

CSM : 16

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. Explain the structure of the cell membrane. Discuss in detail about passive and active transport of molecules across the membrane. (6+14=20)
2. Give an account of chromosomal sex determination. (20)
3. What is an operon? Give a detailed description of the lac operon. What is its significance? (2+14+4=20)
4. What is enzyme? Write in detail about mechanism of enzyme action with special reference to temperature and pH. Give a note on feed-back regulations of enzyme. (4+10+6=20)

PART - B

5. Give an account of urine formation in mammalian kidney. (20)
6. What are hormones? Explain the mechanism of action of steroid hormones. (2+18=20)
7. What is gastrulation? Describe the formation of the three germ layers in frog embryo giving suitable diagram. (3+12+5=20)
8. What is aging? What are the symptoms of aging? Describe the modern approaches to delay it. (2+10+8=20)

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