पाठ्यक्रमको रुपरेखालाई निम्न अनुसार विभाजन गरिएको छ

लिखित परीक्षा (Written Examination):-प्रथम चरण

पूर्णाङ्क :- २००

चरण द्वितीय चरणः-

(क) सामूहिक परीक्षण (Group Test)

पूर्णाङ्क :- १०

(ख) अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ३०

परीक्षा योजना (Examination Scheme)

१. लिखित परीक्षा:- प्रथम चरण (First Phase)

पूर्णाङ्क:- २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उर्तीर्णाङ्ग	परीक्षा प्रणाली		प्रश्नसंख्या ×अङ्ग	समय
प्रथम	General Subject	Part I: General Awareness &General Ability Test Part II: General	900	80	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	५० प्रश्न ×१ अङ्ग	१घण्टा ३० मिनेट
		Technical Subject					५०प्रश्न ×१ अङ्क	
द्वितीय	Technical Subject		900	४०	विषयगत (Subjective)	छोटो उत्तर लामो उत्तर	४ प्रश्न 🗙 ५ अङ्क ८ प्रश्न 🗙 १०अङ्क	३ घण्टा

द्वितीय चरण :सामूहिक परीक्षण (Group Test) र अन्तर्वार्ता (Interview) पूर्णाङ्क :- ४०

पत्र ∕विषय	पूर्णाङ्क	उर्तीर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	90		सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तर्वार्ता (Interview)	३ 0		बोर्ड अन्तर्वार्ता(Board Interview)	-

द्रष्टव्यः

- १. लिखित परीक्षाको माध्यम भाषा नेपाली वा अङ्ग्रेजी अथवा नेपाली र अङ्ग्रेजी दुबै हुनेछ ।
- २. प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- ३. वस्तुगत बहुवैकल्पिक (Multiple choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- ४. बह्वैकल्पिक प्रश्नहरु हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (calculator) प्रयोग गर्न पाइने छैन ।
- ४. विषयगत प्रश्नहरूको हकमा तोकिएको अङ्कको एउटा लामो प्रश्न वा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सिकने छ।
- ६. द्वितीय पत्रमा (विषयगत प्रश्न हुनेका हकमा) प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परिक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डको उत्तरपुस्तिकामा लेखुपर्नेछ ।
- ७. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापिन पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरु परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाइएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठक्रममा परेको सम्झनु पर्दछ ।
- ८. प्रथमचरणको परीक्षाबाट छुनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- ९. पाठ्यक्रम लाग् मितिः २०७७। १०। ०७

प्रथम पत्र (Paper I): General Subject

Part (I): - General Awareness & General Ability Test (50 Marks)

1. General Awareness and Contemporary Issues $(25 \times 1 \text{ Mark} = 25 \text{ Marks})$

- 1.1 Physical, socio-cultural and economic geography and demography of Nepal
- 1.2 Major natural resources of Nepal
- 1.3 Geographical diversity, climatic conditions, and livelihood & lifestyle of people
- 1.4 Notable events and personalities, social, cultural and economic conditions in modern history of Nepal
- 1.5 Current periodical plan of Nepal
- 1.6 Information on sustainable development, environment, pollution, climate change, biodiversity, science and technology
- 1.7 Nepal's international affairs and general information on the UNO, SAARC & BIMSTEC
- 1.8 The Constitution of Nepal (From Part 1 to 5 and Schedules)
- 1.9 Governance system and Government (Federal, Provincial and Local)
- 1.10 Provisions of civil service act and regulation relating to constitution of civil service, organisational structure, posts of service, fulfillment of vacancy and code of conduct
- 1.11 Functional scope of public services
- 1.12 Public Service Charter
- 1.13 Concept, objective and importance of public policy
- 1.14 Fundamentals of management : planning, organizing, directing, controlling, coordinating, decision making, motivation and leadership
- 1.15 Government planning, budgeting and accounting system
- 1.16 Major events and current affairs of national and international importance

