

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 Ponds
 - 2.2 Application of feed, fertilizer and chemicals, liming and organic manure 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
 - 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
 - 4.10.2 Function of different organ system (Digestive, Reproductive, Respiratory)

- 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

Section D– 30 Marks

- 6. Plan 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
6.5 Fisheries prospective plan
6.6 Province no.2, Agriculture related Plans and Policies
6.7
- 7. Aquaculture 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. Miscellaneous 10**
8.1 Fish Marketing, Aquaculture economics and credit support system
8.2 Province no.2, Agriculture related Acts, Rules and Regulations
8.3 जलचर संरक्षण ऐन, २०१७; तथा पशु स्वास्थ्य तथा पशु सेवा ऐन, २०५५ र नियमावली, २०५६

कृषि सेवाका विभिन्न समूह/उपसमूह, अधिकृत सातौं तहको पदमा प्रथम चरणको लिखित परीक्षाबाट
छनौट भएका उम्मेदवारहरूलाई मात्र सामूहिक परीक्षण (**Group Test**) लिइने छ ।

सामूहिक छलफल (Group Discussion)

यस प्रयोजनका लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेता विहिन सामूहिक
छलफल (Leaderless Group Discussion) का रूपमा अवलम्बन गरिने छ । दिइएका प्रश्न वा Topic का
विषयमा पालैपालोसँग निर्दिष्ट समय भित्र समूह बीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति
(Individual Presentation) गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनका लागि ३ जना भन्दा बढीको समिति
रहनेछ ।