



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - VI

Subject: ZOOLOGY

Paper : C 13-T & P

Developmental Biology

Full Marks : 60 (Theory-40 + Practical-20)

Time : 3 Hours

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

The figures in the margin indicate full marks.

[Theory]

Answer *any two* of the following:

2×15=30

1. Define organizer. State in brief the organizer concept of Spemann and Mangold. What is Nieuwkoop center ? (2+10+3)
2. Define Regeneration. What do you mean by epimorphosis, morphallaxis and compensatory regeneration? State in brief the process of regeneration of a Limb of a Newt. [2+(2×3)+7]
3. (a) Define cleavage. State the role of yolk in cleavage.
(b) Classify different types of eggs with suitable examples. [(2+5)+8]

4. (a) Write notes on teratogenesis and embryonic stem cell.

(b) Write notes on Fate of Germ Layers. [(4+4)+7]

Answer **any one** of the following: 1×10=10

5. State in brief the developmental process of eye in vertebrate. 10

(b) Write notes on Fate of Germ Layers. [(4+4)+7]

6. (i) What do you mean by deciduous and non-deciduous placenta?

(ii) What do you mean by Amniocentesis?

(iii) What is capacitation?

(iv) What do you mean by stereoblastula?

(v) Mention the endocrine functions of placenta. 5×2

[Practical]

Answer **any one** of the following: 1×20=20

7. Identify with reasons: (a) 24 hours of chick embryo (b) 72 hours of chick embryo (c) haemochorial placenta (d) haemoendochorial placenta.

(5×4)

8. State in brief the procedure of permanent histological slides preparation technique.

(20)

9. Describe in brief the culture process of *Drosophila*. Distinguish between male and female *Drosophila*.

(18+2)