2. General Ability Test

 $(25 \times 1 \text{ Mark} = 25 \text{ Marks})$

2.1 **Verbal Ability Test** $(8 \times 1 \text{ Mark} = 8 \text{ Marks})$

Jumble words, Series, Analogy, Classification, Coding-Decoding, Matrix, Ranking Order Test, Direction and Distance Sense Test, Common Sense Test, Logical Reasoning, Assertion and Reason, Statement and Conclusions

2.2 **Numerical Ability Test** $(9 \times 1 \text{ Mark} = 9 \text{Marks})$

Series, Analogy, Classification, Coding, Arithmetical reasoning/operation, Percentage, Ratio, Average, Loss & Profit, Time & Work, Data interpretation & Data verification

2.3 **Non-verbal/Abstract Ability Test** (8×1 Mark = 8 Marks)

Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion/Finding, Analytical Reasoning Test, Figure Formation and Analysis, Rule Detection, Water images, Mirror images, Cubes and Dice & Venn-diagram

Part (II): - General Technical Subject (50 Marks)

1.	Aquaculture	32%
	1.1 History of fish culture in Nepal	
	1.2 Present status and prospect of aquaculture in Nepal	
	1.3 Principle of aquaculture	
	1.4 Definition of fisheries and aquaculture	
	1.5 Fish farm design and construction	
	1.5.1 Planning	
	1.5.2 Site selection	
	1.5.3 Soil texture and quality	
	1.5.4 Topography and layout of fish pond	
	1.5.5 Pond construction	
	1.5.6 Water budgeting & sources of water	
	1.6 Species selection for pond fish culture	
	1.7 Cultivated indigenous & exotic fish species in Nepal	
	1.8 Aquatic ecology in relation to fish production	
	1.9 Hatchery management techniques	
	1.9.1 Brood fish management	
	1.9.2 Fish breeding (natural & induced)	
	1.9.3 Nursing and rearing of hatchling, fry, fingerlings (fish) seed	
	1.9.4 Transportation of hatchling, fry, fingerlings (fish) seed	
	1.9.5 Feed and fertilizer	
	1.9.6 Improvement by selection	
_	1.9.7 Hybridization	
2.	Introduction to Ichthyology	14%
	2.1 Definition of fish, economic importance of fish	•
	2.2 Taxonomy, economically important fishes of Nepal: General character	s and
	classification of class Pisces	1
	2.3 Morphology of fish: external features, shape and shape and size, struct	ure and
	functions of different organs	
	2.4 Anatomy of fish: Study of location and functions of different organs	
	2.5 Different organ systems: structure and functions	
	2.5.1 Digestive system-structure and functions of alimentary canal	
	2.5.2 Respiratory system- structure and function of gills	
	2.5.3 Reproductive system- structure and functions of gonads2.6 Endocrine system related to reproduction	
	2.0 Endocrine system related to reproduction	
3.	Water quality management in pond culture	10%
J.	3.1 Relationship between water quality parameter and fish production	10 / 0
	3.2 Planktons	
	3.3 Aquatic weeds and its control	
	3.4 Water quality management	
	1 7 6	
4.	Nutrition	10%
4.	Nutrition 4.1 Feed formulation	10%
4.		10%
4.	4.1 Feed formulation	10%

4.2.3 Essential minerals and amino acids

5. Fish health management

10%

- 5.1 Common fish disease causes, symptoms & species affected
- 5.2 Types of general fish diseases infections & non-infections
- 5.3 Different methods of treatment: prevention, prophylaxis and treatment: sanitation of aquaculture equipments, quarantine and restriction of movements, curative measure: dip bath, flush, pond treatment

6. Post harvest technology

6%

- 6.1 Nutritional significance of fish production
- 6.2 Quality control
- 6.3 Methods of preservation and processing
 - 6.3.1 Fish drying
 - 6.3.2 Fish smoking
 - 6.3.3 Curing
 - 6.3.4 Fish chilling & refrigeration
 - 6.3.5 Transportation

