### लोक सेवा आयोग

## नेपाल कृषि सेवा, फिसरिज समूह, राजपत्रांकित द्वितीय श्रेणी, खुला र आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको पाठयक्रम

पुर्णाक : १००

# द्वितीय पत्र - समूह सम्बन्धी

#### 1. Introduction

- 1.1 Importance of aquaculture in Nepal
- 1.2 Potentialities and prospects of aquaculture
- 1.3 Biology of major fresh water cultivated fishes
  - 1.3.1 Biology of cultivated fishes
  - 1.3.2 Biology of artificial propagation
- 1.4 Fish culture system in Nepal
  - 1.4.1 Extensive system
  - 1.4.2 Semi Intensive system
  - 1.4.3 Intensive system
- 1.5 Type of fish production system in Nepal
  - 1.5.1 Integrated aquaculture
  - 1.5.2 Rice-fish culture
  - 1.5.3 Cage and Enclosure fish culture
  - 1.5.4 Pond fish culture
  - 1.5.5 Aquaculture in marginal swamps/ ghoals
  - 1.5.6 Open water stocking
- 1.6 Design and construction of pond fish farm
  - 1.6.1 Integrated aquaculture
  - 1.6.2 Site selection and preparation
  - 1.6.3 Overall layout of the farm
  - 1.6.4 Leakage control and soil management
- 2. Fisheries Plan (five year and long term prospects plans)
- 3. Fish hatchery and Nursery Management Techniques
  - 3.1 Hatchery design and construction
  - 3.2 Nursery pond management
- 4. Fish breeding
  - 4.1 Artificial breeding
  - 4.2 Natural breeding
- 5. Fish health management
- 6. Fisheries project planning and management
- 7. Fisheries Extension and Training
- 8. Planning of on integrated fish farm
  - 8.1 Necessity, objectives and system of planning management
  - 8.2 Planning models
  - 8.3 Design and construction of on integrated fish farm
- 9. Environmental category of aquaculture in Nepal
  - 9.1 Action of wastes on the fish ponds
  - 9.2 Wastes as direct feed
  - 9.3 Wastes as indirect feed
- 10. Economically important indigenous fish species of Nepal (Cold water fishes) and its prospects for fisheries conservation
- 11. Fisheries law 2017 and amendment 2055
  - 11.1 Fish Nutrition
  - 11.2 Types of fish feed
  - 11.3 Feed formulations
  - 11.4 Natural and artificial feed

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- 12. Pond fertilization
  - 12.1 Types of fertilizers
  - 12.2 Use of fertilizers
- 13. Role and importance of fisheries in aquatic resources management to aid in poverty alleviation
- 14. Role of fisheries in food security
- 15. Role of women in Fisheries
- 16. Present status of fisheries development in Nepal
  - 16.1 Production
  - 16.2 Area coverage
  - 16.3 Contribution to GDP
- 17. Importance of aquatic resources for the poor
- 18. Fisheries policies
- 19. Fisheries Research
- 20. Bio-diversity
- 21. Limnological aspects
- 22. Aquaculture economics
- 23. Fish tsxonomical studies and migration biology
- 24. Fish migration
- 25. Fish mythological and physiological biology

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# **Model Questions**

- Define taxonomy. How a fish is classified to a particular order, family and genus? 15
- 2. Give an account importance of water quality parameters in fish culture?
- 3. Give an account of design and construction of an integrated fish farm? 15
- 4. Describe in detail techniques used in induced breeding of fishes and discuss their significance?
- 5. Make an assessment of private sector fish breeders in Nepal and suggest its qualitative and quantitative improvements?
- 6. How application of fertilizers boost fish production? Discuss merits and demerits of different kind of fertilizers available in market.