

B.Sc. ZOOLOGY SESSIONAL EXAMINATION, 2023
PAPER: DEVELOPMENTAL BIOLOGY
PAPER CODE: ZOO-HC-6016

Marks: 30

Time: 1 hour

Q1. Define the following terms:

1x5=5

- a) Morphogen
- b) Competence
- c) Spermiogenesis
- d) Regeneration
- e) In-Vitro Fertilization

Q2. Answer the following (any five):

2x5=10

- a.) State two functions of the Placenta.
- b.) Mention the steps involved in acrosome reaction in sea-urchins.
- c.) How is polyspermy prevented in mammals?
- d.) What happens during implantation of the embryo?
- e.) Give a detailed diagram of extra embryonic membranes in birds.
- f.) What is a teratogen? Give one example.
- g.) What is a 'Regenerative Blastema' formed during Salamander limb regeneration?

Q3. Write short notes on (any three):

5x3=15

- a.) Early Development in Frog
- b.) Steps involved in Fertilization in mammals
- c.) Embryonic Induction
- d.) Amphibian Metamorphosis
- e.) Teratogenesis