7. Capture Fisheries

10%

- 7.1 Limnological studies
- 7.2 Stock enhancement biodiversity conversation and management
- 7.3 Freshwater ecology and consequences
- 7.4 The effects of water resource development & human activities eg. Hydraulic works/illegal fishing, etc) on aquatic ecosystems & mitigation measures for the sustainable utilization of natural water bodies in Nepal

खण्ड ग भाषा- नेपाली र अङ्ग्रेजी- २५ अङ्क

1. नेपाली शुद्धाशुद्धि सम्बन्धी

4%

सरकारी कामकाजको नेपाली भाषाको लेखाइ विशेष गरी टिप्पणी र आदेश, पत्राचार, परिपत्र, निर्देशन, आदेश, विज्ञप्ति, सूचना, विज्ञापन, राजपत्र, प्रतिवेदन, वार्षिक प्रतिवेदन, ऐन-नियमावली तथा कार्यविधि, बैठकको माइन्युट तथा निर्णय, प्रशंसा पत्र, निमन्त्रणा पत्र, करारनामा, सम्झौता, कबुलियतनामा, बयान, वेवसाइट लेख लगायत सबै प्रकारका मस्यौदा वा अन्तिम लिखत तयारी गर्दा शुध्दाशुध्दि लेखाइको परीक्षण (विशेष गरी वर्णविन्यास, पदसङ्गति, नाम, सर्वनाम, विशेषण, क्रिया, अव्यय [नामयोगी, क्रियायोगी (क्रियाविशेषण), संयोजक, विस्मयादिबोधक, निपात], काल, वाच्य, पदवर्ग, अनुकरणात्मक शब्द, कारक र विभक्ति, लिङ्ग, वचन, पुरुष, उल्टो अर्थ आउने शब्द, पर्यायवाची शब्द, मौलिक शब्दःतत्सम शब्द, तद्भव शब्द, स्वदेशी आगन्तुक शब्द, विदेशी आगन्तुक शब्द, उपसर्ग लागेर निर्मित शब्द, प्रत्यय लागेर निर्मित शब्द, समास भएर निर्मित शब्द, द्वित्व भएर निर्मित शब्द, हस्व दीर्घ, श, ष, स तथा ब र व, शिरबिन्दु र चन्द्रबिन्दुको प्रयोग गर्ने क्षमताको परीक्षण)।

2. English proficiency-

4%

2.1 Comprehension: questions will be asked on the passage given. The questions will try to accommodate the following areas: Fact finding, Inferential, core theme, true/false identification, issues raised, and language based.

- 2.2 Vocabulary: Questions will be asked to assess their grasp on the English language vocabulary. The questions will be of the following nature, -Meaning of the words (literal/figurative/contextual), single word for expressions, Synonyms/antonyms, Derivatives and Homonyms/ homophones.
- 2.3 Syntactic ability: Questions will be asked to assess the syntactic ability of the candidates. The questions will be based on the following categories: Agreement, tense, parallel structures, clauses, modifier, conditionals, phrasal expressions, shifts (tense, number, person), transformations, varieties, prepositions/conjunctions, and parts of speech.

Note: this above English Language Competence Test syllabus is devised for assessing the proficiency of the English language of candidates. With the view to assess the candidates' language competence, the syllabus aims:

- To test the understanding of their language though reading comprehension,
- To map the range of their vocabulary,
- To examine their syntactic ability.

The nature and standard of questions in English Language Competence Test will be such that and educated class XII level person will be able to answer them without any specialized study.

