

Third Semester M. Sc. - II Examination

ZOOLOGY

Paper - XII

Special Paper - Fisheries - II

Fish Physiology

P. Pages : 3

Time : Three Hours]

[Max. Marks : 80

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- Note :** (1) All questions are compulsory.
(2) All questions carry equal marks.
(3) Draw well labelled diagram wherever necessary.

1. Give an account of :—

- (a) Keratinized Epidermis.
- (b) Significance of chromatophores.
- (c) General organisation of Dermis.
- (d) Water flow across the gills and respiration.

OR

- (e) Mucogenic epidermis.
- (f) Transport of respiratory gases.

(g) Pump Musculative and skeleton.

(h) Physiological adaptations in air breathing fishes. 16

2. Describe alimentary canal in relation to food and feeding habits of fishes.

OR

Give an account on structure and function of swim bladder. 16

3. Explain the followings :—

- (i) Structure of Fish heart.
- (j) Regulation of cardiac activity.
- (k) Fish haemoglobin.
- (l) Haemodynamics.

OR

- (m) Cardiac output.
- (n) Aortic arches in Dipnoi.
- (o) Blood pressure.
- (p) Circulation time. 16

4. Give an account of various receptors in fishes.

OR

Describe Acoustico-lateralis system in Fish.

16

5. Describe the followings :—

- (q) Glomerular Kidney.
- (r) Excretion of nitrogenous wastes.
- (s) Urea cycle.
- (t) Anadromous Teleosts.

OR

- (u) Stenohaline Teleosts.
- (v) Water and ion balance.
- (w) Aglomerular Kidney.
- (x) Euryhaline teleosts. 16

