

2020

Time : 3 hours

Full Marks : 75

Candidates are required to give their answer in their own words as far as practicable.

Figures in the margin indicate full marks

Answer five questions, in which Q.No. 1 is compulsory.

1. Select the correct answer from the options given below:

1x15=15

(a) The filter feeding mechanism is not found in

- |                |                |
|----------------|----------------|
| (i) Petromyzon | (ii) Herdmania |
| (iii) Pyrosoma | (iv) Amphioxus |

(b) The stage in the life cycle of Petromyzon is spent in fresh water is:

- |                           |                        |
|---------------------------|------------------------|
| (i) Adult Stage           | (ii) Larval Stage      |
| (iii) Both larval & adult | (iv) None of the above |

(c) Echinoderm larval theory of origin at chordates was proposed by:

- |                       |                          |
|-----------------------|--------------------------|
| (i) Muller & Bateson  | (ii) Garstang & De Beer  |
| (iii) Semper & Minnot | (iv) Needham & Wilhelmis |

(d) Ampulla of Lorenzini of Scoliodon are:

- |                      |                   |
|----------------------|-------------------|
| (i) Thermoreceptor   | (ii) Rheoreceptor |
| (iii) Thermoreceptor | (iv) None         |

(e) Anabas body is covered by:

- |                     |                    |
|---------------------|--------------------|
| (i) Cycloid Scale   | (ii) Ctenoid Scale |
| (iii) Placoid Scale | (iv) Ganoid Scale  |

(f) Swim bladder in Dipnoi functions as

- |                             |                        |
|-----------------------------|------------------------|
| (i) Hydrostatic organ       | (ii) Respiratory organ |
| (iii) Sound Producing organ | (iv) All of the above  |

(g) Which of the following Lung fish is found in South America?

- |                    |                   |
|--------------------|-------------------|
| (i) Protopterus    | (ii) Lepidosiren  |
| (iii) Neoceratodus | (iv) All of these |

(h) The Venom of Cobra and Krait is:

- |                   |                    |
|-------------------|--------------------|
| (i) Neurotoxic    | (ii) Haemotoxic    |
| (iii) both I & II | (iv) None of these |

(i) Poison gland of Snake is a modification of

- |                     |
|---------------------|
| (i) Mucous gland    |
| (ii) Salivary gland |
| (iii) Sweet gland   |
| (iv) None of these  |

(j) Echidna is a connecting link between:

- |                       |
|-----------------------|
| (i) Reptile and Birds |
|-----------------------|

- (ii) Reptile and Mammal
- (iii) Bird & Mammal
- (iv) Amphibia & Reptile
- (k) Prototherians are having
  - (i) Mammary gland without nipple
  - (ii) Mammary gland with nipple
  - (iii) No mammary gland
  - (iv) All of these
- (l) Chimpanzee and Man belong to the same
  - (i) Class and order
  - (ii) Order and genus
  - (iii) Genus & Species
  - (iv) All of these
- (m) Archaeopteryx is a fossil bird found for the first time in
  - (i) India
  - (ii) Germany
  - (iii) South America
  - (iv) Italy
- (n) The Common have at Herdmania is
  - (i) Sea Squid
  - (ii) Sea Squirt
  - (iii) Sea devil
  - (iv) Sea Star

- (o) The Poisonous teeth of snake is commonly known as
  - (i) Fan
  - (ii) Fang
  - (iii) Toxin
  - (iv) Carnassial teeth
- 2. Give an account of the origin and evolution of amphibia. 15
- 3. Describe the process of feeding and digestion in Amphioxus. 15
- 4. Give an account of structure & function of gills in Rehu. 15
- 5. Describe the general organization & affinities of Dipmol. 15
- 6. Give on account of different types of skull found in reptiles and add a note on, its significance. 15
- 7. Describe the flight adaptations in Birds. 15
- 8. Describe the structure & Life cycle of Pyrosoma. 15
- 9. Write short notes on any **three** of the following: 3×5=15
  - (i) Air breathing fishes (1)
  - (ii) Branchial heart
  - (iii) Primate
  - (iv) Metatheria
  - (v) Extinct Reptiles (11)

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