་མིང་གི་སྡེ་ཚན་བྱ་ཆོག་གི་སྡེ་ ཚན་ཁྱད་ཆོག་གི་སྡེ་ཚན་ཟེར་ཡོད་པ་ལས་གཤམ་གསལ་མིང་ཆོག་ཚུ་མིང་བྱ་ཆོག་ཁྱད་ཆོག་གསུམ་གྱི་སྡེ་ ཚན་བཟོ། (ལག་ལེན) CBQ མཛེས་འདུ་འཛོལ་སྔོན་འཛོད་།འཛོམ་ཤ་སྒྲེ།མཛེས་ཡིད་ལ་ཤལ་ལེ།མཛེས་བོ་སྒྲོར་འཇུལ་ཇུབ་ཇུབ། <table border="1"> <tr> <td>མིང་།</td><td>བྱ་ཆོག</td><td>ཁྱད་ཆོག</td></tr> <tr> <td></td><td></td><td></td></tr> </table>	མིང་།	བྱ་ཆོག	ཁྱད་ཆོག				[༥]
མིང་།	བྱ་ཆོག	ཁྱད་ཆོག						
ཁ	གཤམ་གསལ་ཐིག་ཁྲམ་ཀ་པའི་དོན་དང་ཁ་པའི་མིང་ཆོག་ཚུ་མཐུན་སྒྲིག་འབད་དེ་ཀ་རྟགས་ལན་གྱི་ས་སྟོང་ནང་	[༥]						

<p>རྩི་བ་བྱུག་པ།</p>													
<p>ཀ འོག་གི་རྫོང་ཚོག་ནང་གི་བྱ་ཚོག་ཚུ་ལུ་འོས་འབབ་ཡོད་པའི་སྡོན་འཇུག་གདམ་སྟེ་བཙུགས་ཏེ་བྲིས།དཔེར་ན་ མཚམས་པས་དམ་ཚེས་.....སྐབས་འདུག། (འཁལ།) ལན་བསྐྱབས།(ལག་ལེན)CBQ</p> <table border="1"> <thead> <tr> <th>རྫོང་ཚོག་གི་འཇུག་པ།</th><th>སྡོན་འཇུག་གི་འཇུག་པ།</th></tr> </thead> <tbody> <tr> <td>༡གནམ་ལས་ཆར་པ་.....བབ་བཞེན་འདུག</td><td>༥༡༥༥</td></tr> <tr> <td>༢སེམས་ལ་བདེ་བ་འབྱུང་ཕྱིར་ཞི་གནས་.....སྒྲིམ་དགོས།</td><td>༥༡༥༥</td></tr> <tr> <td>༣སེམས་ཅན་.....སངས་ལྷན་པ་ཆེ།</td><td>བཀའ།</td></tr> <tr> <td>༤.....གཤམ་བྱའི་སྡོན་ལྷན་སྡོད་བར་བྱ།</td><td>༥༡༥༥</td></tr> <tr> <td>༥བསམ་དོན་བསྐྱབས་པས་རང་སེམས་.....གཤམ།</td><td>བཀའ།</td></tr> </tbody> </table>	རྫོང་ཚོག་གི་འཇུག་པ།	སྡོན་འཇུག་གི་འཇུག་པ།	༡གནམ་ལས་ཆར་པ་.....བབ་བཞེན་འདུག	༥༡༥༥	༢སེམས་ལ་བདེ་བ་འབྱུང་ཕྱིར་ཞི་གནས་.....སྒྲིམ་དགོས།	༥༡༥༥	༣སེམས་ཅན་.....སངས་ལྷན་པ་ཆེ།	བཀའ།	༤.....གཤམ་བྱའི་སྡོན་ལྷན་སྡོད་བར་བྱ།	༥༡༥༥	༥བསམ་དོན་བསྐྱབས་པས་རང་སེམས་.....གཤམ།	བཀའ།	[ལ]
རྫོང་ཚོག་གི་འཇུག་པ།	སྡོན་འཇུག་གི་འཇུག་པ།												
༡གནམ་ལས་ཆར་པ་.....བབ་བཞེན་འདུག	༥༡༥༥												
༢སེམས་ལ་བདེ་བ་འབྱུང་ཕྱིར་ཞི་གནས་.....སྒྲིམ་དགོས།	༥༡༥༥												
༣སེམས་ཅན་.....སངས་ལྷན་པ་ཆེ།	བཀའ།												
༤.....གཤམ་བྱའི་སྡོན་ལྷན་སྡོད་བར་བྱ།	༥༡༥༥												
༥བསམ་དོན་བསྐྱབས་པས་རང་སེམས་.....གཤམ།	བཀའ།												
<p>ཁ རྩི་བ་འཇུག་ལས་ མོ་ལ་རབ་འབྱིང་ཐ་གསུམ་ ཞེས་བཤད་པའི་སྐབས་ རབ་འབྱིང་ཐ་གསུམ་པོ་དེ་ རྩི་བ་འཇུག་དང་ ཡང་འཇུག་གང་གི་ རུས་པ་གིས་གྲུབ་སྟོན་ རྩི་བ་མཚན་བྲིས།</p>	[ལ]												
<p>རྩི་བ་བྱུག་པ།</p>													
<p>ཀ མོ་ཡིག་བ་ཡིས་ རུས་གསུམ་ལས་ བྱེད་པ་པོ་དང་འབྲེལ་བའི་རུས་འདས་པ་དང་ བདག་གཞན་ལས་ བྱེད་པ་པོ་ དང་དངོས་སུ་འབྲེལ་བའི་གཞན་གྱི་དངོས་པོ་བསྐྱབ་ནིའི་དོན་ལུ་འཇུག་པའི་དཔེར་བཞིན་ལྟ་རྒྱུ་ལྟོས། (ལག་ལེན)</p>	[ལ]												
<p>ཁ གསལ་བྱེད་སུམ་ཅུ་ཐམས་པ་འདི་མོ་མ་ཞིང་མོ་གི་རྩ་ལོ་མོ་གཤམ་འབད་སྟེ་ཚན་ལུ་ཕྱེ་ལྷག་དེ་འབད་ མ་ཕྱེ་བ་ ཅིན་སྟོན་ག་ཅི་འོང་ནི་མས་? (དབྱེ་དཔྱད)CBQ</p>	[ལ]												
<p>རྩི་བ་བཟུང་པ།</p>													
<p>ཀ རྩི་བ་འཇུག་གི་སྟོབས་ཀྱིས་མིང་གཞིའི་ཡི་གུ་རྩམས་ སྐྱ་བྲག་ཞན་ལུ་ ག་དེ་སྟེ་འགྱུར་མ་སྟོན་? དཔེ་༡༠ བྲིས། (ལག་ལེན) CBQ</p>	[ལ]												
<p>ཁ རྩི་བ་འཇུག་གི་སྟོབས་ཀྱིས་མིང་གཞིའི་ཡི་གུ་རྩམས་ སྐྱ་བྲག་ཞན་ལུ་ ག་དེ་སྟེ་འགྱུར་མ་སྟོན་? དཔེ་༡༠ བྲིས། (ལག་ལེན) CBQ</p>	[ལ]												

༡ རག་སྒྲོན་རྟགས་འཇུག་གི་རི་བོ་དཔྱད་འཆར་གཞིའི་རེ་འཁུམ་མིག་། སྡེ་ཚན་ཀ་དང་ལ། ༢༠༢༡

<div>རིག་ཆུལ།</div> <div>ལས་དོན།</div>	སྟགས་བཤོ་བཤའ།		བཟང་ཤེས།	གོ་རྟོགས།	ལག་ལེན།	དབྱེ་དཔྱད།	བསྟོམས།	
	བརྒྱ་ཆ་༡༠༠	བརྒྱ་ཆ་༣༠					སྟགས་	རི་བ།
མིང་ཚིག་། བྱད་ཚིག་ཚུ་མི་ཚེའི་གནས་སྤངས་ དང་འཁྲིལ་ཏེ་ བེ་སྤྲོལ་འབད་ཚུགས་དགོ།	༢༠	༤	༡ གདམ་ལ། ༤ལན་བྱང་།	༤གདམ་ལ།	༤ལན་བྱང་།		༤	༤
གྲིབ་ཚིག་ཚུ་ ཅུས་གསུམ་གྱི་ནུམ་གཞག་དང་ འཁྲིལ་ཏེ་ བེ་སྤྲོལ་འབད་ཚུགས་དགོ།	༢༠	༤		༣གདམ་ལ། ༡ལན་བྱང་།	༥གདམ་ལ། ༣ལན་བྱང་།		༤	༤
རྟགས་འཇུག་།								
ཡི་གེའི་ཕོ་མོ་མ་ནིང་གི་རྟགས་ཀྱི་དབྱེ་བ་ཚུ་ སོ་ སོར་བྱེས་ཏེ་ འབྲི་སྤྲོལ་འབད་ཚུགས་དགོ།	༥	༡	༡ གདམ་ལ།				༡	༡
སྒྲོན་འཇུག་གི་འཇུག་ཡུལ་དང་བཅས་ཏེ་ ལྷབ་ སྤྱང་འབད་དེ་ འབྲི་སྤྲོལ་འབད་ཚུགས་དགོ།	༢༥	༥		༣ལན་བྱང་།	༥གདམ་ལ། ༥ལན་བྱང་།	༥ལན་བྱང་། ༨གདམ་ལ།	༥	༥
དངོས་པོ་བདག་གཞན་ཅུས་གསུམ་གྱི་དབྱེ་བ་ དང་ དཔེར་བཞེད་ཚུ་སྤྲོལ་སོབ་དང་བསྟུན་གྱི་ ཚུགས་དགོ།	༢༠	༤	༤གདམ་ལ།	༡ལན་བྱང་།	༡༠ལན་བྱང་།	༡༠གདམ་ལ།	༤	༤
རྗེས་འཇུག་གི་ནང་གསེས་ རྟགས་བརྒྱད་ དཔེ་ དང་བཅས་ རྟོགས་ཏེ་ བེ་སྤྲོལ་འབད་ཚུགས་	༡༠	༣		༡གདམ་ལ།	༨ལན་བྱང་།		༣	༣

<p>དགོ།</p> <p>ཆེས་འཇུག་གིས་བྱགས་ཀྱིས་ མིང་མཐའ་འདྲེན་</p> <p>ཚུལ་ཚུ་ གོམས་སྒྱུར་ཚུ་དེ་ སྐབས་ཐོབ་དང་</p> <p>འཁྲིལ་ལག་ལེན་འཐབ་ཚུགས་དགོ།</p>								
བསྡོམས།	༡༠༠	༣༠	༤	༩	༩	༤	༣༠	༣༠

༣ དག་སྐྱོན་རྟགས་འཇུག་གི་བྱི་བཀོད་འཆར་གཞིའི་རེབ་མིག། སྡེ་ཚལ་ག། ༣༠༣༡

[illegible]

ཡི་གེའི་ཕོ་མོ་མ་ནིང་གི་རྟགས་ཀྱི་དབྱེ་བ་ཚུ་ སོ་སོར་ཕྱེས་ཏེ་ འབྲི་སྒྲིབ་འབད་ཚུ་གས་ དགོ།	ཕ	ཕ				ཟུལ།			ཕ	༡
ཐོན་འཇུག་གི་འཇུག་ཡུལ་དང་བཅས་ཏེ་ སྐབ་སྐྱུང་འབད་དེ་ འབྲི་སྒྲིབ་འབད་ ཚུ་གས་དགོ།	༣༠	༢༥			༤-ཟླ།	༤ལ།	ཕལ།	༣ལ།	༣༠-ཕ	ཕ
དངོས་པོ་བདག་གཞན་དུས་གསུམ་གྱི་དབྱེ་ བ་དང་ དཔེར་བཞིན་ཚུ་སྐབས་ཐོབ་དང་ བསྐྱེད་ཐིམ་ཚུ་གས་དགོ།	༢༠	༡༥		༤-ཕྱྱ།			༤ལ།		༡༥	༣
རྗེས་འཇུག་གི་ནང་གསེས་ རྟགས་བརྒྱད་ དཔེ་དང་བཅས་ རྟོགས་ཏེ་ འབྲི་སྒྲིབ་འབད་ ཚུ་གས་དགོ། རྗེས་འཇུག་གིས་ཤུགས་ཀྱིས་ མིང་མཐའ་ འདྲེན་ཚུ་ལ་ཚུ་ ཐོམས་སྐྱུང་ཚུ་དེ་ སྐབས་ ཐོབ་དང་འབྲིལ་ལག་ལེན་འཐབ་ཚུ་གས་ དགོ།	༡༠	༡༠			༡ཀ།	༡ལ།			༡༠	༢
བསྟོོམས།	༡༠༠	༤༠	ཕ	༡༥	༢༠	༢༠	༡༥	ཕ	༠	༡༤

ENGLISH

ENGLISH

Writing and Language (Paper – I)

Examination Time: Three Hours Fifteen Minutes.

(The first fifteen minutes is for reading the Question Paper)

Section A: Writing

Question 1

Direction: Write an argumentative essay on any ONE of the following. **(25 marks)**

- The National Assembly of Bhutan endorsed the legalisation of sale of tobacco and tobacco products in the country. This is good for the country and the people.
- The government should enhance public transport service and stop the ever-increasing number of taxis in the country.

Question 2

(10 marks)

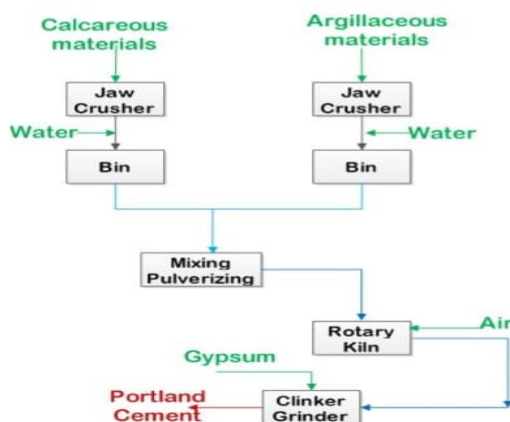
Tendruk College of Science and Technology is celebrating the golden jubilee (50 years) of its foundation, and important officials and personalities have been invited for the celebration.

You, Yeatshok, a reporter working for the Bhutan Tribune, have been assigned to cover the event. Write a report of about 150 words for your newspaper.

Question 3

(10 marks)

Direction: Study diagram below and describe, in about 100 words, how Portland cement is manufactured.



Question 4**(10 marks)**

You are the Director of Bhutan Institute of Sustainability and have been noticing most of your staff leaving the office without switching off the lights and heaters in their respective offices. Write a memo to all the staff about this situation stating the consequence that could follow if the memo is not adhered to.

Section B: Language and Grammar.
Answer all questions.

Question 5**(1 x 4 =4)**

- a. *Direction: Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and write it in your answer sheet.*
- i. The basic unit of language is
- A word.
 - B sound.
 - C speech.
 - D thought.
- ii. Humans have the capacity to learn any language because it
- A is meta-linguistic.
 - B is open ended system
 - C has duality of structure
 - D is culturally transmitted
- iii. "Human language can be used to refer to any dimension of space and time." Which feature of the human language does this statement explain?
- A Duality
 - B Arbitrariness
 - C Displacement
 - D Open-endedness
- iv. In the level of language analysis, phonological level means
- A sounds and their forms.
 - B forms and their organization.
 - C sounds and their organization.
 - D manifestation in the phonological syntactic levels.

- b. Why is it said that language cannot be transmitted genetically? (3 marks)
- c. Of the two theories of language acquisition – rationalist and behaviourist – which one do you support? Why? (3 marks)

Question 6

(1 x 5 =5)

Direction: Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and circle the letter of your choice.

- i. Nobody has the authority to _____ the decision of the Board of Directors.
- A over-run
 - B over-turn
 - C over-rule
 - D over-throw
- ii. Fed up of the world's corruption and misery, she decided to _____ the world.
- A retire
 - B resign
 - C renounce
 - D denounce
- iii. Typhoid has broken
- A in this town.
 - B out in this town.
 - C down in this town.
 - D about in this town.
- iv. You look bored. Aren't you interested.....?
- A in what I am saying
 - B of what I am saying
 - C with what I am saying
 - D about what I am saying
- v. Dorji went to the hospital yesterday because he well for the last couple of days.
- A hadn't been feeling
 - B was not feeling
 - C hasn't been feeling
 - D haven't been feeling

Question 7

Direction: Write “true” for correct statements and “false” for incorrect ones. **(1 x 5 = 5)**

- i. “**I ain’t**” is the informal contraction of **I am not**.
- ii. The sentence: “**The dress I was given was of inferior quality to the sample I was shown**”, is correct.
- iii. The plural of ‘people’ is ‘peoples.
- iv. The past participle of **find** is **find**.
- v. To **read between the lines** means to **look for implied meaning**.

Question 8

Direction: Rewrite the following sentences as instructed in each case. **(2 x 5 = 10 marks)**

- i. The young man wanted to travel. He wanted new experiences.
(join the two sentences using an appropriate coordinating conjunction)
- ii. Dechen writes. She has something to say.
(Join the two to make a complex sentence.
- iii. A man was walking down the street with long grey hair.
(Rewrite placing the modifier in the correct place)
- iv. a) The man turned pale. b) He shivered violently. c) He slumped on the ground.
(Combine the three as one sentence by using appropriate discourse markers/connectives)
- v. The rise in the number of stray dogs in towns is because of our misplaced compassion.
(Use a modal adjective or modal verb to hedge or tone down the language)

Question 9

(1 x 5 = 5)

Each of the sentences below is incorrect. Rewrite after rectifying the errors. Hints have been provided in brackets.

- i. I like swimming, cycling and to play football. *(faulty parallelism)*
- ii. Love is a difficult emotion to express. *(misplaced modifier)*
- iii. Our landlord was expected to make changes. Such as fixing the plumbing and installing a dryer. *(fragment)*

- iv. I am not angry with you, I am not happy with you, either. (*comma splice*)
- v. The car had a powerful engine and auto gear; therefore, it had no brakes. (*faulty discourse marker/connector*)

Question 10

(1 x 5 = 5)

Direction: Rewrite the following sentences using the correct idioms given in the table below. Your sentences should have a similar meaning to the ones given.

its not rocket science	give a cold shoulder	a dime a dozen
call it a day	cut corners	get out of hand

- i. When the police arrived, they found out that the late-night party goers were difficult to be controlled.
- ii. Pedey thought her friends would be happy to see her, but she was completely ignored.
- iii. Learning algebra is fun! It's easy.
- iv. After working continuously for five hours, Dorji decided to stop and go home.
- v. To maximise profits the company started doing things in a cheap and easy way.

Question 11

(1 x 5 = 5)

Direction: Make a sentence each using the phrasal verbs given below.

- i. Get along
- ii. Look forward to
- iii. Put up with
- iv. Turn out
- v. Run into

English I (Writing and Language) Blueprint for Classes XI and XII

Sl #	Chapter/topic	Weighting	Remembering	Understanding	Applying	Analysing	Evaluating	Creating	Total marks
SECTION A: Writing									
1	Persuasive / Argumentative Essay	25%						Q1 (25 marks)	25
2	Report Writing/ Summary Writing	10%				Q2(10 Marks)			10
3	Information Transfer	10%			Q3 (10Marks)				10
4	Letter writing/Memo Writing	10%			Q. 4 (10 marks)				10
SECTION B: Nature of Language and Grammar									
5	Nature of Language	10%	Q5.a(i) (1 mark)	Q5.a(ii) (1 mark)		Q5.a(iii), Q5.a(iv) (2 marks), Q5.b(i) (3 marks)	Q5.b(ii) (3 marks)		10
6	Grammar (Based on competencies and learning objectives given in the framework)	35%				Q6 (5 marks)			5
				Q7 (5 marks)					5
							Q.8 (10 marks)		10
					Q. 9 (5 marks)				5
						Q.10 (5 marks)			5
					Q.11 (5 marks)				5
	TOTAL	100%	1	6	30	25	13	25	100

ENGLISH

Reading & Literature (Paper – II)

Examination Time: Three Hours Fifteen Minutes.

(The first fifteen minutes is for reading the Question Paper)

.....
Instructions:

1. This paper has four **Sections: A, B, C and D** corresponding to Short Stories, Essay, Poetry and Drama respectively.
 2. Each **Section** has three types of **Questions**
 3. All questions are compulsory **UNLESS** where specified.
 4. The intended marks for each question is given in brackets.
 5. Mention the section and question number before writing the responses.
 6. Begin each section on a fresh page.
 7. No marks will be awarded for any extra questions attempted.
-

Section A: Short Stories.

Question 1

(1 x 5 =5)

Direction: Answer the following questions with reference to the story **Mirror Image** by Lena Coakley.

- a) *Direction: Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and circle the letter of your choice.*
- i. The hospital scene in this story occurs as
 - A a prologue.
 - B a flashback.
 - C an epilogue.
 - D a foreshadow.
 - ii. When Alice's mother says, "My lawyer says they don't have a legal leg to stand on."
What figure of speech is she using?
 - A Metaphor
 - B Oxymoron
 - C Epithet
 - D Irony
 - iii. Alice had to try hard to eat the cake her mother had made because
 - A the cake was made with chocolate and mocha cream.
 - B she knew why her mother had made the cake.
 - C she had a different brain.
 - D she had a different body.

Alice and Jenny lay on top of their beds supposedly doing homework

- iv. The above sentence means that Alice and Jenny were
- A sleeping on their bed respective beds.
 - B believed to be doing their homework.
 - C planning to do their homework.
 - D doing their homework.
- v. Jenny refuses to let Alice read her diary because
- A Jenny feels that she did not know Alice any longer.
 - B Jenny has written about her new boyfriend.
 - C Jenny does not want to let out her secrets.
 - D Alice does not share her diary with her.

Question 2

Direction: Answer both the questions.

(5 x 2 = 10)

- i. Imagine that you are Jenny in the story, write a paragraph of about 100 words expressing your feelings when you first saw Alice after the operation.
- ii. To what literary sub-genre does the story *The mirror Image* belong? Support your answer by writing down the features of the genre with reference to the story.

Question 3

Direction: Answer any ONE.

(1 x 10 = 10)

- i. Compare and contrast the stories, *Lamb to the Slaughter* by Roald Dahl and *The Mirror Image* by Lena Coakley with close reference to their respective narrative structure, character development and theme.
- ii. How is the story, The Elephant by *Slawomir Mrozek* a satirical allegory? Identify at least five characters or things used in the story and explain the symbolic meaning of each.
- iii. How does Roald Dahl use dramatic irony to enhance the overall effect on the readers in his story, *Lamb to the Slaughter*?

Section B: Essay

Direction: Read the essay given below and answer the questions that follow in reference to the essay.

May 10 dawned bright and clear. For the past few days, I had been pleasantly besieged by arriving world leaders and dignitaries paying their respects. The inauguration would be the largest ever gathering of international leaders on South African soil.

The ceremonies took place in the sandstone amphitheatre formed by the Union Buildings in Pretoria. I was accompanied by my daughter Zenani. On the podium Mr. Klerk was first sworn in as the second deputy President. Then Thabo Mbeki was sworn in as the first deputy President. When it was my turn, I pledged to obey and uphold the constitution and to devote myself to the well-being of the republic and its people.

We all lifted our eyes in awe as a spectacular array of South African jets, helicopters and troop carriers roared in perfect unison over the Union Buildings. It was a display not only of pinpoint precision and military force but of the military's loyalty to democracy, to a new government that had been freely and fairly elected. Only moments before, the highest generals of the South African Defense Force and police, their chest covered with ribbons and medals from days gone by had saluted me and pledged their loyalty. I was not unmindful of the fact that not so many years before, they would not have saluted but arrested me.

The day was symbolized for me by the singing of our two national anthems and the vision of whites singing '*Nkosi Sikelel' iAfrika*' and blacks singing '*Die Stem*', the old anthem of the republic. Although that day neither group knew the lyrics of the anthem they once despised, they would soon know the words by heart. On the day of the inauguration I was overwhelmed with a sense of history. That day had come about through the unimaginable sacrifices of thousands of my people. I felt that day that I was simply the sum of all the African patriots who had gone before me. The policy of apartheid created a deep and lasting wound in my country and my people. All of us will spend many years recovering from that profound hurt. But the decades of oppression and brutality had another, unintended effect – they produced the Oliver Tambos, the Walter Sisulus, the Chief Luthulis, the Bram Fischers of our time. Men of such extraordinary courage, wisdom and generosity; that their like may never be known again.

Perhaps it requires such depths of oppression to create such heights of character. My country is rich in the minerals and gems that lie beneath its soil, but I have always known that its greatest wealth is its people, finer than the purest diamonds.

It is from these comrades in the struggle that I learned the meaning of courage. Time and again I have seen men and women risk and give their lives for an idea. I have seen men in prison stand up to attacks and torture without breaking, showing a strength and resilience that defy the imagination. I learned that courage was not the absence of fear, but the triumph over it. I felt fear myself more times than I can remember, but hid it behind a mask of boldness. The brave man is not he who does not feel afraid, but he who conquers that fear.

I never lost hope that this great transformation would occur. No one is born hating another

person because of the colour of his skin or his background or his religion. People must learn to hate, and if they can learn to hate, they can be taught to love, for love comes more naturally to the human heart than its opposite.

For myself, I have never regretted my commitment to the struggle. But my family paid a terrible price – perhaps too dear a price – for my commitment. In South Africa, a man who tried to fulfil his duty to his people was inevitably ripped from his family and his home and was forced to live a life apart, a twilight existence of secrecy and rebellion. It was as simple and yet as incomprehensible as the moment a small child asks her father, “Why can you not be with us?”

I was not born with a hunger to be free. I was born free – free in every way that I could know. Free to run in the fields near my mother’s hut, free to swim in the clear stream that ran through my village. It was only when I began to learn that my boyhood freedom had already been taken from me that I began to hunger for it. And I saw that it was just not my freedom that was curtailed but the freedom of everyone who looked like I did. That was when I joined the African National Congress, and that was when the hunger for my own freedom became the still greater hunger for the freedom of my people.

This hunger became a hunger for the freedom of all people, white and black. I knew as well as I knew anything that the oppressor must be liberated just as surely as the oppressed. A man who takes away another man’s freedom is a prisoner of hatred. I am not truly free if I am taking away someone else’s freedom, just as surely as I am not free when my freedom is taken from me. The oppressed and the oppressor alike are robbed of their humanity.

When I walked out of the prison; that was my mission: to liberate both the oppressor and the oppressed. Some say that has now been achieved. But I know that the truth is that we are not yet free; we have merely achieved the freedom to be free, the right not to be oppressed. We have taken the first step on a longer and even more difficult road.

I have walked that long road to freedom. I have tried not to falter; I have made mistakes along the way. But I have discovered the secret that, after climbing a great hill, one only finds that there are many more hills to climb. I have taken a moment here to rest, to steal a view of the glorious vista that surrounds me, to look back at the distance I have come. But I can rest only for a moment, for with freedom comes responsibilities, and I dare not linger, for my long walk is not yet ended.

Nelson Mandela

Extract from *Long Walk to Freedom*

Question 1

(1 x 5 = 5)

Direction: *Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and circle the letter of your choice.*

- i. A brave person, according to the essay, is one who
 - A overcomes fear.
 - B does not know fear.
 - C can tolerate extreme pain.
 - D has a hunger for freedom.

- ii. May 10 appears to be the inaugural day of
 - A the Union Building
 - B South African Defence Force
 - C the author as a President
 - D World Leaders' Seminar.

- iii. The names Oliver Thambo and Walter Sisulus (paragraph 4) have been used as symbols of
 - A wisdom and courage.
 - B bravery and rebellion.
 - C wisdom and rebellion.
 - D freedom and courage.

- iv. 'I have walked that long road to freedom. I have tried not to falter'(last Paragraph)is an example of
 - A a hyperbole.
 - B a metaphor.
 - C a symbol.
 - D an allusion.

- v. The essay can be best categorised as
 - A descriptive.
 - B persuasive.
 - C narrative.
 - D expository.

Question 2**(5 x 2 = 10)****Direction:** Answer both the questions.

- i. Explain the ideas of freedom that the author presents in the essay.
- ii. Do you think the author is bitter about the events in his life? Justify your answer in about ten lines.

Question 3.**(1 x 10 = 10)****Direction:** Answer any ONE question

- i. The essay can easily be told as a story. Outline the features of a short story with examples from the essay that correspond to the features.
- ii. Write a paragraph of about 15 lines as a continuation of the last paragraph. Your paragraph should have a clear topic sentence.

Section C: Poetry**Direction:** Read the poem given below and answer the questions that follow.**The Darkling Thrush**BY THOMAS HARDY

I leant upon a coppice gate
When Frost was spectre-grey,
And Winter's dregs made desolate
The weakening eye of day.
The tangled bine-stems scored the sky
Like strings of broken lyres,
And all mankind that haunted night
Had sought their household fires.

The land's sharp features seemed to be
The Century's corpse outleant,¹
His crypt² the cloudy canopy,
The wind his death-lament.
The ancient pulse of germ and birth
Was shrunken hard and dry,
And every spirit upon earth
Seemed fervourless³ as I.

At once a voice arose among
The bleak twigs overhead

In a full-hearted evensong
Of joy illimited⁴;
An aged thrush, frail, gaunt, and small,
In blast-beruffled plume,
Had chosen thus to fling his soul
Upon the growing gloom.

So little cause for carolings⁵
Of such ecstatic sound
Was written on terrestrial things
Afar or nigh around,
That I could think there trembled through
His happy good-night air
Some blessed Hope, whereof he knew
And I was unaware.

1 stretched out.

2 burial place

3 empty of fervour, passion

4 unlimited

5 Singing, celebrating

Question 1

(1 x 5 = 5)

Direction: Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and circle the letter of your choice.

- i. "...weakening eye..." (1st stanza) refers to the
 - A end of winter.
 - B melting snow.
 - C evening sun.
 - D poor eyesight.
- ii. The first stanza contains both
 - A metaphor and personification.
 - B simile and personification.
 - C simile and hyperbole.
 - D simile and metaphor.
- iii. "His crypt the cloudy canopy." is an example of
 - A onomatopoeia.
 - B alliteration.
 - C symbolism.
 - D satire.

iv. "... blast-beruffled plume." (3rd stanza). The underlined word can be replaced by

- A feathers.
- B hairs.
- C furs.
- D coat.

v. The speaker, in the beginning of the poem appears to be

- A remorseful.
- B gloomy.
- C hopeful.
- D happy.

Question 2

(5x2 = 10)

Direction: Answer both questions.

- i. Why does the speaker say "so little cause for carolling" (last stanza)?
- ii. In your own words, write down a five-line stanza as continuation to the poem.

Question 3

(1 x 10 =10)

Direction: Answer any ONE.

- i. Contrast the first two stanzas with the last two in terms of the mood, tone and implied message they carry.
- ii. What could be the possible themes of the poem? Elaborate by quoting relevant lines or phrases from the poem.

Section D: Drama

Direction: Answer the questions in this section with reference to *The Merchant of Venice* by William Shakespeare.

Question 1

(1 x 5 = 5)

Direction: Each question below is followed by four responses. Choose the correct answer or response that best fits the given question and circle the letter of your choice.

- i. The friend who accompanies Bassanio to Belmont is
 - A Solanio.
 - B Salario.
 - C Gratiano.
 - D Lorenzo.

- ii. In Act I, Scene III, Shylock turns down Bassanio's invitation to dinner because he
 - A has prior engagement with Tubal.
 - B thinks they would serve him pork.
 - C has to keep an eye on his daughter.
 - D hates Antonio, and doesn't want to eat with him.

- iii. "...The shadowed livery of the burnished sun." (Act II, Scene 1) refers to the
 - A uniform that Bassanio gives to Lancelot.
 - B complexion of the Prince of Morocco.
 - C dark colour of Arragon's dress.
 - D Phoebus' dark dress.

- iv. **BASSANIO:** Gratiano speaks an infinite deal of nothing, more than
any man in all Venice. His reasons are as two grains of
wheat hid in two bushels of chaff – (Act 1, Scene 1)

In the above dialogue, Bassanio uses

- A irony.
 - B sarcasm.
 - C metaphor.
 - D hyperbole.
- v. In Act I scene 3, Shylock narrates the story of Jacob grazing his uncle Laban's sheep to
- A justify his practice of lending money on interest.
 - B make Antonio feel safe about taking his money.
 - C make Bassanio believe that he does not have ill will.
 - D justify his feelings towards the Christians.

Question 2**(2 x 5 = 10)****Direction:** Answer both the questions.**ANTONIO**

Mark you this, Bassanio,
The devil can cite Scripture for his purpose.
An evil soul producing holy witness
Is like a villain with a smiling cheek,
A goodly apple rotten at the heart.
Oh, what a goodly outside falsehood hath! (Act I, Scene 3)

- i. Explain the truth conveyed by Antonio in the above dialogue with a realistic example.
- ii. The Prince of Morocco would have been a better husband to Portia than Bassanio. Do you agree? Justify your answer.

Question 3**(1 x 10 = 10)****Direction:** Answer any ONE question.

“All that glisters is not gold--
Often have you heard that told.
Many a man his life hath sold
But my outside to behold.
Gilded tombs do worms enfold.
Had you been as wise as bold,
Young in limbs, in judgment old,
Your answer had not been inscrolled... (Act II, Scene 7)

- i. Explain how the above extract can be a metaphor for the reality of life.
- ii. Write a dialogue between Portia and Nerissa expressing their feelings had the Prince of Morocco chosen the right casket. Each should speak at least twice.

English II (Reading and Literature) Blueprint for Classes XI and XII

Sl #	Genres	Weighting	Remembering	Understanding	Applying	Analysing	Evaluating	Creating	Total marks
Section A: Short Story									
1	MCQ (compulsory)	5%	Q1a (i) (1 mark)	Q1a (ii) (1 mark)	Q1a (iii), Q1a (iv) (2 marks)	Q1a (v) (1 mark)			5
2	SRQ (compulsory)	10%			Q2 (i) (5 marks)			Q2 (ii) (5 marks)	10
3	ERQ (Choice based)	10%				Q3(a) OR Q3(b) (10 marks)			10
Section B: Essay									
4	MCQ (compulsory)	5%		Q1a (i), Q1a (ii) (2 marks)	Q1a (iii), Q1a (iv) (2 marks)	Q1a (v) (1 mark)			5
5	SRQ (compulsory)	10%				Q.2 (i) (5 marks)	Q.2 (ii) (5 marks)		10
6	ERQ (compulsory)	10%			Q3(a) OR Q3(b) (10 marks)				10
SECTION C: Poem									
7	MCQ (compulsory)	5%		Q1a (i), Q1a (ii) (2 marks)	Q1a (iii), Q1a (iv) (2 marks)	Q1a (v) (1 mark)			5
8	SRQ (compulsory)	10%		Q.2 (i) (5 marks)				Q.2 (ii) (5 marks)	10
9	ERQ (Choice based)	10%				Q.3(a) OR Q.3(b) (10 marks)			10
SECTION D: Play									
10	MCQ (compulsory)	5%	Q1a (i) (1 mark)	Q1a (ii), Q1a (iii) (2 marks)	Q1a (iv) (1 mark)	Q1a (v) (1 mark)			5
11	SRQ (compulsory)	10%				Q.2 (i) (5 marks)	Q.2 (ii) (5 marks)		10
12	ERQ (Choice based)	10%			Q.3(a) OR Q.3(b) (10 marks)				10
	TOTAL	100%	2	12	32	34	10	10	100

MATHEMATICS

Class XII (BHSEC Mathematics)**Part I: Test Blueprint****Blue Print BHSEC Mathematics****Section A (30 Marks)**

Strands	Rem	Unders	Applying	Analyzing	Evaluating	Creating	Total
Numbers and Operations		Q1(i)[2]	Q1(vi) [2]	Q1(x) [2]			6
Patterns and Algebra	Q1(xi) [2]	Q1(xiv) [2]	Q1(vii) [2]	Q1(xii) [2]	Q1(ii) [2]		10
Measurement			Q1(iv) [2]	Q1(iii) [2]			4
Geometry			Q1(viii) [2]	Q1(xiii) [2]	Q1(xv) [2]		6
Data Management & Probability		Q1(ix) [2]	Q1(v) [2]				4
Total	2	6	10	8	4		30

SECTION B (12 Questions 84 Marks)

Strands	Rem	Unders	Applying	Analyzing	Evaluating	Creating	Total
Numbers and Operations		Q5(a)[2] Q9(a)[3]	Q3(a)[5]	Q4b [4]	Q10(b)[4]		18
Patterns and Algebra	Q3(b)[2]		Q6b [5] Q8(b)[4] Q9(b)[4]	Q2b [4] Q11(b)i [2]		Q12(a)[4]	25
Measurement	Q2(a)[3]	Q7(a)[3]	Q13(a)[3]				9
Geometry	Q6a [2]	Q8(a)[3]	Q7(b)[4]	Q5(b)[5] Q11(b)ii [2]	Q13(b)[4]		20
Data Management & Probability		Q4a [3]	Q10(a)[3]	Q11(a)[3]	Q12(b)[3]		12
Total	7	14	28	20	11	4	84

Part II: Sample Question Paper

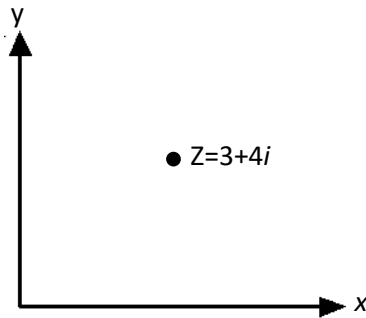
SECTION A [30 MARKS] ANSWER ALL QUESTIONS

Question 1

Direction: For each question, there are four alternatives: A, B, C and D. Choose the correct alternative and circle it. Do not circle more than ONE alternative. If there are more than ONE choice circled, NO score will be awarded. [30]

- i) From the Argand plane, the modulus of Z is

- A 7.
- B 6.
- C 5.
- D 4.



- ii) The transpose of the matrix obtained by replacing each element of the matrix by its cofactor of

$$\begin{bmatrix} 2 & -3 \\ 0 & -5 \end{bmatrix} \text{ is}$$

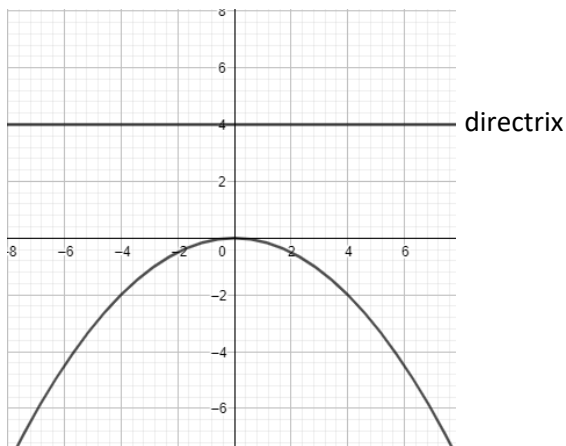
- A $\begin{bmatrix} -5 & 3 \\ 0 & 2 \end{bmatrix}$.
- B $\begin{bmatrix} -5 & 0 \\ 3 & 2 \end{bmatrix}$.
- C $\begin{bmatrix} -2 & -3 \\ 0 & 5 \end{bmatrix}$.
- D $\begin{bmatrix} 2 & 0 \\ -3 & -5 \end{bmatrix}$.

