

2022
B.A./B.Sc.
Sixth Semester
CORE – 13
ZOOLOGY
Course Code: ZOC 6.11
(Development Biology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Explain the use of a morphogen gradient to elicit pattern formation. 14
2. Write notes on the following: 7×2=14
 - (a) Cell junction
 - (b) Cytoplasmic determinants

UNIT-II

3. Describe the process of oogenesis. Add a note on types of eggs. 10+4=14
4. Explain the different patterns of cleavage with suitable diagrams. 14

UNIT-III

5. Explain the structure and functions of placenta. 14
6. Write a note on the following: 7×2=14
 - (a) Implantation of embryo in humans
 - (b) Fate of three germinal layers

UNIT-IV

7. Describe the changes and hormonal regulations of metamorphosis in amphibians and insect. 14
8. Explain the concepts and different theories of ageing. 14

UNIT-V

9. Give a detail account on the different teratogenic agents and their effects on embryonic development. 14
10. Write notes on the following: $7 \times 2 = 14$
- (a) In vitro fertilization
 - (b) Amniocentesis
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