

Total No. of Printed Pages—3

**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 \_\_\_\_\_.

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( Turn Over )

( 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.  $2 + 10 = 12$

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