- iii) The least numerical value of $\sin^{-1} \frac{\sqrt{3}}{2} + 2 \tan^{-1} \frac{1}{\sqrt{3}}$ is

- A $-\frac{\pi}{3}$.
- B $\frac{2\pi}{5}$.
- C $\frac{2\pi}{3}$.
- D $\frac{3\pi}{4}$.

iv) The equation of the given parabola is

- A $y^2 = x.$
- B $y^2 = 16x.$
- C $x^2 = -4y.$
- D $x^2 = -16y.$



v) Match list-I (Equality/Inequality) with list-II (Inference) and select the correct answer.

List-I	List-II
(Equality/Inequality)	(Inference)
I. $P(E_1) + P(E_2) = 1$	1. E_1, E_2 are mutually exclusive events
II. $P(E_1) + P(E_2) = 0$	2. E_1, E_2 are mutually exhaustive events
III. $P(E_1) + P(E_2) \leq 1$	3. E_1, E_2 are not sure events
IV. $P(E_1).P(E_2) = 1$	4. E_1, E_2 are impossible events
	5. E_1, E_2 are not equally likely events

- | | | | | |
|---|---|----|-----|----|
| | I | II | III | IV |
| A | 2 | 1 | 4 | 3 |
| B | 3 | 1 | 5 | 2 |
| C | 2 | 4 | 1 | 3 |
| D | 1 | 3 | 2 | 5 |

vi) If A is non-singular matrix, then what is $|A^{-1}|$ equal to

- A 0.
- B $|A|.$
- C $\frac{1}{|A|}.$
- D 1.

vii) The $\frac{dy}{dx}$ of $x = a(\theta - \cos \theta)$ and $y = a(1 + \sin \theta)$ is

A $\frac{\theta - \cos \theta}{1 + \sin \theta}.$

B $\frac{\theta + \cos \theta}{1 + \sin \theta}.$

C $\frac{\cos \theta}{1 + \sin \theta}.$

D $\frac{1 + \sin \theta}{\cos \theta}.$

viii) If the walls facing opposite to each other of your classroom are described by $3x + 4y - 12z = 3$ and $6x + 8y - 24z + 9 = 0$ respectively, then find the distance between them.

A $\frac{15}{26}$

B $\frac{17}{26}$

C $\frac{26}{15}$

D $\frac{26}{17}$

ix) Given that $\sigma_x = 3$, $\sigma_y = 3.2$, and $b_{yx} = 0.85$, find the correlation coefficient.

A 1.07

B 0.99

C 0.97

D 0.94

x) Given $\int 2^x dx = f(x) + C$, then $f(x)$ is

A $\frac{2^{x+1}}{x+1}.$

B $2^x \log_e 2.$

C $2^x \log_e 2.$

D $2^x.$

xi) If $f(x)$ is defined by $f(x) = \begin{cases} x-4 & \text{if } x \geq 4 \\ -x+4 & \text{if } x \leq 4 \end{cases}$, then $\int_2^6 f(x) dx$ is equal to

- A 4.
- B 5.
- C -4.
- D -5.

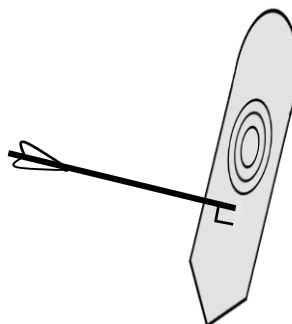
xii) Complete the table when $x = 0$.

$e^x - \cos x$	0
$\log x$	Undefined
$x^3 + 3x^2 + 2$	2
$2 \sin x + 3 \cos x$

- A -3
- B -2
- C 2
- D 3

xiii) Find the direction cosines of the arrow to the target. The equation of the target is given by $2x + 4y - 4z = 5$.

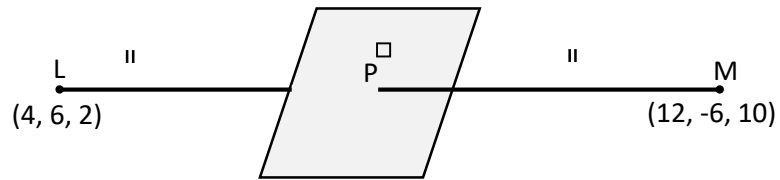
- A $\frac{1}{3}, \frac{2}{3}, \frac{-2}{3}$
- B $\frac{-2}{3}, \frac{-2}{3}, \frac{-1}{3}$
- C $\frac{-2}{3}, \frac{-2}{3}, \frac{1}{3}$
- D $\frac{-2}{3}, \frac{2}{3}, \frac{1}{3}$



xiv) If $\sin 2x = 2 \sin x \cos x$ and $1 + \sin 2x = (\cos x + \sin x)^2$, then $\int \frac{\cos x - \sin x}{1 + \sin 2x} dx$ is equal to

- A $\frac{2}{\cos x - \sin x} + c.$
- B $\log(\cos x + \sin x)^2 + c.$
- C $\frac{-1}{\cos x + \sin x} + c.$
- D $\log(1 + \sin 2x) + c.$

xv) Find the equation of the given plane.



- A $x - 3y - 4z - 21 = 0$
- B $2x - 3y + 2z - 34 = 0$
- C $4x - 6y + 2z - 12 = 0$
- D $12x - 6y + 10z - 16 = 0$

SECTION B [70 MARKS]
ATTEMPT ANY TEN QUESTIONS

Question 2

a) Examine the equality of the statement $\cos^{-1} \frac{12}{13} + \sin^{-1} \frac{3}{5} = \sin^{-1} \frac{56}{65}$. [3]

b) The following table shows the average weights (y kg) for the given heights (x cm) in a class. [4]

Height (x cm)	165	170	175	180	185
Weight (y kg)	67.8	70.0	72.7	75.5	77.2

- i. Determine the equation of the line of best fit for y on x .
- ii. Estimate the weight of a student whose height is 172 cm.

Question 3

a) The system of linear equations below can be written as the matrix equation $AX = B$. [5]

$$2x + 3y + 4z = -3, \quad 5x + 4y - 6z = 4, \quad 3x - 2y - 2z = 6.$$

- i. Write down the matrices A and B .
- ii. Find A^{-1} .
- iii. Write down the solution of the system of linear equations.

b) Find $\frac{dy}{dx}$ if $y = \sqrt{(x^3 + 1) + \sqrt{(x^3 + 1) + \sqrt{(x^3 + 1) + \dots \text{to } \infty}}}$. [2]

Question 4

a) Find out the rank correlation coefficient between X and Y in the data given below and interpret the result. [3]

X	10	20	30	40	50	60
Y	8	12	20	10	7	3

b) Solve for x : $\tan^{-1}(x-1) + \tan^{-1} x + \tan^{-1}(x+1) = \tan^{-1} 3x$ [4]

Question 5

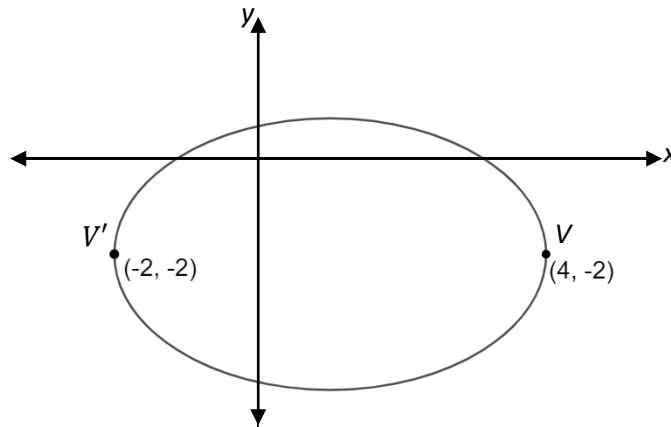
- a) A box contains two white balls, three black balls and four red balls. In how many ways can three balls be drawn from the box, if at least one black ball is to be included in the draw? [2]
- b) Find the equation of the plane passing through the line of intersection of the planes $x + 6y - 2z = 5$ and $3x - 2y - z = -1$ cutting off equal intercepts on OX and OY axes. [5]

Question 6

- a) Show that the equation $2x^2 + 7xy - 15y^2 + 26y - 8 = 0$ represents pairs of straight line. [2]
- b) Sketch the curve $y = x^2 - 2x$. Determine the area of two regions, one bounded by the curve and x -axis and the other between the curve, the x -axis and the line $x = 4$. Shade the smaller of these two areas. If the region between $x = 0$ and $x = 2$ is rotated through four right angles about x -axis, calculate the volume of the solid generated. [5]

Question 7

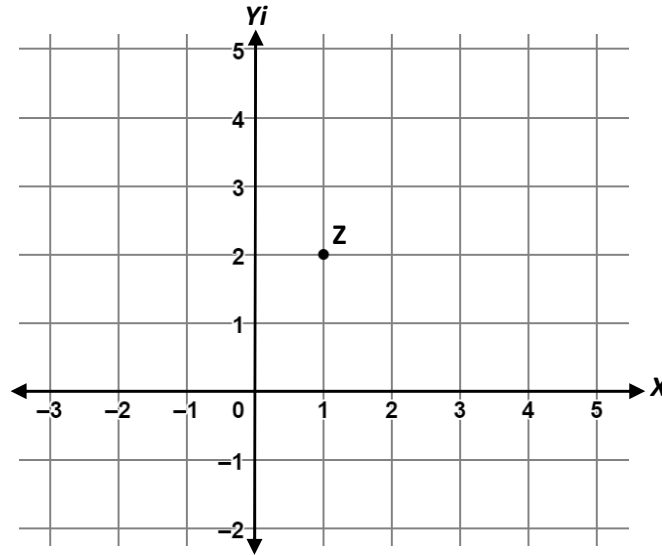
- a) Find $\frac{dy}{dx}$ if $y = \sin^{-1} x + \sin^{-1} \sqrt{1 - x^2}$. [3]
- b) Find the equation of the given conic section whose eccentricity is $\frac{1}{3}$. [4]

**Question 8**

- a) For what value of x will the line through $(5, 2, -3)$ and $(x, 1, 4)$ be parallel to the line through $(-3, -2, -1)$ and $(-1, -4, 13)$. [3]
- b) The difference between two positive numbers is 5. Find the numbers, if the square of the greater exceeds twice the square of the smaller by the maximum amount. [4]

Question 9

- a) Determine the region in the complex plane represented by $1 < |z - z_1| \leq 3$ and represent it on the given Argand Diagram. [3]



- b) The probability of Bhutan winning a football match against Sri Lanka is $\frac{1}{2}$. Assuming the matches as independent, find the probability that in a five-match series, Bhutan's second win occurs in the third match. [4]

Question 10

- a) Evaluate: $\int \frac{x+4}{(x^2+8x-5)^3} dx$ [3]
- b) There are 8 teachers (5 gentlemen and 3 ladies) are called for a round table meeting by the school Principal who is also a gentleman. In how many ways can they be seated so that every gentleman may have a lady teacher by their side? [4]

Question 11

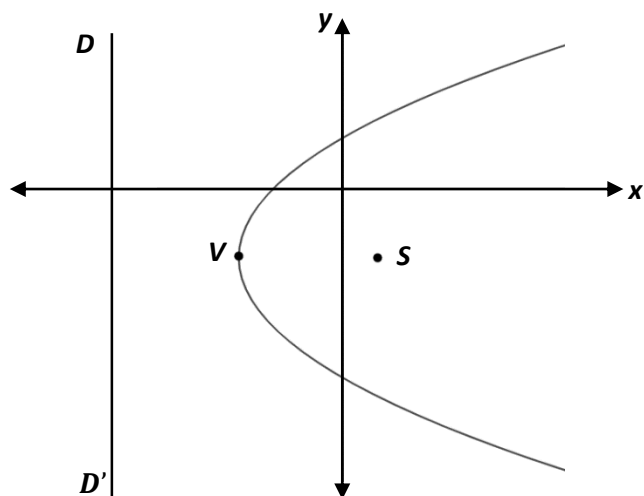
- a) Evaluate: $\int x \cos 2x dx$ [3]
- b) Solve the following questions:
- i) For the matrix $A = \begin{bmatrix} 1 & -1 \\ 4 & 5 \end{bmatrix}$, show that $A^2 - 4A + 5I = \begin{bmatrix} 1 & -2 \\ 8 & 6 \end{bmatrix}$. [2]
- ii) Given $z_1 = 1+i, z_2 = -2+i$, calculate the values of a and b if $a + bi = \frac{z_1 z_2}{z_1}$. [2]

Question 12

- a) Find the second order derivative of $y = \sin(2 \sin^{-1} x)$. [4]
- b) Calculate Karl Pearson's coefficient of correlation between the values of x and y for the following data: $n = 10$, $\sum x = 55$, $\sum y = 40$, $\sum x^2 = 385$, $\sum y^2 = 192$ and $\sum (x + y)^2 = 947$. [3]

Question 13

- a) Solve the equation: $\cos(\tan^{-1} x) = \sin\left(\cot^{-1} \frac{3}{4}\right)$. [3]
- b) Find the parts of the conic section leveled for the given diagram. [4]



FORMULAE**Strand A : Numbers and Operations**

$$a^2 - b^2 = (a + b)(a - b)$$

$$(a \pm b)^2 = a^2 \pm 2ab + b^2$$

$$\text{In QE } ax^2 + bx + c = 0, x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$${}^nP_r = \frac{n!}{(n-r)!}$$

$${}^nC_r = \frac{n!}{r!(n-r)!}$$

$$C_{ij} = (-1)^{i+j} M_{ij}$$

$$A^{-1} = \frac{1}{|A|} \text{adj}A$$

$$AA^{-1} = A^{-1}A = I$$

$$r = \sqrt{a^2 + b^2}$$

$$\tan \theta = \frac{b}{a}, \Rightarrow \theta = \tan^{-1} \left| \frac{b}{a} \right|$$

$$z = r(\cos \theta + i \sin \theta)$$

Strand B : Patterns and Algebra

$$y = x^n, y' = nx^{n-1}$$

$$y = cf(x), y' = cf'(x)$$

$$\text{If } y = uv, \frac{dy}{dx} = u \frac{dv}{dx} + v \frac{du}{dx}$$

$$\text{If } y = \frac{u}{v} = \frac{v \frac{du}{dx} - u \frac{dv}{dx}}{v^2}$$

$$\frac{dy}{dx} = \frac{dy}{du} \times \frac{du}{dx}$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + c$$

$$\int (ax + b)^n dx = \frac{(ax + b)^{n+1}}{a(n+1)} + c$$

$$\int uv dx = u \int v dx - \int \left(\frac{du}{dx} \int v dx \right) dx.$$

$$\frac{dy}{dx} + py = Q, I.F = e^{\int p dx},$$

General solution :

$$y(I.F) = \int Q(I.F.) dx + c$$

$$1 + 2 + 3 + \dots + (n-1) = \frac{1}{2}n(n-1)$$

$$1^2 + 2^2 + 3^2 + \dots + (n-1)^2 = \frac{1}{6}n(n-1)(2n-1)$$

$$1^3 + 2^3 + 3^3 + \dots + (n-1)^3 = \left\{ \frac{n(n-1)}{2} \right\}^2$$

$$\int_a^b f(x) dx = \lim_{h \rightarrow 0} h \left[\sum_{r=0}^{n-1} f(a+rh) \right]$$

$$A = \int_a^b y dx, V = \pi \int_a^b y^2 dx$$

$$\text{Volume of Cone} = \frac{1}{3} \pi r^2 h$$

$$\text{Volume of Sphere} = \frac{4}{3} \pi r^3$$

$$\text{Volume of Cylinder} = \pi r^2 h$$

$$S.\text{Area of Cone} = \pi rl + \pi r^2$$

$$S.\text{Area of Sphere} = 4\pi r^2$$

$$S.\text{Area of Cylinder} = 2\pi rh + 2\pi r^2$$

$$\text{Area of sector} = \frac{1}{2} r^2 \theta$$

Strand C : Measurement

$$\sin^{-1} x \pm \sin^{-1} y = \sin^{-1} \left(x\sqrt{1-y^2} \pm y\sqrt{1-x^2} \right),$$

$$\text{if } x, y \geq 0 \text{ and } x^2 + y^2 \leq 1$$

$$\cos^{-1} x \pm \cos^{-1} y = \cos^{-1} \left(xy \mp \sqrt{1-x^2} \sqrt{1-y^2} \right),$$

$$\text{if } x, y > 0 \text{ and } x^2 + y^2 \leq 1$$

$$\tan^{-1} x + \tan^{-1} y = \tan^{-1} \left(\frac{x+y}{1-xy} \right), \text{ if } xy < 1$$

$$\tan^{-1} x - \tan^{-1} y = \tan^{-1} \left(\frac{x-y}{1+xy} \right), \text{ if } xy > -1$$

$$2 \tan^{-1} x = \tan^{-1} \frac{2x}{1-x^2}$$

$$= \sin^{-1} \frac{2x}{1+x^2} = \cos^{-1} \frac{1-x^2}{1+x^2}$$

$$\operatorname{cosec}^{-1} x = \sin^{-1} \frac{1}{x}$$

$$\sec^{-1} x = \cos^{-1} \frac{1}{x}$$

$$\cot^{-1} x = \tan^{-1} \frac{1}{x}$$

Strand D : Geometry

Angle between two lines

$$\cos \theta = \pm \frac{a_1 a_2 + b_1 b_2 + c_1 c_2}{\sqrt{a_1^2 + b_1^2 + c_1^2} \sqrt{a_2^2 + b_2^2 + c_2^2}}$$

If $a_1 x + b_1 y + c_1 z = 0$ and $a_2 x + b_2 y + c_2 z = 0$

$$\frac{x}{b_1 c_2 - b_2 c_1} = \frac{y}{c_1 a_2 - c_2 a_1} = \frac{z}{a_1 b_2 - a_2 b_1}$$

$$l = \pm \frac{a}{\sqrt{a^2 + b^2 + c^2}}$$

$$m = \pm \frac{b}{\sqrt{a^2 + b^2 + c^2}}$$

$$n = \pm \frac{c}{\sqrt{a^2 + b^2 + c^2}}$$

$$SP = ePM$$

$$\Rightarrow \sqrt{(x - \alpha)^2 + (y - \beta)^2} = \left| \frac{ax + by + c}{\sqrt{a^2 + b^2}} \right|$$

$$\Delta = abc + 2fgh - af^2 - bg^2 - ch^2 = 0$$

$$\tan \theta = \left| \frac{2\sqrt{h^2 - ab}}{a + b} \right|$$

Equation to the bisectors of angles :

$$\frac{x^2 - y^2}{a - b} = \frac{xy}{h}$$

The point of intersection :

$$\left(\frac{hf - bg}{ab - h^2}, \frac{gh - af}{ab - h^2} \right)$$

Strand E: Data Management and Probability

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$r = \frac{\sum (x - \bar{x}) - \sum (y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2} \sqrt{\sum (y - \bar{y})^2}}$$

$$r = 1 - \frac{6 \sum D^2}{n(n^2 - 1)},$$

$$\text{Correction factor} = \frac{1}{12} (m^3 - m)$$

$$r = \pm \sqrt{b_{yx} \times b_{xy}}$$

$$b_{yx} = r \frac{\sigma_y}{\sigma_x} = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2}$$

$$y - \bar{y} = b_{yx} (x - \bar{x})$$

$$y - \bar{y} = r \frac{\sigma_y}{\sigma_x} (x - \bar{x})$$

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

$$P(A) + P(\bar{A}) = 1$$

$$P(B / A) = \frac{P(A \cap B)}{P(A)}, P(A) \neq 0$$

$$P(A / B) = \frac{P(A \cap B)}{P(B)}, P(B) \neq 0$$

BIOLOGY

SECTION A (40 Marks)

Answer *all* the question

Question 1

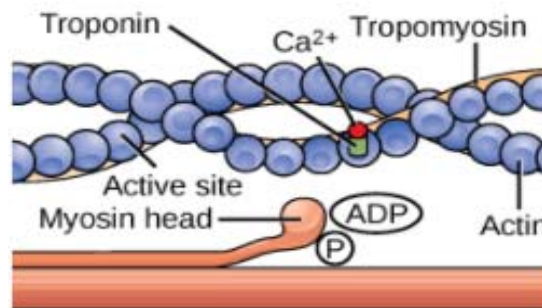
- a Read the following questions carefully. For each question, there are four alternatives A, B, C and D. Choose and CIRCLE the most correct alternative. Do not circle more than ONE alternatives. If there are more than ONE alternatives circled, no score will be awarded. [25]

- i. After the surgical removal of gall bladder, doctors advice patients to reduce the intake of diets, such as butter, pork, and oils. This medical advice is linked with the
- A oxidation of fat.
B absorption of fat.
C assimilation of fat.
D emulsification of fat.
- ii. Plants can reduce the concentration of air pollutants that contribute in global warming. This capacity of plants is regulated by a biological process called photosynthesis. In this regard, which of the following statement closely supports the anti-global warming effects of plants?
- A CPhotolysis of water
B DPhytolysis of water
C Carboxylation of RuBP
D BRegeneration of RuBP
- iii. In the figure given below, a population of red beetles have gradually evolved into a new population of green beetles. From evolutionary point of view, the emergence of a population of green beetles is caused by



- A adaptation and mutation.
B adaption and natural selection.
C mutation and natural selection.
D adaptation, mutation, and natural selection.

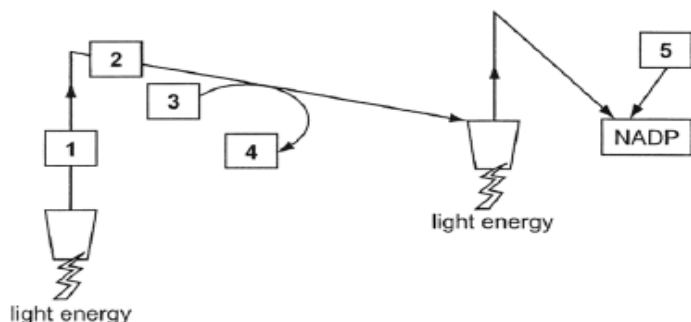
- iv. Human beings are considered as one of the main driving forces of evolution. For instance, our relentless pursuit of dogs with desirable traits, especially through artificial selection, has led to the emergence of dogs with differing appearances. In terms of evolutionary genetics, the descendant of dogs with new physical appearance would change the
- Allele and phenotype frequency
 - Allele frequency and DNA frequency
 - Phenotype frequency and DNA frequency
 - Allele frequency, phenotype frequency, and DNA frequency
- v. Mr Subba took part in 9th Asian weight lifting competition. During the weight lifting session, a myologist studied his bicep muscles to study the mechanism of muscle contraction at sub-cellular level. The myologist produced a micrograph of one of the stages of muscle contraction as shown below.



The above micrograph of the muscle contraction represents

- myosin head forms cross-bridge with actin
 - active site on actin is exposed as Ca^{2+} binds to troponin
 - myosin head is bent and ADP and phosphate are released
 - ATP hydrolyzes to ADP and phosphate, which return myosin to normal position
- vi. You are comparing brain, heart, liver, and skin cells from the same individual. The Cells from these body parts contain DNA, mRNA, rRNA, and proteins. Which of the following molecules would you expect to be identical between these four cell types?
- DNA
 - mRNA
 - rRNA
 - Protein

- vii. The diagram represents non-cyclic phosphorylation of the photosynthesis.



Which reactants would be present at point 1, 2, 3, 4, and 5?

- A Electron carrier, electrons, ADP, ATP, and hydrogen ions
 B Electrons, electron carrier, ATP, ADP, and hydrogen ions
 C Electrons, electron carrier, ATP, ADP, and hydrogen molecules
 D Electron carrier, electrons, ADP, ATP, and hydrogen molecules
- viii. Respiration is the biological process that provides energy to body cells. However, during an intensive exercise, the amount of oxygen becomes insufficient to complete the process of respiration. Which of the following are the results of incomplete respiration?

1	ATP	NADH	Pyruvate	Lactate
2	ADP	NADH	Pyruvate	Lactate
3	ATP	NAD	Pyruvate	Lactate
4	ADP	NAD	Pyruvate	Lactate

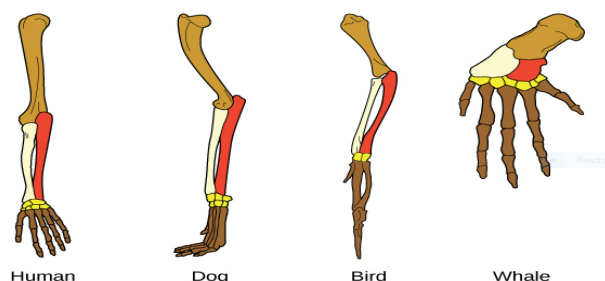
- A 1 and 2
 B 1 and 3
 C 2 and 3
 D 3 and 4
- ix. The 5th National Environment Commission of Bhutan reports that the species like White-Bellied Heron and Red Panda have reached a staggering low population as consequences of anthropogenic disturbance. To an animal conservationist, the best methods to manage the population of these species is
- 1 The development of management policies and strategic plans
 - 2 Strategies of educating populace on these species
 - 3 Strategies of reducing poverty of local populations
- A 1 and 2 only
 B 2 and 3 only
 C 1 and 3 only
 D 1, 2, and 3

- x. *Staphylococcus aureus* is a common bacterium, found on our skin. In the past, the antibiotic methicillin was used to treat wounds caused by *Staphylococcus aureus*. Now, there are at least 15 variants of methicillin resistant *Staphylococcus aureus*. As per you, the emergence of 15 variants of methicillin resistant bacteria explained by

- 1 The bacteria mutated when it was exposed to methicillin, thus becoming resistant.
- 2 The bacteria underwent spontaneous mutation and some variants of them happened to be methicillin resistant
- 3 The antibiotic caused bacteria to produce methicillin resistant protein.

- A 1 only
B 2 only
C 1 and 2 only
D 2 and 3 only

- xi. Many organisms share similar anatomical or morphological structures. For example, in the figure given below, the fore arm of the human shares similar patterns with that of dog, bird, or whale. This shared biological phenomena amongst these organisms best explains



- A micro-evolution
B macro-evolution
C divergent evolution
D convergent evolution

- xii. In a genetic engineering experiment, a piece of double stranded DNA containing 6000 nucleotides is transcribed and translated into a polypeptide containing several hundreds of amino acids. What is the total number of amino acids used and the theoretical number of tRNA molecules required to translate mRNA for this type of peptide?

- A 500 amino acids and 20 tRNA molecules
B 100 amino acids and 15 tRNA molecules
C 200 amino acids and 20 tRNA molecules
D 300 amino acids and 15 tRNA molecules

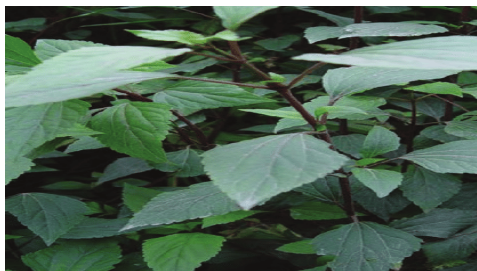
- xiii. DNA fingerprinting is one of the DNA technologies that is widely used in the forensic science. It brings to light complex ethical issues involving rights of victims and suspect alike. Which of the following is correct about DNA fingerprinting and traditional ink-based fingerprinting?

1	Parents and siblings share similar DNA fingerprinting	Parents and siblings share similar ink-based finger printing
2	No two individuals contain same DNA fingerprinting	No two individuals contain same ink-based fingerprinting
3	DNA fingerprinting can solve paternity issues	Ink-based fingerprinting can solve paternity issues
4	DNA fingerprinting can solve criminal issues	Ink-based fingerprinting can solve criminal issues

- A 1 and 2
B 2 and 3
C 3 and 4
D 1 and 4
- xiv. Let's say that you want to make a model of prokaryotic cells. The group of cell organelles you will use are
- A cell wall, plasma membrane, Chloroplast, flagella, cytoplasm, pilli, desmosome
B cell wall, plasma membrane, mitochondria, flagella, cytoplasm, pilli, desmosome
C cell wall, plasma membrane, desmosome, chloroplast, flagella, cytoplasm, pilli, desmosome
D cell wall, plasma membrane, plasmid, episomes, flagella, cytoplasm, pilli, desmosome
- xv. The nitrogenous base sequences in DNA template 'ATGCATGC' got altered due to substitution mutation as 'AAGCATGC'. The nitrogenous base sequences on RNA transcripts after mutation would be
- A TTCGTACG
B UUGGUACG
C UUCGUACG
D TUCGUACG
- xvi. Karma was riding bus and fell down and fractured her wrist. After several weeks, the bones of her wrist still have not repaired themselves. Which of the following cell types in Karma's body have failed to do their job?
- A Osteoblasts
B Osteoclasts
C Osteocytes

D Osteoprogenitor cells

- xvii. In the 5th National Environment Commission of Bhutan's report, Crofton weed, as shown in the figure below, has been identified as one of the fast spreading invasive plant species found in Bhutan. The report mentions that this species of plant not only reproduce fast but also invades any kinds of niche and competes with any plant species.



As per you, if the multiplication of this plant species is not checked, it would

- 1 damage nations economy
- 2 damage native ecosystem
- 3 cause human health related issues

- A 1 and 2 only
- B 2 and 3 only
- C 1 and 3 only
- D 1, 2, and 3

- xviii. Suppose in your biology project work, you are given a task to create a robot that acts and behaves similar to human beings. Your project demands you to study the human nervous system first and transfer the knowledge to build the robot. Which part of the brain would you study to build a robot that can regulate its emotion, line of thoughts, and voluntary movements?

- A Cerebrum
- B Cerebellum
- C Hypothalamus
- D Medulla oblongata

- xix. Your family is going to renovate your home. Your family is busy gathering wooden blocks to design pillars. As a biology student, what would be your recommendation to your father to get the most durable wooden blocks?

- A Wooden blocks that contain more rings
- B Wooden blocks that contain more living cells
- C Wooden blocks that contain more conducting tissues
- D Wooden blocks that contain more death cells and tannins

xx. In a grand challenge competition, you are given a task to design a container that works like a dialyzer machine used by kidney patients. Your container must have features to allow some objects to enter and leave without resistance, some objects to travel only one way, and other objects not to enter the container at all. The working of a container must demonstrate the principle of

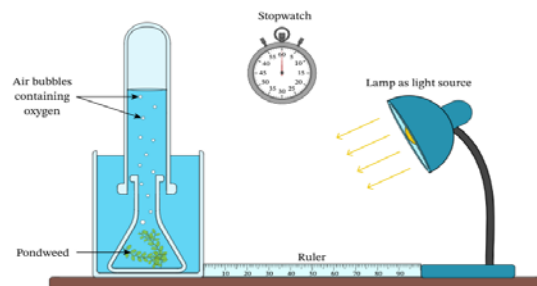
- A selective secretion.
- B selective reabsorption.
- C selective permeability.
- D selective ultra filtration.

xxi. Bhutan is blessed with clean natural environment. As per the national policy, Bhutan is mandated to maintain at least 70 percent of the forest coverage. Besides, there are other values that provide indirect supporting mechanism to conserve Bhutan's natural environment. In this regard, which of the following adds in the conservation of Bhutan's natural environment?

- 1 Cultural and spiritual values
- 2 Recreational values, such as botanical parks and gardens
- 3 Economical values to maintain national economic status

- A 1 and 2 only
- B 2 and 3 only
- C 1 and 3 only
- D 1, 2, and 3

xxii. Mr. Dorji conducted an experiment to determine the effect of light intensity on the rate of photosynthesis. He used 20, 30, 40, and 50 watt lamp as the source of light. Study the figure given below to understand Mr. Dorji's experimental set-up.



If Mr. Dorji is to design control set-up for this experiment, what would be your advice to him?

- 1 keep the distance between pondweed and the lamp same in each round of experiment
- 2 use 20, 30, 40, and 50 watt lamp each in each round of experiment
- 3 use same amount of water, same apparatus, and same plant in each round of experiment

- A 1 and 2 only
- B 2 and 3 only
- C 1 and 3 only
- D 1, 2, and 3

- xxiii. With minor exceptions, all living organisms from simple to complex use same genetic code to produce proteins. Despite this similarity, all living organisms differ from one to another in many ways. For instance, the figure given below shows plant leaves in different structure and shape.



According to you, this phenomenal difference of leaves are all related to

- A sequence of DNA
 - B sequence of genes
 - C sequence of proteins
 - D sequence of nitrogenous bases
- xxiv. Which stages of respiration in eukaryotes have the correct products?

	ATP	CO ₂	FAD	NAD	reduced NAD
1 glycolysis	✓	×	×	×	✓
2 oxidative phosphorylation	✓	×	✓	✓	×
3 Krebs cycle	✓	✓	✓	×	✓
4 link reaction	✓	✓	×	×	✓

Key: ✓ = product × = not a product

- A 1 and 2
 - B 1 and 4
 - C 2 and 3
 - D 3 and 4
- xxv. Oparin and Haldane proposed biochemical theory of evolution. They explained that life on the earth was formed by the reactions of inorganic compounds. From scientific community point of view, their theory is a
- 1 hypothesis backed up by some scientific evidences
 - 2 hypothesis based on logic and reasoning
 - 3 hypothesis built out of imagination and creativity
- A 1 and 2 only
 - B 2 and 3 only
 - C 1 and 3 only
 - D 1, 2, and 3

b Fill-in-the-blanks with appropriate word/words.

[5]

- i. Adults suffer from conditions, such as bloating, abdominal pain, and discomfort after consuming dairy products. This phenomenon is caused by the lack of _____ enzyme in adults.
- ii. When the axon is at the resting stage, it contains more _____ ions on the outside of the cell.
- iii. The excessive use of chemical fertilisers may lead excessive algal growth leading to the death of aquatic life. This is called _____.
- iv. Today, it is certainly impossible to see the origin of new life due to _____ atmosphere.
- v. The development of frogs from young fish-like tadpoles recapitulate _____.
- vi. As per Bhutan National Environment Commission report, there are more than 94 native species found in Bhutan. This indicates that Bhutan has high _____ of fish fauna.
- vii. It is worrisome that the overharvesting of *Cordyceps* in Bhutan may lead to the population crash of *Cordyceps*. From evolutionary point of view, this may contribute towards the evolution of the *Cordyceps* population through change in the _____ frequency.
- viii. When chronic alcoholics suffer from medical conditions, such as thirst, dehydration; or contain high concentration of electrolytes in the blood, it is an issue related to the _____ of nephrons.
- ix. Dorji took breakfast containing high content of beans. His body cells will receive _____ as the final product of the digestion.
- x. The release of African giant catfish into Toorsa river at Phuentsholing alarmed environmentalists in Bhutan as African giant catfish is an _____.

c Match each item of Column A with the most appropriate item of Column B. Rewrite the correct pairs by writing the number and the corresponding alphabet in the spaces provided.

[5]

Column A	Column B
i) Anaerobic in nature	a) DNA polymerase
ii) Defective genes	b) Gene therapy
iii) Connecting links	c) Monocots
iv) Genetic equilibrium	d) Dicots
v) Open vascular bundles	e) Glycolysis
vi) Synthesis of DNA	f) Gene therapy
vii) Management of resources	g) Common ancestry
viii) Coacervates	h) Hardy-Weinberg
ix) Threats to biodiversity	i) Biogeny
x) Embryonic appearances	j) Climate change
	k) Community forest
	l) Evolutionary history

d State True or False against each statement.

[5]

- i. Ethyl alcohol is a product of incomplete respiration.
- ii. The rice that we eat never gets digested in the stomach.
- iii. The grasses and bamboos are thin as they lack cambium.
- iv. Environment in Bhutan is linked with age-old spiritual values.
- v. Loop of Henle plays important role in concentrating the urine.
- vi. The use of fire to control the overgrowth of shrubs conserves biodiversity.
- vii. Wings of dragon flies and birds represent their evolution from a common ancestor.
- viii. The trait in all organisms is characterized by the type of proteins produced in the body.
- ix. Spinal cord is one of the parts of the central nervous system that analyses nerve impulses.
- x. The use of home-made pesticides, such as those prepared from native herbs, is an example of sustainable management of resources.

SECTION B (60 marks)

Answer any SIX questions

Question 2

- a) In one of your biology classes, you are going to investigate the anatomical features of the monocot and dicot stem. Outline the research question for this experiment. [1]
- b) Suppose you had a breakfast containing high content of rice. Outline steps involved in the digestion of your breakfast in the alimentary channel. [2]
- c) If you were the chief environmental officer, would you give environmental clearance to construct highway via national park? Justify your opinion. [2]
- d) Do humans contribute towards the evolution of an organism? Explain. [2]
- e) The experimental set-up shown below is to examine the effect of carbon dioxide concentration on the rate of photosynthesis. Answer the questions that follow.

Procedure:

- Step 1. Take an aquatic plant and set up the experiment as shown in Figure 3.1
- Step 2. Keep the set-up near the light source and count the number of bubbles evolved in a specified time. Record the observation in Table 3.1.
- Step 3. Add 5 g of NaHCO_3 into the flask and record the number of bubbles evolved in a specified time. Record the observation in Table 3.1.
- Step 4. Add 10 g and 15 g of NaHCO_3 into the flask and record the number of bubbles evolved respectively. Record the observations in Table 3.1.
- Step 5. Plot the graph showing number of bubbles evolved against the amount of NaHCO_3 using spreadsheet or graph paper.

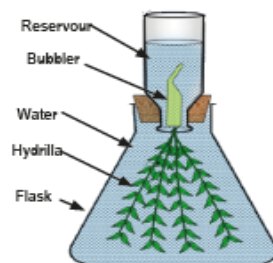
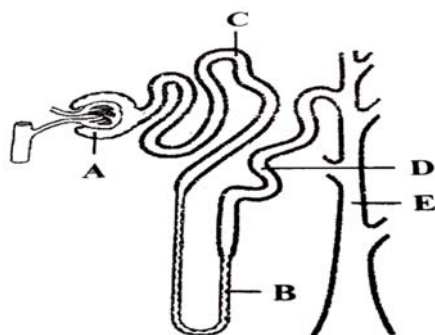


Figure 3.1. Wilmott's bubbler.

- i. Develop research question(s) for the above experimental set-up. [1]
- ii. State hypothesis for the above experimental set-up? Outline. [1]
- iii. Identify independent and dependent variables of the above experimental set-up. [1]

Question 3

- a) Many explanations suggest that eukaryotes have evolved from prokaryotes. Comment. [2]
- b) Explain how Bhutan's environment is connected to spiritual or religious values. [1]
- c) Argue with reasons the importance of GNH in sustainable management of natural resources. [2]
- d) Study the figure given below and answer the questions that follow.



- i. Name the part labelled B. [1]
- ii. How would body homeostasis change if the part labelled A is non-functional? Claim with reasons. [2]
- e) Species richness is one of the indicators of healthy biodiversity. Devise an experiment or method to measure the species richness of the Manas National Park. [2]

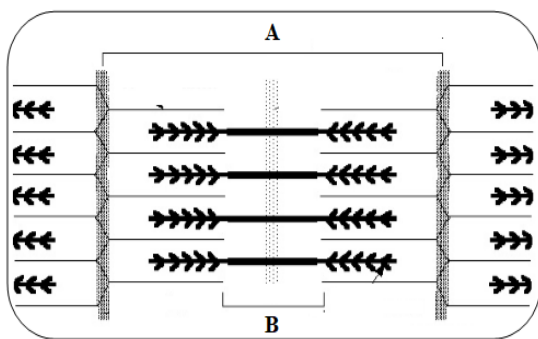
Question 4

- a) The idea of using plants to mitigate global warming/climate change is a rising topic. Why are plants considered as suitable option? [2]
- b) The figure given below shows the beak of a pigeon and a crow.



