

9243

M.Sc. IVth SEMESTER EXAMINATION, 2019

ZOOLOGY

Paper – III

Limnology & Fisheries: Fish & Fisheries Biology

Time: Three Hours

Maximum Marks: 80

PART – A (खण्ड – अ)

[Marks: 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं। प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – B (खण्ड – ब)

[Marks: 40]

Answer five questions (250 words each),

selecting one from each unit. All questions carry equal marks.

प्रत्येक इकाई से एक-एक प्रश्न चुनते हुए, कुल पाँच प्रश्न कीजिए।

प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – C (खण्ड – स)

[Marks: 20]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – A

Q.1 Give the answer of following questions -

- (i) Write the name of any two extinct fishes.
- (ii) Differentiate between osteichthyes and chondrichthyes.
- (iii) Define osmoregulation.
- (iv) Write the name of any two air breathing fish.
- (v) What is the function of lateral line system in fish?
- (vi) Which hormones control the reproduction in fish?
- (vii) What is the function of caudal fin?
- (viii) Write the name of any two bacterial diseases in fish.
- (ix) Define fish migration.
- (x) What is homing in fish?

PART – B

UNIT – I

Q.2 Describe the bio-geographical distribution of fishes.

Q.3 Classify the Pisces with suitable example (After Berg, 1940).

UNIT – II

Q.4 Describe the accessory respiratory organs in fishes.

Q.5 Explain air bladder in fishes with suitable diagram.

UNIT – III

Q.6 Write short note on the following –

(a) Sound production in fish

(b) Sense organs in fish

Q.7 Give detail account of endocrine regulation of fish reproduction.

UNIT – IV

Q.8 Describe various types of scales in fishes.

Q.9 Explain age and growth relationship in fishes.

UNIT –V

Q.10 Write short notes on the following–

(a) Shoaling behaviour in fish

(b) Orientation in fish

Q.11 Explain migration in fish.

PART – C

Q.12 Give detail account of extinct fishes.

Q.13 Explain Weberian Ossicles and its function.

Q.14 Describe electric organs in fish with suitable diagram.

Q.15 Describe the fish diseases, diagnosis, prevention and their control methods.

Q.16 Give detail account of parental care in fish.
