

CSM : 18

ZOOLOGY

PAPER - II

Time Allowed : 3 hours

Full Marks : 100

Marks for each question is indicated against it.

Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.

PART - A

1. Illustrate the structure of nuclear envelope with its pore. How are molecules transported across the nuclear envelope? (10+10=20)
2. What is non-disjunction? Discuss the causes and effects of Down's syndrome, Turner's syndrome and Klinefelter's syndrome. (5+15=20)
3. Describe the structure and importance of nucleosome, polytene chromosome, and lampbrush chromosome. (20)
4. Give an account on the enzymatic reactions in glycolysis. What is the significance of glycolysis? (16+4=20)

PART - B

5. Describe the structure of haemoglobin. How are gases transported in the blood? (10+10=20)
6. What are the roles of pancreatic hormones? Explain the mechanism of action of insulin. (4+16=20)
7. What is gametogenesis? Describe the entire process of oogenesis. (4+16=20)
8. Explain the types, structure and general functions of antibodies. (20)

* * * * *