- i. What is the evolutionary phenomenon represented by the above figure? [1]
- ii. Provide reasons to support the evolutionary phenomenon identified in the above question. [2]
- c) How is the arrangement of tissue system in sugar cane different from those in beans? Explain. [3]

- d) Study the diagram given below and answer the questions.



- i. Name the parts labelled A and B. [1]
- ii. During the contraction of the above structure, which part disappear? [1]

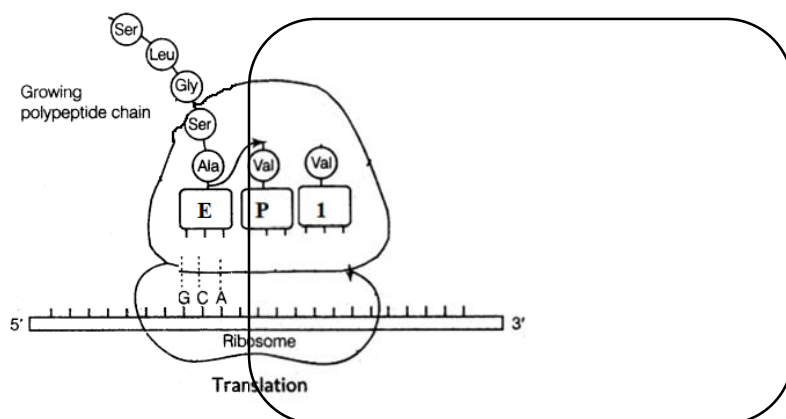
Question 5

- a) Explain the evolution of yaks from the point of mutation theory. [1]
- b) Which amongst Lamarckism, Darwism, or mutation theory is more credible in explaining the mechanism of evolution? Claim with reason. [2]
- c) Is gene therapy free of issues and concerns? Comment. [2]
- d) Write two uses of DNA fingerprinting in our daily lives. [1]
- e) Responses developed by the brain are mostly rationale, while responses developed by the spinal cord are mostly involuntary or automatic. How? [1]
- f) How do sodium ions help in the transmission of nerve impulse? Explain [1]
- g) The structure of the DNA is everything that makes each one of us unique. Outline how the structure of the DNA makes us how we look. [2]

Question 6

- a) Cartilages are one of the connective tissues. Explain how cartilages contribute towards the movement and support of our body. [1]
- b) Drinking milk is good for the development of bones. Justify [1]
- c) Genetic code is the secret language coded in the DNA. Explain. [2]
- d) Outline Oparin and Haldane's biochemical evolution of life. [2]
- e) Aerobic respiration is more efficient than anaerobic respiration. Explain in terms of products. [2]

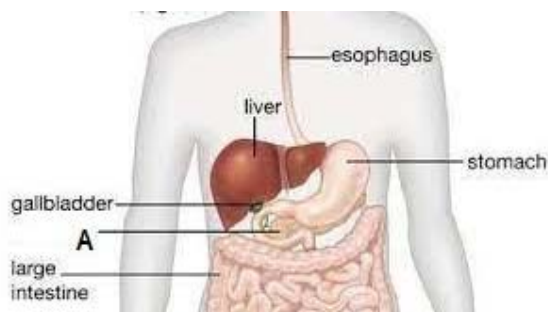
- f) The diagram given below shows a stage occurring in protein synthesis. Use the diagram to answer the following questions.



- How the structure labelled **1** in the diagram does contribute in protein synthesis? [1]
- The structure labelled from 5' to 3' is necessary for protein synthesis. How? [1]

Question 7

- National park is one of the strategies to conserve biodiversity in Bhutan. In your opinion is it the best strategy to conserve biodiversity? Justify. [2]
- Automobile workshops in Thimphu are connected mostly with some of the freshwater streams. Devise strategies as how to control the flow of toxics and effluents coming from workshops into streams. [3]
- Can fossils provide clues for a climate change? Explain. [2]
- Study the diagram given below and answer the questions that follow.



- Name the structure labelled **A** in the above diagram. [1]
- What would happen to our body cells if the part labelled **A** is removed? Explain with reasons. [2]

Question 8

- White-bellied heron is one of the critically endangered species found in Bhutan. Outline strategies to conserve the population of a white-bellied heron. [2]
- Southern foothills in Bhutan are warmer, receive heavy rainfall and experience more windstorms. It is also observed that broad-leaved plants and monocot plants grow more in such places. Relate the pattern of distribution of broad leaved plants and monocots to the anatomy of the plants. [3]

- c) Without light, plants fail to manufacture food. Comment from the point of light and dark reaction. [2]
- d) If a robot responds to stimuli automatically, which part of the central nervous system does it function alike? Why? [2]
- e) Give **ONE** significance of Krebs cycle. [1]

Question 9

- a) Write one consequence of oxygen evolution on the primitive earth. [1]
- b) All organisms, including bacteria, plants, and animals use same codons to make proteins. What makes these organism different from one to another despite the universal nature of genetic code? [2]
- c) The change in allele frequency of a population indicates the evolution of a population. Show the evolution of a population using Hardy- Weinberg's principle in the context of W allele and w allele. [2]
- d) Does cellular respiration consume ATP? Explain with example? [1]
Outline with one example how human body cells are more complex than prokaryotes. [1]
- e) A person diagnosed with kidney failure is usually characterized by swelling in his/her legs or the entire body. How would you relate the swelling to kidney failure? [1]
- f) The emergence of male silent crickets is one of the examples of recent evolution. The male silent crickets can now hide from their predators. Provide an explanation on the evolution of silent crickets from the population of a singing crickets [2].

BHSEC Biology Paper I Blue print (section A)
70 Marks

sl no	Disciplinary Core Ideas	Weighting out of 100	Weighting out of 110	Weighting out of 70	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	Total Marks
1. Molecules to Organism: Structures and Processes											
1.1	Prokaryotic and Eukaryotic Cells				Q. xiv (1)						1
1.2	Support and Movement Systems					Q. v (1)		Q. xxii (1)			2
1.3	What is in the Plate?					Qb. i (0.5)	Q. i (1) Qd.i (0.5)		Qb. ix (0.5)		2.5
1.4	Food and Energy					Qc. i (0.5)		Q. vii (1) Qd. vii	Q. xxiv (1)		3
1.5	Perception and Interaction				Qb.ii (0.5)			Q. xvi (1)	Qd. ii (0.5)		2
1.6	The Organs of Waste Removal						Q. xviii (1)	Qb. viii (0.5) Qd. vi (0.5)			2
1.7	What is inside a Plant?						Q. xvii (1) Qc. v (0.5)				1.5
1.8	Food for Life				Q. vi (1)				Q. ii (1)	Q. xxi (1)	3
2. Ecosystems: Interactions, Energies, and Dynamics											
2.1	Our Environment					Q. xvii (1) Qd.v (0.5)	Qb. vii (0.5)				2
2.2	Threats on Biodiversity					Qb.iii (0.5) Qd. iii (0.5)	Qb. x (0.5)		Q. xix (1) Qc.ix (0.5)		3
2.3	Sustainable Management of Natural Resources					Q. viii (1) Qd. iv (0.5)		Q. xx (1)	Qc. vii (0.5)		3
3. Heridity: Inheritance and Variation of Traits											
3.1	The Enigma of Living					Q.xi (1) Qc. vi (0.5)				Q. xv (1)	2.5
3.2	Breaking the Code						(1)	Q. xii (1)			2
3.3	Gene Therapy and Genetic Fingerprinting				Qc. ii (0.5)		Q. xiii (1)				1.5
4. Biological Evolution: Unity and Diversity											
4.1	Origin of Life				Qc. viii (0.5)		Qb. iv (0.5)	Q. xxv (1)			2
4.2	Evidence of Common Ancestry						Q. x (1) Qb. v (0.5)	Qc. iii (0.5)	Qd. iii (0.5)		3
4.3	Theories that Explain Evolution						Q. ix (1)	Q. iii (1)			2
4.4	Evolution from Allele Frequency						Qb. vii (0.5)	Q. iv (1)	Qc.iv (0.5)		2
Total					3.5	7.5	11	10	6	2	40

BHSEC Biology Paper I Blue print (section B)

70 Marks

sl no	Disciplinary Core Ideas	Weighting out of 100	Weighting out of 110	Weighting out of 70	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	Total Marks
1. Molecules to Organism: Structures and Processes											
1.1	Prokaryotic and Eukaryotic Cells							Q3. a (2) Q9.e (1)			3
1.2	Support and Movement Systems				Q4.d (2)	Q 6. a (1)		Q6.b (1)			4
1.3	What is in the Plate?				Q7. di(1)		Q2. b (2)			Q.7 dii (2)	5
1.4	Food and Energy				Q8. e (1)	Q6. e (2)			Q9. d (1)		4
1.5	Perception and Interaction							Q5. e (1) Q5. e(1) Q 8. d (2)			4
1.6	The Organs of Waste Removal				Q3. ci (1)		Q9. f (1)	Q3.c ii (2)			4
1.7	What is inside a Plant?					Q4.d (3)	Q8. b (2)			Q2.a (1)	6
1.8	Food for Life				Q2.e iii (1)	Q 8. c (2)	Q4. a (3) Q2.e i&ii (2)				8
2. Ecosystems: Interactions, Energies, and Dynamics											
2.1	Our Environment					Q3. b (1)				Q3. e (2)	3
2.2	Threats on Biodiversity						Q 8. a (2)			Q7. b (3)	5
2.3	Sustainable Management of Natural Resources							Q2.c (1) Q3.c (2) Q7. a (2)			5
3. Heridity: Inheirtance and Variation of Traits											
3.1	The Enigma of Living						Q5. g (2)	Q6.f (2)			4
3.2	Breaking the Code					Q6.c (2)	Q 9. b (2)				4
3.3	Gene Therapy and Genetic Fingerprinting				Q5.d (1)				Q5. c (2)		3
4. Biological Evolution: Unity and Diversity											
4.1	Origin of Life				Q6.d (2) Q9. a (1)						3
4.2	Evidence of Common Ancestry						Q4. bi (1)	Q4. dii (2)	Q7.c (2)		5
4.3	Theories that Explain Evolution						Q5. a (1) Q 9. c (2)		Q5.b (2)		5
4.4	Evolution from Allele Frequency					Q. 9c (2)			Q2.d (2)		4
Total					10	13	20	20	9	8	80

CHEMISTRY

Section A(40 marks)
Attempt all the questions

Question 1

(a) Choose the correct alternative

- (i) The preparation of soap in laboratory is shown in Figure 1.

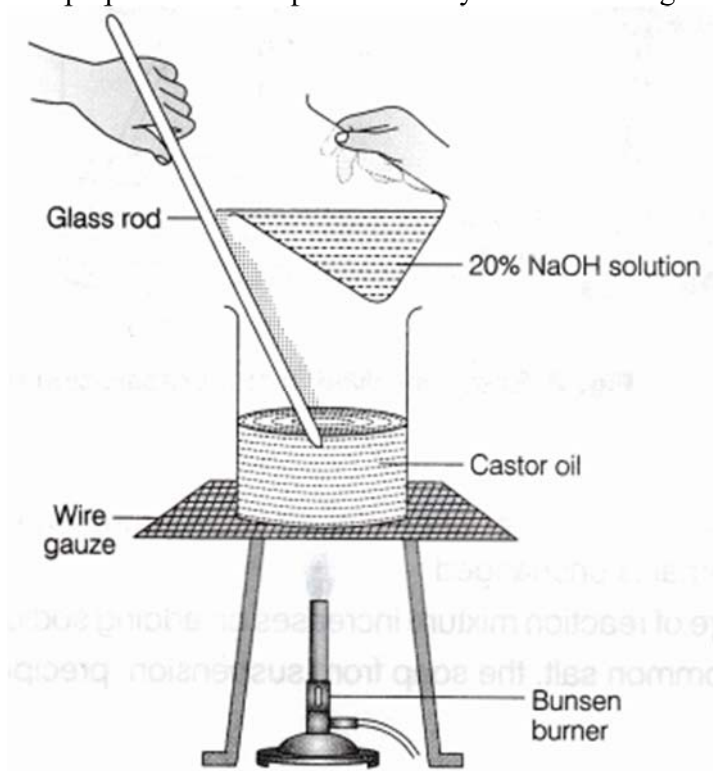


Figure 1

The by-product of the reaction is

- [A] triglyceride.
- [B] glycerol.
- [C] ethanol.
- [D] sodium stearate.

(ii) Figure 2 shows four U-tubes containing different solutes but all the solutions have the same molarity.

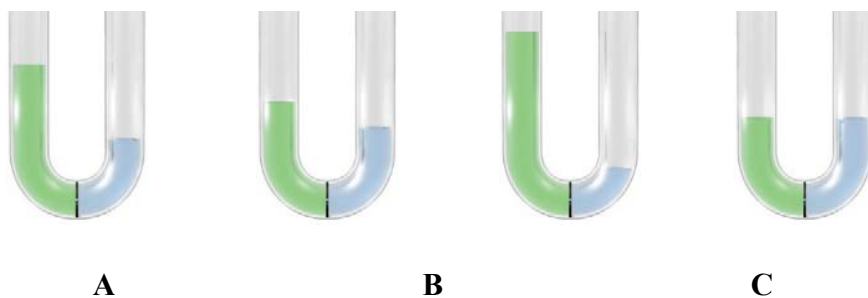


Figure 2

The U – tube that contains the smallest number of dissolved ions is

- [A] U –tube A.
- [B] U – tube B.
- [C] U – tube C.
- [D] U –tube D.

(iii) **Figure 3** depicts 0.5m solutions.

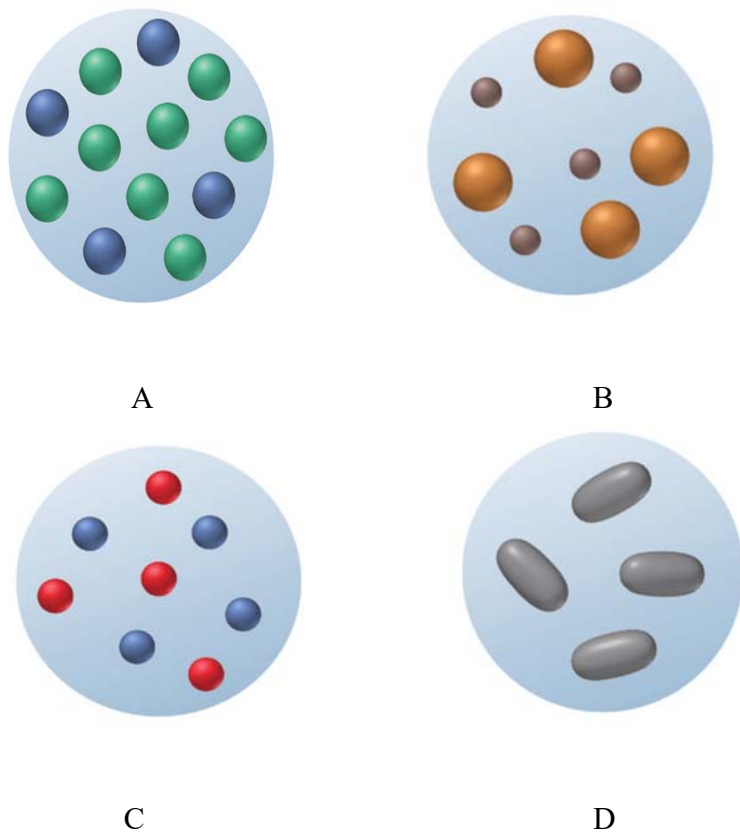


Figure 3

Assuming that the solutions behave ideally, the solution with the lowest freezing point is

- [A] solution A.
- [B] solution B.
- [C] solution C.
- [D] solution D.

(iv) A student performed a volumetric titration in which 25 mL of 0.25 M barium hydroxide are required to fully titrate 50 mL solution of sulphuric acid. The initial concentration of sulphuric acid would be

- [A] 0.125 M.
- [B] 0.135M.
- [C] 0.145M.
- [D] 0.155M.

(v) A chemist in Army Welfare Project distillery in Gelephu mixes 0.25 mole of ethyl alcohol with 0.5 mole of water to formulate a brand of whisky. The mole fraction of alcohol in the formulation is

- [A] 0.30.
- [B] 0.31.
- [C] 0.32.

[D] 0.33.

(vi) A chemist calculates the pH of a solution containing hydronium ion concentration $[H_3O^+] = 10^{-4}$ M. The pH of the solution is

[A] 4.

[B] -4.

[C] 8.

[D] -8.

(vii) Karma attempted to formulate a coolant to be used in the car radiator. The main chemical composition of coolant may be

[A] acid and water.

[B] ethylene glycol and water.

[C] ethyl alcohol and water.

[D] glycerol and water.

(viii) Sonam applies his knowledge to formulate a buffer that may be used in dialysis solution. The dialysis solution should have pH similar to that of body fluids. The buffer in dialysis solution is a

[A] weak acid and its conjugate base.

[B] strong acid and its conjugate base.

[C] weak acid and strong base.

[D] weak base and strong acid.

(ix) A student was investigating acid-base equilibria in which it was found that the value of K_a for a weak acid was 2.0×10^{-4} . The value of K_b for its conjugate base is

[A] 5.0×10^{-6} .

[B] 2.0×10^{-7} .

[C] 2.0×10^{-8} .

[D] 2.0×10^{-9} .

(x) A human body fluid has a pH of 7.38. The concentration of hydrogen ion $[H^+]$ present in the body fluid is

[A] 4.16×10^{-8} M.

[B] 4.16×10^{-9} M.

[C] 4.16×10^{-10} M.

[D] 4.16×10^{-11} M.

(xi) An experiment was carried out by a team of students to design a device that can produce maximum emf by referring the standard electrode potential data given in Table 1.

Table : 1

Cathode (reduction) Half reaction	Standard potential E^0 volts
$Mg^{2+}(aq) + 2e^- \rightarrow Mg(s)$	-2.38
$Zn^{2+}(aq) + 2e^- \rightarrow Zn(s)$	-0.76
$Fe^{3+}(aq) + 3e^- \rightarrow Fe(s)$	-0.04
$2H^+(aq) + 2e^- \rightarrow H_2(g)$	0.00

$\text{Cu}^{2+}(\text{aq}) + 2\text{e}^- \rightarrow \text{Cu}(\text{s})$	0.34
---	------

The maximum emf can be produced by the combination of

- [A] Mg and Cu half cells.
- [B] Zn and Cu half cells.
- [C] Fe and Cu half cells.
- [D] Zn and Fe half cells.

(xii) Lhaden designs an electrochemical cell to light a torch bulb using lemon available in the locality. The flow of current in lemon is due to

- [A] acetic acid.
- [B] citric acid.
- [C] lactic acid.
- [D] formic acid.

(xiii) Sonam was investigating a factor that determines the rate of reaction. In the investigation he studied a factor which is illustrated in Figure 4.

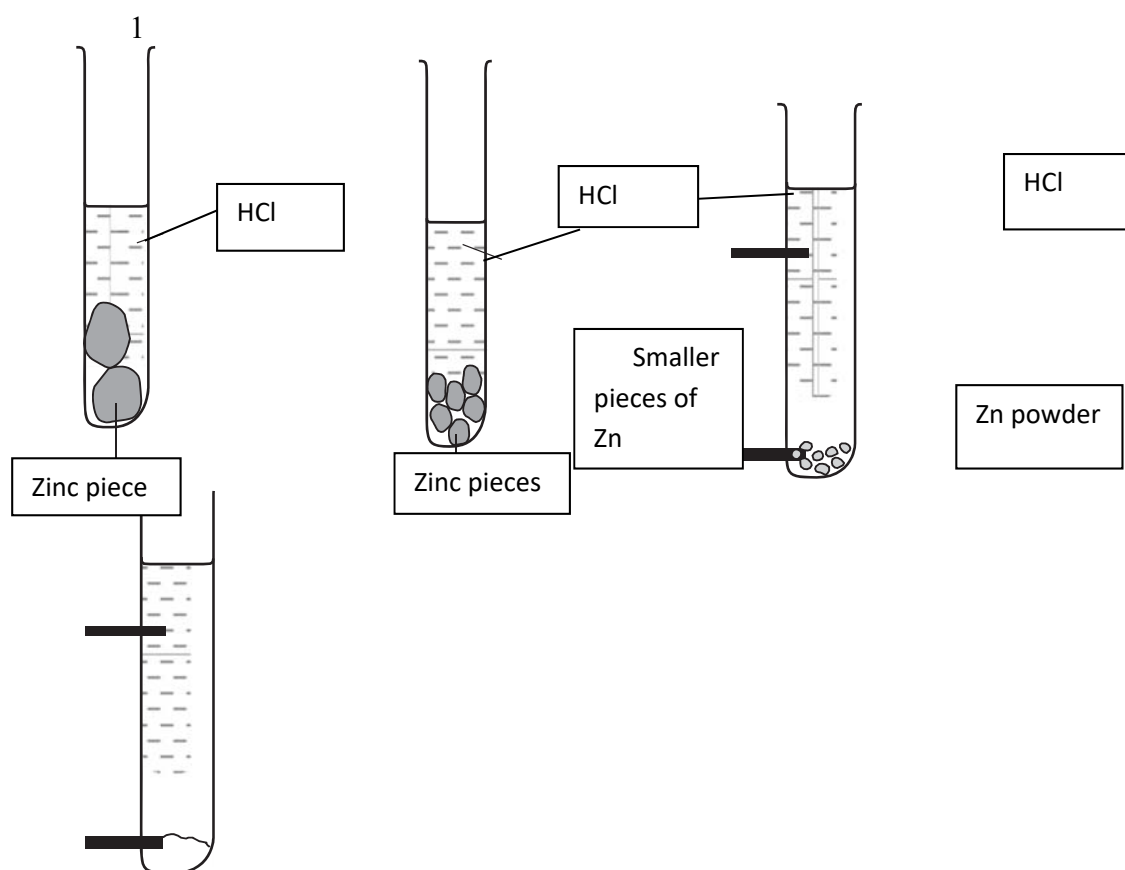


Figure 4

The fastest reaction would occur in

- [A] Test tube 1.
- [B] test tube 2.
- [C] test tube 3.
- [D] test tube 4.

(xiv) A student conducted an experiment to investigate the rate of reaction. A graph was plotted for volume of hydrogen gas formed vs time taken as shown in Figure 5.

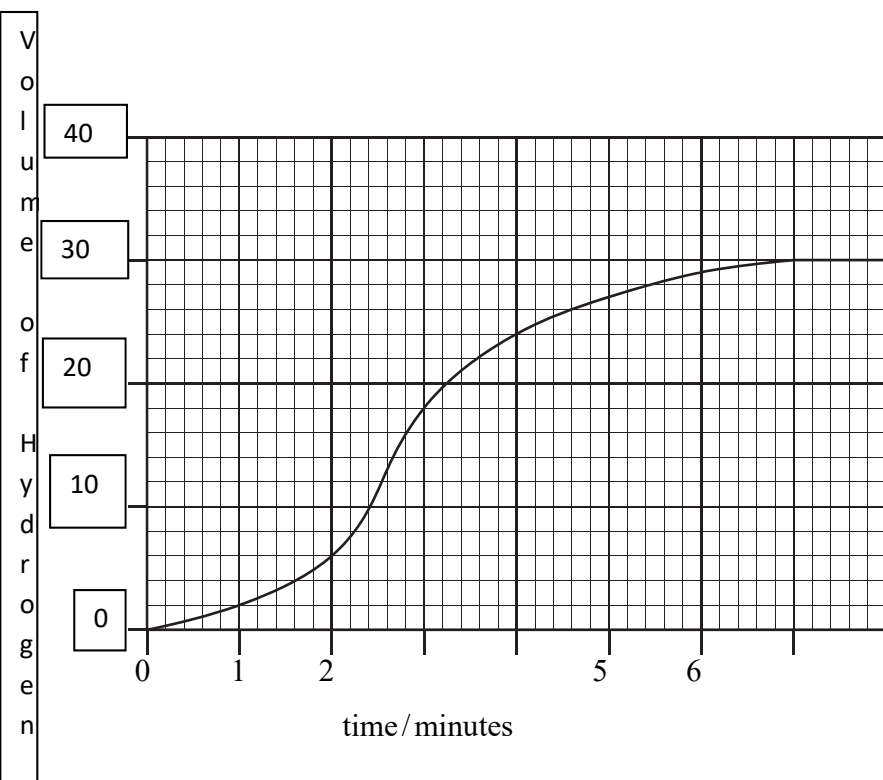


Figure 5

The reaction is fastest between

- [A] 0 and 1 minute.
- [B] 1 and 2 minutes.
- [C] 2 and 3 minutes.
- [B] 7 and 8 minutes.

(xv) A mechanical engineer while investigating a system observed that a system suffers an increase in internal energy of 80 J and at the same time has 50 J of work done on it. The change in heat energy in the system is

- [A] -30 J.
- [B] +30 J.
- [C] - 40 J.
- [D] + 40J.

(xvi) Karma was investigating the feasibility of the reaction between hydrogen and iodine. H_2 and I_2 reacted to form hydrogen iodide according to the following equation.



The reaction between hydrogen and iodine is

- [A] endothermic and spontaneous.
- [B] exothermic and spontaneous.
- [C] endothermic and non-spontaneous.
- [D] exothermic and non-spontaneous.

(xvii) A student applied his knowledge of n/p ratio to predict the stability of the following nuclides.

${}^6\text{W}^{14}$, ${}^8\text{X}^{17}$, ${}^{15}\text{Y}^{32}$, ${}^{16}\text{Z}^{32}$

The most stable among the four nuclides is

- [A] ${}^6\text{W}^{14}$.
- [B] ${}^8\text{X}^{17}$.
- [C] ${}^{15}\text{Y}^{32}$.
- [D] ${}^{16}\text{Z}^{32}$.

(xviii) Tetraammineaquaiodocobalt(III) sulphate is a coloured coordination complex. Sonam applied IUPAC rules to write the formula of the complex. The formula of the compound is

- [A] $[\text{Co}(\text{NH}_2)_4(\text{OH}_2)\text{I}]\text{SO}_4$.
- [B] $[\text{Co}(\text{NH}_2)_4(\text{OH})\text{I}]\text{SO}_4$.
- [C] $[\text{Co}(\text{NH}_3)_4(\text{OH}_2)\text{I}]\text{SO}_4$.
- [D] $[\text{Co}(\text{NH}_3)_4(\text{OH})\text{I}]\text{SO}_4$.

(xix) Sonam extracted an unknown organic compound from a local plant and analysed it using infrared spectroscopy. The spectrum of the compound is shown in Figure 6.

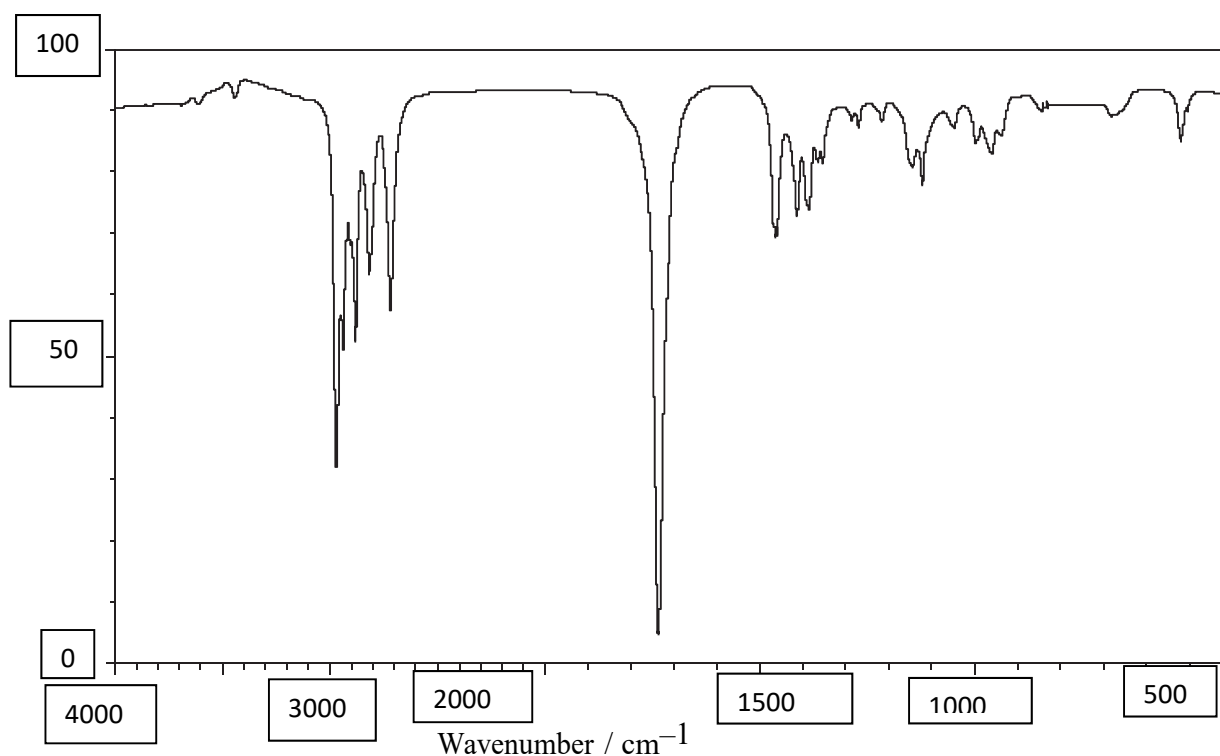


Figure 6

Bond	Wavenumber range / cm^{-1}
O–H (alcohol)	3750 – 3200
C–H (alkane)	2962 – 2853
C–H (aldehyde)	2900 – 2820 and 2775 – 2700
C=O (aldehyde or ketone)	1740 – 1680

Using the above information, the compound present in the local plant can be

- [A] butan-1-ol.
- [B] butan-2-ol.
- [C] butanal.

[D] butanone

(xx) An unknown substance was analysed through mass spectrometry. The mass spectrum is recorded as shown in Figure 7.

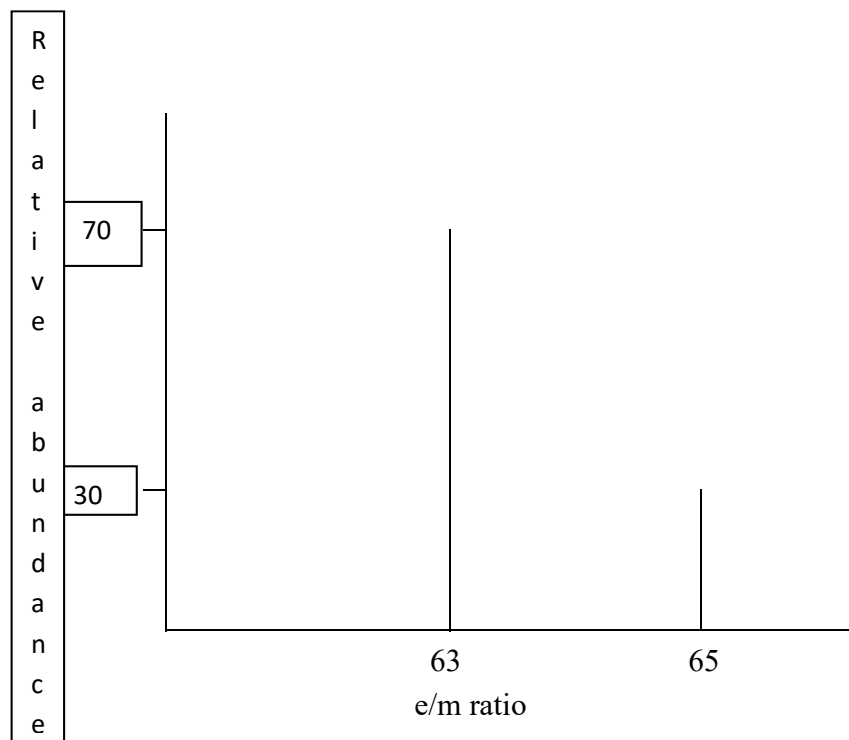


Figure 7

With reference to the spectrum the relative atomic mass of an unknown compound is

- [A] 63.2.
- [B] 63.4.
- [C] 63.6.
- [D] 64.0.

(xxi) Which of the following is most reactive in alkaline hydrolysis?

- [A] CH_3COCl
- [B] CH_3CONH_2
- [C] $\text{CH}_3\text{COOCH}_2\text{CH}_3$
- [D] CH_3NH_2

(xxii) A student carried out the reduction of benzaldehyde using NaBH_4 in the laboratory. On analysis, the major product formed was found to be

- [A] amino benzene.
- [B] benzoic acid.
- [C] benzyl alcohol.
- [D] benzene.

(xxiii) Sonam investigated the properties of an organic compound Y. The compound has the following properties.

- It is colourless crystalline solid.
- It is highly soluble in alcohol but poorly soluble in water.
- It reacts with alcohol to form pleasant smelling compound.
- It produces effervescence when it reacts with NaHCO_3 .

The compound Y could be

- [A] benzoic acid.
- [B] benzaldehyde.
- [C] benzyl alcohol.
- [D] benzene.

(xxiv) A student treated acetamide with bromine and alcoholic sodium hydroxide solution. On analysis, the product was found to be

- [A]ethyl amine.
- [B]methyl amine.
- [C]propyl amine.
- [D]butyl amine.

(xxv) Sonam treated aniline with HCl in the laboratory. The product on analysis was found to be

- [A] alcohol.
- [B] amide.
- [C] ammonium salt.
- [D] cyanide.

(b)Match the following from Table 2. (5marks)

Table 2

Column A	Column B
(i)Cell potential at any concentration	a) Ostwald's dilution law
(ii)Molecule carrying both negative and positive charge	b) NMR spectroscopy
(iii)Formaldehyde	c) Methylamine
(iv)Weak electrolyte	d) Zero order reaction
(v) Lachrymator	e) Zwitter ion
(vi) $p = x_1p_1^0 + x_2p_2^0$	f) Cannizaro reaction
(vii) Purity and content of the sample	g) Raoult's law
(viii)Etard reaction	h) Ethylene diamine
(ix) Rate does not change with time	i) First order reaction
(x)Bidentate ligand	j) Nernst equation
	k) Acetyl chloride

(c) Fill in the blanks (5 marks)

- (i) An amino acid was analysed using gel electrophoresis. It was observed that at a particular pH amino acid molecules did not migrate to any of the electrodes. This particular pH is called
- (ii) As wine ages, some of the acids react with ethanol to produce a pleasant smelling compound. The compound produced is
- (iii) A student reacted Copper (II) carbonate with dilute sulphuric acid according to the

following equations: $\text{CuCO}_3(\text{s}) + \text{H}_2\text{SO}_4(\text{aq}) \rightarrow \text{CuSO}_4(\text{aq}) + \text{CO}_2(\text{g}) + \text{H}_2\text{O}(\text{l})$. The factor that increases the rate of reaction is the concentration of reactants.

- (iv) Coordination number is the number of donor atoms which form coordinate bonds with a central metal ion in complex compound. The coordination number in $[\text{Co}(\text{NH}_3)_3\text{Cl}_3]$ is
- (v) A student analyses a sample of honey by adding ammonium chloride and excess of ammonium phosphate solution to it. A crystalline white precipitate is formed at the sides of the test tube. The cation present is
- (vi) Acetone givesprecipitate with 2,4-DNP.
- (vii) Solutions have higher boiling point and lower melting point than pure solvent. This property of the solutions that depend on number of solute particles is called.....
- (viii) The potential difference between the two terminal of the cell when no current is drawn from it is called.....
- (ix) The mathematical expression that relates the rate of reaction to the concentration of either reactants or products is called.....
- (x) The emission of from radioisotope leaves both atomic number and mass number unchanged.

(d) True or False(5marks)

- (i) The vapour pressure of the solution is directly related to the mole fraction of solute.
- (ii) The stability of a nuclide is determined by charge by mass ratio.
- (iii) When the substances changes from solid to liquid, the entropy of the system increases.
- (iv) Benzaldehyde undergoes Cannizzaro reaction.
- (v) In a chemical reaction, the slowest step determines the rate of reaction.
- (vi) A strong acid has a high K_a value.
- (vii) A closed system can experience a decrease in entropy only when there is heat transfer from the system to its surroundings during the process.
- (viii) Aromatic amines are weaker bases than aliphatic amines.
- (ix) The salt bridge contains strong electrolyte whose ions will not react with other ions in solution or with the electrodes.
- (x) Aldehydes and ketones are oxidized to carboxylic acids.

Section B

Attempt any six questions (60 marks)

Question 2

- (a) Scientists say that some food colourings cause hyperactive behaviour in young children. The food colourings are added to cake and some sweets. W,X, Y and Z are food colourings that may be added in the sweets. Sonam used chromatography to investigate if two different samples of sweets S and P contain food colourings. The chromatogram is shown in Figure 8.

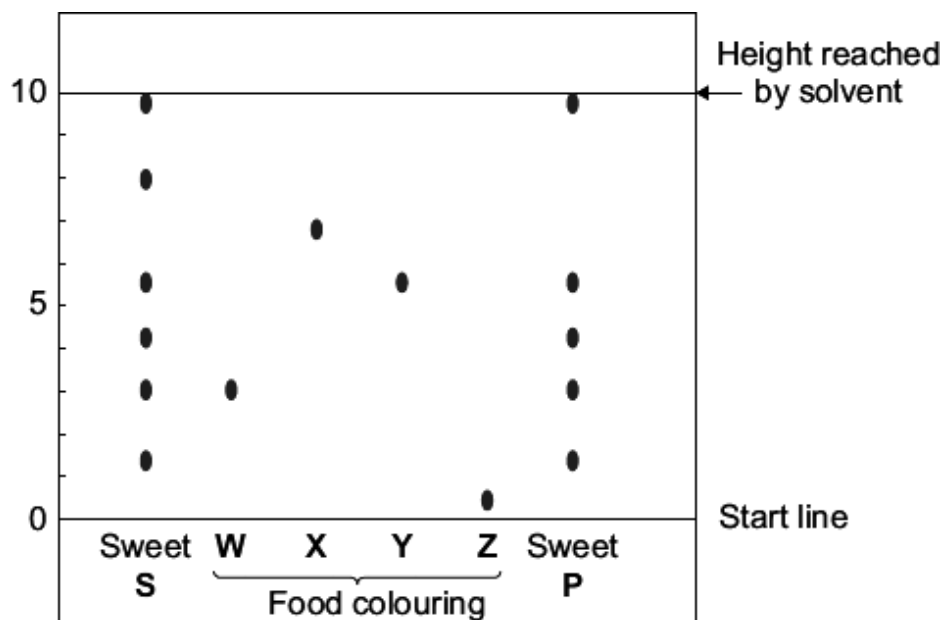


Figure 8

With reference to the chromatogram, answer the following questions

- (i) What are the food colourings present in S and P? [1]
- (ii) Which food colouring has an R_f value of 0.7? [1]
- (iii) What conclusion can you draw about food colourings in S and P? [1]
- (iv) How can you prevent using food colourings that are harmful? [1]

- (b) A student wanted to find the molar mass of an unknown solute X by the depression in freezing point method. The depression in freezing point is the colligative property of the solution. A solution was prepared by dissolving 0.5580g of an unknown solute X in 33.50 g cyclohexane. The freezing point of cyclohexane is 6.50 °C and the freezing point of the solution is 4.32 °C. (K_f for cyclohexane is 20.0 °C.kg/mole).

With reference to the above experiment, answer the following questions.

