

**Instruction:** This paper consisting of Short-Answer Questions (Section "B") and Detailed-Answer Questions (Section "C") will be given after 30 minutes and its total duration will be 2 ½ hours only.

**SECTION "B" (SHORT-ANSWER QUESTIONS)****ZOOLOGY****(MARKS 21)**

**NOTE: Answer any 7 questions from this section. Each questions carries 3 marks.**

2. Draw a neat and labelled diagram of Ventral view of Heart of Frog.
3. Write three salient features of the cell theory.
- OR** Draw a neat and labelled diagram of Rod Shaped Bacterium.
4. Define the following:  
(i) Hypothesis (ii) Biotechnology (iii) Theory
5. Write names of any three books of Abdul Malik Asmai.
- OR** Name three main arteries of the arterial system of Frog.
6. Define Taxonomy. What is Binomial nomenclature?
7. Write three characteristics of Phylum Annelida.
8. Write three difference between arteries and veins.
- OR** Name three endocrine glands also write one hormone secreted by each gland.
9. Describe three types of respiration in Frog.
- OR** Define Metamorphosis. Write two types of Metamorphosis with examples.
10. Write three differences between a Prokaryotic cell and Eukaryotic cell.
11. Name three components of Cigarette smoke and their harmful effects on human health.

**(SHORT-ANSWER QUESTIONS)****BOTANY****(MARKS 21)**

**NOTE: Answer any 7 questions from this section. Each questions carries 3 marks.**

12. Write three general characters of Cyanobacteria (Blue green Algae).
13. Write three points of importance of Fungi.
14. Write 3 differences between Dicot. plants & Monocot. plants
15. What are Antibiotics? Write the name of any two types of antibiotics.
- OR** Write two functions of Root and Leaf.
16. Write three differences between Combustion and

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57

Photosynthesis.

**OR** Define the following:

(i) Producers (ii) Consumers (iii) Decomposer

17. Draw a neat and labeled diagram of Flower of Brassica.

**OR** Define the following:

(i) Osmosis (ii) Transpiration (iii) Stomata

18. Write names of three main groups of Bryophytes.

**OR** Draw a neat and labelled diagram of an Adiantum Plant.

19. Define the following:

(i) Parasites (ii) Saprophytes (iii) Symbionts

20. Describe three factors affecting the rate of transpiration.

**OR** Describe five kingdom classification of whittaker.

21. Define Tropic movement and explain any one of tropic movement.

**OR** Describe two conducting tissues of plants.**SECTION 'C' (DETAILED-ANSWER QUESTIONS)****ZOOLOGY****(MARKS 14)**

**NOTE: Attempt Two questions from this section. Each question carries 7 marks.**

22. What is Tissue? Describe four types of animal tissues with the help of labelled diagrams.
- OR** Draw a neat and labelled diagram of human respiratory system.
23. What are the components of Blood? Describe each one of them in detail with diagram.
- OR** Draw a neat and labelled diagram of the eye of Frog.
24. Describe Darwin's theory of evolution and explain its four important points in detail.
- OR** Draw a neat & labelled diagram of human alimentary canal.

**(DETAILED-ANSWER QUESTIONS)****BOTANY****(MARKS 14)**

**NOTE: Attempt Two questions from this section. Each question carries 7 marks.**

25. Describe the different parts of Brassica flower and write their functions. Draw diagram of Stamen and Carpel.
26. What is meant by dispersal of seeds and fruits? Describe any two methods of dispersal.
- OR** Define Fauna and Flora? Describe the Flora of Pakistan.
27. Describe an experiment to prove that Carbon dioxide is needed for Photosynthesis. Draw its labeled diagram also.