

Discuss different stages of development of microgametogenesis with necessary diagrams. (2+2=4)

Group C

Give long answers to the following questions. (2·8=16)

5. Define genetic material. Describe the process involved in the semi-conservative mode of replication of DNA with necessary neat and clean diagrams. (1+4+3=8)

Or

Who is the father of Genetics? What does it mean by dihybrid cross? Explain the Law of Independent Assortment. (1+2+5=8)

6. What is photosynthesis? Describe the light dependent steps of photosynthesis. How are they linked to the dark reaction? Discuss. (1+6+1=8)

Part – II (Zoology)

Group A

Circle the correct answer from the given alternatives (6x1 = 6)

- Which of the following is the most abundant leukocyte?
a. acidophil b. neutrophil c. monocyte d. lymphocyte
- Blastopore is present during
a. cleavage b. morula c. blastula d. gastrula
- Ceruminous glands are present in
a. skin b. eye-lids
c. external auditory meatus d. Vagina of female
- Reasoning power is maximum in human due to the development of
a. cerebral cortex b. midbrain c. cerebellum d. medulla
- All the mentioned drugs are Hallucinogens except for
a. bhang b. heroin c. LSD d. charas
- The principal microorganism for yogurt is
a. *Streptococcus thermophilus* b. *Streptococcus lactis*
c. *Lactobacillus acidophilus* d. *Saccharomyces*

Group B

Give short answers to the following questions (4·4 = 16)

- Bone is a hard skeletal connective tissue. Describe the structure of compact bone in detail with necessary diagram. (2+2)
- Explain the process of spermatogenesis in frog with required diagram. (2+2)

Or

Write down the advantages of fish farming. Also mention two examples, one each of endemic and exotic fishes. (3+1)

- Explain the changes that occur in ovaries and uterus of females during the menstrual cycle. (2+2)
- Write a short note on some respiratory disorders.

Group C

Give long answers to the following questions.

(2·8 = 16)

5. Describe the anatomy of the human heart with diagram.

(5+3)

Or

Explain the physiology of respiration in human.

(2+2+2+2)

6. What are communicable diseases? Describe the causative agent, symptoms, effects and control measures of any one communicable disease you have studied. (1+1+2+2+2)