- (i) Calculate the molar mass of solute X. [3]
- (ii) What is a colligative property?[1]
- (iii) Freezing point is not a colligative property but depression in freezing point is. Explain.[1]
- (iv) Mention two applications of colligative property.[1]

Question 3

- (a) Karma carried out permanganometric titrations using 0.1M oxalic acid solution and KMnO_4 solutions as shown in Figure 9.

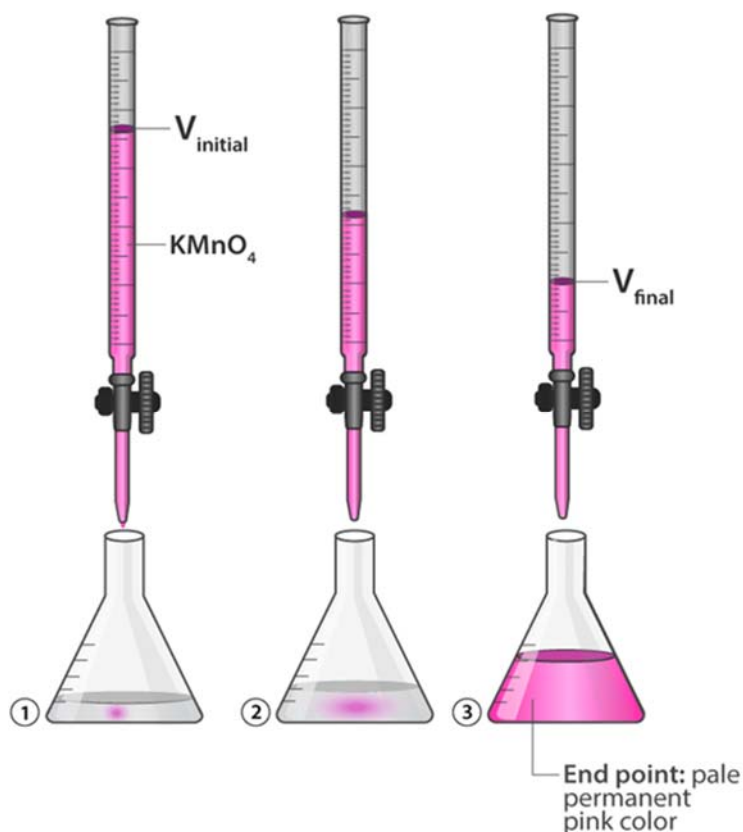


Figure 9

The equation for the reaction is given as



The observation is recorded in Table 3.

Table 3

Sl no	Volume of oxalic acid (mL)	Volume of KMnO ₄ used(mL)
1	20	19.1
2	20	19.0
3	20	19.0

Use the data in Table 3 to answer the following questions.

- (i) Calculate the molarity of KMnO₄ solution. [1½]
 - (ii) Calculate the strength of KMnO₄ solution. [1½]
 - (iii) What is the specific name given to this permanganometric titrations?[½]
 - (iv) Name the indicator used in the titration.[½]
 - (v) Mention two precautions for the experiment.[1]
- (b) A student formulates a buffer that may be used in dialysis solution. The pH of dialysis solution must be equal to the pH of body fluids.
- (i) Name the buffer that may be used in dialysis solution. [1]
 - (ii) Why should dialysis solution have pH equal to pH of body fluids?[1]
 - (iii) Explain the mechanism of buffer action. [[2]
 - (iv) Define buffer. [1]

Question 4

- (a) Sonam designs a device similar to the one shown in Figure 10. This device can be used to power electronic gadgets. Given that E^0 for $\text{Zn}^{2+} = -0.76\text{V}$ and E^0 for $\text{Mn}^{2+} = 0.74$.

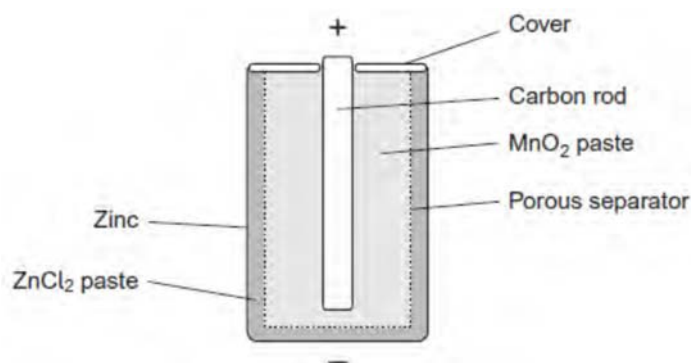


Figure 10

With reference to the device, answer the following questions.

- Identify the cathode and the anode.[1]
- Calculate the emf of the cell. [2]
- Write equation for the overall reaction when the cell discharges.[1]
- Suggest one function of carbon rod in the cell.[½]
- State one environmental disadvantage of this device.[½]

- (b) A student obtains the following data for the reaction

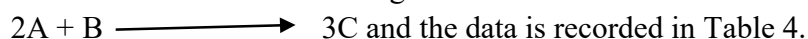


Table 4

Experiment	[A] (mol/L)	[B] (mol/L)	Initial rate(mol/L.s)
1	0.10	0.10	2.0×10^{-4}
2	0.30	0.30	6.0×10^{-4}
3	0.10	0.30	2.0×10^{-4}
4	0.20	0.40	6.0×10^{-4}

Use the data to answer the following questions.

- Determine the rate law. [2]
- What is the overall order of reaction. [1]
- Calculate the value of k for the reaction. [1]
- Define order of reaction. [1]

Question 5

- (a) Figure 11 shows the variation of entropy of sample of water with change in temperature.

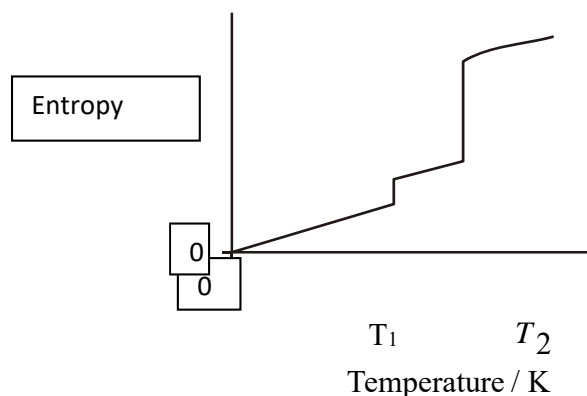
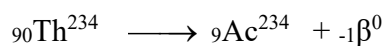
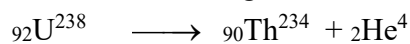


Figure 11

Refer the figure to answer the following questions.

- (i) Why is entropy of water zero at 0K? [1]
- (ii) What change of state occurs at temperature T_1 ? [1]
- (iii) Explain why the entropy change, ΔS , at temperature T_2 is much larger than that at temperature T_1 . [1]
- (iv) It requires 3.49 kJ of heat energy to convert 1.53 g of liquid water into steam at 373 K and 100 kPa. Calculate the enthalpy change, ΔH , when 1.00 mol of liquid water forms 1.00 mol of steam at 373 K and 100 kPa. [2]
- (v) Define entropy. [1]

- (b) Uranium disintegrates to form thorium and thorium disintegrates to form actinium due to radioactive disintegration. The disintegration is shown by the following equations.



With reference to the above information, answer the following questions.

- (i) State the radioactive law demonstrated by the above equations. [1]
- (ii) How many alpha and beta particles are emitted when ${}_{90}\text{Th}^{232}$ is converted into ${}_{82}\text{Pb}^{206}$? [2]
- (iii) An atomic nucleus A emits a beta particle and changes to new nucleus C? What is the composition of nucleus C? [1]

Question 6

- (a) $[\text{CoBr}(\text{NH}_3)_5]\text{SO}_4$ and $\text{K}_4[\text{Fe}(\text{CN})_6]$ are two coordination compounds. With reference to the coordination compounds, answer the following questions.
 - (i) Why do transition elements form coordination compounds? [1]
 - (ii) Mention one characteristic feature of coordination compounds. [1]
 - (iii) Calculate the oxidation number in the above two compounds and give IUPAC name of the compounds. [2]
 - (iv) Identify the ligands and central metal atom in the above compounds. [1]
 - (v) Mention one biological significance of coordination compound. [1]
- (b) At 25°C, the value for K_w is 1.00×10^{-14} . Use this information to answer the following questions.
 - (i) Show why the pH of pure water is 7 at this temperature. [1]
 - (ii) At 30°C, K_w has a value of 1.471×10^{-14} (in the same units). Calculate the pH of pure water at this temperature. [2]
 - (iii) As the temperature increases, the value of K_w increases. Use your knowledge of Le

Chatelier's Principle to work out whether the ionisation of water is exothermic or endothermic: [1]



Question 7

(a) A student carried out titration to investigate the effectiveness of antacid tablet available in the market. The data were recorded in the table below.

Table 3

Sl No	Volume of 0.1M HCl used (mL)	Volume of NaOH used (mL)
1	25	21.0
2	25	21.3
3	25	21.2

Use the data from the table to answer the following questions.

- Calculate the number of moles of NaOH titrated with 0.1M HCl. [1]
- Calculate the number of moles of acid neutralized by antacid tablet. [1]
- On analysis of different sample of antacid, it was found that the number of moles of acid neutralized by antacid tablet is less than the above. What conclusion can you draw from these two observations? [1]
- If one tablet contains 0.5g of antacid, calculate the amount volume of 0.16 M stomach acid that would be required to neutralize by one tablet. [2]
- What is the name of the titration? [$\frac{1}{2}$]
- Name the indicator used in the titration. [$\frac{1}{2}$]

(b) Ketones are widely used as solvents and as intermediates in the chemical industry. One member of ketone family is acetone with the formula CH_3COCH_3 . With reference to the information, answer the following questions

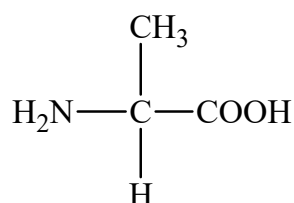
- Acetone undergoes reaction with HCN. What is the name of this reaction? [1]
- Write the balanced equation for the above reaction. [1]
- Acetone reacts with 2, 4 -dinitrophenyl hydrazine to form a yellow precipitate. What is the yellow precipitate due to and write the balanced chemical equation for the reaction. [$1\frac{1}{2}$]
- Mention one health impact of acetone. [$\frac{1}{2}$]

Question 8

(a) Formaldehyde is the first member of homologous series of aldehyde. Several studies have shown that exposure to formaldehyde has increased risk of cancer in humans. With reference to formaldehyde, answer the following questions.

- What do you observe when formaldehyde is warmed with Tollen's reagent? [1]
- Write a balanced equation for the above reaction.[1]
- Why does formaldehyde undergo Cannizzaro reaction?[1]
- Write a balanced equation for the Cannizzaro reaction. [1]
- Mention health and environmental impact of formaldehyde.[1]

(b) Amino acids are monomers of protein and proteins are building blocks of life. The structural formula of alanine is



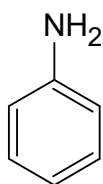
With reference to alanine, answer the following questions.

- (i) What is carbon atom called in alanine? [$\frac{1}{2}$]
- (ii) Draw the structure of the main alanine species present in the aqueous solution.[1]
- (iii) Give the name of this species. [$\frac{1}{2}$]
- (iv) Draw the structure of alanine species when excess of HCl is added to the solution.[1]
- (v) Why is glycine optically inactive? [1]
- (vi) Comment on some of the deficiency diseases related to amino acids.[1]

Question 9

- (a) Many organic substances are interconvertible on changing the conditions. Sonam was studying the interconversions of compounds A, B and C. Compound 'A' is prepared by oxidation of compound 'B' with alkaline KMnO_4 . Compound 'A' on reduction with lithium aluminium hydride gets converted back to compound 'B'. When compound 'A' is heated with compound 'B' in the presence of H_2SO_4 , it produces fruity smell of compound 'C'. With reference to the above information, answer the following questions.
 - (i) Identify A, B, C. [$1\frac{1}{2}$]
 - (ii) Write balanced equations for the above reactions. [3]
 - (iii) What are some of the health impacts associated with compound B? [1]

(b) Aromatic amines are primarily used for making dyes. Since many of them are carcinogenic, they must be handled with care. Aniline is an example of aromatic amine. The structural formula of amine is given below.



With reference to aniline, answer the following questions.

- (i) Write balanced equation for reaction of aniline with HCl.[1]
- (ii) Explain how this reaction shows that aniline is a Bronsted- Lowry base.[$1\frac{1}{2}$]
- (iii) The table below shows the K_b for different amines. Arrange the amines in increasing order of their basicity. [1]

Table 5

Name	Formula	K_b
Ammonia	NH_3	1.8×10^{-5}
Methyl amine	CH_3NH_2	4.38×10^{-4}
Ethyl amine	$\text{C}_2\text{H}_5\text{NH}_2$	5.6×10^{-4}
Aniline	$\text{C}_6\text{H}_5\text{NH}_2$	3.8×10^{-10}

- (iv) Why is aniline less basic than other amines?[1]

BLUEPRINT FOR BHSEC CHEMISTRY-SECTION A

Levels ↓ Chapters	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	Total Marks
1. Carbonyl Compounds	1(a)(xxii)[1],	1(d)(iv)[½], 1(d)(x)[½], 1(c)(vi)[½]		1(b)(iii)[½]			3
2. Carboxylic Acids	1(a)(xxiii)[1]	1(c)(ii)[½]					1½
3. Carboxylic Acid Derivatives	1(a)(i)[1], 1(a)(xxiv)[1]	1(a)(xxi)[1]		1(b)(v)[½]			3½
4. Amines	1(a)(xxv)[1]	1(d)(viii)[½]		1(b)(viii)[½]			2
5. Amino Acids	1(c)(i)[½]			1(b)(ii)[½]			1
6. Colligative Properties	1(a)(viii)[1], 1(d)(i)[½]	1(a)(vii)[1], 1(c)(vii)[½]	1(a)(iv)[1],1(a)(v)[1]	1(a)(ii)[1],1(a)(iii)[1], 1(b)(vi)[½]			7½
7. Acid-base Equilibria		1(d)(vi)[½]	1(a)(vi)[1],1(a)(ix)[1],1(a)(x)[1]	1(b)(iv)[½]			4
8. Ionic Equilibria	1(a)(xii)[1], 1(c)(viii)[½]			1(a)(xi)[1],1(b)(i)[½], 1(d)(ix)[½]			3½
9. Chemical Kinetics	1(c)(ix)[½], 1(d)(v)[½]	1(a)(xiii)[1], 1(c)(iii)[½]		1(a)(xiv)[1], 1(b)(ix)[½]			4
10. Nuclear Chemistry	1(d)(ii)[½]	1(c)(x)[½]	1(a)(xviii)[1]				2
11. Thermodynamics		1(d)(vii)[½]	1(a)(xv)[1]	1(a)(xvi)[1], 1(d)(iii)[½]			3
12. Coordination Compounds			1(a)(xviii)[1], 1(c)(iv)[½]	1(b)(x)[½]			2
13. Analytical Techniques		1(c)(v)[½]		1(a)(xix)[1], 1(a)(xx)[1], 1(b)(vii)[½]			3
Total	9	8½	8½	13	0	0	40

BLUEPRINT FOR BHSEC CHEMISTRY-SECTION B

Levels ↓ Chapters	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	Total Marks
1. Carbonyl Compounds	7(b)(i)[1], 7(b)(ii)[1], 8(a)(ii)[1], 8(a)(iv)[1]	7(b)(iii)[1½], 7(b)(iv)[½], 8(a)(i)[1]		8(a)(iii)[1], 8(a)(v)[1]			9
2. Carboxylic Acids		9(a)(iii)[1]	9(a)(ii)[3]	9(a)(i)[1½]			5½
3. Carboxylic Acid Derivatives							
4. Amines		9(b)(ii)[1½], 9(b)(iv)[1]	9(b)(i)[1]	9(b)(iii)[1]			4½
5. Amino Acids	8(b)(iii)[½]	8(b)(i)[½], 8(b)(vi)[1]	8(b)(ii)[1], 8(b)(iv)[1]	8(b)(v)[1]			5
6. Colligative Properties	2(b)(ii)[1], 3(a)(iii)[½], 3(a)(iv)[½]	2(b)(iii)[1], 3(a)(v) [1]	2(b)(i)[3], 2(b)(iv)[1], 3(a)(i)[1½], 3(a)(ii)[1½]				11
7. Acid-base Equilibria	7(a)(v)(vi)[1], 3(b)(iv) [1]	3(b)(i)[1], 3(b)(iii)[2]	7(a)(i)(ii)[2], 7(a)(iv)[2], 6(b)(i)[1], 6(b)(ii)[2], 6(b)(iii)[1]	7(a)(iii)[1], 3(b)(ii)[1]			15
8. Ionic Equilibria	4(a)(i)[1]	4(a)(iv)[½], 4(a)(v)[½]	4(a)(ii)[2], 4(b)(iii)[1]				5
9. Chemical Kinetics	4(b)(iv)[1]		4(b)(i)[2], 4(b)(ii)[1], 4(b)(iii)[1]				5
10. Nuclear Chemistry	5(b)(i)[1]		5(b)(ii)[2], 5(b)(iii)[1]				4
11. Thermodynamics	5(a)(v)[1]		5(a)(iv)[2]	5(a)(i)[1], 5(a)(ii)[1], 5(a)(iii)[1]			6
12. Coordination Compounds	6(a)(v)[1]	6(a)(i)[1], 6(a)(ii)[1]	6(a)(iii)[2], 6(a)(iv)[1]				6
13. Analytical Techniques			2(a)(ii)[1], 2(a)(iii)[1], 2(a)(iv)[1]	2(a)(i)[1]			4
Total	13½	16	39	11½			80

PHYSICS

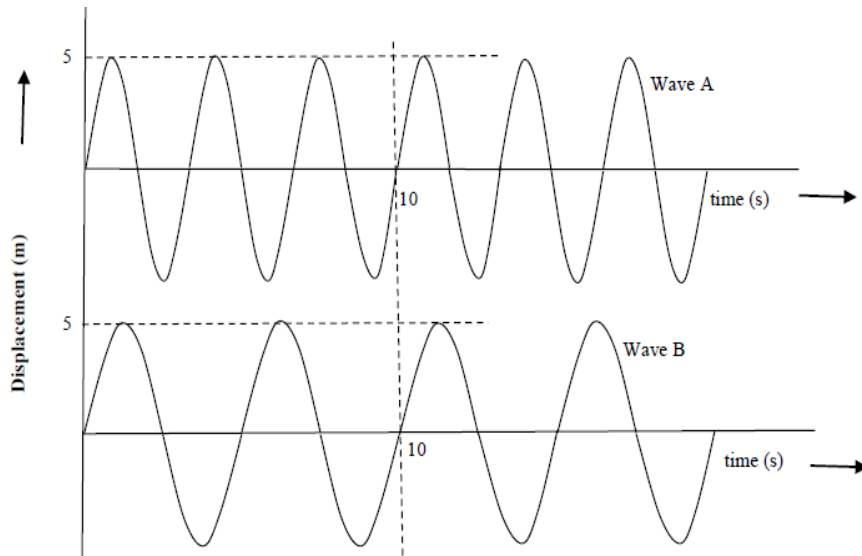
SECTION A [40 MARKS]
ANSWER ALL QUESTIONS

Question 1

[25]

- a) For each question, there are four alternatives A, B, C and D. Choose the correct alternative and circle it. Do not circle more than ONE alternative. If there are more than one choice circled, NO score will be awarded.

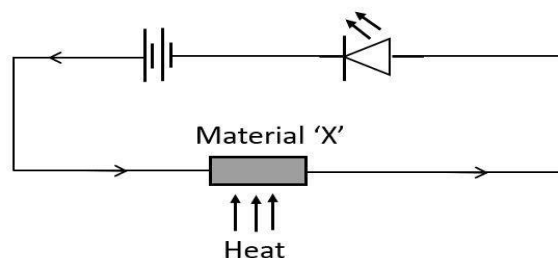
- i. Two particles execute SHM as shown in the figure below. Which of the following statement is TRUE for waves A and B?



- A Amplitude of wave A is greater than wave B.
B Amplitude of wave A is shorter than wave B.
C Frequency of wave B is greater than wave A.
D Frequency of wave B is less than wave A.
- ii. The paper towel used for wiping the water droplets from any surface works on the concept of
- A polarity.
B pressure.
C viscosity.
D capillarity.
- iii. Identify the type of semiconductor when pentavalent impurity is added to a pure silicon through doping.
- A P-Type
B N-Type
C Intrinsic
D Extrinsic

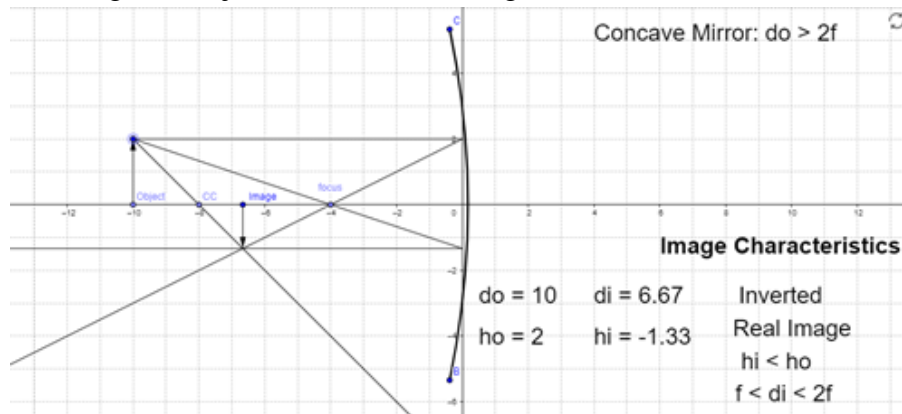
- iv. In Young's double slit experiment, the distance between slits is doubled and the distance between the slit and the screen is halved. What would be the effect on the fringe width?
- A Same
 - B Doubled
 - C one-fourth
 - D quadrupled
- v. Two capacitors, C_A greater than C_B , are connected in series with a battery. Which of the following is true?
- A More charge stored on C_A .
 - B More charge stored on C_B .
 - C Same charge stored on each capacitor.
 - D Same potential difference across both capacitors.
- vi. If Young's double slit experiment is performed in water keeping the rest of the set-up same, the fringes will
- A not be formed.
 - B decrease in width.
 - C increase in width.
 - D remain unchanged.
- vii. The electromotive force (EMF) produced by ac generator depends on the number of armature coil turns, magnetic field strength and speed of rotating field. If you have to transport the ac generator to a remote place, which factor would you consider to increase the efficiency of the machine in terms of transportation and output emf?
- A Magnetic field strength and speed of rotating field.
 - B Number of armature coils and speed of rotating field.
 - C Number of armature coils and magnetic field strength.
 - D Number of armature coils, speed of rotating field and magnetic field strength.

- viii. The material 'X' in the circuit does not conduct electricity at room temperature. However, when the material 'X' is heated to a certain temperature, the current flows through the circuit making the LED glow. What could be the material 'X'?



- A Iron
B Glass
C Copper
D Silicon
- ix. Which quarks are most unstable and found rarely?
- A Up and Down.
B Top and Down.
C Top and Bottom.
D Strange and Charm.
- x. Bhutan is well known to the outside world in terms of conservation of the environment. However, our environment is getting polluted due to rapid developmental activities. As a physicist, how would you use the concept of nanotechnology to promote and clean up the environment in Bhutan?
- A Low cost detection and treatment of impurities in water.
B Enhanced technology for extraction of oil products from the ground.
C Paving the way for earlier detection and treatment of disease in patients.
D Monitor the structural integrity and performance of bridges, railway, parking etc.
- xi. The image of lens A is magnified by a factor of 3 relative to the original object. In addition, lens B magnifies this object further by a factor of 8. What will be the magnification of its final image due to the two-lens system?
- A 24 times
B 30 times
C 80 times
D 120 times

- xii. The figure below is a screen shot from PhET simulation on formation of image by concave mirror. If an object distance and image distance is reversed with the same height of object, what kind of image will be formed?



- A The size and nature of the image remain the same.
- B The size of the image increases and the nature of the image changes
- C The size of the image increases and the nature of the image remains the same.
- D The size of the image decreases and the nature of the image remains the same.
- xiii. When we turn off the room's lights in one room and lights are on in another room, we notice that light is coming into our darkroom if the door is not properly closed, as shown in the figure. This concept can be applied to have a low illumination light in our room. On what principle does this phenomenon work?



- A Diffraction
- B Interference
- C Superposition
- D Refraction and reflection
- xiv. A particle of mass 0.2 kg executes SHM from the mean position. How far will it travel in 0.5 s if the period and the amplitude are 6 s and 8cm respectively?
- A 3 cm
- B 4 cm
- C 5 cm
- D 6cm

- xv. In a step up transformer, the current flowing through a coil decreases from 30 A to 10 A in five seconds. If an emf of 220V is supplied across the terminals of primary coil, what will be the opposing emf induced in the adjacent coil due to the change in current?
- A 440 V
 - B 550 V
 - C 660 V
 - D 770 V
- xvi. What is the beneficial aspect of nuclear fission?
- A The ability to absorb energy.
 - B The ability to release tremendous amounts of energy.
 - C The ability to produce more energy than nuclear fusion.
 - D The nuclear fission is safer to operate as it does not pose any health risk to the human kind.
- xvii. In line with Gross National Happiness Philosophy of development in Bhutan, which area of space exploration would be taken into priority, if Bhutan ventures into mega space exploration?
- A Gravity.
 - B Radiation.
 - C Space debris.
 - D Charged particles.
- xviii. The rocket can be launched based on the concept of Newton' third law of motion. However, we cannot successfully launch the rocket without principle of conservation of
- A mass.
 - B energy.
 - C momentum.
 - D internal energy.
- xix. Karma and Sonam are planning to develop and launch a satellite for the country and need a series of consultations for approval. Therefore, which of the following are steps suitable for the development of satellites?
- A Mission definition review, preliminary design review, critical design review, and safety review.
 - B Mission definition review, critical design review, preliminary design review, and safety review.
 - C Mission definition review, preliminary design review, safety review, and critical design review.
 - D Preliminary design review, critical design review, safety review, and mission definition review.

- xx. In the experimental set up for photoelectric effect, photo-current becomes zero when the applied voltage reaches
- A zero voltage.
 - B saturation potential.
 - C stopping potential.
 - D Infinitely high voltage.
- xxi. Dorji and karma argue on the nature of electromagnetic radiation. Dorji argue that electromagnetic radiation behaves like waves as well as particles in nature and therefore claims that electromagnetic radiation has dual nature. Karma claims that electromagnetic radiation has only wave nature. Whose argument is correct as per the nature of electromagnetic radiation nature theory?
- A Karma = Radiation does not travel in air.
 - B Dorji = Radiation travels in the form of waves.
 - C Karma = Radiation travels in a straight line only.
 - D Dorji = Radiation travels in straight line and wave form.
- xxii. The table below shows the functional applications of lens x and y. Use the information from the table and identify the nature of the lens in relation to its usage in spy holes in doors.

Lens: x	Lens: y
<p>→ Use as magnifying glass and microscope</p> <p>→ Form real or virtual images based on the position of the object.</p>	<p>→ Use in flashlight</p> <p>→ Forms virtual and diminished image</p>

- A both the lenses are convex
- B both the lenses are concave
- C x is convex and y is concave
- D x is concave and y is convex

- xxiii. For the projection of a circular motion to be a Simple Harmonic Motion (SHM), the speed of a particle in circular motion should be constant. If a ball, hanging from a thread is given some speed such that the ball makes a complete circle under the influence of gravity. What will be the projection of the ball on the x-axis?
- A Circular.
 - B Parabolic.
 - C Hyperbolic.
 - D Simple Harmonic Motion.
- xxiv. A particle in simple harmonic motion while passing through mean position will have
- A Maximum kinetic energy and maximum potential energy
 - B Maximum kinetic energy and minimum potential energy
 - C Minimum kinetic energy and maximum potential energy
 - D Minimum kinetic energy and minimum potential energy
- xxv. Thermistor has a resistance R_1 of 500 ohm at 30°C and 100 ohm at 80°C . What will be its output voltage at 80°C ?
- A 0.16 V
 - B 0.5 V
 - C 1.6 V
 - D 5.0 V

b) Fill in the blanks with appropriate words.(5 statements with 10 blanks) [5]

- i. The angle of contact is _____ of the inclination of solid to liquid surface and is _____ for a given pair of solid and liquid and surrounding medium.
- ii. For an oscillator, if the frequency of driving force is very close to its _____ frequency, there is increase in amplitude of the oscillation which is known as _____.
- iii. According to _____ law, the magnitude of induced emf produced in a coil is directly proportional to the rate of change of _____.
- iv. In a _____ lens, a virtual object cannot form a virtual image and in a _____ lens, a real object cannot form a real image.
- v. A heat dependent resistor known as _____ thermistor decreases its resistance as the temperature _____.

- c) **Match each item of Column A with the most appropriate item of Column B. Rewrite the correct pairs by writing the alphabet against the number in the spaces provided.** [5]

Column A	Column B
i. Produce a desired electric field	a) Density
ii. Absolute zero temperature	b) Turbulent
iii. Rotational flow	c) $\frac{3PV}{2}$
iv. Electric flux	d) $V = I \left(\frac{R_1 \times R_2}{R_1 + R_2} \right)$
v. Potential divider	e) Capacitors
vi. Critical velocity	f) $V_o = V_i \left(\frac{R_2}{R_1 + R_2} \right)$
vii. Ohm's law	g) -273°C
viii. Electric field strength	h) Velocity
ix. Average kinetic energy	i) Inductors
x. Produce a desired magnetic field	j) $\phi = EA \cos \theta$
	k) $E = \frac{F}{q_0}$
	l) Laminar

- d) **Read the statement below carefully and write TRUE or FALSE.** [5]
- A real gas most closely approach the behaviour of an ideal gas under condition of low pressure and high temperature.
 - Capacitors are connected in parallel to obtain same amount of charge from the battery.
 - Baryons are weakly interacting particles because it is made of quarks.
 - According to ideal gas law, pressure is directly proportional to temperature at constant volume.
 - Electric field between the two plates of capacitor are always uniform.
 - Electromagnetic force is strongest force among four fundamental forces according to the standard model.
 - Enrichment process in fission reaction is done in order to increase the critical size of the uranium

- viii. Huygen's principle is used to locate the wavefront of the waves.
- ix. Till date, none of the country is able to implement the thermonuclear reactor because of limited of supply of fuel called hydrogen.
- x. Only transverse waves will exhibit the diffraction phenomenon.

SECTION B [60 MARKS]
ATTEMPT ANY SIX QUESTIONS

Question 2

- a) Why do you think that most of the country prefer nuclear fission instead of nuclear fusion to generate electricity? [1]
- b) Verify that one dimensional projection of uniform circular motion is a SHM. [2]
- c) An alternating voltage $V=200 \sin 300t$ is applied across a series combination of $R=10\Omega$ and $L=800\text{mH}$. Calculate [2]
 - i. The impedance of the circuit
 - ii. The peak current in the circuit.
- d) As said by Bertolt Brecht, "The headlong stream is termed violent. But the river bed hemming it in is termed violent by no one". Why deep river is termed non violet as compared to stream? [2]
- e) Using a mirror, you want to focus an upright image of double the size of the object on the screen. What type of mirror will you use? If your mirror has a focal length of 20 cm, at what distance will you place your object in front of the mirror for this situation? [3]

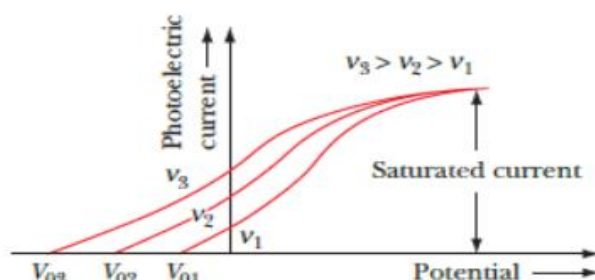
Question 3

- a) How can you distinguish between a metal and an insulator on the basis of energy bands? [1]
- b) During your practical examination, you are asked to place a convex lens and concave lens in contact to obtain the combined focal length experimentally. The focal lengths of convex lens and concave lens are 20 cm and 30 cm respectively. Determine the combined focal length theoretically to compare your practical result. [2]
- c) A capillarity tube of diameter $2 \times 10^{-3} \text{ m}$ is dipped in a liquid of surface tension 0.072 N/m, and density of 993.73 kg/m^3 . Calculate the height to which the liquid will rise in the capillary tube? (Given: $g = 10 \text{ m/s}^2$, angle of contact = 45°) [2]
- d) A copper sheet is placed in a magnetic field. If we pull it out of the field or push it into the field, why does it experience an opposing force? [1]

- e) The Standard Model of particle physics is a theory concerning different forces as well as classifying all the elementary particles. Do you find any possibilities in revising Standard Model to Modern Standard Model? Suggest drawbacks that you finds to support the possibilities of revising Standard Model. [2]
- f) Is production of Nanoscale materials boons or banes to the people? Justify your answer. [2]

Question 4

- a) Why step down transformer is preferred over step up transformer in domestic use? [1]
- b) Why do you think p-p cycle is not feasible on earth but on Sun? [2]
- c) A photoelectric experiment was conducted taking radiation of different frequencies (ν) but of same intensity, and the variation between photoelectric current and potential of plate A is obtained and is shown in the graph. What conclusions can you draw from this experiment? [2]

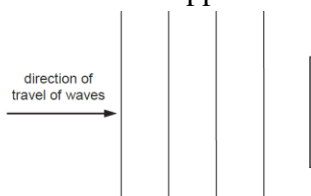


- d) Name the force which is charge independent and holds the elementary particles together in a nucleus. [1]
- e) You are provided with two convex lenses A and B of focal lengths 10 cm and 60 cm respectively, and a concave lens C of focal length 50 cm. If you are asked to design a pair of spectacles of power +8D, which pair of lenses will you choose? [2]
- f) Electricity can be generated from hydropower plants as well as nuclear power plants. Which power plant is better for generating electricity and why? [2]

Question 5

- a) State any **TWO** sign conventions for spherical mirrors. [1]
- b) How can you determine the strength of electric field by using concept of density of field lines? [1]
- c) Dawa charged a parallel plate capacitor with a battery and then disconnected it. He then decreased the distance between the plates. What changes he will observe in (i) capacitance and (ii) charge on the plates of the capacitor? Give reasons or supporting equations for your answer. [2]
- d) You are given a variety of thermistors and asked to sort out NTC and PTC thermistors. How can you succeed in doing it? [2]

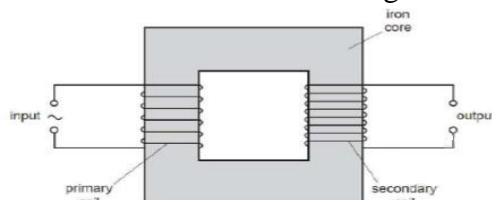
- e) A ripple tank is used to show the diffraction and interference of waves. In the given figure, plane wavefronts are shown approaching an object.



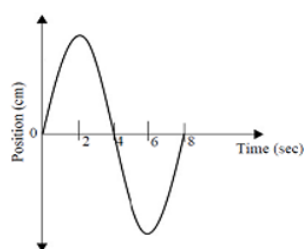
- i. Draw four wavefronts to show the waves after they passed through the object [2]
 - ii. If the object is made closer, then describe the change in appearance of the diffracted wavefront. [1]
- f) When the intensity of light falling on a photocell is increased, what will be its effect on the current flowing out of the cell? [1]

Question 6

- a) How can you determine the energy of capacitor graphically? [1]
- b) Viscosity is fluid friction. Support the statement. [2]
- c) The temperature inside refrigerator is 4°C . If you place a balloon in fridge that initially has a temperature of 22°C and volume is 0.5 L, what will be the volume of the balloon when it is fully cooled by refrigerator? [2]
- d) An iron cored transformer is illustrated in the figure.

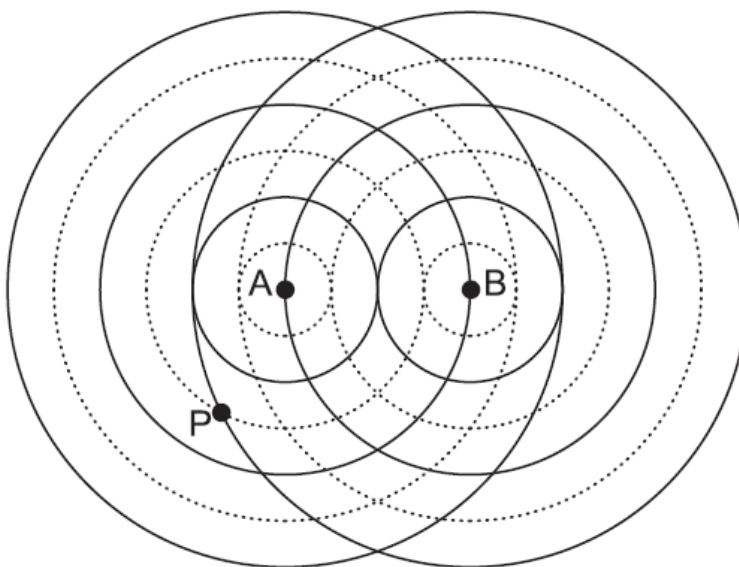


- i. State why the primary and secondary coils are wound on a core of soft iron. [1]
 - ii. Explain why thermal energy is generated in the core when the transformer is in use. [2]
 - iii. State a typical features in the design of the iron core to reduce power loss. [1]
- e) The graph given represents the position of a ball attached to a spring oscillating in simple harmonic motion. When will the ball have maximum velocity and acceleration? [1]



Question 7

- a) Two in-phase point sources, A and B, generate waves as shown in the diagram below. [3]
The solid lines indicate crests while the dotted lines indicate troughs. Calculate the path difference between the lines AP and BP, and state the type of interference produced at point P.



- b) In semiconductors, the number of electrons in the conduction band is equal to the number of holes in valence band. Rationalise the given statement. [2]
- c) Imagine yourself falling vertically downwards. Represent graphically how your velocity changes as you fall in presence and in absence of drag force. [1]
- d) What happens to the pressure in a tightly sealed house when the electric furnace turns on and runs for while? [2]
- e) Does the current lag the voltage in a LCR circuit? Justify your answer. [2]

Question 8

- a) The emf is induced in an AC generator whenever magnetic flux linked with conductor changes. State any two ways of increasing the magnitude of the induced emf. [1]
- b) Experiments are conducted to investigate the photoelectric effect. [1]
i. It was found that, on exposure of a metal surface to light, either electrons are emitted immediately or they are not emitted at all. Suggest why this observation does not support a wave theory of light.

Data for the wavelength of the radiation incident on the metal surface and maximum kinetic energy of the emitted electrons are given in the table.

$\lambda(\text{nm})$	$E_K(10^{-19} \text{ J})$
650	—
240	4.44

[1]

ii. Without any calculation, suggest why no value is given for E_K for the radiation of wavelength 650 nm.

[2]

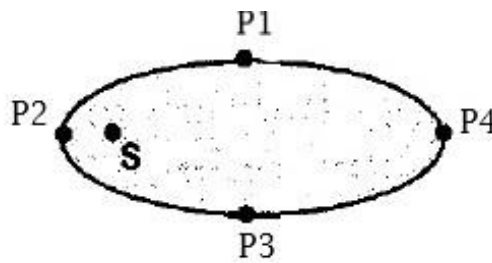
iii. Use the data to determine the work function energy of the metal.

c) In the tomb stoning event, a diver having mass 41 kg jumps from the height of 9.5 m straight down into water. At that instant she strikes the water, what is her de Broglie wavelength? Calculate the momentum of the body.

