

92274

B.Sc. 4th Semester (New Scheme) Examination,

May-2017

BIOTECHNOLOGY

Paper-BT-403

Animal Developmental Biology

Time allowed : 3 hours]

[Maximum marks : 40

Note : Question No. 1 is compulsory. Attempt four more questions by selecting at least one from each unit. All questions carry equal marks.

1. Write the short notes on the following : 2×4=8
- Embryology
 - Epiboly
 - Genome
 - Placenta found which class of animals.

Unit-I

2. What is Embryology ? Describe the scope and historical view of Developmental biology ? 8
3. Write the short note on any *two* :
- Spermatogenesis
 - Vitellogenesis
 - Fertilization. 4×2=8

Unit-II

4. Define gastrulation ? Describe the various morphogenic movements occurring during the gastrulation. 8

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5. Write the short note on any *two* : 4×2=8
- (a) Cleavage
 - (b) Primary Germ Layers
 - (c) Blastulation

Unit-III

6. Write the short note on : 4×2=8
- (a) Embryonic induction
 - (b) Epigenetic landscape
7. How the cellular differentiation controls at transcriptional and post-translational level during the embryonic developmental explain in details. 8

Unit-IV

8. What is placenta ? Describe various types and functions of placenta in mammals ? 8
9. Write the short note on any *two* : 4×2=8
- (a) Neurulation
 - (b) Development of eye (vertebrate)
 - (c) Behaviour development.