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6 SEM TDC ZOOH (CBCS) C 13

2 0 2 4

(May)

ZOOLOGY

(Core)

Paper : C-13

(Developmental Biology)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks :

1×5=5

(a) The type of cleavage found in insects
is _____.

(b) The notochord develops from embryonic
germ layer is called _____.

(c) Haemoendothelial placenta takes place
in _____.

(2)

- (d) At the end of gastrulation, _____ movements start.
- (e) _____ is the study of aging.

2. Write short notes on (any *three*) : $3 \times 3 = 9$

- (a) Significance of blastulation
- (b) Fate map
- (c) Yolk sac and its significance
- (d) Plasmagones
- (e) Parthenogenesis

3. Distinguish between (any *two*) : $3 \times 2 = 6$

- (a) Fertilizin and Antifertilizin
- (b) Epiboly and Emboli
- (c) Acrosome reaction and Cortical reaction

4. Define gastrulation. Describe briefly the subdivisions and fates of different germ layers. $2 + 8 = 10$

Or

What is gametogenesis? Describe the process of spermatogenesis. $2 + 8 = 10$

(3)

5. What is placenta? Classify the different types of placenta and also discuss their functions.

1+6+4=11

Or

What is an organizer? Describe the structure and types of organizer. What are the properties of organizer?

1+3+4+3=11

6. What are the different types of stem cells? Describe elaborately.

12

Or

What are extra-embryonic membranes? Discuss the structure and functions of extra-embryonic membranes found in chick.

2+10=12