[2]

d) The figure given shows a planet in elliptical orbit around the sun S. At what position will the kinetic energy of the planet be maximum? Justify your answer using appropriate law.

[2]



e) A particle called K^- anti-meson is made up of an anti-up and strange quarks. Based on this information, predict the charge of the K^- .

[1]

Question 9

a) i. What would happen to time period of a swing if a girl swinging in sitting position stands? Why?

[3]

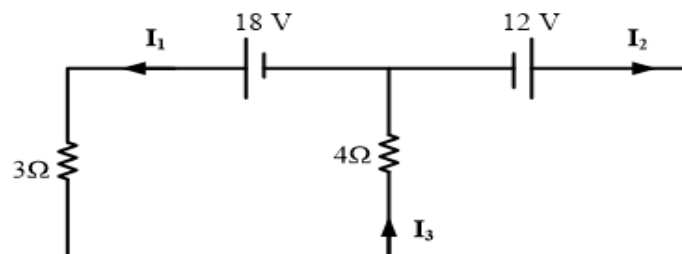
ii. What would happen to the time period if she swings in the same swing at higher altitude than before? Why?

b) Design the functional and operational requirement of the weather forecasting satellite to transform the mission objective into designing process.

[2]

c) Using Kirchhoff's laws, find currents I_1 , I_2 and I_3 in the given circuit.

[3]



d) Why is it necessary to dispose satellite after completing mission? What is the common practices of satellite disposal?

[2]

[PHYSICAL CONSTANTS]

Acceleration due to gravity	$g = 9.8 \text{ m/s}^2$
Avogadro's number	$N_A = 6.022 \times 10^{23}$
Boltzmann constant	$k = 1.38 \times 10^{-23} \text{ J/K}$
Density of water at 4°C	$\rho = 1000 \text{ kg/m}^3$
Electron charge	$e = 1.6 \times 10^{-19} \text{ C}$
Energy equivalent of	$1\text{u} = 931.5 \text{ MeV}$
Mass of an electron	$m_e = 9.1 \times 10^{-31} \text{ kg}$
Mass of a neutron	$m_n = 1.008665 \text{ u}$
Mass of a proton	$m_p = 1.007276 \text{ u}$
Permeability of free space	$\mu_0 = 4\pi \times 10^{-7} \text{ TmA}^{-1}$
Permittivity of free space	$\epsilon_0 = 8.85 \times 10^{-12} \text{ C}^2\text{N}^{-1}\text{m}^{-2}$
Planck's constant	$h = 6.63 \times 10^{-34} \text{ J.s}$
Speed of electromagnetic wave	$c = 3 \times 10^8 \text{ ms}^{-1}$
Standard atmospheric pressure	$1 \text{ atm} = 101325 \text{ Pa}$
Universal gas constant	$R = 8.31 \text{ J/mol.K}$
1 electron volt	$1\text{eV} = 1.6 \times 10^{-19} \text{ J}$
	$\pi = 3.14$

Rough Work

ENVIRONMENTAL SCIENCE

SAMPLE BHSEC ENVIRONMENTAL SCIENCE (Class XII)

INTRODUCTION

1. Subject background

Environment in totality encompasses those that are living and nonliving, tangible and intangible, which include materialistic, religion and culture. These are indispensable for the prosperity and wellbeing of all living things. The inter-relationship of people with the environment guided by the social and spiritual values is well captured in the tenets of the Gross National Happiness, the developmental philosophy of Bhutan.

The study of Environmental Science relies heavily on experiential learning and application; hence attempts to equip students with skills and competencies that are necessary to explore, analyse and build knowledge based on various aspects of the environment. It engages students in hands-on experiences, exposes students to complex challenges of life and environment, encourages critical thinking, and assists students to develop problem-solving skills. With this array of skills, ES inspires students to construct new knowledge and create ideas of doing things differently, and helps improve their general education. These skills prepare them to perceive a wide range of career opportunities and challenges in the real world.

2. Goals and purpose of the subject

The goal of Environmental Science is to “build a cadre of young people equipped with knowledge, skills and values to engage them in the conservation of natural heritage, promote sustainable and equitable use of natural resources, and the prevention of all forms of environmental degradation in the pursuit of GNH”.

3. Broad Learning outcomes / Competencies

By the end of key stage 5 (class XII), the learner should be able to:

1. Structures and Functions of Ecosystem

- 1.1. Use the knowledge and understanding of biomes and ecosystems, to plan evidence-based conservation works collaboratively with the community to enhance humans’ harmony with nature.

2. Balance in Nature

- 2.1 Exhibit understanding of the ecosystem, its spheres, function and interactions of various components to generate ideas of maintaining balance in nature.

3. People and Environment

- 3.1 Analyse the change in human’s consumption patterns with the corresponding impacts on the natural resources, based on which, design measures to sensitize people of the increasing pressure on the natural resources.

4. Natural Resources Degradation

- 4.1 Analyse how humans' lifestyles are responsible for the degradation of natural resources and generate ideas to promote the mindful livelihood to live in harmony with nature.

5. Pollution

- 5.1 Analyse the various forms of pollution as the social concern in Bhutan, and design awareness programs with innovative ideas in collaboration with the community towards addressing various forms of pollution.

6. Climate Change

- 6.1 Carry out research in various fields related to climate change and suggest ways to control factors causing climate change and reduce the impacts of climate change on the socio-economic wellbeing of people.

7. Disaster Risk Reduction and Environment

- 7.1 Assess the potential causes of disaster (flood, fire, drought, etc.) in the locality, and plan and disseminate disaster management plans and activities for the family and the community they live in.

8. Biodiversity and its Measurement

- 8.1 Draw evidence from various researches on impacts of biodiversity loss and work collaboratively with various organizations to carry out conservation initiatives.

9. Biodiversity Conservation

- 9.1 Design actions to safeguard the natural heritage in Bhutan and inspire appreciation towards Bhutan's unique rich natural heritage based on its spiritual beliefs and economic benefits for the social wellbeing of people.

10. Water and Land Management

- 10.1 Justify that natural resources are adequate for all, and appreciate the need for strategies to conserve water and land resources for the wellbeing of all life forms.

11. Energy Conservation

- 11.1 Through the understanding of characteristics of all energy forms, generate innovative ideas towards producing clean energy and conserve energy with appropriate strategies for sustainable use of energy resources

12. Environment and Development

- 12.1 Analyse the impact of development on the environment in developed countries and generate ideas on how to manage the environment in the face of development in Bhutan.

13. Sustainable Development

- 13.1 Analyse the diverse school of thoughts of sustainable development at the global level to generate new perspectives on sustainable development for Bhutan.

4. Salient Learning experiences

The curriculum is grounded on the principle of competency based and experiential learning with emphasis on development of various skills through activity-based approaches, including indoor, outdoor activities, hands on experiences, experiments, case studies, surveys, debates, discussion, team work, folk art and, so on. It encourages teachers to engage students continuously in experimentation, investigation, and project works, design of different experiments and associated principles, reasoning and arguments with scientific evidence, analysis and interpretation of data to develop coherent knowledge and understanding.

5. Purpose of the Assessment

Assessment is the process of gathering and interpreting evidence to make judgments about student learning. It is the crucial link between learning outcomes, content and teaching and learning activities. Assessment is used by learners and their teachers to decide where the learners are at in their learning, where they need to go, and how best to get there. The summative assessment in particular is the means to benchmark students' learning by which aptitudes in subject disciplines are interpreted; hence the suitability for the diverse career options.

6. Question types used and their underpinning principles or big ideas

With the understanding that the New Normal Curriculum underpins the Competency Based Learning principles driven by open source and experiential learning approach leveraged on digital technologies, all the test items shall be Competency Based Test items (CBT). The CBT gauges holistic learning achievements of students of bigger conceptual knowledge competencies articulated in critical thinking, creativity, analytical, design, computational and social judgment tasks in examinations.

Therefore, CBT papers in all subject are informed by the following broad underlying principles:

- i. All the test items are CBT based on the concepts and principles of competency based assessment.
- ii. The competency based test items are purported to test a wide range of behavioural, cognitive, and knowledge-based skills of students. Therefore, tasks in question papers stimulate students to make connections of the learnt concepts and information to a specific situation of the task by deploying multiple cognitive, social and physical skills.
- ii. Question patterns differ across the subject as informed by the subject nature and the corresponding characteristics. The ES question paper consists of two sections: Section A (40%) - objective type of questions, Section B (60%) - extended response questions.
- iii. Understanding that assessment is giving students the opportunity to display their abilities and potential, not as punishment, and that each of students have individual differences in learning style, diversity in question types is emphasized. This is also to uphold the inclusive education principles and the philosophy of education for all.
- iv. Adopt a thematic approach to writing test items so that maximum conceptual knowledge, skills and values judgment in the subjects are assessed with a smaller number of test items.
- v. The weighting for the summative assessment (SA) through examination is 70% and CFA is 30%.

SAMPLE BHSEC ENVIRONMENTAL SCIENCE (Class XII)

SECTION A (40 Marks) ANSWER ALL QUESTIONS

Question 1

- a) For each question, there are four alternatives: A, B, C and D. Choose the correct alternative and circle it. Do not circle more than ONE alternative. If there is more than one choice circled, NO score is awarded. [25]
- i. Ecosystem services are crucial for sustenance of all living things and the health of the environment. Which of the following is an example of provision services?
- A Ecotourism
 - B Fresh water
 - C Photosynthesis
 - D Climate regulation
- ii. Translocation of wild animals is one of the alternatives to reduce human-wildlife conflict. However, it can pose negative impact because
- A it may replicate the problem in the new habitat.
 - B the animal's innate behaviour changes in the new habitat.
 - C the new location might have a diversity of natural resources.
 - D the new habitat could be far away from the reach of humans.
- iii. A farmer leaves his 50 decimal land uncultivated. The type of succession occurring in that area of land is
- A primary.
 - B autogenic.
 - C allogenic.
 - D secondary.
- iv. In the process of urbanization and industrialization, many critical watersheds are destroyed at an alarming rate around the world. In Bhutan, this condition may lead to
- A Salinisation.
 - B Alkalisation.
 - C Acidification.
 - D Desertification.
- v. The risk assessment in a locality considers both structural and non-structural strategies. The example of non-structural mitigation is
- A mounting furniture.
 - B safe electrical wiring.
 - C building flood embankment.
 - D keeping objects in a safer place.

- vi.** What is the order of the waste management hierarchy from most to the least favoured one?
- A Prevention-Reuse-Disposal-Recycle
 - B Prevention-Reuse-Recycle-Disposal
 - C Prevention-Disposal -Reuse-Recycle
 - D Prevention- Recycle-Reuse- Disposal
- vii.** Which of the following may be referred to as the hedonic price method for valuing the environmental assets?
- A Using willingness to pay to value an environmental asset.
 - B Using option value to estimate the value of an environmental asset.
 - C Using existence value to estimate the value of an environmental asset.
 - D Using linkages between variations in house prices and geographical proximity to an environmental asset.
- viii.** A landslide occurred at the roadside removing the existing ecosystem and fresh surface of the area is exposed to various climatic factors. It is best described by
- A reaction.
 - B invasion.
 - C nudation.
 - D aggregation.
- ix.** A cement manufacturing industry has developed an Environment Management System. The key aspect of this EMS would include the
- A development of an overall environmental policy.
 - B consideration of the costs involved in developing an environmental policy.
 - C focus on an increased investment by shareholders in environmental policy.
 - D limited audit of some areas of the manufacturing, plants safety procedures.
- x.** The Park Manager puts a sign saying “Take nothing but pictures, leave nothing but footprints” in the park area. Which one of the following is the main purpose of such signage?
- A Flowering shrubs foster aesthetic values among visitors.
 - B All animals feed directly on flowering shrubs that may be removed.
 - C Removal of flowering trees and shrubs does not affect biodiversity.
 - D Humans can destroy habitats by removing flowering trees and shrubs.
- xi.** Following are some of the aims of SDGs:
- I. End poverty and hunger in all forms and dimensions.
 - II. Extracting resources to boost economic development.
 - III. Creating equal distribution of wealth around the world.
 - IV. Protect mother earth through sustainable consumption and production.

Which of the following combinations best explain the aims for adoption of SDGs?

- A I, II and IV
- B I, II and III
- C I, III and IV
- D II, III and IV

- xii.** Soil is composed of varieties of components. Organic matter is an important part of the soil because it
- A prevents surface runoff.
 - B drains out excess water.
 - C is a component of the soil.
 - D provides nutrients for plants.
- xiii.** Read the following statements given below and conclude the relation between X and Y. Read the statement given below:
- (a) $X \rightarrow$ Air pollutants of PM 2 increase the chances of heart diseases.
 - (b) $Y \rightarrow$ These micro-particles can penetrate deep into lungs and enter the blood circulation.
- Which of the following explains the relation between X and Y?
- B X is correct but Y is wrong.
 - C Y is correct but X is wrong.
 - D Both are correct. Y explains X.
 - E Both are correct. Y does not explain X.
- xiv.** With the increasing climate change, natural calamities are common events. Lives and properties are lost, affecting the society. Therefore, the society needs to be prepared to face such calamities. The mock drills are conducted in schools to
- A increase the likelihood of survival.
 - B strengthen disaster mitigation strategies.
 - C eliminate the need for centralised disaster management.
 - D prepare students to participate in a mock drill at the national level.
- xv.** Lhatu wants to carry out maintenance for his building. He wants to ensure that his building is protected from weatherization. Which one of the following should he prioritise for the maintenance?
- A Install insulation in walls.
 - B Use thin window curtains.
 - C Remove vinyl sweep from the under-door drafts.
 - D Replace double-glazed windows with single-glazed windows.
- xvi.** People use different means to transport goods and services around the world. With the impending calamities of the climate change, priorities are for green transport. Which one of the following is the characteristic of a green transport?
- A Car-pooling.
 - B Fuel-efficient.
 - C Public transport.
 - D Low carbon emission.
- xvii.** A farmer in Sarpang uses a perforated earthen pot and buries it next to each other in the soil to irrigate the field. This method of conservation of water in agriculture is known as
- A drip irrigation.
 - B pitcher irrigation.
 - C surface irrigation.

D sprinkle irrigation.

xviii. All of the following ways would help reduce the projected ecological footprint EXCEPT

- A recycling non-renewable metallic resources.
- B converting open-access resources to private ownership.
- C using shared resources at rates well below their estimated sustainable yields.
- D continuing reliance on the current fossil fuel–based, automobile-centered economy.

xix. The morphology and physiology of plants and animals vary based on rate of change of temperature and precipitation. Therefore, phenophases of plants and animals are used to determine the climate change because

- A plants and animals are climate resilient.
- B plants and animals phenophases are observable.
- C plants and animals are sensitive to climate change.
- D plants and animals are affected more during climate change.

xx. Which one of the following best explains the suitability of the indigenous practices in biodiversity management?

- A They are methods that ensure effective biodiversity management.
- B They are all effective for large-scale application of biodiversity management.
- C All forms of indigenous practices exemplify the sustainable use of natural resources.
- D Some practices are deeply rooted in the community with a positive attitude towards biodiversity.

xxi. Establishment of industrial plants in a location considers all the factors that may impact the sustainability of the production and employment for people.

An example of non-geographical factor that influences industrial location is

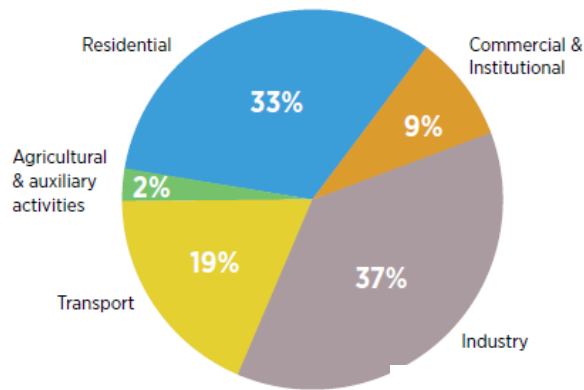
- A power.
- B capital.
- C labour supply.
- D transport facilities.

xxii. Biodiversity is the most precious gift of nature to humankind.

A well protected and conserved biodiversity have the following benefits EXCEPT

- A protects from natural disasters.
- B provides an avenue for recreational activities.
- C provides a variety of food sources and alleviates poverty.
- D creates issues in the decision-making process for the government.

xxiii. Following diagram shows the usage of fuel by different sections of the society.



Source: initiative@nordicasiaimpact.org

Which of the following accounts for the largest use of fuel in Bhutan?

- A Hotels
- B Offices
- C Industry
- D Transportation

xxiv. All of the following is the part of sustainable development goals EXCEPT

- A promotion of decent jobs for all.
- B access to sustainable energy for all.
- C provision of internet services for all.
- D availability of water and sanitation for all.

xxv. Study the diagram.



The difference between mitigation and adaptation is

- A mitigation adjusts and adaptation controls impacts of climate change.
- B mitigation controls and adaptation adjust to the impact of climate change.
- C mitigation is planning process and adaptation is implementation process of climate change,
- D mitigation is the implementation process and adaptation is the planning process for climate change.

b) Fill in the blanks with appropriate word/s.

[5]

- i. People visiting Taktsang Monastery in Paro is an example of ecosystem service.
- ii. Tool for verifying compliance with the environmental laws and regulations and evaluating the effectiveness of EMS is
- iii. Unsustainable consumption and production patterns would result in huge costs.
- iv. Hybrid cars have a combination of gasoline and engine to power the car.
- v. Reducing greenhouse gas emission is an example for measure.
- vi. The dominant component that contributes to the overall ecological footprint is
- vii. Increase in BOD indicates in DO of water.
- viii. Under the Royal patronage of His Majesty The King, the rural rehabilitation program has helped many homeless and landless citizens of the country thus contributing to achieve the..... pillar of GNH.
- ix. Trash or garbage created by individuals, households and small businesses are known as
- x. The Bonn Convention adopts strict protection measures for migratory species.

c) Match each item under column A with the most appropriate item in column B. Rewrite the correct pairs by writing the alphabet against the number in the space provided.

[5]

Column A	Column B
i. Genes transferred from unrelated species.	i. Emergency relief
ii. Assess level of air quality.	ii. Early recovery
iii. Increase level of carbonate and bicarbonate of sodium and magnesium in soil.	iii. Genetically Modified Organism
d. Immediate survival of assistance to the victim of the disaster.	iv. National Biodiversity Centre
e. Occurrence of organisms from both the adjacent ecological communities.	v. Biodiversity Management System
f. Restoration of basic services, livelihoods, transitional shelter, governance and security.	vi. Air Quality Index
g. Occurrence of increase in variety and intensity at the transitional zone of the adjacent ecological communities.	vii. Alkalisation
h. Implements National Biodiversity Strategies and Action Plan.	viii. Acidification

i. Occurrence of a species playing a unique and critical role in an ecological community.	ix. Ecotone
j. People come together to take collective action and generate solutions to common problems.	x. Edge effect
	xi. Keystone species
	xii. National Environment Protection Act
	xiii. Recovery phase

[5]

d) Write TRUE or False for the following statements.

- i. PM 2.5 pollutants are more harmful than PM 10 pollutants.
- ii. Planting trees, minimising soil degradation and removal of harmful species are activities for ecosystem restoration.
- iii. Carbon negative countries absorb less carbon gas than what the country produces.
- iv. It costs more to use LEDs than incandescent bulbs for an individual.
- v. Removal of keystone species can lead to unstable communities.
- vi. Contour bunds are used to slow down water runoff and to build soil rich in nutrients.
- vii. The final stage of succession is stable and self-sustaining.
- viii. Environmental Impact Assessment (EIA) is carried out to study and reduce adverse impacts prior to clearance of any project.
- ix. Increasing carbon footprint is the foremost step in reducing the over consumption of resources.
- x. The World Heritage Convention is concerned with identifying GM crops and destroying it.

SECTION B (60 Marks)

Attempt any **SIX** questions

Question 2

Read the situation given below and answer the questions that follow.

Mr. Penjor recently returned from Australia. He wants to buy a house in Bumthang. He has two options from which he needs to make a choice. The first house is located in the Chamkhar town while the second house is located away from the town. The second house has a beautiful surrounding, continuous water supply and no noise pollution. Penjor is seeking help from you to make a choice.

- a) Which environmental service valuation method would you use to help Penjor make a choice? Why? [2]
- b) How does the ecological service influence the pricing of the house in this method? [2]
- c) How does a community help establish the next community in the process of primary succession? [2]
- d) Suggest some mitigation strategies to reduce the negative impacts of urbanisation on the environment. [2]
- e) Mention some ways to reduce earthquake hazards at your home. [2]

Question 3

- a) How does gene pollution act as a disturbance to the ecosystem? [2]
- b) The pressure on land in Bhutan is growing with economic development and population growth.
 - i. What do you understand by the term land degradation? [1]
 - ii. Predict the scenario of land degradation in Bhutan after 10 years. Justify your prediction. [2]
- c) Community of Khatoed gewog depends on forest resources for their livelihood. Imagine you are Karma and being appointed as Chief Environment Officer at Gasa Dzongkhag. Dasho entrusted you with a task to develop a biodiversity management plan. Design a biodiversity management system to enhance socio-economic services for the community. [3]
- d) How will you explain 'GNH and sustainable development' to a farmer in your locality? [2]

Question 4

- a) Inspired by the Royal Address of His Majesty the King to the Nation on 12th September, 2020, the *De-Suups* have volunteered their service to develop water projects in different dzongkhag as a part of *De-suung* National Service. You are entrusted with the responsibility to coordinate and manage water resources in one of the Dzongkhags after the completion of the project. What would be some strategies that you would like to adopt to conserve water resources? [2]
- b) We should plant trees and nurture the ones already present in the neighbourhood. Why? [2]
- c) Make a diagrammatic representation of how SDGs can contribute to environmental conservation. [2]

- d) What are some of the adaptation measures currently carried out by Bhutan to combat climate change? [2]
- e) The measuring unit for ecological footprint and biocapacity is global hectare (gha). Illustrate the relationships between the two. [1]
- f) A few years ago, villages in eastern Bhutan were devastated by storms. Briefly describe the disaster cycle. [1]

Question 5

- a) Why is community participation important in disaster management? [1]
- b) Your school has a variety of flora species exhibiting different phenological events. You have selected three plant species. Formulate any four phenology investigation questions. [2]
- c) Green economy begins with the reformation of developmental policies followed by implementation of legal, economic and regulatory instruments to stimulate green investments. What do you understand about the term Green Economy? [1]
- d) Explain how genetic pollution can pose a threat to life forms in Bhutan? [2]
- e) Besides benefiting the locals in the area, why do you think the protected area contributes to biodiversity conservation? [2]
- f) Design a simple strategy to maintain the quality of soil for today and tomorrow. [2]

Question 6

- a) Discuss any two challenges faced by Bhutan in achieving sustainable development goals? [2]
- b) What do you understand by the mine reclamation? [1]
- c) The school administration has implemented rules to safeguard the environment by reducing paper use, encouraging re-use, double-sided copies, printing drafts on used paper and reducing the number of copies. Develop an environmental audit tool to verify the compliance of the rules. [2]
- d) How can walking to school instead of travelling by a taxi help to reduce climate change? [1]
- e) Which type of landforms in Bhutan could be more vulnerable to desertification? Why? [2]
- f) What are the criteria you will consider if you design a model of alternative energy device? [2]

Question 7

- a) Explain some of the challenges that may affect the availability and accessibility of fresh water in Bhutan in the near future? [1]
- b) The Constitution of the Kingdom of Bhutan states that “Every Bhutanese is a trustee of the Kingdom’s natural resources”. What do you comprehend from the clause? [1]

- c) No community can ever be completely safe from natural and anthropogenic hazards. Therefore, it may be helpful to think of a disaster-resilient community as the safest possible community. Suggest some strategies for a community to adopt to become a disaster-resilient community? [2]
- d) Design an eco-friendly Environmental Management System (EMS) for your school in the context of creating clean air for living and study. [2]
- e) Human need has caused land cover to change by changing the ways of land use. Suggest two solutions to mitigate the land use change. [1]
- f) What is carbon offsetting? [1]
- g) Nature regenerates towards establishing an ecological equilibrium, Evaluate the pros and cons of ecological succession. [2]

Question 8

- a) Compare ecological footprint with carbon footprint. [1]
- b) Is green building a solution to overcome the disadvantages faced in using alternative energy sources over fossil fuels? Explain. [2]
- c) What is the significance of having a legal instrument for land and water management with reference to Bhutan? [2]
- d) Describe how establishment of community forest has benefited the locality in poverty reduction? [2]
- e) How are youths involved in the sustainable development programmes in Bhutan? [2]
- f) What are the social and economic benefits of conserving the aquatic community? [2]

Question 9

- a) Evaluate the contribution of cultural services to the conservation of biodiversity? [2]
- b) How does gene pollution act as a disturbance to the ecosystem? [2]
- c) Which technology or strategy to reduce environmental pollution do you think is the best option. Support your answer with valid reasons. [2]
- d) Identify some ethical issues associated with the generation and use of biofuel. [2]
- e) The growth of tourism is accompanied by increased GHG emissions, increase water consumption, waste generation, damage to both terrestrial and aquatic biodiversity, and threats to the survival of local cultures and traditions. Suggest some ways to create Green Tourism in our country. [2]

Sample Test Blue Print

Class: XII

Subject – Environmental Science

Objectives/skills Chapter/content	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	Total
Chapter 1	Sect-A.C.i,j(1)		Sect-A.A.1.i(1) Sect-B.2.a.i(2)	Sect-A.B.i(0.5) Sect-B.8.f(1)	Sect-A.A.1.vii (1) Sect-B.2.a.ii(2) Sect-B.9.a(2)		10.5
Chapter 2		Sect-A.D.vii(0.5)	Sect-A.D.ii(0.5)	Sect-A.A.1.iii (1) Sect-B.3.a(2) Sect-B.7.g(2) Sect-B.9.b(2)	Sect-A.A.1.viii(1) Sect-B.2.b(2)		11
Chapter 3	Sect-B.4.e(1)	Sect-B.8.a(1) Sect-A.D.ix(0.5)	Sect-A.A.1.xviii(1) Sect-B.2.c(2) Sect-B.4.a(2)	Sect-A.B.vi(0.5)	Sect-A.A.1.xxi (1)		9
Chapter 4	Sect-A.C.g,h(1)	Sect-B.3.b.i(1)		Sect-B.6.e(2)	Sect-A.A.1.iv(1) Sect-B.3.b.ii(2) Sect-B.7.a(1)		8
Chapter 5	Sect-A.B.ix(0.5) Sect-A.C.c,f(1) Sect-B.7.f(1)		Sect-A.A.1.vi (1) Sect-B.4.b(2)	Sect-A.D.i(0.5)	Sect-A.A.1.xiii(1) Sect-B.5.d(2) Sect-B.9.c(2)		11
Chapter 6		Sect-A.D.iii(0.5)	Sect-A.B.v(0.5) Sect-B.4.d(2) Sect-B.6.c(1)	Sect-A.A.1.xix (1)	Sect-A.A.1.xxv (1)	Sect-B.5.b(2)	8
Chapter 7	Sect-A.C.a,b(1) Sect-B.4.f(1)		Sect-A.A.1.xiv (1) Sect-B.7.c(2)	Sect-A.A.1.v(1) Sect-B.5.a(1)		Sect-B.2.d(2)	9
Chapter 8	Sect-A.B.x(0.5)	Sect-A.D.x(0.5) Sect-B.7.b(1)	Sect-A.A.1.x(1)	Sect-B.8.d(2)	Sect-A.A.1.xxii(1) Sect-B.5.e(2)		8

Chapter 9	Sect-A.C.d,e(1)		Sect-A.A.1.xx(1)	Sect-A.D.v(0.5)	Sect-A.A.1.ii(1)	Sect-B.3.c(3)	6.5
Chapter 10		Sect-A.A.1.xii (1)	Sect-A.D.vi(0.5) Sect-B.6.b(1) Sect-B.7.e(1)	Sect-A.A.1.xvii(1) Sect-B.8.c(2)	Sect-A.B.vii(0.5)	Sect-B.5.f(2)	9
Chapter 11	Sect-A.B.iv(0.5)		Sect-A.A.1.xv(1)	Sect-A.D.iv(0.5) Sect-B.8.b(2)	Sect-A.A.1.xxiii(1) Sect-B.9.d(2)	Sect-B.6.f(2)	9
Chapter 12	Sect-A.B. ii (0.5)	Sect-A.D.viii(0.5)	Sect-B.6.c(2) Sect-B.9.d(2)	Sect-A.A.1.ix(1)	Sect-A.A.1.xvi (1)	Sect-B.7.d(2)	9
Chapter 13	Sect-A.B.iii(0.5)	Sect-B.3.d(2) Sect-B.5.c(1)	Sect-A.A.1.xxiv(1)	Sect-A.A.1.xi(1) Sect-B.6.a(2)	Sect-A.B.viii(0.5) Sect-B.8.e(2)	Sect-B.4.c(2)	12
Total	10.5	9.5	28.5	26.5	30	15	120

Note: The Number given in the brackets is the marks intended for each question.

AGRICULTURE FOOD SECURITY

SECTION A (50 Marks)

Attempt **ALL** the questions

Question 1.

- a) For each question, there are four alternatives A, B, C and D. Choose the correct alternative and circle it. **DO NOT** circle more than ONE alternative. If there are more than ONE circled alternative, NO score shall be awarded.

(15 Marks)

- i. Which one of the following is not a Bio-fertilizer?
 - A. Rhizobium.
 - B. Azotobacter.
 - C. Azospirillum.
 - D. Agrobacterium.
- ii. Select the definition which best defines the term “Olericulture”.
 - A. Production and marketing of grapes.
 - B. Production and marketing of vegetables.
 - C. Production and marketing of floral crops.
 - D. Production and marketing of apples.
- iii. What is breeder seed?
 - A. Seeds that are handled to maintain genetic and purity and distributed by the government and private seed companies.
 - B. Seed materials directly controlled by the sponsoring plant breeder or institution.
 - C. Seed which are acceptable to the certifying agency.
 - D. Seed which are used by our local farmers.
- iv. Identify the most appropriate abbreviation of the CARD farm established in 1982 at Bajo to develop improved high yielding crops and do research on crop variety development.
 - A. Central Agriculture Research Development.
 - B. Center for Agricultural Research and Development.
 - C. Central agricultural Research and Development.
 - D. Center of Agricultural Research and Development.
- v. What is meant by fungus?
 - A. Is an organism where body consists of mass root-like threads.
 - B. Green mosses growing on the dead logs.
 - C. Plankton formed on the stones.
 - D. Wound formed on the rotten part of the plants.

- vi. Distinguish the insects and pest which feed on the mushroom directly.
 - A. Termites.
 - B. Bark beetle larvae
 - C. Ambrosia beetles.
 - D. Fungus beetles *Erotylidea* and *Endomychidae*.
- vii. Which of the following breed of goat is good for milk production?
 - A. Alpine.
 - B. Saanen.
 - C. Nubian.
 - D. Boer.
- viii. The reason for doing grade up for our cattle is to
 - A. make graded males useful for breeding.
 - B. make graded cattle adaptable to the climate and environment.
 - C. grade males useful for draught purpose.
 - D. avoid expenditure of purchasing the exotic females' herd of improved animals.
- ix. Identify the best breed of cattle for milk production.
 - A. Local purebred.
 - B. Jersey.
 - C. Holstein-Friesian.
 - D. Brown Swiss.
- x. Select the best definition of organic farming.
 - A. Farming that improves the production of the agriculture
 - B. Farming sustains the health of the environment.
 - C. Farming that promotes health of people.
 - D. Farming that promotes the health of soil, plants, animals, insects and the entire agro-ecosystem.
- xi. Identify the positive result of organic farming on economy.
 - A. healthy environment for future.
 - B. reduces pollutions.
 - C. produces chemical free food.
 - D. provides fair return for the famers, creates rural employment and reduces cost of farming.
- xii. Choose the best definition of animal breeding.
 - A. An animal science that addresses the evaluation of the genetic value of livestock.
 - B. Crossing of the different breed of animal.
 - C. Sciences to crossing same breed of animal.
 - D. To make animal products safer for consumption.

- xiii. Which of the following is **NOT** the principles of breeding?
- Enhance the value of food crops and animals.
 - Increase the nutritional quality of food crops and animals.
 - Make plant and animal products more digestible and safer to eat.
 - Decrease production of food such, as milk, rice, and meat.
- xiv. Which one of the following mechanizations is used by our famers in terms of mechanization in land preparation?
- Modified bull plough and two-wheeler tractor.
 - Manual weeding and rotor weeding.
 - Manual transplantation and machine planting.
 - Harvesting with sickle and reaper.
- xv. What is the idea behind having hydroponics farming?
- Growing fresh fruits and vegetables where the soil condition is not suitable for conventional farming.
 - Water is available in abundance.
 - Easy to grow on water than on soil.
 - Means of income for the farmer.

b) Fill in the blanks with appropriate word(s). (5 Marks)

- Viticulture includes the production and marketing of _____.
- The two parts of the compound plants are known as rootstock and _____.
- Goats are mostly reared by rural communities and are referred to as _____.
- Green manures add _____ as organic matter in the soil.
- Mechanization refers to use of _____ in farming activity.

Column A	Column B
i. Rootstock and Scion	a) Artemisia
ii. Weeds	b) Organic farming
iii. Species hybridization	c) Interlocking graft
iv. Seed treatment using bio-fertilizers	d) Type of horticulture which involves nutrient solution.
v. Hydroponics	e) Type of horticulture which involves growing in air.
	f) Local purebred cow X mithun bull

c) Match each item of Column A with the most appropriate item of column B. Rewrite the correct pairs by writing the number and corresponding alphabet in the spaces provided. (5 Marks)

d) Write True or False against each sentence below. (5 Marks)

- i. NSC follows three-generation system of seed multiplication.
- ii. Goats are the latest ruminants to be domesticated and are found world-wide.
- iii. The graded males are sterile and useless for breeding purpose.
- iv. The aim of plant breeding is to develop same cultivars adapted to specific environmental conditions.
- v. Hydroculture uses soil with mineral nutrient solutions.

e) Correct the following statements by changing the underlined word(s) only. Rewrite ONLY the correct word. DO NOT copy the whole sentence. (5 Marks)

- i. Oilseeds are crops cultivated for making of cooking oil.
- ii. Incubate the mushroom-logs after it is inoculated with spawn.
- iii. Male Goat must be active and ready to breed in-heat Doe.
- iv. Organic markets accept certificates of the organic producers issued by the certified bodies.
- v. The choice of reproducing methods mainly depends on the mode of pollination, gene action and reproducing objectives of the crops.

f) Answer the following questions. (15 Marks)

- i. List down two broad sections of horticulture. (2 Marks)
- ii. How would you explain vegetative propagation? (1 mark)
- iii. What is meant by billets in the light of growing mushroom on logs? (2Marks)
- iv. Explain why we need stainless steel and aluminum containers for collecting milk? (1 Mark)
- v. Explain three importance of organic farming. (3 Marks)
- vi. If you are working in a plant and animal breeding center, how would you justify the statement to farmers, “*breeding is the art and science of changing the traits of plants and animals in order to produce desired characteristics*” (2Marks)
- vii. How does agriculture machinery center contribute in the light of farm mechanization in Bhutan? Comment. (2 Marks)
- viii. Do you think hydroponics is a good practice of growing crops? How? (2 Marks)

SECTION B

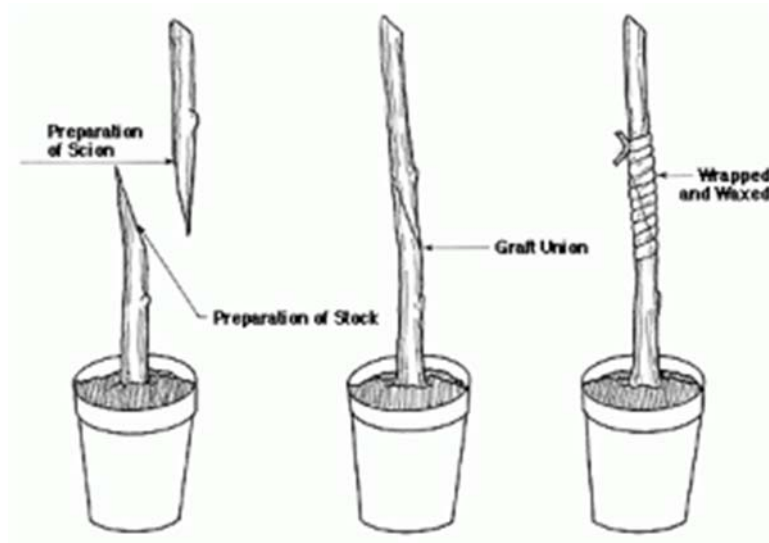
Attempt ANY FIVE questions (50 Marks)

Question 2

- Explain Horticulture in your own words and list down at least five areas of study. (6 Marks)
- You are a fresh graduate of College Natural Resources, employed as Agriculture Extension Officer at Sha Samtengang. What are some of your opinions on horticulture that you want to share with your farmers? At least write four importance. (4Marks)

Question 3

- Study the diagram given below to answer the following questions; (4 marks)
 - Define grafting.
 - Explain how grafting is done.