द्वितीय पत्र (Paper II) : Technical Subject

Section A-30 Marks

1.	Aquaculture Production Systems in Nepal	30%
	1.1 Aquaculture Practices	
	1.1.1 Cage fish culture	
	1.1.2 Enclosure fish culture	
	1.1.3 Raceway fish culture	
	1.1.4 Integrated fish culture	
	1.1.5 Rice fish culture	
	1.2 Aquaculture Systems	
	1.2.1 Monoculture	
	1.2.2 Polyculture	
	1.2.3 Monosex culture	
	1.3 Aquaculture Techniques	
	1.3.1 Extensive	
	1.3.2 Semi-intensive	
	1.3.3 Intensive	
	1.3.4 Super-intensive	
	Section B– 20 Marks	
2.	Management Practices in Aquaculture	10%
	2.1 Management techniques in Nursery, Rearing and Production Pond	ls
	2.2 Application of feed, fertilizer and chemicals, liming and organic n	nanure in
	ponds	
	2.3 Importance of growth checkup	
	2.4 Water quality management	
	2.5 Record keeping	
3.	Natural water Fisheries Programs	10%
	3.1 Importance of bio-limnological study	
	3.2 Environmental factors and its effects to fish population	
	3.3 Factors affecting survival and migration of fish	
	3.4 Stock enhancement, biodiversity, conservation & management	
	Section C– 20 Marks	
4.	Fish breeding techniques	10%
	4.1 Site selection and design of a carp fish hatchery	20,0
	4.2 Brood fish management	
	4.3 Criteria for brood fish selection	
	4.4 Natural breeding	
	4.5 Semi-artificial breeding	
	4.6 Induced breeding	
	4.7 Application of hormones in induced breeding	
	4.8 Incubation techniques	
	4.9 Endocrine system related to reproduction	
	4.10 Fish Physiology	
	4.10.1 Physiological systems and osmoregulation	
	, e ,	Reproductive,
	Respiratory)	<u>.</u>
5.	Fish Health Management	10%
	5.1 Factors affecting fish health	

	5.2	Identification of fish diseases and parasites	
	5.3	Lab techniques	
	5.4	Treatment procedures/ Control mechanisms	
	Secti	on D– 30 Marks	
6.	Plan a	and policy	10%
	6.1	Recent five years fisheries development plan	
	6.2	Recent policies in fisheries development	
	6.3	Present aquaculture status in Nepal	
	6.4	Agriculture prospective plan	
	6.3 F	isheries prospective plan	
7.	Aqua	culture Extension	10%
	7.1	Extension methodology, tools & communication systems	
	7.2	Participatory approach in planning, implementation and monitoring	
	7.3	Capacity building of farms and extension services	
	7.4	Pocket package program	
	7.5	Social mobilization, gender, integration and group dynamics	
	7.6	Public, Private, NGOs, CBOs, Partnership, Contract- out program	
8.	Misco	ellaneous	10%
	8.1	Fish Marketing, Aquaculture economics and credit support system	
	8.2	जलचर संरक्षण ऐन, २०१७; तथा पशु स्वास्थ्य तथा पशु सेवा ऐन, २०५५	र नियमावली,

२०५६

प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र लिइने सामूहिक परीक्षण (Group Test) को लागि

सामूहिक छलफल (Group Discussion)

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहिन सामूहिक छलफल (Leaderless Group Discussion)को रुपमा अवलम्बन गरिने छ । दिइएको प्रश्न वा Topic का विषयमा पालैपालोसँग निर्दिष्ट समयभित्र समूहबीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति (Individual Presentation) गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनको लागि देहाय अनुसारको समिति रहनेछ ।

 आयोगका अध्यक्ष/सदस्य
 —अध्यक्ष

 मनोविज्ञ
 — सदस्य

 दक्ष/विज्ञ (१ जना)
 —सदस्य

सामूहिक छलफलमा दिइने नमुना प्रश्न वा Topic

उदाहरणको लागि — दिगो विकास, सडक दुर्घटना, रोजगारी जस्ता Topics मध्ये कुनै एक Topic मात्र दिइनेछ।