2020-21

Time - 3 hours
Full Marks – 60

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Candidates are required to answer
in their own words as far as practicable.

Group-A

1. Answer all questions or fill in the blanks as required. [1x8]
   a) The larval form of Balanoglossus is known as _____ larva.
   b) _____period of palaeozoic era is known as "Age of Amphibians".
   c) Neurotoxic venom affects_____causing and cardiac and respiratory failure.
   d) Both clavicle and single interclavicle are united to form_____ bone.
   e) Posterior caudal vertebrae are usually fused to form_____.
   f) Birds _____bone is shaped like keel.
   g) The skull of Prototheria is_____.
   h) Plantigrade locomotion is found in_____ adoptation of mammals.

GROUP-B

2. Answer any eight of the following questions within two or three sentences each. [$1\frac{1}{2}$x8]
   a) Which protochordate is known as ciliary feeder?
   b) Write larval form of Herdmania.
   c) State the dipleurula concept.
   d) Write the parental care of Hippocampus.
   e) Which venom causes internal hamorrhage?
   f) What is perching mechanism?
   g) What is 'star orientation' in bird migration?

h) Write causes of Adaptive Radiation.

i) What is palaeartic region?

j) Which animal is known as 'second grade mammals'?

GROUP-C

3. Write notes on any eight of the followings within 75 words: [2x8]

a) Coelom in Balanoglossus

b) Tornaria larva

c) Wheel organ in Amphloxus

d) Differentiate Protochordates and Eurochordates.

e) Viviparity mode of parental care in fishes

f) Polson glands in snake

g) Fossil bird

h) Navigation during migration

i) Specialised characters of Prototheria

j) Zoogeographical realms

GROUP- D

4. Answer any four questions within 500 words each. [6x4]

a) Describe the structure of Ascidian tadpole larva and discuss the retrogressive metamorphosis.

b) Describe different types of fish migration.

c) Write evolutionary significance of Dipnol.

d) Give an account of origin of Tetrapoda.

e) Give an account of affinities of Sphenodon.

f) Discuss flight adaptation of birds.

g) Describe different theories pertaining to distribution of animals.

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