- “Nursery Raising involves semi-dry method, wet bed method, tray method and poly tunnel method. All the methods have specific procedures that are similar yet specific condition to fulfil one’s requirement.”*

In the light of the above statement, interpret six main steps involved in wet bed method. (6 Marks)

Question 4

- In addition to being antioxidant powerhouses, mushrooms contain unique compounds that appear to boost our immune defense. To justify the statement, list down six health benefits of consuming mushrooms. (6 Marks)

- ii. Discuss competitor fungi and its symptoms. **(4 Marks)**

Question 5

- i. As a farmer, you are required to have concepts of breeding methods. Explain different types of breeding methods applied in the society. **(4 Marks)**
- ii. Distinguish local purebred cattle from Mithun. Give at least three differences. **(6 Marks)**

Question 6

- i. Organic farming is known by various names, definition and description in different countries. However, a group of common concepts has been developed to describe what encompasses organic farming and related activities by International Federation of Organic Agriculture Movement (IFOAM).
Imagine you are the member of IFOAM from Bhutan. How would you explain your understanding of organic farming and its four principles to the farmers of Bhutan? **(6 Marks)**
- ii. What could be possible benefits of organic agriculture back in your farm? Explain. **(4 Marks)**

Question 7

- i. *“Genetic engineering is one of the modern agricultural biotechnology tools that is based on recombinant DNA technology. The term genetic engineering, often interchanged with terms, such as gene technology, genetic modification, or gene manipulation, is used to describe the process by which the genetic makeup of an organism can be altered using “recombinant DNA technology.”*
In the above context, outline steps required for successful completion of the genetic engineering process. **(6 Marks)**
- ii. Bhutan has adopted biosafety bill in place to protect, conserve and safeguard the biodiversity of Bhutan. In your opinion, how would the biosafety bill work against the impact of genetically modified crops in Bhutan? **(4 Marks)**

Test Blue-print

Level of thinking / chapter	Weighting	Remember	Understand	Apply	Analyze	Evaluate	Create	Total
Introduction to advance Horticulture in Bhutan	10	MCQ(1M)		MCQ(1M) FB(1M)	SRQ(2M)			5
Seed Production and Marketing	15	MCQ(1M)	FB(1M)	MCQ(1M) TF(1M)	MTP(1M)	SRQ (1M)	RW(1M)	7
Mushroom Production and Management	10	MCQ(1M)	SRQ(2M)		MCQ(1M)		RW(1M)	5
Starting a Goat Farming	10		MCQ(1M) FB(1M)	TF(1M)	MTP (1M)		RW(1M)	5
Dairy Farming II	10	MCQ(1M)	SRQ(1M)	MCQ(1M) TF(1M)	MTP(1M)			5
Introduction to Organic Farming	15		MCQ(1M) FB(1M)	MCQ(1M)	MTP(1M)	SRQ (3M)	RW(1M)	8
Plant and animal breeding	15			MCQ(1M) FB(1M) TF(1M)	MCQ(1M)	SRQ (2M)	RW(1M)	7
Farm mechanization in Bhutan	5			MCQ(1M)	SRQ (2M)			3
Application of Technologies in Agriculture	10	TF(1M)			MCQ(1M) MTP(1M)	SRQ(2M)		5
Total	100	5	8	12	12	8	5	50

Section A

Section B

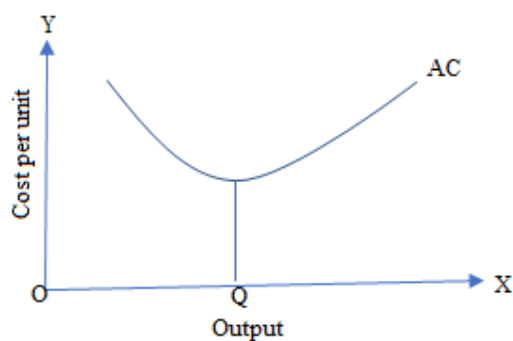
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ECONOMICS

SECTION A: (50 MARKS) ANSWER ALL QUESTIONS			
Question 1			
a) Read the following questions carefully. For each question there are four alternatives: A, B, C and D. Choose the correct alternative and circle it. If there are more than one choice circled, No score will be awarded.			
i. The law of supply explains the			
A inverse relationship between price and quantity supplied.			
B positive relationship between price and quantity supplied			
C inverse relationship between input price and quantity supplied.			
D positive relationship between input price and quantity supplied.			
Topic	Competency	Learning Objective	Bloom's Level
Law of Supply	Illustrate supply function to understand the decision of the producers in producing goods and services	Explain the law of supply and its exceptions	Remembering
ii. Suppose, the government imposes 5% tax on the import of goods and services from third countries. The type of tax imposed is			
A sales tax.			
B export tax.			
C excise duty.			
D custom duty.			
Topic	Competency	Learning Objective	Bloom's Level
Types of indirect taxes	Discuss different sources of government revenue to analyse the financial status and minimise resource gap of the country	Explain direct and indirect taxes.	Understanding
iii. Suppose Firm A is operating with 5 units of capital in the short run. As the firm increases the number of worker, initially marginal product increases. What would happen to the firm's total product when marginal product increases?			
A Firm's total product increases at an increasing rate			
B Firm's total product increases at a diminishing rate			
C Firm's total product increases			
D Firm's total product decreases			
Topic	Competency	Learning Objective	Bloom's Level
Law of	Illustrate the law	Explain law of	Understanding

	variable proportions	of variable proportion to help the producer choose the best stage of production	variable proportion & Law of returns to scale with diagram.									
iv.	Usually the government plans and prepares the budget before the onset of a fiscal year. However, under certain circumstances, the government often finds the need to spend more than the amount projected in the original budget. This extra budget planned and proposed in the course of the fiscal year is known as A Rolling budget. B Proposed budget. C Government budget. D Supplementary budget.											
	<table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Supplementary Budget</td><td>Formulate budget to understand comprehensive financial programs both at micro and macro level in allocating scarce resources efficiently</td><td>Explain the types of Budget in context to Bhutan.</td><td>Understanding</td></tr></table>	Topic	Competency	Learning Objective	Bloom's Level	Supplementary Budget	Formulate budget to understand comprehensive financial programs both at micro and macro level in allocating scarce resources efficiently	Explain the types of Budget in context to Bhutan.	Understanding			
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v.	If the price of a commodity rises from Nu. 50 to Nu. 100 per unit, the quantity demanded falls from 200 units to 150 units. The elasticity of demand for the commodity will be A 0.25. B 0.375. C 2.67. D 1.											
	<table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Elasticity of demand.</td><td>Compute price elasticity of demand to help producers estimate the quantity demanded of the commodity in response to the change in price</td><td>Calculate price elasticity of demand using percentage method</td><td>Applying</td></tr></table>	Topic	Competency	Learning Objective	Bloom's Level	Elasticity of demand.	Compute price elasticity of demand to help producers estimate the quantity demanded of the commodity in response to the change in price	Calculate price elasticity of demand using percentage method	Applying			
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vi. Study the diagram below:



As the firm increases its level of output beyond OQ output, the cost per unit

- A **increases.**
- B decreases.
- C reaches the maximum.
- D reaches the minimum.

Topic	Competency	Learning Objective	Bloom's Level
Short run cost	Analyse behavior of short run and long run cost to help producers make decision if the investment is economically sound	Explain behavior of costs under short and long run with diagrams	Applying

vii. The Bhutanese cultural value system is deteriorating because of modernizing forces and it's important for us to uphold it in the times to come. Which of the following will help to uphold our unique culture and traditional values?

- A Rising demand for imported goods
- B **Preserving age-old festivals**
- C Awareness on globalization
- D Promoting modern values

Topic	Competency	Learning Objective	Bloom's Level
Gross National Happiness	Discuss Gross National happiness as the development philosophy to bring balance economic growth and development	Explain the significance of GNH	Applying

viii. Study the table given:

Product	Production in units	
	Bhutan	Bangladesh
Kiwi	300	200
Cordycep	400	100

What conclusion can be drawn from the table?

- A **Bhutan has comparative advantage in production of cordycep.**
- B Bhutan has absolute advantage in production of cordycep.
- C Bhutan has comparative advantage in production of kiwi.
- D Bhutan has absolute advantage in production of kiwi.

Topic	Competency	Learning Objective	Bloom's Level
Basis of Trade	Compute comparative cost differences to specialise and maximise gain from the trade	Discuss the Basis of International Trade using Absolute & Comparative Cost Theory	Applying

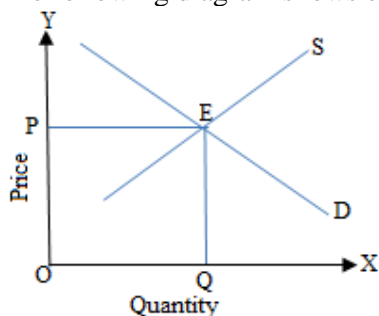
ix. While consuming chocolates, Sonam noticed that the 1st bar of the chocolate gave her the highest utility and thereafter, her utility from additional bars started to decline.

This principle will hold good under all of the following conditions except

- A all the units of the chocolate bars are identical.
- B the units of the chocolate bars are standard.
- C Sonam consumes chocolate bars without intervals.
- D **Sonam prefers chocolate more in the process of consumption.**

Topic	Competency	Learning Objective	Bloom's Level
Marginal Utility Analysis	Analyse the marginal utility approach to make decision on the allocation of resources and purchases to maximise utility	Explain law of diminishing marginal utility	Analyzing

x. The following diagram shows equilibrium in the market for a commodity.



<p>Other factors remaining same, suppose the income of the consumer increases. What would be the effect of this on equilibrium price and quantity?</p> <p>A Equilibrium price and quantity both rises</p> <p>B Equilibrium price rises and quantity falls</p> <p>C Equilibrium price falls and quantity rises</p> <p>D Equilibrium price and quantity both falls</p>		<table border="1"> <thead> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> </thead> <tbody> <tr> <td>Effects of shift in Demand on equilibrium price and quantity</td><td>Examine the demand and supply function to analyse interaction between the sellers and buyers in determining the actual market prices and volume of goods traded.</td><td>Explain effects of shift in demand and supply on equilibrium price and quantity using diagrams</td><td>Analyzing</td></tr> </tbody> </table>		Topic	Competency	Learning Objective	Bloom's Level	Effects of shift in Demand on equilibrium price and quantity	Examine the demand and supply function to analyse interaction between the sellers and buyers in determining the actual market prices and volume of goods traded.	Explain effects of shift in demand and supply on equilibrium price and quantity using diagrams	Analyzing
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<p>xi. If payments to the rest of the world is greater than the receipts from the rest of the world, the circular flow of income in a four sector economy will</p> <p>A be in equilibrium.</p> <p>B remain constant.</p> <p>C contract.</p> <p>D expand.</p>		<table border="1"> <thead> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> </thead> <tbody> <tr> <td>Four sector model of the circular flow of income</td><td>Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy measures in enhancing the health of the economy</td><td>Explain circular flow of income in four sector model.</td><td>Analyzing</td></tr> </tbody> </table>		Topic	Competency	Learning Objective	Bloom's Level	Four sector model of the circular flow of income	Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy measures in enhancing the health of the economy	Explain circular flow of income in four sector model.	Analyzing
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<p>xii. All of the following are the causes of deficit balance of payment EXCEPT</p> <p>A rise in demand for foreign goods</p> <p>B rise in price of domestic products</p> <p>C imposition of taxes on foreign goods</p> <p>D developmental activities of the government</p>		<table border="1"> <thead> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> </thead> <tbody> <tr> <td>Causes of deficit BoP</td><td>Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance</td><td>Explain the causes of Disequilibrium in the balance of Payment.</td><td>Analyzing</td></tr> </tbody> </table>		Topic	Competency	Learning Objective	Bloom's Level	Causes of deficit BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance	Explain the causes of Disequilibrium in the balance of Payment.	Analyzing
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<p>xiii. Economy of a country can be uplifted by public spending on development of human resources. Which sector should the government allocate its budget so as to develop the human resources in Bhutan?</p> <p>A Trade and industry B Health and education C Agriculture and forestry D Transport and Communication</p> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Public Expenditure</td><td>Discuss the importance of public expenditure to understand the allocation and distribution of resources in bringing sustainable and equitable economic development</td><td>Explain the reasons for the rise in public expenditure in recent times in Bhutan</td><td>Analyzing</td></tr></table>					Topic	Competency	Learning Objective	Bloom's Level	Public Expenditure	Discuss the importance of public expenditure to understand the allocation and distribution of resources in bringing sustainable and equitable economic development	Explain the reasons for the rise in public expenditure in recent times in Bhutan	Analyzing
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<p>xiv. Of the total public debt, a higher percentage is used for development of hydropower projects in Bhutan. The hydropower debt which is part of the public debt can be categorized under</p> <p>A unproductive debt. B productive debt. C compulsory debt. D voluntary debt.</p> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Public Debt</td><td>Examine the reasons for public debt to understand financial status of the government and to check the unproductive debt.</td><td>Evaluate the trend of debt in Bhutan and its impact on Bhutanese economy.</td><td>Analyzing</td></tr></table>					Topic	Competency	Learning Objective	Bloom's Level	Public Debt	Examine the reasons for public debt to understand financial status of the government and to check the unproductive debt.	Evaluate the trend of debt in Bhutan and its impact on Bhutanese economy.	Analyzing
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<p>xv. If the production of goods and services do not increase with adoption of deficit financing, it will lead to</p> <p>A equitable development. B faster economic growth. C soar in the general price level. D contraction of Bhutanese economy.</p> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Reasons for deficit</td><td>Analyse reasons for deficit financing to</td><td>Discuss reasons for</td><td>Analyzing</td></tr></table>					Topic	Competency	Learning Objective	Bloom's Level	Reasons for deficit	Analyse reasons for deficit financing to	Discuss reasons for	Analyzing
Topic	Competency	Learning Objective	Bloom's Level									
Reasons for deficit	Analyse reasons for deficit financing to	Discuss reasons for	Analyzing									

	financing	understand its impact on the economy	deficit Financing.		
b) Fill in the blanks with appropriate word/s.					[5]
i.	The goods for which the demand decreases as the income of the consumer increases are known as goods. Inferior				
	Topic	Competency	Learning Objective	Bloom's Level	
	Reasons for deficit financing	Analyse reasons for deficit financing to understand its impact on the economy	Discuss reasons for deficit Financing.	Remembering	
ii.	Indifference curves are to the origin because of the law of diminishing marginal rate of substitution. Convex				
	Topic	Competency	Learning Objective	Bloom's Level	
	Indifference curve	Analyse the indifference curve approach to make decision on the allocation of resources and purchases to maximise utility	Explain the properties of indifference curve	Understanding	
iii.	In order to allocate scarce resources efficiently, the government prepares an annual financial statement known as the Budget				
	Topic	Competency	Learning Objective	Bloom's Level	
	Budget	Formulate budget to understand comprehensive financial programs both at micro and macro level in allocating scarce resources efficiently	Explain the need for Budget	Understanding	
iv.	The expenditure for the household sector is for the business sector. Income				
	Topic	Competency	Learning Objective	Bloom's Level	
	Circular flow of income	Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy measures in enhancing the health of the economy	Explain circular flow of income in four sector mod	Remembering	

1.Sustainable development	Discuss Gross National happiness as the development philosophy to bring balance economic growth and development	Give the meaning of GNH Explain the significance of GNH	Analyzing	
2.Causes of deficit BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment	Explain the causes of Disequilibrium in the balance of Payment.	Analyzing	
3.Taxes	Analyse the importance of paying tax to inculcate the value of social responsibility and upliftment of social welfare of the community	Explain direct and indirect taxes.	Analyzing	
4.Gross National Product	Analyse the interrelationship amongst the various national income aggregates to understand different components of income used in calculating national income	Explain the national income aggregates	Analysing	
5. Budget	Formulate budget to understand comprehensive financial programs both at micro and macro level in allocating scarce resources efficiently	Explain the need for Budget	Analyzing	
d) Write TRUE or FALSE for the following statements.				[5]
i. In the short run, the firms can change the quantity of all the inputs simultaneously and in the same proportion. FALSE				
Topic	Competency	Learning Objective	Bloom's Level	
Short run production function	Analyse production function to assess the producers to produce the maximum	Differentiate between short run &	Remembering	

		quantity using the given amount of inputs	long run production function.		
ii.	If saving is greater than investment, there will be contractionary effect on the circular flow of income. TRUE				
	Topic	Competency	Learning Objective	Bloom's Level	
	Circular flow of income	Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy measures in enhancing the health of the economy	Explain circular flow of income in four sector model.	Remembering	
iii.	The general public can help in minimizing the public expenditure by being mindful in utilization of public resources and goods. TRUE				
	Topic	Competency	Learning Objective	Bloom's Level	
	Public Expenditure	Evaluate the pattern of resource allocation by the government to manage resources efficiently and understand the priority sector	Explain the reasons for the rise in public expenditure in recent times in Bhutan	Understanding	
iv.	Firm's $AR=MR$ under imperfect competition because all firms under imperfect competition follows uniform price. FALSE				
	Topic	Competency	Learning Objective	Bloom's Level	
	Behavior of revenue under imperfect competition	Illustrate the behaviour of revenue under different market structure to interpret the relationship amongst different revenue concepts in understanding the significance of revenues for the firm	Explain the relationship between average and marginal revenue under perfect and imperfect competition with diagrams	Understanding	
v.	One of the fiscal measures to achieve the objective of equity is by granting tax holidays to industries located in the rural areas. TRUE				
	Topic	Competency	Learning Objective	Bloom's Level	
	Fiscal Policy	Discuss fiscal policy in	Evaluate how	Understanding	

and equity	relation to equity, stability and growth to monitor and influence the performance of country's economy	fiscal policy helps in achieving national objectives of equity, stability and economic growth		
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e) Answer the following questions briefly.

i. In the face of Covid-19 pandemic, economic activities are disrupted and a lot of people especially the tourism and business sector are earning a relatively lower income. What would happen to their demand for normal goods and inferior goods

Marking Scheme:[1+1]

Topic	Competency	Learning Objective	Bloom's Level
Determinants of demand	Analyse the determinants of demand to forecast the price and market for goods and services	Explain the factors affecting demand	Applying

ii. Suppose Good X and Good Y are substitute goods. What would happen to the quantity of X supplied by the producer as the price of Y rises? Explain.

Marking scheme:[1+1]

Topic	Competency	Learning Objective	Bloom's Level
Determinants of Supply	Illustrate supply function to understand the decision of the producers in producing goods and services	Explain the factors affecting supply	Analyzing

iii. The following table shows the marginal utility derived from consumption of cake. The price of cake is Nu. 50 per piece.

Pieces of Cake	1	2	3	4	5
MU	70	60	50	40	30

If you are the consumer, how many pieces of cake will you consume? Why?

Marking Scheme:[1+1]

Topic	Competency	Learning Objective	Bloom's Level
Consumer's equilibrium	Analyse the marginal utility approach to make	Illustrate and explain	Applying

	using Marginal Utility Analysis	decision on the allocation of resources and purchases to maximise utility	consumer's equilibrium through marginal utility approach		
iv.	Despite the government's effort to promote exports and discourage imports, Bhutan's balance of trade continues to be in deficit since the country imports both essential products as well as non-essential products. What alternatives can the government adopt to rectify the deficit in balance of payment?				[2]
Marking scheme:[1+1]					
	Topic	Competency	Learning Objective	Bloom's Level	
	Measures to rectify deficit BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment	Examine the measures to correct the disequilibrium in the balance of payment.	Applying	
v.	Study the table below:				[2]
	Country	Silk (units)	Wool (units)		
	Bhutan	2700	1000		
	Thailand	900	500		
Which commodity should Bhutan and Thailand specialize to produce? Why?					
Marking Scheme:[1+1]					
	Topic	Competency	Learning Objective	Bloom's Level	
	Comparativ e Cost Theory	Compute comparative cost differences to specialise and maximise gain from the trade	Discuss the Basis of International Trade using Absolute& Comparative Cost Theory	Analyzing	
vi.	Is it profitable to have a bumper harvest in agriculture? Justify.				[2]
Marking Scheme:[1+1]					
	Topic	Competency	Learning Objective	Bloom's Level	
	Importance of the concept of elasticity of demand	Compute price elasticity of demand to help producers estimate the quantity demanded of the commodity in response to the change in price	Explain the importance of Elasticity.	Evaluating	
vii.	Should Bhutan keep on importing foreign goods or impose a restriction on it?				[2]

<i>Marking Scheme:[Point ½ ;Explanation ½]</i>			
Topic	Competency	Learning Objective	Bloom's Level
Basis of Trade	Compute comparative cost differences to specialise and maximise gain from the trade	Explain the meaning & need for Trade.	Evaluating

<p>viii. The Ministry of Health and Education are allocated the highest budget for the fiscal year 2019-20.</p> <p style="text-align: right;">(Source: BR 2019-20)</p> <p>Will such allocation help in promoting the fiscal objective of economic growth? Explain with TWO reasons.</p> <p style="text-align: right;"><i>Marking Scheme:[1+1]</i></p>			
[2]			

Topic	Competency	Learning Objective	Bloom's Level
Fiscal policy and economic growth	Discuss fiscal policy in relation to equity, stability and growth to monitor and influence the performance of country's economy	Evaluate how fiscal policy helps in achieving national objectives of equity, stability and economic growth	Evaluating

<p>ix. As the public debt of Bhutan is rising every year, there is a need to assess the cost and benefit of borrowing so as to avoid debt crisis in the future.</p> <p>What measures would you suggest so as to avoid debt crisis in future?</p> <p style="text-align: right;"><i>Marking Scheme:[1+1]</i></p>			
[2]			

Topic	Competency	Learning Objective	Bloom's Level
Effects of public debt	Analyse the effects of public borrowing to inculcate the sense of rational borrowing in achieving self-reliance	Evaluate the trend of debt in Bhutan and its impact on Bhutanese economy	Creating

<p>x. “Aggravated by the overseas returnees and laid-off employees due to Covid-19 pandemic, the country's unemployment rate has reached five percent according to Labour Force Survey Report (LFS).”</p> <p style="text-align: right;">(Source: Kuensel, April 3rd, 2021)</p> <p>How can the government address this issue through deficit financing?</p> <p style="text-align: right;"><i>Marking Scheme:[1+1]</i></p>			
[2]			

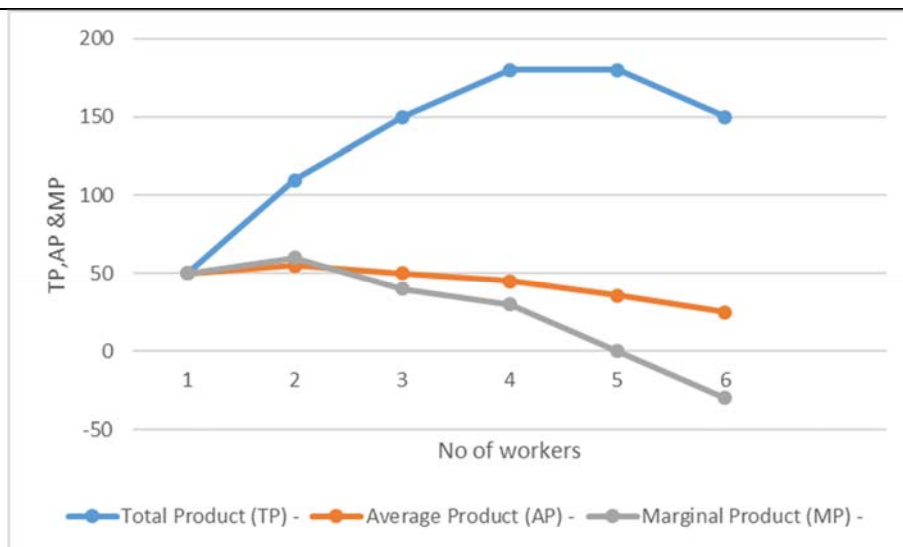
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SECTION A: (50 MARKS) ANSWER ALL QUESTIONS																											
Question 2 a) Explain the following values of price elasticity of supply: i. $E_s > 1$ ii. $E_s < 1$ iii. $E_s = 1$ iv. $E_s = 0$ <div>Marking Scheme:[Point: ½ Explanation ½]</div> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Categories of Price elasticity of supply</td><td>Compute price elasticity of supply to help producers estimate the quantity to be supplied in response to the change in price according to the consumer's behavior</td><td>Explain types of price elasticity of supply</td><td>Remembering</td></tr></table>			Topic	Competency	Learning Objective	Bloom's Level	Categories of Price elasticity of supply	Compute price elasticity of supply to help producers estimate the quantity to be supplied in response to the change in price according to the consumer's behavior	Explain types of price elasticity of supply	Remembering	[4]																
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b) From the following table, derive the TFC and TVC. <table><tr><td>Output (units)</td><td>Total Cost</td><td>Total Fixed Cost</td><td>Total Variable Cost</td></tr><tr><td>0</td><td>50</td><td></td><td></td></tr><tr><td>1</td><td>90</td><td></td><td></td></tr><tr><td>2</td><td>120</td><td></td><td></td></tr></table> <div>Marking Scheme:[TFC-1; TVC-1]</div> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr><tr><td>Behaviour of cost in the short run</td><td>Discuss different concepts of cost and its impact to make rational decision which involves cost</td><td>Explain behavior of costs under short and long run with diagrams</td><td>Applying</td></tr></table>			Output (units)	Total Cost	Total Fixed Cost	Total Variable Cost	0	50			1	90			2	120			Topic	Competency	Learning Objective	Bloom's Level	Behaviour of cost in the short run	Discuss different concepts of cost and its impact to make rational decision which involves cost	Explain behavior of costs under short and long run with diagrams	Applying	[2]
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c)	<p>Examine FOUR areas of public expenditure that you think is necessary to be incurred in the current situation and mention its importance.</p> <p><i>Marking Scheme:[Point: ½ Explanation ½]</i></p> <table border="1"> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> <tr> <td>Areas of Public expenditure</td><td>Discuss the importance of public expenditure to understand the allocation and distribution of resources in bringing sustainable and equitable economic development</td><td>Explain the reasons for the rise in public expenditure in recent times in Bhutan</td><td>Analyzing</td></tr> </table>	Topic	Competency	Learning Objective	Bloom's Level	Areas of Public expenditure	Discuss the importance of public expenditure to understand the allocation and distribution of resources in bringing sustainable and equitable economic development	Explain the reasons for the rise in public expenditure in recent times in Bhutan	Analyzing	[4]
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Question 3		[3]								
a)	<p>Demand for agricultural goods are relatively inelastic. Explain four factors that makes demand for such products inelastic.</p> <p><i>Marking Scheme:[Point: ½ Explanation ½]</i></p> <table border="1"> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> <tr> <td>Determinants of elasticity of Demand</td><td>Compute price elasticity of demand to help producers estimate the quantity demanded of the commodity in response to the change in price</td><td>Explain the determinant of Elasticity of Demand</td><td>Understanding</td></tr> </table>	Topic	Competency	Learning Objective	Bloom's Level	Determinants of elasticity of Demand	Compute price elasticity of demand to help producers estimate the quantity demanded of the commodity in response to the change in price	Explain the determinant of Elasticity of Demand	Understanding	
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b)	<p>Illustrate the interdependence between the different sectors of the economy in a four sector economy.</p> <p><i>[Firms and Hosehold-1, Firms and Government-1, Household and government-1 Firms and RoW-1, Households and RoW-1]</i></p> <table border="1"> <tr> <th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom's Level</th></tr> <tr> <td>Circular flow of income</td><td>Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy</td><td>Explain circular flow of income in four sector</td><td>Understanding</td></tr> </table>	Topic	Competency	Learning Objective	Bloom's Level	Circular flow of income	Illustrate the circular flow of income to analyse the interdependency amongst the different sectors for appropriate policy	Explain circular flow of income in four sector	Understanding	[5]
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c)	One of the measure to rectify the deficit in balance of payment is by opting for external borrowing. Would you recommend the government to use this as a measure to rectify the deficit in BoP? Why? <div>Marking Scheme:[Point: ½ Explanation ½]</div> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom’s Level</th></tr><tr><td>Measures to correct deficit in BoP</td><td>Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment</td><td>Examine the measures to correct the disequilibrium in the balance of payment.</td><td>Understanding</td></tr></table>			Topic	Competency	Learning Objective	Bloom’s Level	Measures to correct deficit in BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment	Examine the measures to correct the disequilibrium in the balance of payment.	Understanding	[2]																								
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Measures to correct deficit in BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment	Examine the measures to correct the disequilibrium in the balance of payment.	Understanding																																	
Question 4																																				
a)	What are the reasons for deficit financing? Explain any TWO. <div>Marking Scheme:[Point: ½ Explanation ½]</div> <table><tr><th>Topic</th><th>Competency</th><th>Learning Objective</th><th>Bloom’s Level</th></tr><tr><td>Reasons for deficit financing</td><td>Analyse reasons for deficit financing to understand its impact on the economy</td><td>Discuss reasons for deficit Financing</td><td>Understanding</td></tr></table>			Topic	Competency	Learning Objective	Bloom’s Level	Reasons for deficit financing	Analyse reasons for deficit financing to understand its impact on the economy	Discuss reasons for deficit Financing	Understanding	[2]																								
Topic	Competency	Learning Objective	Bloom’s Level																																	
Reasons for deficit financing	Analyse reasons for deficit financing to understand its impact on the economy	Discuss reasons for deficit Financing	Understanding																																	
b)	With the help of the information given in the table, construct TP, AP and MP curve. <table><tr><th>No of workers</th><th>Total Product (TP)</th><th>Average Product (AP)</th><th>Marginal Product (MP)</th></tr><tr><td>0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>1</td><td>50</td><td>50</td><td>50</td></tr><tr><td>2</td><td>110</td><td>55</td><td>60</td></tr><tr><td>3</td><td>150</td><td>50</td><td>40</td></tr><tr><td>4</td><td>180</td><td>45</td><td>30</td></tr><tr><td>5</td><td>180</td><td>36</td><td>0</td></tr><tr><td>6</td><td>150</td><td>25</td><td>30</td></tr></table>			No of workers	Total Product (TP)	Average Product (AP)	Marginal Product (MP)	0	-	-	-	1	50	50	50	2	110	55	60	3	150	50	40	4	180	45	30	5	180	36	0	6	150	25	30	[4]
No of workers	Total Product (TP)	Average Product (AP)	Marginal Product (MP)																																	
0	-	-	-																																	
1	50	50	50																																	
2	110	55	60																																	
3	150	50	40																																	
4	180	45	30																																	
5	180	36	0																																	
6	150	25	30																																	



Marking Scheme:[Curves-1 each; Axis-1]

Topic	Competency	Learning Objective	Bloom's Level
Short run production function	Illustrate the law of variable proportion to help the producer choose the best stage of production.	Explain law of variable proportion & Law of returns to scale with diagram	Applying

- c) From the two theories of consumer behavior, Marginal utility analysis and Indifference curve analysis, which is more realistic and applicable to consumer's behavior? Justify your stand.

[4]

Marking Scheme:[1+1+1+1]

Topic	Competency	Learning Objective	Bloom's Level
Comparison between indifference curve and marginal utility analysis	Analyse the marginal utility approach to make decision on the allocation of resources and purchases to maximise utility. Analyse the indifference curve approach to make decision on the allocation of resources and purchases to maximise utility	Compare and contrast between marginal utility approach and indifference curve analysis	Evaluating

Question 5

- a) The government imposes excise duty on production of alcoholic beverages. What are the benefits of imposing such a tax? Explain.

[3]

<i>Marking Scheme:[Point: ½ Explanation ½]</i>				
Topic	Competency	Learning Objective	Bloom's Level	
Types of Indirect Taxes	Discuss the importance of taxes as the source of government revenue to suggest new tax policies to help broaden the tax base	Discuss merits and demerits of direct and indirect taxes.	Applying	
b) As most Bhutanese have a habit of consuming spicy food, the demand for chilli remains high throughout the year. Yet chilli prices are higher during the winter and lower in summer. Use a demand and supply graph to demonstrate why prices decrease during the summer. <i>Marking Scheme:[Labelled diagram -2.5, Explanation -2.5; Missing components – deducts 0.5]</i>				[5]
Topic	Competency	Learning Objective	Bloom's Level	
Shift in supply	Examine the demand and supply function to analyse interaction between the sellers and buyers in determining the actual market prices and volume of goods traded.	Explain effects of shift in demand and supply on equilibrium price and quantity using diagrams	Analyzing	
c) Most economies of the world today are open economies and countries trade with each other for the fact that they gain from international trade. Bhutan has been opening its trade link with many other countries. What would be some of the impact if Bhutan closes its trade links? <i>Marking Scheme:[Point: ½ Explanation ½]</i>				[2]
Topic	Competency	Learning Objective	Bloom's Level	
Gains from Trade	Compute comparative cost differences to specialise and maximise gain from the trade	Explain the meaning & need for Trade.	creating	
Question 6 a) Complete the following equation: i. $GNP_{mp} = GNP_{fc} + \dots\dots\dots$				[2]

ii.	GDP= GNP-.....	<i>Marking Scheme:[1+1]</i>		
Topic	Competency	Learning Objective	Bloom's Level	
Gains from Trade	Analyse the interrelationship amongst the various national income aggregates to understand different components of income used in calculating national income	Discuss interdependence and inter - connectedness of national income aggregates.	Understanding	
b)	Of the total public debt, more than Nu 189B is external debt and around Nu 3.2B of domestic debt. The hydropower debt accounts for 74.8 percent of the total external debt, which is around Nu 141B. (Source: BBS, June 2,2020) What are the risk associated with the rising external debt of Bhutan? <i>Marking Scheme:[1+1]</i>			[5]
Topic	Competency	Learning Objective	Bloom's Level	
Gains from Trade	Analyse the effects of public borrowing to inculcate the sense of rational borrowing in achieving self-reliance	Evaluate the trend of debt in Bhutan and its impact on Bhutanese economy	Applying	
c)	The global economies have been severely affected by the Covid-19 pandemic. In Bhutan too, it has disrupted the economic activities which would lead to contraction of the economic growth rate. Suggest THREE measures that would help the government to restore the economy from the current recession. <i>Marking Scheme:[Point: ½ Explanation ½]</i>			[3]
Topic	Competency	Learning Objective	Bloom's Level	
Fiscal Policy in relation to growth and stability.	Discuss fiscal policy in relation to equity, stability and growth to monitor and influence the performance of country's economy	Evaluate how fiscal policy helps in achieving national objectives of equity, stability and economic growth	Creating	
Question 7				[4]

a)

Interpret the table below by explaining the basis of trade and specialization for the two countries.

Country	Juice (units)	Milk (units)
Bhutan	1200	500
Bangladesh	400	1000

Marking Scheme:[1+1+1+1]

Topic	Competency	Learning Objective	Bloom's Level
Absolute Cost Theory	Interpret absolute and comparative cost theories to specialise and maximise gain from the trade.	Discuss the Basis of International Trade using Absolute& Comparative Cost Theory	Understanding

b)

Often times the government's revenue doesn't meet its expenses leading to deficit budget. The government might opt for creation of new money to meet this gap.

What effect will creation of new money have on the economy?

Marking Scheme:[1+1]

Topic	Competency	Learning Objective	Bloom's Level
Deficit financing	Analyse reasons for deficit financing to understand its impact on the economy.	Discuss reasons for deficit Financing	Analyzing

c)

Bhutan imports a wide range of consumer and capital goods while our export consists of few items causing trade imbalance. Is trade imbalance always bad for a country? Why?

Marking Scheme:[Point: ½ Explanation ½]

Topic	Competency	Learning Objective	Bloom's level
Causes of deficit in BoP	Discuss the cause and effect of deficit balance of payment to suggest measures to correct deficit balance of payment	Explain the causes of Disequilibrium in the balance of Payment.	Evaluating

GEOGRAPHY

BHSEC sample question paper

Section A (50 MARKS)

ANSWER ALL QUESTIONS

Question 1

- a. Directions: For each question, there are four alternatives **A, B, C and D**, choose the correct alternative and circle it. **Do not** circle more than ONE alternative. If there are more than one circles, **NO** score will be awarded.

- i) Which one of the following theories about the origin of universe is based on fundamental scientific facts such as Newton's laws of gravity and motion? [1]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
The Origin of Universe	Explain the origin of universe with reference to gaseous mass hypothesis and electromagnetic theory.	Explore various theories to comprehend the scientific origin of the universe.	Sustainable Living	Remembering

- A. Big Bang Theory
- B. Solar Nebula Theory
- C. **Gaseous Mass Hypothesis**
- D. Electromagnetic Theory

- ii) All of the following are examples of sedimentary rocks **EXCEPT** [1]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Physical Processes and Their Impact	Discuss type of rocks	Examine the physical processes in the formation of landforms and their impact.	Spirituality and Values	Remembering

- A. shale
- B. **slate**
- C. sandstone
- D. chalk

- iii) Spatial data is the data that has [1]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Survey and Geo-Technology	Demonstrate the use of GIS software for spatial and non-spatial data.	Apply geo-technology to develop maps for land use and resource management	Digital Competence	Remembering

- A. complex values
- B. graphic values
- C. decimal values
- D. positional values**

iv) Which of the following is not the feature of Central Business District? [1]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Urbanization and Spatial Diversity	Discuss models of urban centres.	Analyse the similarities and differences between places and regions to comprehend spatial diversity.	Health and Wellbeing	Understanding

- A. Low land values**
- B. Tall buildings
- C. Busy traffic
- D. Converging highways

v) The climate that is characterized by extreme freezing temperature, permanent ice and tundra is

vi) [1]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Physical Processes and Their Impact	Discuss Koppen's classification of climate.	Examine the physical processes in the formation of landforms and their impact.	Sustainable Living	Understanding

- A. tropical climate
- B. dry climate
- C. polar climate**
- D. continental climate

Theme	Learning objective	Competency	Key Competency	Bloom's level
1.Origin of universe	Explain the origin of universe with references to gaseous mass hypothesis and electromagnetic theory	Use the concept to understand the formation of solar system	Sustainable living	Understanding

vi. Kant's idea of Gaseous Mass Hypothesis describes that solar system began as a [1]

- A. cloud of dispersed particles.
- B. cloud of circulated particles.
- C. cloud of irradiated particles.
- D. cloud of radiated particles,

Theme	Learning objective	Competency	Key Competency	Bloom's level
2.Urbanization and spatial diversity	Describe the role of working population and its impact on the economy	Use the concept to identify the group	Wellbeing	Understanding

vii. As per the United Nations Organisation (UNO), working population is considered from the age range; [1]

- A. 25-60 years.
- B. 15-64 years.
- C. 25-65 years.
- D. 15-65 years.

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	To understand the concept	Sustainable living/values	Understanding

viii. Third Pole which is located in Hindu Kush Himalayan and Tibetan plateau is the true model of [1]

- A. Antarctica model.
- B. Green land model.
- C. Pole model.
- D. Arctic model.

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	To use the concept in order to analyze the process and landforms	Enterprising and industrious	Analysis

ix. A river overflows its banks during flood dropping much of its coarser-grained load immediately forming landforms called [1]

- A. Deltas
- B. Alluvial fans
- C. Natural levees
- D. Point bars

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	To understand the concept	Enterprising/sustainable living	Understanding

x. Particles that roll and slide along the river bottom are called [1]

- A. bed load
- B. dissolved load
- C. suspended load
- D. none of the above

xi. According to Dzongkhag Health Officer (DHO) of Gasa, there were 160 deaths in 2020. If the total population was 80,000, what would be the death rate in the dzongkhag? [1]

- a. 1
- b. 2
- c. 3
- d. 4

Theme	Learning objective	Competency	Key competency	Bloom's level
Population & Economic Development	Explain fertility and mortality	Assess different sources of information and data to plan for economic development.	Sustainable living	Applying

xii. Which statement is NOT correct about active and passive remote sensing? [1]

- Passive remote sensing systems record EMR that is reflected or emitted from the surface of the Earth.
- Active remote sensing systems are dependent on the Sun's EMR or the thermal properties of the Earth.
- RADAR and LiDAR are examples of active remote sensing.
- Examples of passive sensors include film photography, infrared and radiometers.

Theme	Learning objectives	Competency	Key competency	Bloom's level
Survey an Geo-Technology	Discuss remote sensing and its application	Use geo-technology to develop maps for land use and resource management, planning and development.	Digital competency	Analyzing

xiii. Geographic Information System (GIS) is important for the preparation of 12th Five Year Plan according to the Prime Minister of Bhutan. Which one of the following justifications demonstrates least realistic to make planning more efficient in Bhutan? [1]

- The country has a small population and therefore GIS services is required for spatial planning.
- GIS is important because of topography that has made population spread across high mountains and narrow valleys.
- Planning appropriately is must for a poor country so that limited resources are optimally used.
- Government must use GIS services because it is important in preparation and planning of any plans and programmes.

Theme	Learning objectives	Competency	Key competency	Bloom's level
Survey an Geo-Technology	Discuss GIS and its application	Use geo-technology to develop maps for land use and resource management, planning and development.	Digital competency	Analyzing

xiv. At present, Bhutan's fertility rate of 1.7 is much below the replacement rate of 2.1. The reasons for the decline in fertility rate are. [1]

- I. Most of the married couples are not planning for a third child.
- II. The reproductive age group is less in the country.
- III. Bhutanese young people are delaying the marriage.
- IV. Fertility has declined due to improved health facilities.

