

BIOLOGY

Time: 2 ½ Hours

9th Class Karachi Board

Max. Marks: 68

SECTION "B" (SHORT-ANSWER QUESTIONS)

ZOOLOGY

(MARKS 21)

NOTE: Answer 7 questions from this section.

2. Define the following branches of Biology:
(i) Palaeontology (ii) Embryology (c) Genetics
3. Write down any three distinctive characteristics of Phylum Echinodermata.
4. Define Portal System. Name the two kinds of Portal System of frog.
5. Write three functions of human skeleton.
6. Write any three differences light Microscope and Electron Microscope.
7. State Lamarck's Theory of Evolution.
8. Define the following and give one example of each:
(i) Herbivores (b) Insectivores (c) Carnivores
9. Write three functions of blood.
10. Define Cold Blooded and Warm Blooded animals and give two examples of each.
11. Draw a neat and labelled diagram of human tooth.

(SHORT-ANSWER QUESTIONS)

BOTANY

(MARKS 21)

NOTE: Answer 7 questions from this section.

12. Draw a neat and labeled diagram of chlamydomonas.
13. Define Photosynthesis and write its chemical equation.
14. Describe any three types of bacteria according to their shape.
15. Write three differences Angiosperms & Gymnosperms.
16. Write three points of economic importance of Fungi.
17. Define Phototropism and Geotropism.
18. Write one functions of each of the following:
(i) Root (ii) Stem (iii) Leaf
19. Define Pollination and write the names of its two kinds.
20. State Mendel's Law of Dominance and the Law of Segregation.
21. Define the following:
(i) Transpiration (ii) Osmosis (iii) Diffusion

SECTION 'C' (DETAILED-ANSWER QUESTIONS)

ZOOLOGY

(MARKS 14)

NOTE: Attempt 2 questions from this section.

22. Draw a neat and labeled diagram of the Digestive system of frog.
23. Define Mitosis. Write the names of the four phases of Mitosis. Describe the significance of Mitosis.
24. What are Viruses? Write general characteristics of viruses. Write the names of four viral diseases.

(DETAILED-ANSWER QUESTIONS)

BOTANY

(MARKS 14)

NOTE: Attempt 2 questions from this section.

25. Draw a neat and labeled diagram of the T.S. of the root of Brassica.
26. Describe an experiment to prove that oxygen is evolved during photosynthesis. Draw its labeled diagram also.
27. Define Aerobic respiration. Write its chemical equation. Define anaerobic respiration. Write its chemical in bacteria and in animals.