

বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - VI

Subject: PHYSIOLOGY

Paper : C 13-T

Reproductive Physiology, Embryology and Chronobiology

Full Marks: 40 Time: 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group-A

Answer any four of the following questions:

 $5 \times 4 = 20$

- 1. What is menopause? Discuss the hormonal changes during menstrual cycle. 1+4
- 2. Define placenta. How foetal circulation changes after birth?

1+4

3. Write the process of penetration of sperm into ovum.

5

4. What is estrous cycle? Briefly discuss the previtellogenic phase of oocyte maturation.

3+2

5. Why zygotic division is called cleavage instead of classical cell division? What is gastrulation? 3+2

6. State the role of Suprachiasmatic Nuclei (SCN) in the regulation of biological clock.

5

Group-B

Answer any two of the following questions:

 $10 \times 2 = 20$

- 1. Describe the mechanism of parturition in man. Mention the various factors regulating parturition. 5+5
- 2. Define pharmacogenetics. Write a brief note on in vitro fertilization. What is endometriosis? 2+5+3
- 3. What are morula and blastula? State the importance of zeitgeber on circadian rhythm. Give a brief idea on jet lag. 4+3+3
- 4. What is implantation? Describe the development of heart in human foetus with diagramme. 2+(5+3)