The most appropriate reasons for declining fertility rate in Bhutan is due to:

- a. I, II & III
- b. I, II & IV
- c. II, III & IV
- d. I, III & IV

Theme	Learning objectives	Competency	Key competency	Bloom's level
Population & Economic Development	Explain fertility and mortality	Assess different sources of information and data to plan for economic development.	Sustainable living	Analyzing

xv. Preservation of our rich cultural heritage would strengthen peace and sovereignty of our country because: [1]

- a. The unique culture of Bhutan gives an identity that portrays Bhutanese people are different from the rest and thus strengthening the sovereignty of the country.
- b. Preservation of our rich cultural heritage helps in instilling the values of patriotism among the citizen of the nation.
- c. Preservation of culture hampers the growth of economy which ultimately affects the social harmony in the country.
- d. Preservation of culture helps in reducing the prevalence the **anti-social** activities on one hand and bringing the people of diverse background together.

Theme	Learning objectives	Competency	Key competency	Bloom's level
Urbanization and spatial diversity	Discuss the preservation and promotion of cultural heritage.	Analyze the similarities and differences between places and regions to comprehend spatial diversity.	Spirituality an value	Analyzing

- b. Match the items of Column A with the most appropriate items in Column B.

[1x5]

Column A	Column B
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(i) The theory based on Newton's laws of gravitation and rotatory motion. (ii) The amount of moisture in the air. (iii) Consists of a global network of ground facilities that track the GPS satellites, monitor their transmissions, perform analyses, and send commands and data to the constellation. (iv) The model of urban centre that was published to provide an alternative to the concentric zone model as a way of explaining urban land use. (v) "Landscape is a function of structure, process & time."	a. Control Segment b. Sector Model c. Davis Cycle of Erosion d. Gaseous Mass Hypothesis e. Multiple Nuclei Model f. Absolute Humidity g. Electromagnetic Theory h. Relative Humidity i. Penck's Cycle of Erosion j. Space Segment
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c. Answer the following questions.

[20]

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	Analyze how third pole contribute to economy development of Asian countries	Health and wellbeing	Evaluate

1. Which part of the World is considered as the Third Pole?

[2]

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	Analyze the process and relationship of height and air to form hail	Enterprising and industrious	Analyze

2. 'Hailstones reveal several concentric layers of ice one over the other forming different size'.

Explain with **TWO** points to support the statement.

[2]

Theme	Learning objective	Competency	Key Competency	Bloom's level
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Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	Use the concept to analyze for the real life situation	Enterprising and industrious	Analyze
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3. 'Pre-disaster and post -disaster preventive measures for earthquake risk reduction are necessary and important'. Suggest **One** point each to justify the statement. [2]

Theme	Learning objectives	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	Apply the concept to real life situation to derive the measures to the problems	Spirituality and values	Applying

- iv. . Rising of social problem is a serious concern in the urban centers. Identify any **TWO** social problems. [2]

Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical process and their impacts	Examine the physical processes in the formation of landforms and their impact.	Use the concept to understand purpose of the glaciers	Spirituality and values	Applying

- v. 'Glaciers are known as the agent of gradation'. Explain the role of glacier in the process of gradation. [2]

- d. In the outline map of Bhutan, **mark** and **name** the following as per the instructions. [10]

- Mark and name Brown Swiss farm and National Jersey Breeding Centre.
- 'CBR' over the Dzongkhag with highest Crude Birth Rate as per the PHCB, 2017.
- 'WM' over a place where wind mills are installed by the Department of Renewable Energy.
- "T" over the Dzongkhag which receives the lowest tourist arrivals in the country.
- 'AT' over the place that has recently developed into an administrative town.
- 'MP' over the place where Mangde Chhu Hydroelectric Power Project is situated.

- g. 'UNE' over the Dzongkhag which has recorded the highest unemployment rate in the country as per PHCB 2017.
- h. 'ET' in western region that has developed into an educational town.
- i. 'LPD' over the Dzongkhag with least population as per PHCB, 2017.
- j. Shade the region where new trekking route has been developed in the east.

Section B (50 MARKS)
ANSWER ANY FIVE QUESTIONS

Question 2

- a) If electromagnetism is turned off, the matter would dissolve. Describe any **THREE** importance of electromagnetism. [3]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
The Origin of Universe	Explain the origin of universe with reference to gaseous mass hypothesis and electromagnetic theory.	Explore various theories to comprehend the scientific origin of the universe.	Sustainable Living	Understanding

Ans.

- Electromagnetism causes atoms to stick together.
- Electromagnetism is responsible for the very structure of matter.
- Molecular bonds in our bodies are bound together by electromagnetic interactions are therefore bound together by light.

- b) Bhutan's tourism sector is regarded as one of the most exclusive travel destinations in the world. How would you promote tourism in Bhutan? Discuss any **THREE** strategic steps.

[3]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Natural Resources and Tourism	Suggest measures to enhance tourism industry.	Assess the significance of natural resources to conserve the ecosystem for sustainability.	Enterprising and Industrious	Creating

Ans.

- Taking care of our place with love
- Find the magic and ‘spirit of the place’
- Excite the tourist with live experiences
- Organize the Business of ‘welcoming’ among the populace
- Use web, promote tourism on Social Media and by ‘word of mouth’

c) Classify the clouds into low, middle and high clouds.

[4]

Cirrus	Cumulus	Altostratus	Cumulonimbus
Cirrostratus	Stratus	Alto cumulus	Nimbostratus

Theme	Learning Objectives	Competency	Key Competency	Bloom’s Level
Physical Processes and Their Impact	Describe different forms of condensation.	Examine the physical processes in the formation of landforms and their impact.	Health and Wellbeing	Applying

Ans.

Low Clouds	Middle Clouds	High Clouds
<ul style="list-style-type: none"> - Cumulus - Cumulonimbus - Stratus - Nimbostratus 	<ul style="list-style-type: none"> - Altostratus - Alto cumulus 	<ul style="list-style-type: none"> - Cirrus - Cirrostratus

Question 3

a) The multiple nuclei model is a cost-effective model that describes the layout of a city. Describe any **TWO** criticisms of this model. [2]

Theme	Learning Objectives	Competency	Key Competency	Bloom’s Level
Urbanisation and Spatial Diversity	Discuss models of urban centres	Analyse the similarities and differences	Sustainable Living	Understanding

		between places and regions to comprehend spatial diversity.		
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Ans.

- Negligence of the height of buildings.
- Non-existence of abrupt divisions between zones.
- Each zone displays a significant degree of internal heterogeneity and not homogeneity.
- Unawareness of inertia forces.
- No consideration of influence of physical relief and government policy.
- The concepts may not be totally applicable to oriental cities with different cultural, economic and political backgrounds.

b) Compare Davisian cycle of erosion with Penck's cycle. Write any **FOUR** differences. [4]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Physical Processes and Their Impact	Discuss cycle of erosion.	Examine the physical processes in the formation of landforms and their impact.	Health and Wellbeing	Analysing

Ans.

Davisian cycle of erosion	Penck's cycle of erosion
<ul style="list-style-type: none"> - There are three stages in the Davis Cycle of erosion namely youth, mature, and old stage. - Davis Erosion cycle starts after upliftment of landform stopped. - The end product of the Davis Cycle is Peneplain. - Davis Geographical Cycle of Erosion is a monocycle that means cycle complete after the old stage of landforms. 	<ul style="list-style-type: none"> - There are five stages in the Penck Cycle of erosion namely Primarumpf, Aufsteigende, Gleichformige, Absteigende, and Endrumpf. - Upliftment and erosional act simultaneously in the Penck cycle. - The end product of the Penck cycle is Pedepain. - The Penck erosion cycle is polycyclic that means a never-ending process, the cycle starts again by the rejuvenation of landforms.

<ul style="list-style-type: none"> - In the Davis cycle, landforms are the result of Davis trios that are the structure, process, and Time. - Davis's cycle of landform development is time-dependent. - Landform development is a form of "slope decline"; for example, "V" shaped valley get converted to a "U" shaped valley and then featureless peneplain in Davisian cycle of erosion 	<ul style="list-style-type: none"> - Penck's landforms are the result of the ratio between the intensity of endogenic and exogenic forces. - The Penck cycle of erosion is not time-dependent. - Landform development in the Penck cycle of erosion is in form of "slope replacement" where a free face slope and concave slopes get replaced to rectilinear slopes.
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c) The use of GIS technology is indeed a great opportunity to explore and reap its benefits. Do you agree? Support your stand with FOUR justifications. [2]

Theme	Learning Objectives	Competency	Key Competency	Bloom's Level
Survey and Geo-Technology	Discuss GIS and its application.	Apply geo-technology to develop maps for land use and resource management and Conduct survey using available equipment and technology for planning and development.	Digital Competence	Evaluating

Ans.

Yes,

- GIS explores both geographical and thematic components of data in a holistic way.
- It allows handling and exploration of large volumes of data.
- It allows integration of data from widely disparate sources.
- It allows analysis of data to explicitly incorporate location.
- It allows a wide variety of forms of visualization such as maps, globes, reports, charts etc.
- GIS provides very accurate data.
- It provides better predictions and analysis.

No,

- GIS tools are expensive.
- Learning curve on GIS software can be long.
- It shows spatial relationships but does not provide absolute solutions.
- Integration with traditional map is difficult.
- It (Desktop GIS) requires efficient processor and higher storage space.

Question 4

Theme	Learning objective	Competency	Key Competency	Bloom's level
Natural Resources and Tourism	Assess the significance of natural resources to conserve the economic system for sustainability	To evaluate the understanding of global issues due to global warming/climate change	Spirituality and values	Evaluating

a. Do you consider that Bhutan should harness water energy sooner than later? Why?

[3]

Theme	Learning objective	Competency	Key Competency	Bloom's level
Natural Resources and Tourism	Assess the significance of natural resources to conserve the economic system for sustainability	To understand the concept and create realistic and diverse plan	Health and well being	Create

- c. COVID-19 pandemic has adversely affected tourism sector in Bhutan both extensively and intensively. Propose any **FOUR** plans to the government that will be sustainable and realistic so that the sector employees will be not disrupted by any kinds of pandemic or disasters in future.

[4]

Theme	Learning objective	Competency	Key Competency	Bloom's level
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Population and economic development	Assess different sources of information and data to plan for economic development	To understand the concept and create realistic and diverse plan	Health and well being	Creating
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c. Movement of people from one place to another for important functions and unavoidable reasons might be one of the ways to spread COVID-19. Suggest **THREE** important messages in the form of a poster to educate public so that the risk of the spread of COVID-19 is minimised. [3]

Question 5

Theme	Learning objective	Competency	Key Competency	Bloom's level
Survey and Geo-Technology	Apply geo-technology to develop maps for land use and resource management and conduct survey using available equipment and technology for planning and development	To understand the concept and implement for real life situation	Enterprising and industrious/digital computers	Creating

- a. Ngawang Paljore graduates from College of Natural Resources (CNR) and plans taking up farming rather than public service but he is not acquainted of the importance of geo-technology. How will you create awareness on remote sensing to help him practice agriculture and scale up his farming business? [3]

Theme	Learning objective	Competency	Key Competency	Bloom's level
Population and economic development	Assess different sources of information and data to plan for economic development	To understand the concept and create the solution	Health and wellbeing/sustainable living	Creating

b. Unemployment is becoming a serious concern in Bhutan as the number of graduates exceed available jobs in the market. As an industrious and intellectual youth, imagine and innovate any **THREE** realistic plans to solve this problem without relying on the government for guidance and support. [3]

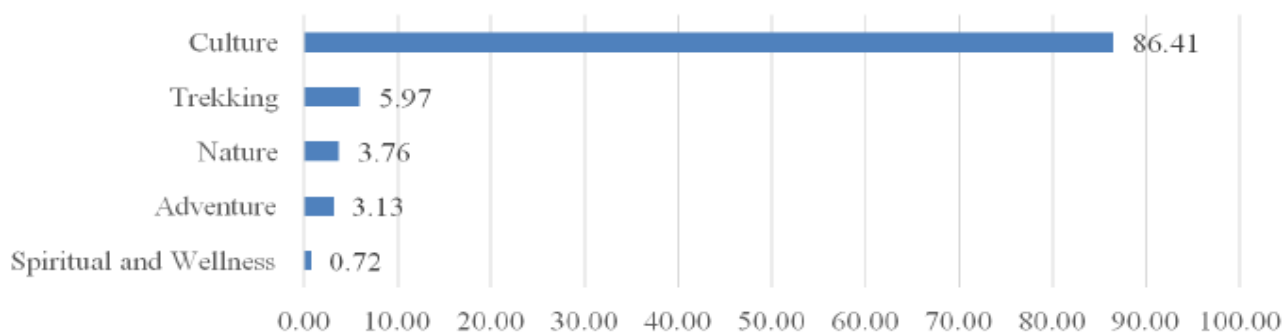
Theme	Learning objective	Competency	Key Competency	Bloom's level
Physical processes and their impact	Examine the physical processes in the formation of landforms and their impact	To know the relationship in order to act and coordinate	Health and well being	Analyze

c. Describe disaster management cycle demonstrating the four different phases of a cycle. [4]

Question 6

- a. A certain amount of revenue generated from tourism should be allocated to Cultural Heritage Trust Fund annually according to one of the National Council members. Explain any **THREE** ways, how such fund mobilisation would help in preserving and preventing our rich cultural heritage from immediate threats? [1x3]

The figure shows the percentage of tourist's arrival by activity.



- b. Why is trekking more popular than adventure activity for visitors in Bhutan? Support your response with three reasons. [3]
- c. Global Positioning System (GPS) is part of satellites orbiting around the universe. It has been beneficial to people in many ways. Explain any **FOUR** benefits. [1x4]

Theme	Learning objectives	Competency	Key competency	Bloom's level
Urbanization and spatial diversity Q6 a	Discuss the preservation and promotion of cultural heritage.	Analyze the similarities and differences between places and regions to comprehend spatial diversity.	Spirituality and values	Applying
Natural resources and Tourism Q6 b	Suggest measures to enhance tourism	Assess the significance of natural resources to conserve the eco-system for sustainability.	Enterprising and industrious	Analyzing
Survey and Geo-Technology Q6 c	Discuss GPS and its application	Use geo-technology to develop maps for land use and resource management, planning and development.	Digital competency	Understanding

Question 7

- Bhutan, located in the young Himalayan Mountains; earthquake constitutes a major destructive event than landslide. Do you agree? Support your stand with THREE valid points. [1x3]
- Use the information given in the table, draw a diagram and label it to show the process of remote sensing. [0.5x4=4]

Sun	Atmosphere	incident (solar radiation)	Earth
Data	Server	Satellite	Reflected (solar radiation)

- Aggravated by the overseas returnees and laid-off employees owing to the Covid-19 pandemic, the country's unemployment rate has doubled from 2019, according to Labour Force Survey Report (LFS). In your opinion, what are the measures that you would develop to resolve unemployment problem in Bhutan? Discuss any THREE measures. [1x3]

Theme	Learning objectives	Competency	Key competency	Bloom's level
Physical Processes and their impact Q7 a	Discuss potential hazard in Bhutan.	Examine the physical processes in the formation of landforms and their impact.	Health and well being	Evaluating
Survey and Geo-Technology Q7 b	Discuss remote sensing and its application	Use geo-technology to develop maps for land use and resource management, planning and development.	Digital competency	Applying
Population and economic development Q7 c	Suggest ways to overcome unemployment of migration	Assess different sources of information and data to plan for economic development.	Sustainable living	Creating

Section A Compulsory Question (50 Marks)

Strands	Competencies	W/ting	Rememb.	Unders.	Apply.	Analy.	Eva.	Creat.	Total Marks
Time and Space	Explore various theories to comprehend the scientific origin of the universe	5%	Ia (1)	Ib (1)					2
People and Environment	Analyze the similarities and differences between places and regions to comprehend spatial diversity.	15%		Ia iv(1)	Ib iv (1) Id i,ii (2)	Ia xv (1)	Ic i (2)		8
	Examine the physical processes in the formation of landforms and their impact	25%	Ia ii (1)	Ia v (1) Ib ii (1)	Ibv(1) Id iii,iv (2)	Ia x (1)	Ic ii (2) Ic iii (2)	Ic iv (2)	13
	Assess different sources of information and data to plan for economic development.	15%		Ia vi (1)	Ia xi (1) Id v,vi (2)	Ia xiv (1) Ic v (2) Ic vi (1)			8
	Assess the significance of natural resources to conserve the eco-system for sustainability.	10%		Ia vii (1)	Id vii, viii (2)	Ic vii (1)			4
Physical Environment	Apply geo-technology to develop maps for land use and resource management	30%	Ia iii (1) Ic xii (1)	Ia viii (1) Ib iii (1)		Ia ix (1) Ia xii,xiii (2) Ic ix (2) Ic xi (1)	Ic viii (2)	Ic x (2)	15
Total		100%	4	8	13	13	8	4	50

Section B – (5 out of 6 question – 60 marks)

Strands	Competencies	W/ting	Rem	Unders.	Apply.	Analy.	Eva.	Creat.	Total Marks
Time and Space	Explore various theories to comprehend the scientific origin of the universe	5%		2a (3)					3
People and Environment	Analyze the similarities and differences between places and regions to comprehend spatial diversity.	15%		3a (2)	6a (3)		5c (4)		9
	Examine the physical processes in the formation of landforms and their impact	25%	4a (2)		2c (4)	3b (4)	7a (3)		14
	Assess different sources of information and data to plan for economic development.	15%			4b (4)	5b (4)		7c (3)	10
	Assess the significance of natural resources to conserve the eco-system for sustainability.	10%				6b (3)		2b (3)	6
Physical Environment	Apply geo-technology to develop maps for land use and resource management	30%	5a (2)	6c (4)	7b (4)	4c (4)	3c (4)		18
		100%	4	9	15	15	11	6	60

HISTORY

<p style="text-align: center;">BHSEC HISTORY SPECIMEN PAPER SECTION A (30 MARKS) ANSWER ALL QUESTIONS</p>	
a) For each question, there are four alternatives: A, B, C and D. Choose ONE correct alternative and circle it. If there are more than ONE choice circled, NO score will be awarded.	[6]
<p>i. Bhutanese are blessed with true leaders. His Majesty the King and His Holiness Jekhenpo lead the country to free from COVID 19. The dual leadership originated from</p> <p>A Kar-Nying Zhungdrel. B Silken Knot and Golden Yoke. C 17th century Choesid system. D Prophecies made by great lamas.</p>	
<p>ii. “Karma from Bhutan, Mike from USA, Tom from Italy, and Jewan from India belong to a single species called, Homo sapiens, and share a common descent.” The term best resonate to the statement above is</p> <p>A social construct. B cultural variations. C physical appearances. D biological characteristics.</p>	
<p>iii. The Fourth Druk Gyalpo Jigme Singye Wangchuck initiated many reforms. Which one of the following initiatives shows his policy of decentralization?</p> <p>A Institution of Bhutan Penal Act B Establishment of GYT and DYT C Founding of Gross National Happiness D Establishment of Royal Civil Service Commission</p>	
<p>iv. Bhutanese being blessed with the event of Punakha Dromchoe today is owing to the</p> <p>A directives of Thrim Zung Chenmo. B efforts of Punakha Dzongpoen. C initiatives of Choesid Nyeden. D initiatives of Zhabdrung.</p>	
<p>v. The Constitution of Bhutan was drafted upon the command of the Fourth Druk Gyalpo.</p> <p>The drafting of the Constitution bears a unique feature as it went through a process of public consultation. The public consultation was convened mainly to</p> <p>A set up a democratic process. B receive general recommendation. C inform the public on its unique nature. D compare the constitutions of other countries.</p>	

vi.	Which of the following is NOT a characteristic of classical civilisation? A social classes B organised religion C arts and culture D decentralised government	
b)	Write TRUE or FALSE against each statement given below.	[5]
i.	His Majesty the King's royal visit to other countries, such as Japan and India, is a way of these countries recognising Bhutan as a sovereign nation.	
ii.	Zhabdrung Ngawang Namgyel is a pioneer of Drukpa Kagyud in Bhutan.	
iii.	The 17 th century dual system of government is not prevalent in Bhutan in today's era.	
iv.	Constitution in Bhutan empowers people with rights not responsibilities.	
v.	Hegelian dialectic is a philosophy or a method in which the contradiction between a proposition and its antithesis is resolved at a higher level of truth.	
c)	Fill in the blank with an appropriate word(s).	[5]
i.	During the world turmoil, such as the WWII and Great Depression, Bhutan was reigned by Druk Gyalpo _____ .	
ii.	COVID 19 has been a disaster to many people globally but we were successful in receiving different vaccines. This discovery would not have been possible if there were no age of _____ in the history of mankind.	
iii.	Renaissance led to human beings to use reason and logic instead of being convinced that everything happened because of God's plan. As a result, the world witnessed the _____ revolution in the 16 th and 17 th centuries.	
iv.	The arrival of Zhabdrung Ngawang Namgyel in Bhutan has helped Bhutan come out of _____ state.	
v.	Mr. Choptong Dorji's way of writing history reflects the idea of medieval historiography. He focussed on _____ as an important theme in historical writing because he believed that history was dictated by God and human beings had no power to change it or question it.	

d) Match the descriptions given in column A correctly against the appropriate term given in column B and write the matching pairs in the space provided.		[4]
COLUMN A	COLUMN B	
i. The only leader, along with King Bhumibol Adulyadej, to receive award and recognition for democratic consolidation in the country.	a. General Assembly	
	b. Je Yonten Thaye	
ii. The organ of UNO that is responsible take decisions, if two-member countries are at war.	c. Druk Gyalpo Jigme Singye Wangchuck	
	d. Security Council	
iii. All media contents are constructed.	e. Core concept of media	
	f. Geshey Gendun Rinchen	
iv. Jekhenpo regarded as a maha siddha who showed the control of mind over body and his remain was kept in Punakha dzong.	g. Druk Gyalpo Jigme Khesar Namgyel Wangchuck	
	h. Components of media literacy	
e) Answer the following questions briefly:		
i. Examine any ONE contribution of 70 th Jekhenpo in context to the welfare of people in Bhutan. (2)		[2]
ii. Evaluate social thought of racial differences. (2)		[2]
iii. Create a timeline to show the contributions of His Majesty the King.		[2]
iv. Explain Drukpa Kuenley's ONE unique approach to teaching of Vajrayana Buddhism in Bhutan		[2]
v. Choose any ONE philosophy of Gandhi and explain how you may wish to apply in your life		[2]

<p style="text-align: center;">SECTION B (70 MARKS) ANSWER ALL QUESTIONS</p>	
Question 2	
i. Appraise ‘ <i>Choethrim Dargi Dudphoe, Gyalthrim Sergi Nyashing</i> ’ as a symbol of Choesid Nyeden with reference to its historical evolution in Bhutan.	[5]
ii. Analyse the initiatives of our great monarchs as a symbol of continuity and change with reference to any FOUR contributions.	[4]
Question 3	
i. Bhutan is blessed to be under the dynamic leadership of The Druk Gyalpo Jigme Khesar Namgyel Wangchuck. Create a concept map with any FIVE of his contributions to people during the COVID-19 pandemic.	[5]
ii. UNO was established to maintain peace and security in the world. Choose any TWO organs of UNO and establish analogy of your school’s way of maintaining peace and security of students and teachers.	[4]
Question 4	
i. Compare any TWO contributions of Guru Rimpoche to Buddhism with that of Terton Pema Lingpa’s spiritual contribution to Bhutan.	[4]
ii. Distinguish the Constitution of Bhutan with any other country’s constitution with THREE differences.	[3]
Question 5	
i. Discuss FOUR roles of media in bringing vibrant democracy in Bhutan.	[4]
ii. Construct a plan for your village with any FOUR features of Classical Civilization.	[4]
iii. Examine the difference between Race, Ethnicity and Identity. Provide an example each.	[6]
Question 6	
i. Historiography is also known as the writing of history. Explain any THREE oral history techniques that you may likely use to write any historical narratives/papers.	[6]
ii. League of Nation failed to maintain peace and security of the world. Evaluate any THREE circumstances leading to its failure and suggest a way forward each for the same.	[6]

Question 7	
i. Explain Identity and it's construct in relation to your identity in your school and community. Provide SIX examples.	[6]
ii. Explain the concept 'militarism' in context to Japan.	[4]
Question 8	
i. What is subjectivity in historical writing? Suggest FIVE ways to avoid subjectivity if you wish to produce a historical writing?	[5]
ii. Classical civilizations had a profound impact on modern civilization." Explain the statement with FOUR points.	[4]

BHSEC History Specimen
Class XII Table of Specification
Section A: 30 Marks

Section	Chapter	Weighting	Marks	Rem	Und	App	Ana	Eva	Crea	Marks
Section A Bhutan History and Civics Citizenship Education	The Silken Knot and Golden Yoke	10	5	MCQ1(1)	MI4(1)	TF3(1)	SAQ1(2)			5
	Monarchy: <i>An era of Stability and Reforms</i>	17	7	MI1(1)	FIB1(1)	TF1(1)	MCQ3(1)		SAQ3(2)	6
	Bhutan and International Organisations: <i>Among the Constellation of Nations</i>	5	1		MI2(1)					1
	Important Historical Figures and Shaping of National Identity	10	5		SAQ4(2) FIB4(1)	MCQ4(1)		TF2(1)	FIB4(1)	5
	Media, Democracy and Constitution	8	3		TF4(1)		MCQ5(1)	MI3(1)		1
Section B World History	Historical Interpretations	15	3	FIB3(1)		FIB5(1)	TF5(1)			3
	Classical Civilisation	10	2		MCQ6(1)		FIB2(1)			2
	Nationalism, Global Peace and Security	15	2			SAQ5(2)				2
	Racial Identity	10	3		MCQ2(1)			SAQ2(2)		3
				3	6	6	6	5	4	30

History
Class XII Table of Specification
Section B: 70 Marks

Section	Chapter	Weighting	Marks	Rem	Und	App	Ana	Eva	Crea	Marks
Section A Bhutan History and Civics Citizenship Education	The Silken Knot and Golden Yoke	10	5					1a(5)		5
	Monarchy: <i>An era of Stability and Reforms</i>	15 17	9				1b(4)		2a(5)	9
	Bhutan and International Organisations: <i>Among the Constellation of Nations</i>	5	4			2b(4)				4
	Important Historical Figures and Shaping of National Identity	10	5				3a(5)			5
	Media Democracy and Constitution	8	4				3b(4)			4
Section B World History	Historical Interpretations	15	12			5a(6)		7a(6)		12
	Classical Civilisation	10	8		7b(4)				4a(4)	8
	Nationalism, Global Peace and Security	15	8		6(b)4			5b(4)		8
	Racial Identity	10	12			4b(6)	6a(6)			12
					11	16	19	15	9	70

ACCOUNTANCY

Accountancy

(Three Hours)

Total Marks: 100

Instructions:

The paper consists of Section A and Section B. Candidates are required to answer all the questions from the Section A (Compulsory) and any FIVE questions from Section B.

SECTION A (50 Marks)

ANSWER ALL QUESTIONS

Question 1

- a) For each question, there are four alternatives: A, B, C and D. Choose the correct alternative and circle it. Do not circle more than ONE alternative. If there is more than one choice circled, NO score will be awarded. [20]**

- i. Zaya Pvt. Ltd had a total income of Nu. 1.3 million and total expenses of Nu. 725,000 (including Non-deductible expenses Nu. 300,000) in the year 2020. The tax amount of Zaya Pvt. Ltd for the 2020 will be:

- A Nu. 172,500.
- B Nu. 262,500.
- C Nu. 300,000.
- D Nu. 390,000.

- ii. Mr. Dorji graduated from Gedu College of Business Studies and was hired by Sangay Steel Pvt. Ltd as a Marketing Officer. He was promised basic salary of Nu.18,000, 20% of basic pay as Service allowance, 15% of basic pay as House Rent allowance and Nu. 300 as GIS. The aforementioned pay package is classified as

- A nonperformance based remuneration.
- B performance based remuneration.
- C salaries.
- D wages.

- iii. Pema Ltd purchases an investment property on 1/1/2019 for Nu.2,000,000. At 31/12/2019, Pema Ltd determines the fair value of the investment property to be Nu. 2,800,000. At 31/12/2020, the fair value of the investment property had fallen to 1,900,000. Pema Ltd.'s accounting policy is to carry investment properties at fair value. Which **ONE** of the following amounts is recorded as book value of investment property by Pema Ltd on 31/12/2019?

- A Nu. 800,000.
 - B Nu. 1,900,000.
 - C Nu. 2,000,000.
 - D Nu. 2,800,000.
- iv. Computer City Pvt. Ltd internally developed several assets. which **ONE** of the following internally generated assets should be recognized in accordance with BAS 38 *Intangible Assets*? Assume that the expected future economic benefits of the internally generated assets are probable and the cost of the asset can be measured reliably.
- A Brand name ‘Computer World’ associated with Computer City Pvt. Ltd.
 - B Customer list of customers signed up to Computer City Pvt. Ltd.’s loyalty program.
 - C Computer Program to keep track of customer’s’ orders and automate the generation of invoices.
 - D Masthead for a new Digital magazine called *computer components* launched by Computer City Pvt. Ltd.
- v. An entity is taking legal action against its competitor for patent infringement relating to a patent that had been granted to the entity on one of its products. The outcome of the case is uncertain. However, it is probable that the court will order the competitor to pay damages to the entity.
Which one of the following is the best option for the entity?
- A Neither asset should be recognized nor contingent asset, should be disclosed.
 - B Recognise it as an asset since it is virtually certain that it will receive economic benefits.
 - C Disclose it as a contingent asset since inflow of economic benefits is probable, but not virtually certain.
 - D Recognise it as a provision since there is a chance that the court would rule in favour of the competitor.
- vi. Assume you are one of the Board members in the Annual General Meeting of AB Ltd. The agenda of the meeting is regarding issue of shares in the form of right issue to its existing shareholders. As a member, which **ONE** of the following would you recommend to the board regarding issue of right shares? The right issue is made at a price
- A below market value but above nominal value.
 - B above market value but below nominal value.
 - C below market value as well as nominal value.
 - D above market value as well as nominal value.
- vii. Pema and Sonam are partners sharing profits and losses in the ratio of 3:2. The net profit during the year was Nu. 12,000. Interest on capital was allotted as Nu. 400 to Pema and Nu. 250 to Sonam. Sonam received a salary of Nu. 5,000. How much was Pema’s share of profit?

- A Nu. 2,540
- B Nu. 3,810
- C Nu. 4,950
- D Nu. 3,060

viii. A company has a retained earning balance of Nu. 100,000 on 1st January 2015. During the year, the company earned a net profit of Nu. 20,000 and a dividend of Nu. 10,000 was declared. Further, a reserve amount of Nu. 8,000 was created for business expansion purpose. The company also issued 1,000 equity share of Nu. 10 each. The ending balance of retained earnings will be

- A Nu. 102,000.
- B Nu. 110,000.
- C Nu. 112,000.
- D Nu. 120,000.

ix. Cost unit is the cost attributable to unit or quantity of product, service time or combination of these. The followings are the examples of cost units, **EXCEPT**

Sl. No	Products or services	Unit of measurement
i	Power	Cost per mega-watt per hour
ii	Books/Pen	Cost per number
iii	Petroleum products	Cost per kilogram
iv	Transport	Cost per kilometer per passenger

- A i
- B ii
- C iii
- D iv

x. X Company has an accounts receivable balance of Nu. 30,000 on 31st March. The company expects to earn sales revenue of Nu. 200,000 at the end of 30th April. The company has an policy of collecting 70% of its sales in the month of sale and the remaining in the month following sale. The total cash collected at the end of 30th April will be

- A Nu. 140,000
- B Nu. 170,000
- C Nu. 200,000
- D Nu. 370,000

xi. Dorji, a private employee is not able to meet his family's needs with a mere monthly salary. He is considering to resign and start a business enterprise that deals with a high-volume low-price trading policy and making a low gross margin. Which of the following enterprises do you expect Dorji to operate after his resignation?

- A A software company.
- B A jewellery store.

- C A supermarket.
- D A garment store.

xii. 30% of net profit is paid as Business Income Tax to the government, because it is

- A the duties of the business to pay tax.
- B the ethical responsibility of business to pay tax.
- C moral responsibility of the accountants to pay tax.
- D mandatory as per The Income Tax act of the Kingdom of Bhutan.

xiii. Until the amount of taxes withheld from the employee salaries are paid by the employer, they are recorded as

- A assets
- B revenue
- C expenses
- D liabilities

xiv. Pemba apartments provides significant ancillary services to tenants in its property. The value of ancillary services

- A may have to be classified as investment property, rather than as owner occupied.
- B may have to be classified as owner occupied, rather than an investment property.
- C may have to be classified as inventories.
- D may have to be expensed.

xv. Which **ONE** of the following grants is accounted under BAS 20, Government Grants and Assistance?

- A Grants given for agriculture activity to a farmer.
- B Grants for accelerated depreciation allowance.
- C Grants given as a tax holiday to a company.
- D Grants given to buy the asset.

xvi. A company sells goods with a warranty for the cost of repairs required in the first two months after purchase. Past experience suggests:

- 70% of the goods sold will have no defect
- 20% will have minor defects
- 10% will have major defects

If minor defects were detected in all products sold, the cost of repairs will be Nu. 100,000; if major defects were detected in all products sold, the cost would be Nu. 700,000. What amount of provision should be made?

- A Nu. 20,000
 - B Nu. 70,000
 - C Nu. 90,000
 - D Nu. 800,000
- xvii. A company has an equivalent capital composition of both common stock and bonds. They provide a higher expected return to common stockholders as opposed to bondholders. What could be the reason for allowing higher returns to common stockholders?
- A There is a market premium required for bonds.
 - B There is less demand for common stock than for bonds.
 - C There is greater demand for common stock than for bonds.
 - D There is more systematic risk involved for the common stock.
- xviii. Samphel and Sonam received Nu. 8,000 each from the partnership business as an interest for the capital contribution of Nu. 150,000 and 160,000 respectively. From the partnership point of view, under which of the following would you categorize it?
- A A gain.
 - B An expense.
 - C An accumulation.
 - D An appropriation.
- xix. A Company has issued Nu. 650,000 ordinary shares of Nu.10 each and ordinary dividend of Nu. 4 per share are paid. The dividend paid would be:
- A Nu. 162,500.
 - B Nu. 260,000.
 - C Nu. 2,600,000.
 - D Nu. 6,500,000.
- xx. Input is 10,000 units and normal loss is 30% of the input and abnormal loss is Nu.400 units. What is the actual output?
- A 7600 units.
 - B 10,000 units.
 - C 10,400 units.
 - D 12,000 units.

b) Fill in the blanks with appropriate word(s). [5]

- i. Dividend paid to the shareholders is outflow of cash from.....activity.
- ii. In the preparation of financial statement, income and expenses should be recognised and recorded as they occur in each accounting period and not as when the cash is received or paid. The accounting principle referred is.....
- iii. When government grant is treated as deduction from asset, the carrying amount of asset is calculated by deducting grant from.....
- iv. include all incentives or productivity related payments made to an employee.
- v. Inventory comprises of inventory of raw materials, inventory ofand inventory of finished goods.

c) Match the items of column A with the most appropriate items in column B. Rewrite the correct pairs by writing the alphabets against the numbers in the space provided. [5]

Column A	Column B
i. Investment property.	a) Measures the ability of the entity to meet its short term financial obligations.
ii. Source of short term finance.	b) Direct labour budget.
iii. Payment made during the year for which economic benefit is expected in following accounting year.	c) Building held by business to used its warehouse.
iv. Records the total direct labour cost incurred in the production of units.	d) Prepaid expenses
v. Liquidity ratio.	e) Overdraft
	f) Building held by for long term capital appreciation.
	g) Ordinary shares

d) State TRUE or FALSE against the statements in the space given below. [5]

- i. Government grants are assistance and assistance are not grant.....
- ii. Present obligation of the business includes legal or constructive obligation.
- iii. Budgeted income statement is an operational budget.....
- iv. Salary allowed to a partner is allocated based on the workload shared by respective partners.
- v. An item will be recognized as a current asset in the financial statement, if it expected to realise within twelve months after the reporting period.

e) Answer the following questions.

- i. A company has current ratio of 2:1, current liability of Nu.100,000 and inventory of Nu.50,000. Calculate quick asset. [2]
- ii. If an income statement of a company shows net profit after tax, is it a conclusive proof for successful business? [2]
- iii. Assume that you are working in one firm where huge amount is spent on advertisement. During the board meeting, the sales department manager proposed the idea of recognizing advertisement as intangible assets since it creates future economic benefits. Should the firm recognize advertisement as intangible assets? Why? [2]
- iv. “An importer in Phuntsholing, the country’s commercial hub, has reportedly evaded sales tax and customs duty amounting to more than Nu. 11.045 million for goods imported from third countries”. (Kuensel, September 2, 2016)

Identify the ethical issue from the above case. What negative impact does tax evasion have on the government? [2]
- v. A company purchased building worth Nu. 2 million with estimated life of 20 years. It is depreciated using straight line method. The company used the building for 5 years and recoverable amount of building is estimated at the cost of Nu. 1.2 million if they sale it. Pass the journal entry to record the impairment loss on building. [2]
- vi. Tashi wants to invest in equity shares of a company. However, a friend of him suggested to him to invest in preference shares. Which shares should Tashi invest? Why? Give TWO reasons. [2]
- vii. A company is involved in legal dispute with a supplier during the year 2020. The supplier is seeking damages of Nu. 500,000. The lawyers advised that it is 10% probable that the company would be liable. Which is the most appropriate option for the company to treat disputed amount in their financial statements in 2020? [2]
- viii. The management of DCPL is confused whether to obtain long term loans from BoBL. The rate of interest charged by the bank is 8% and the Return on Capital Employed of PCAL is 6%. Advise management of DCPL whether they should obtain the loan? Why? [1]

SECTION B (50 MARKS)

ANSWER ANY FIVE QUESTIONS

Question 2

- a) Income Tax department on Thursday conducted searches in Raniganj, Asansol, Purulia and Kolkatta in connection with a case, in which Bengal coal trader was involved. The searches have led to the seizure of unaccounted cash of around Rs. 7.3 crore.

(Times of India, Nov 7, 2020)

- i) From the above extract, identify one ethical issue. [1]
ii) Give **TWO** negative impact of tax evasion on government? [2]

- b) The following is the Statement of Financial Position of ABC Ltd Co.

Non-Current Assets	2016	2017
Property, Plant & Equipment	720,000	820,000
Less: Accumulated Depreciation	<u>(242,000)</u>	<u>(258,000)</u>
	478,000	562,000
Investments	180,000	240,000
Current Assets		
Inventory	590,000	407,000
Accounts Receivables	332,000	392,000
Cash and Cash Equivalent	11,000	4,000
	1,591,000	1,605,000
Equity and Liabilities		
Equity Shares	350,000	500,000
Retained Earnings	212,000	369,000
Non-Current Liabilities		
Bonds	400,000	150,000
Current Liabilities		
Accounts Payable	478,000	418,000
Accrued Expense	151,000	168,000
	1,591,000	1,605,000

During the year, machinery costing Nu. 150,000 with accumulated depreciation of Nu. 20,000 was sold for Nu. 125,000.

Required:

- i) Prepare Cash from Investing and Financing Activities. [3]
 ii) Interpret your findings on cash generated or used in investing activities. [1]
 c) The following is the Statement of Financial Position of ABC Ltd Co.

Non-Current Assets	2016	2017
Property, Plant & Equipment	720,000	820,000
Less: Accumulated Depreciation	<u>(242,000)</u>	<u>(258,000)</u>
	478,000	562,000
Investments	180,000	240,000
Current Assets		
Inventory	590,000	407,000
Accounts Receivables	332,000	392,000
Cash and Cash Equivalent	11,000	4,000
	1,591,000	1,605,000
Equity and Liabilities		
Equity Shares	350,000	500,000
Retained Earnings	212,000	369,000
Non-Current Liabilities		
Bonds	400,000	150,000
Current Liabilities		
Accounts Payable	478,000	418,000
Accrued Expense	151,000	168,000
	1,591,000	1,605,000

Required:

- i) Compute the current ratio and quick ratio of ABC Ltd Co. for the year 2016 and 2017. [2]
 ii) Is ABC Co. Ltd doing better in terms of quick ratio in the year 2016 or 2017? Why? [1]

Question 3

- a) XY Company has an average employee of 1,000 during the year 2017. 100 employees had resigned from the company due to dissatisfaction related to job. The company has been performing poorly for the last three years with significant decline in the profit margin of the company. Most of the funds of the company were misused by the payroll accountant by creating ghost employees.

Required:

- i) Calculate staff turnover ratio. [1]
 - ii) Suggest **ONE** measures to the management of XY company to curb down the problem of employees resigning from the firm. [1]
 - iii) How would the action of accountant impact financial statements of XY Company? [1]
- b) Zimdra Automobile is an authorised distributor of Suzuki cars in Bhutan. The company at the time of selling a car also offers warranty relating to servicing of cars.

Required:

- i) Identify the obligating event from the above case. [1]
 - ii) How is provision different from contingent liability? [1]
 - iii) PCAL company has estimated warranty provision of Nu. 10,000 for the year. However, the management of PCAL company decided to book warranty provision for Nu. 20,000 instead of Nu. 10,000. Comment on the action of PCAL company with a reason. [2]
- c) On 1st January 2020, KY Company has an account receivable balance of Nu.7,000 and accounts payable balance of Nu. 10,000. The company expects to generate sales revenue of Nu 200,000 on Jan, Nu. 250,000 on Feb month and Nu. 300,000 on March month. It follows the following collection pattern for collecting cash on account of sale;
- 60% collected in the month of sale,
 - 40% collected in the month following sale.

The management of the company decided to pay 60% of a month's purchases in the month of purchase and remaining in the following month. The expected cost of the raw material is as follows:

Month	Cost
January	Nu. 100,000
February	20% increase from the month of January
March	40% increase from the month of February

Required:

Prepare Cash Collection and Cash Payment Budget. [3]

Question 4

a) Company A reported all items of land and buildings as Non-current assets before adoption of new accounting standards. In order to improve its reporting and accounting information, company A adopted BAS in which it is required to classify its assets. The company management provides you the list of their assets as follows:

- i. A vacant building to be leased out under an operating lease.
- ii. 10 units of buildings allotted to company employees for which they collect monthly rent.
- iii. 16 acres of land is held for undetermined future use.
- iv. Company has a real estate department that develops land and constructs buildings for selling purpose.

Required:

How will the Company A account for the above assets in their financial statements? [2]

b) Do you agree with the following statement? Justify your stand.

- i) Brands are always treated as an intangible assets. [2]
- ii) Amortisation and Depreciation are similar in nature. [2]

c) The following is the draft income statement of XYZ Co. for the year ending 2018.

Particulars	Amount(Nu.)
Dividend Income	500,000
Interest and other borrowed cost	320,000
Buildings	670,000
Depreciation – office building	150,000
Marketing Van	560,000
Depreciation – Marketing Van	200,000
Sales Revenue	2,100,000
Salary	520,000
Sales Commission	400,000
Bonus (Sales Person)	350,000
Income from Government Grants	300,000
Cost of Sales	650,000
Employee Training and Development	420,000

Required:

Present the statement of income from the above account balances using Function of Expense Method assuming 30% Corporate Tax. [4]

Question 5

a) Bhutan Telecom Limited (BTL) decided to issue Nu. 1 million of 10% bonds on 1st January 2015 repayable three years after the date of issue. Further, BTL issued 100,000 ordinary shares of Nu. 10 each at Nu. 12. The dividend of Nu. 1 per share issued is declared on 31st Dec 2015.

- i) Pass the journal entry to record the issue of bonds on 1st January 2015 and interest payable on the bonds on 31st December 2015. [2]

ii) Pass the journal entry to record the issue of ordinary shares. [1]

- b) Happy Homes Limited (HHL) supplies sofa sets and internal decoration items to local market. The company accounts all its properties using revaluation model after its initial recognition. HHL has a building which was revalued on 31 December 2019 to its fair value Nu. 100,000. On 1 July 2020, the company management decided to transfer this building which was occupied by the business to investment property. On 1 July 2020, the following information were obtained related to this building:

- Fair value at the date of transfer Nu 80,000
- Revaluation surplus of the building Nu. 15,000
- Accumulated depreciation of the building at the date of transfer Nu. 10,000

At the end of 2020, fair value of investment property was Nu. 88,000. The property was later disposed of at Nu. 100,000 in June 2021.

Required:

- i) Pass the journal entry for the year 2020 and 2021. [3]
ii) What would have happened if the investment property was disposed off for Nu. 80,000 instead of Nu. 100,000. Provide the journal entry. [1]

- c) Choden garment made the following purchases of new product (t-shirt) during 2020 and uses FIFO method for inventory valuation:

10 January 2020: 1,000 units at Nu 30 each;
14 February 2020: 1,500 units at Nu 30.5 each;
17 March 2020: 3,000 units at Nu 35 each; and
18 June 2020: 2,500 units at Nu 35.5 each;.

As t-shirt is a new product and massive advertising campaign is planned after 1 July 2020, Choden sold only one batch of 4,200 units of t-shirt to its biggest customer, for total sales price of Nu. 150,000. This happened on 2 May 2020.

Required:

Calculate the closing inventory and cost of goods sold of t-shirts in Choden's warehouse on 30 June 20X1. How will this be presented in the financial statement of Choden? [3]

Question 6

- a) The statement of profit or loss and other comprehensive income of ABC Ltd for the financial year ending 30th Dec 2010 was as follows:

Revenue	Nu. 250, 000
Add: Accrued Income	<u>Nu. 10,000</u>
Profit Before Tax	Nu. 260,000

Required:

- i. Redraft the statement of income and other comprehensive income of ABC Ltd. for tax purpose after computing tax at 30%. [1]
 - ii. The tax rate for Business Income Tax and Corporate Income Tax is 30%. What would you recommend to promote more companies in the country? Suggest any **TWO**. [2]
- b) You are working in ABC company. The company is confused whether to opt for debt financing or equity financing and has asked for your expert opinion. Design a report.(The report should mention what would be the best option for ABC company with reasons). [3]
- c) Tashi and Sonam are partners sharing profits and losses equally and runs restaurant situated at Thimphu. Their business has been performing well beyond their expectation and most of the customers are employees working under different organizations. Tashi wanted business to grow further in terms of profit and even sacrificed her lunch time to accommodate regular customers. Sonam on other hand does not sacrifice his lunch time but rather takes longer lunch hours. Furthermore, Sonam makes significantly larger withdrawals than Tashi and contends stating he generally maintains proper drawings account. Sonam's drawings to date are double of Tashi's.

Required:

- i. Who are the stakeholders in this situation? [1]
 - ii. Identify the problems with Sonam's actions and discuss the ethical considerations of his actions. [1]
 - iii. How might the partnership agreement be revised to accommodate the differences in Tashi's and Sonam's work and withdrawal habits? [1]
- d) Mr. Sonam works as a manger in sales department. In order to increase the sales commission, he decided to manipulate the sales revenue. How will this affect the financial statement? [1]

Question 7

a) The following is the statement of financial position of XYZ Co.

Non-Current Assets	2016	2017
Property, Plant & Equipment	720,000	820,000
Less: Accumulated Depreciation	<u>(242,000)</u>	<u>(258,000)</u>
	478,000	562,000
Investments	80,000	40,000
Intangible Assets	100,000	200,000
Current Assets		
Inventory	590,000	407,000
Accounts Receivables	332,000	392,000
Cash and Cash Equivalent	11,000	4,000
	<hr/> 1,591,000	<hr/> 1,605,000

- i) Perform the common size statement analysis of XYZ company. [2]
 - ii) Interpret and draw up relation between inventory and accounts receivable. [1]
- b) Identify any **FOUR** elements of financial statements. [2]
- c) Provisions and Liabilities are same. Do you agree? Why? [2]
- d) ABC Co. paid Nu. 100,000 cash to acquire a patent on 1st January 2019 and the useful life of the patent is 5 years. During the year the company also developed customer list internally estimated at Nu. 50,000.

Required:

- i) Pass the journal entry to record purchase of patent and amortisation expense on the patent acquired for the year ending 31st December 2019. [2]
- ii) Should ABC Co. recognise customer list as an intangible asset? Why? [1]

Accountancy/Test blueprint

Section A: 50 Marks (Compulsory)

Strand	Chapters Level	Weighting (%)	Total Adjusted marks	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Financial Accounting	1. Accounting for Taxation and Business Income Tax	10	5		Q1biv(1)	Q1ai(1)	Q1axii(1)	0 Q1eiv(2)	
	2. Accounting for payroll	5	2			Q1axiii(1)	Q1aii(1)	0	
	3. Accounting for Investment Property	10	5		Q1axiv(1)	Q1aiii(1)	Q1ci(1)	0 Q1ev(2)	
	4. Accounting for Intangible Assets and Govt. Grants	12	6	Q1di(1)	Q1biii(1)	Q1axv(1)	Q1aiv(1)	0	Q1eiii(2)
	5. Provisions and contingencies	10	5	Q1dii(1)		Q1av(1)	Q1axvi(1)	0	Q1evii(2)
	6. Accounting for Equity Shares and Debt Finance	10	5		Q1avi(1)	Q1axvii(1)	Q1cii(1)	0 Q1evi(2)	
	7. Accounting for Partnership	5	3	Q1div(1)	Q1axviii(1)	Q1avii(1)		0	
	8. Financial Statement of a Limited Company	18	9	Q1dv(1)	Q1bii(1) Q1bv(1)	Q1axix(1)	Q1aviii(1) Q1ciii(1)	1 Q1eii(2)	Q1eviii(1)
Cost Accounting	9. Store Ledger	5	2			Q1aix(1)	Q1axx(1)	0	
Management Accounting	10. Budget	5	3	Q1diii(1)		Q1ax(1)	Q1civ(1)	0	
	11. Financial Statements Analysis and Interpretation	10	5		Q1bi(1)	Q1axi(1) Q1ei(2)	Q1cv(1)	0	
	Total	100	50	5	8	12	12	8	5

MCQ	FIB	Matching	True/False	SAQ
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Section B: 6qs @ 10 = 60 (Choose 5qs @ 10 =50 Marks)

Strand	Chapters Level	Weighting (%)	Total marks/Adjusted marks	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Financial Accounting	12. Accounting for Taxation and Business Income Tax	10	6			Q2a(i,ii)(3)			Q6a(i,ii)(3)
	13. Accounting for payroll	5	3		Q3a(i,ii,iii)(3)				
	14. Accounting for Investment Property	10	6	Q4a (2)		Q5b(i,ii)(4)			
	15. Accounting for Intangible Assets and Govt. Grants	12	7			Q7d(i,ii)(3)		Q4b(i,ii)(4)	
	16. Provisions and contingencies	10	6				Q3b(i,ii,iii)(4)	Q7c(2)	
	17. Accounting for Equity Shares and Debt Finance	10	6		Q5a(i,ii)(3)				Q6b(3)
	18. Accounting for Partnership	5	3				Q6c(i,ii,iii)(3)		
	19. Financial Statement of a Limited Company	18	11	Q7b(2)	Q4c(4)	Q6d(1)		Q2b(i,ii)(4)	
Cost Accounti	20. Store Ledger	5	3				Q5c(3)		
Management	21. Budget	5	3				Q3c(3)		
	22. Financial Statements Analysis and Interpretation	10	6			Q2c(i,ii)(3) Q7a(i,ii)(3)			
	Total	100	60	5	10	17	13	10	5

COMMERCE

Commerce

(Three Hours)

Total Marks: 100

Instructions:

The paper consists of Section A and Section B. Candidates are required to answer all the questions from the Section A (Compulsory) and any FIVE questions from Section B.

Section A: 50 Marks

ANSWER ALL QUESTIONS

Question 1

- a) **For each question, there are four alternatives: A, B, C and D. Choose the correct alternative and circle it. Do not circle more than ONE alternative. If there is more than one choice circled, NO score will be awarded.** [20]
- i. Corporates or companies forms of business organisations are known for their stable life due to its unique features of
- A unlimited capital
 - B shares are transferable
 - C ability to manage skilled manpower
 - D ability to bring in any amount of resources
- ii. Which one of the following is the most common method used for the appointment of directors in a Public Limited Company?
- A Appointment by the promoters
 - B Direct appointment by the Company's Board
 - C Elected by shareholders in the Annual General Meeting
 - D Directly appointed by the government in major shareholdings
- iii. A company has been in a business for the last five years and gained a quite good reputation in the market for its efficiency in terms of service delivery and product quality. Now the company has a plan to expand its production capacity which involves the construction of a

plant, purchase of machines, and recruitment of new skilled staff and training. The expenditure is estimated to be Nu. 10 million for the expansion. The company is looking for a reliable financial source.

Recommend the best possible financial source for the company.

- A Issue new shares
- B Issue right shares
- C Finance from the internal reserves
- D Borrow loans from financial institutions

- iv. The selection of the right person for the right job is perceived as very important for the efficiency of a job, and manning and training are considered even more crucial for any organisation to prosper. How can an organisation ensure the right person for a job?

- A Offer good pay package
- B Stringent selection process
- C Increase probation working period
- D Continuous observation and supervision

- v. The management of a company was in the process of taking a very important decision on the issue pertaining to high labour turnover in the company. A quiet but hardworking employee suggested the reshuffling of supervisors, as the reason for turnover was due to them. However, management didn't consider his suggestion which impacted the company adversely later.

The type of communication barrier presented in the above case is

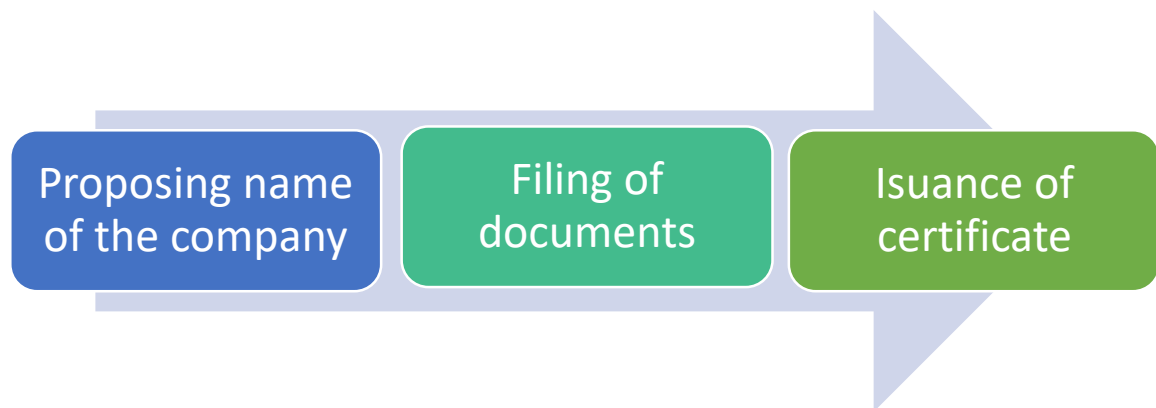
- A physical barriers
- B perfunctoral attention
- C semantic barriers
- D premature evaluation

vi. Which function of marketing does the following picture represent?



- A Grading
- B Branding
- C Packaging
- D Standardisation

vii.



Issuance of a certificate brings the company into legal existence as a separate legal entity. Name the certificate issued by the company's registrar.

- A Business license
- B Certification of registration
- C Certificate of incorporation
- D Certificate of commencement of business

- viii. Section 2 of the Companies Act of the Kingdom of Bhutan requires the appointment of a Chief Executive Officer (CEO) in the public limited companies. How are civil servants appointed to the post?
- A Based on seniority
 - B Based on meritorious promotion
 - C Based on the past evaluation system
 - D Directly appointed by the government
- ix. Monthly payment of salaries to the employees of an organisation is an example of
- A Fixed capital
 - B Working capital
 - C Fixed working capital
 - D Floating working capital
- x. A cement company plans to produce 100,000 bags of cement every month. At the end of the month, it is found that they could achieve only 80,000 bags despite having enough machine capacity and human resources.
Which function of management must be put in place to narrow such gaps?
- A Staffing
 - B Directing
 - C Controlling
 - D Motivation
- xi. Mr. Karma a CEO of a company is planning to invite shareholders for the Annual General Meeting next month. He must use a communication mode such that every shareholder gets the information.
If you are the CEO of the company, which mode of communication would you use for inviting the shareholders.
- A Send email
 - B Telephonic calls
 - C Formal written letter
 - D Notify through the Facebook

- xii. Example of an online shopping site in Bhutan. (source: www.zaala.bt)

The best online shopping store in Bhutan

Zala.bt is the biggest online shopping store in Bhutan with products from various categories including consumer electronics, IT equipments, groceries, hardware tools, pet care, home appliances, baby products, fashion, Bhutan lottery and Made in Bhutan products. It's the first e-commerce platform in Bhutan that provides online stores for retailers to sell their products to customers online. Zala.bt is also an initiative to support the COVID-19 pandemic situation by creating an online marketplace in Bhutan.

With the introduction of various online platforms for marketing, sellers and buyers hardly know each other. If such trends of marketing continue, which qualities of salesmanship is not required?

- A Aptitude
- B Physically fit
- C Knowledgeable
- D Sales presentation

- xiii. Those companies which are listed under DHI with shareholding of 51 – 80% is known as



- A Parent companies
- B Subsidiary companies
- C Controlled companies
- D Branches

- xiv. If you are a major shareholder of a company and want to become a director, you must

- A be equal to above the age of 18
- B have the relevant experience
- C be nominated by the shareholders
- D hold at least 50% or more share of that company

- xv. As per (source: [www. https://www.unescap.org/blog/bhutans-first-sovereign-bond](https://www.unescap.org/blog/bhutans-first-sovereign-bond)) the Royal Government of Bhutan recently made history by successfully issuing its first

sovereign bond despite a very small population size. It has completed the offering of a 3-year domestic bond of US\$ 41 million (or Nu. 3 billion) at an annual coupon rate of 6.5 percent to support increasing fiscal needs. The transaction was very well-received with more than 300 percent oversubscription.

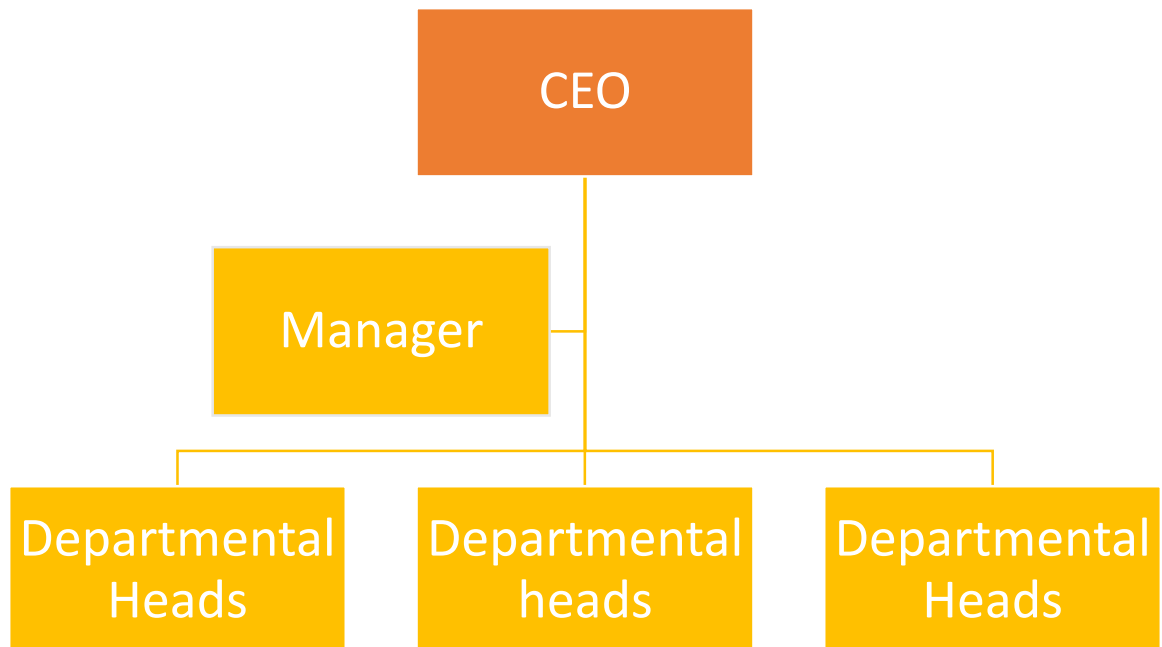
Why do you think, bonds were oversubscribed although the coupon or interest rate was just above the bank rate?

- A People trust the government for repayment
- B All types of bonds are secured.
- C People purchased bonds to support the government
- D There is no risk for investing in the government bonds

xvi. Preparation of Individual Work Plan (IWP) by the civil servants is an example of which function of management?

- A Planning
- B Controlling
- C Directing
- D Supervising

xvii. A conventional organisational structure is given as follows.



Although such organisational structure existed for centuries and still some authoritarian manager seems to prefer the same structure, such arrangements are under criticism today. What is the main drawback with such arrangement?

- A CEO is the most powerful
- B There will be reporting issue
- C Too many layers for communication
- D Subordinates are suppressed in such arrangements

xviii. Study the information given below:

Source: <https://www.dailybhutan.com>

Sherza Ventures Limited Launched IPO, Aims To Establish Brand Bhutan Products Globally And More



Sherza Ventures Limited aims to be a hyper retail and wholesale trading venture using e-commerce.

Initial Public Offering (IPO) is the type of shares offered for sale by the public company for the first time in the stock market.

If you are to invest in the company's share, which is the document that needs to be read thoroughly before making an investment decision?

- A Prospectus
- B Companies Act
- C Articles of Incorporation
- D Management guidelines of the company

xix. A newly established company floated 1 million shares @ Nu.10 per share through RSEBL Securities to the public. After one month of issue, the company received a subscription for 799,999 shares. Can the company allot shares to the public?

- A Cannot allot as the minimum subscription is not met
- B Cannot allot as 200,001 shares are unsubscribed
- C Can allot the shares as the company got enough money
- D Ask stock exchange to decide on the company's behalf

xx. Although companies are able to raise finance through floating shares in the market, companies rely on borrowings or the issue of bonds for financing their business. What is the main reason for not floating shares to the public?

- A Sharing of control
- B High cost of capital
- C Required to pay dividends annually
- D Borrowings are a cheap source of finance

b) **Fill in the blanks with an appropriate word(s).** [5]

- i. The stage of a company where business ideas and opportunities are identified, analyses are undertaken to know the prospects and resources are gathered is called.....
- ii. Fees paid by the business firms on registration of a business is expenses.
- iii. A function of management which requires designing of the future course of action with anticipation of problems is called.....
- iv. A function of marketing which is shown in the picture is



<https://www.wwfbhutan.org.bt>

- v. BBS covering news on Green Road is an example of

c) **Match the items of column A with the most appropriate items in column B. Rewrite the correct pairs by writing the alphabets against the numbers in the space provided.**

[5]

Column A	Column B
i. 90% of the issued capital	a) Trunkey projects
ii. Providing direction and guidance to the employees	b) Branding
iii. Buy 2 Get 1 Free	c) Minimum subscription
iv. Technological edge	d) ICT products

v. The phrase ‘organic’ used in the market	e) Directing
	f) Sales promotion
	g) Subscribed capital
	h) Advertisement

d) State TRUE or FALSE against the statements in the space given below. [5]

- It is necessary to get every company incorporated, whether private or public.....
- Investment in bonds or debenture is made by a class of investors who wants to control the affairs of the company.
- Communication is effective only when messages flow in two-way traffic.....
- Marketing includes only the exchange of physical goods, and not ideas, places, people and events.
- In the modern era of management, ‘Boss is always right’.

e) Answer the following questions. [15]

- With exception to the transferability of shares and limitation of the number of members, can the private limited companies enjoy the same privileges as that of public limited companies? [2]
- If you are the CEO of Bhutan Telecom, mention TWO changes that you wish to bring to benefit the customers. [2]
- Farmers are finding it difficult time to market their product during the harvesting season and suffer huge losses which are even seen as demotivating for them. Explain one best possible strategy to protect the farmers. [1]
- Study the information given in the table below: (*Source www.rsebl.org.bt*)

BTCL-BHUTAN TOURISM CORPORATION LTD.		
Buy Vol	Prices	Sell Vol
3261	194.00	
50	183.00	
12	184.00	
100	180.00	
7	176.00	
700	173.50	

With the onset of the COVID Pandemic, Bhutan closed its door to the tourist threatening all the businesses related to tourism. However, the share price of BTCL is on rise. which means the investors are willing to buy more shares even if the company has no revenue to earn. Do you think that investors are taking right decision by investing in BTCL shares at this time? [3]

- v. Tomorrow you are joining as Manager of the newly established Druk Gaki Pvt. Ltd., a company dedicated to serving customers by producing mango juice with the help of locally available resources. Under your leadership, list at least four most important things that are required to keep your company running. [2]
- vi. There is increasing evidence that managers use informal communication to motivate and boost the morale of their employees. Can informal communication be considered formal if it contributes to the better performance of an organisation? [2]
- vii. With the emergence of social media platforms goods are easily traded online. The person who wants to sell their goods can directly post and get customers and vice versa without even the intention of doing business. Do you think such trade practices are good for the country? [2]



Facebook post

- viii. MNC giants such as Coke, Pepsi, Big Cola have started operations in Bhutan for quite some time. Mention the benefits of their presence to the Bhutanese economy. [1]

SECTION B (50 MARKS)
ANSWER ANY FIVE QUESTIONS

Question 2

- a) Company does not come into existence of its own until it is registered under the Company Law. Explain the stages that are required to be fulfilled to bring the company into existence. [5]

- b) Kuensel report June 19, 2021

More than 2,000 investors applied for Bhutan National Bank Ltd (BNBL) and Royal Insurance Corporation of Bhutan (RICBL) shares between June 15 and yesterday, according to data from the Royal Securities Exchange of Bhutan (RSEBL).

The RSEBL announced the mass sale of 15,640,000 shares of RICBL at a floor price of Nu 70, and 17,620,000 shares of BNB at a floor price of Nu 33 between June 15 and July 15. The shares were held in the name of Sungchob Fund and Kidu Fund.

What are some of the benefits of buying such shares? Explain any **FIVE**. [5]

Question 3

- a) Explain the procedures for the appointment of directors in the public limited company. [6]
- b) Royal Audit Authority of Bhutan every year reports numerous cases of financial lapses in the entities that they have audited. This will not only adversely impact the reputation and health of the organisation but also affect the required service delivery to the people.
Which functions of the management do you think are not applied effectively?
Suggest **FOUR** ways to improve the check and balance system in the organisation with the help of such management functions. [4]

Question 4

- a) Companies generally finance their capital expenditure through the issue of shares and bonds or debentures. While shares are usually issued in the initial stage of the company, bonds are issued at the later stage of the company.
How do bonds differ from shares as a source of finance to the company? Mention any **FOUR**. [4]

b) Study the case and answer the following questions.

Joanne supervised 36 professionals in 6 city libraries. To cut the costs of unnecessary overtime, she issued this one-sentence memo to her staff:

Memo

When workloads increase to a level requiring hours in excess of an employee's regular duty assignment, and when such work is estimated to require a full shift of eight (8) hours or more on two (2) or more consecutive days, even though unscheduled days intervene, an employee's tour of duty shall be altered so as to include the hours when such work must be done, unless an adverse impact would result from such employee's absence from his previously scheduled assignment.

After the 36 copies were sent out, Joanne's office received 26 phone calls asking what the memo meant. What the 10 people who didn't call about the memo thought is uncertain. It took a week to clarify the new policy.

- i. Do you think the intention of Joanne's was clear? [1]
- ii. Suggest at least FIVE ways to improve the memo so that 26 phone calls are avoided. [5]

Question 5

a) Kuensel report June 29, 2021

The two Houses of the Parliament have passed the Customs Bill 2021, which reduces the customs duty, an indirect tax levied on third-country imports, to a uniform rate of 10 percent.

- i. How will such policy decisions impact the pricing decision of a business in the country? [1]
 - ii. Discuss **FOUR** benefits and drawbacks of such a decision to the Bhutanese customers. [4]
- b) Kuensel November 23, 2018, reported that Bhutan drops to 81st position in ease of doing business from 73rd out of 190 countries as per the world bank report. Higher the rank, the policy allows entry of MNC or foreign companies to Bhutan and vice versa. The government has pledged to take the country's ranking to the top 50. How can Bhutan benefit from such policy relaxation? Explain any **FIVE** [5]

Question 6

a) Kuensel report July 25, 2021

The Opposition Party has said that the government must look into the issue of farmers' inability to sell vegetables during the production season.

In a press release issued on July 2, Druk Phuensum Tshogpa recommended that the government should improve the buy-back system with minimum guaranteed price.

One of the causes of the problem, the Opposition said, was that vegetables from Bhutan were not in the list of imports allowed into India. This, it stated, was a major problem for our farmers and the future of the Bhutanese agriculture sector.

Considering the persistent issue of farmers not being able to sell vegetables during the production season, there is viability for establishing cold storage business in Bhutan. It will not only help to store vegetables but also help the government in addressing the issue.

If you are starting a cold storage company, develop an Article of Incorporation for your business. The document must contain clauses such as the name of the business, location, capital structure, associates, etc. [4]

b) Companies form of businesses have the ability to garner financial resources easily given their large resources and capacity to repay. However, small businesses which are mainly of sole proprietorship and partnership may face difficulty to get finance. What are the different sources of finance available for small business firms? [3]

c) Kuensel report February 17, 2021

Is marijuana commercialised?

Thimphu-based firm selling hemp extracts

Even as people are prosecuted for possession or consumption of cannabis and its derivatives every year, the existence of a private firm in Thimphu that has been producing and selling hemp extracts has raised eyebrows.

The firm is selling hemp extract with a 10 millilitre of the extract from the widely grown marijuana plant, packaged in a syringe, for Nu 2,000.

Referring to the case presented above, if the sale of the marijuana plant is legalised, can Bhutan find a market for such products? Give **THREE** points [3]

Question 7

- a) Planning has played a crucial role in the smooth execution and completion of any project. Mention any **FIVE** basis on which the planning must be done to ensure the least hindrance to the ongoing project. [5]
- b) With the people increasingly embracing ICT, digital marketing is likely to supplement and replace most of the functions of marketing.



Source:
<http://bluedragondigitalmarketing.com/>

Bhutan is no exception with already some firms in the digital marketing business. Examine how digital marketing is likely to impact the functions of marketing? Explain any **FIVE** points [5]

BHSEC/Test blueprint/Commerce

Section A: 50 Marks (Compulsory)

Sl.no	Topics Level	Weighting (%)	Adjusted Marks	Remembering	Understanding	Applying	Analysis	Evaluating	Creating
1	Corporate Organization	23	11	Q1di(1)	Q1ai(1) Q1bi(1)	Q1avii(1) Q1axix(1) Q1axiii(1)	Q1ci(1) Q1civ(1)	Q1ei(2)	Q1eviii(1)
2	Management Personnel	10	5		Q1aii(1)	Q1axiv(1)	Q1aviii(1)		Q1eii(2)
3	Financing	20	10	Q1dii(1)	Q1bii(1)	Q1aix(1) Q1aiii(1)	Q1axx(1) Q1axv(1) Q1civ(1)	Q1eiv(3)	
4	Management	15	8	Q1dv(1)	Q1biii(1)	Q1ax(1) Q1axvi(1)	Q1aiv(1) Q1cii(1)		Q1ev(2)
5	Communication	10	5	Q1diii(1)		Q1axi(1) Q1av(1)	Q1axvii(1))	Q1evi(1)	
6	Marketing	22	11	Q1div(1)	Q1avi(1) Q1biv(1) Q1bv(1)	Q1axviii(1) Q1eiii(1)	Q1axii(1) Q1ciii(1) Q1cv(1)	Q1evii(2)	
	Total	100	50	5	8	12	12	8	5

Q1(i-xx)MCQ	Q1b(i-v)FIB	Q1c(i-v)Matching	Q1d(i-v)True/False	Q1e(i-viii)SAQ
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Section B: 6qs @ 10 = 60(5qs @ 10 =50 Marks)

Sl.no	Topics Level	Weighting	Adjusted Marks	Remembering	Understanding	Applying	Analysis	Evaluating	Creating
1	Corporate Organization	23	14	Q2a(5)		Q6a(4)	Q5b(5)		
2	Management Personnel	10	6		Q3a(6)				
3	Financing	20	12		Q4a(4)		Q6b(3)		Q2b(5)
4	Management	15	9			Q7a(5)	Q3b(4)		
5	Communication	10	6					Q4b(6)	
6	Marketing	22	13			Q5a(5)	Q7b(5)	Q6c(3)	
	Total	100	60	5	10	14	17	9	5

MEDIA STUDIES

Answer all Questions

There are two parts, Section A; consisting of objective and Short answer Question and Section B consisting of Subjective type questions. Answer ALL Questions. [100 Marks]

Question 1

- a) **For each question, there are four alternatives; choose the correct answer from the given alternatives and circle it.**

[1x8]

1. BBS 2 broadcasts the live football match for the purpose of

- A education
- B information
- C socialization
- D **entertainment**

2. *Your school releases a printed report featuring the star student of the week and the upcoming events. The Cultural Concert scheduled in the weekends makes all your friends excited and you are already imagining your role for the big day.*

Which of the following forms of print media is best described in the above statement?

- A Flyer
- B Brochure
- C **Newsletter**
- D Newspaper

3. The dissemination of news in Bhutan through the print media began in

- A 1982
- B 1984
- C **1986**
- D 1988

4. The purpose of media in the society is

- A education.
- B entertainment.
- C enlightenment.
- D **both A and B.**

5. *A Journalist covers the story of fuel price hike in the country. Submits the write up to the editor, who checks the facts and decides the content for publishing.*

The above context best describes the practice of journalism in

- A New Media
- B Social Media
- C Digital Media
- D **Traditional Media**

6. Yangchen steals the show in her friend's birthday party, wearing the latest dress and hairdo. She is a hollywood movie fan and there's no doubt that she followed the movie star's fashion sense. The phenomenon, described in the above statements is a result of

- A **popular culture.**
- B cultural diversity.
- C cultural tolerance.
- D cultural stereotyping.



7. The feature of media representation best portrayed by the media text is

- A realism
- B objectivity
- C influences
- D **stereotyping.**

8. Which of the following is **NOT TRUE** about media's role in society?

- A Media shapes the society.
- B Media reflects the society.
- C Media is a pillar of democracy
- D **Media primarily persuades society**

b) Choose the most appropriate term given in the box below and match them correctly against the following statements: (1x5)

Point of view	Construction
Media text	Deconstruction
Media Literate	

1. A movie that features the living conditions of the slum people. Media text
2. Nima believes in evaluating the news source. Media Literate
3. The news reader, refers the crime suspects as criminals. Point of view
4. Radio producers use voices and sound effects with music to create media message. Construction
5. After watching the movie, the meaning that parents derived from it differed from the children. Deconstruction

c) State whether the following statements are true or false. (1x10)

1. The advantage of living in an information age is the access to adequate and right information always.
2. A news channel covering the disruption of rush-hour morning traffic due to road accident in the evening news bulletin, abides by the features of information delivery.
3. Information storage is one of the integral parts of information management.
4. A class attendance register is an example of primary sources.
5. In a website, URL shows the source code.
6. Provision of the Constitution that requires every citizen to respect the National flag is Fundamental Right.
7. Legal restriction on broadcasting offensive information is a feature of media regulation.

8. Media fulfils the individuals' right to information by covering updates on latest events.
9. Dema upholds the fundamental duties when she uploads a picture of garbage dumped inappropriately.
10. Social media provides a platform for all individuals to report events, known as Publisher Journalism.

d) Complete the statements using ONE word. (1x10)

1. An American tourist cannot communicate with a Chinese in their native language. The component of communication referred in the statement is_____.
2. The school uses _____ form of communication to invite the parents for annual meeting through their official Facebook page.
3. A question answer session between a student and her teacher is an example of _____ model of communication.
4. Repeated dishwashing ads on television portraying women embed stereo typical thoughts in viewers. This theory of communication was propounded by _____.
5. The students' response of applauding in excitement over and announcement of school picnic is _____ from of communication.
6. News stories that report the progress of the developmental projects of a country is _____ journalism.
7. Abuse of power in a system is covered by _____ journalism.
8. Principle of journalism that regards the privacy and dignity of an individual is _____.
9. Covering sensational story with catchy headlines is _____ journalism.
10. Journalistic Code of ethics forbid journalists to practice **libel** which can affect the credibility of an organization.

e) Match the activities listed under Column A correctly against the tools listed under Column B for effective delivery of message. (1x4)

A	B
1. Class teacher submitting monthly report to the principal.	Text message
2. Teacher conducting an online class with the students.	Telephone
3. Booking a hotel room.	Mail
4. Sending your Cid. Card number to the bank official.	e-mail
	Web conferencing

f) Match the examples listed under Column A correctly against the camera angles listed under Column B. (1x4)

	A	B
1	View from an aeroplane	Low angle
2	Neutral perception	High angle
3	Weak subject	Dutch angle
4	Magnified subject	Eye level angle
		Bird's eye view

Question 2 Answer the following questions:

a) Write an example each for the following: (1x4)

- i. Multimedia
- ii. Cultural Homogenization
- iii. Secondary source of information
- iv. Slander

b) List **TWO** persuasion techniques of media language. (2)

c) Briefly explain how: (1x2)

- i. media conveys message through visuals.
- ii. hyperdermic needle theory conveys message.

Section B
ANSWER ALL THE QUESTIONS UNDER THIS PART

Question 1

- a) Study the above media texts and discuss list **FOUR** differences in relation to media representation. (4)
- b) You are a Journalist, concerned about the diminishing culture of social values in the urban cities.

Adhering to the *Journalists' Code of Conduct, Design* a story with a relevant caption to report the concern. (6)

Question 2

- a) Which core concepts of CML do you think is most important in deconstruction? Justify your answer with **THREE** reasons. (7)
- b) List an advantage each associated with the **THREE** forms of communication. (3)

Question 3

- a) Design a media text and identify the artistic proofs used in it. (6)
- b) Your friend is participating in the cultural festival organised in your Dzongkhag and plans to compose a song using the tunes and lyrics of the latest hits.

With reference to the provisions of Copyright Act of Bhutan, explain the implications of his plan. (4)

Question 4

- a)) The graph shows the decline of newspaper in the U.S over the past five years. With reference to the information, assess the current status of newspaper in Bhutan and compare it with international trend. (6)
- b) *Tina goes to a primary school in one of the remote parts of southern Bhutan. She is one of the forty five students seated in a make-shift classroom. The teacher, who hails from Trashigang tries his best to deliver lesson, but she fails to understand.*
Discuss any **TWO** barriers to effective communication in Tina's classroom. State **TWO** measures to overcome these barriers. (4)

Question 5

- a) Define communication in your own words. (3)
- b) i. Are you living in an information age? (1)
- ii. Do you think the information age keeps us abreast with the worldly events or exposes us to social strains? Justify your views with **THREE** reasons. (6)