

Section A - Multiple Choice Questions

- Q1. Which of the following is NOT a part of the human respiratory system? (1 marks)
- Q2. Which of the following is a renewable source of energy? (1 marks)
- Q3. Which scientist proposed the theory of evolution by natural selection? (1 marks)
- Q4. Which of the following is a characteristic of a metal? (1 marks)
- Q5. What are the different types of chemical reactions? Give examples of each. (1 marks)

Section B - Fill in the Blanks

- Q6. The force of attraction between two objects due to their masses is called _____. (1 marks)
- Q7. The process of formation of sperms is called _____. (1 marks)
- Q8. The chemical formula for water is _____. (1 marks)
- Q9. Acids turn blue litmus paper _____. (1 marks)
- Q10. The resistance of a conductor is directly proportional to its _____ and inversely proportional to its _____. (1 marks)

Section C - Short Answer Questions

- Q11. Differentiate between mitosis and meiosis. (3 marks)
- Q12. Explain the process of respiration. (3 marks)
- Q13. Explain the difference between a physical change and a chemical change with examples. (3 marks)
- Q14. State Ohm's law and write its mathematical representation. (3 marks)
- Q15. Explain the difference between a physical change and a chemical change. (3 marks)

Section D - Long Answer Questions

- Q16. Describe the structure and function of the human heart. (5 marks)

Q17. Describe the process of evolution by natural selection. (5 marks)

Q18. Describe the different types of chemical reactions with examples. (5 marks)

Q19. Explain the process of digestion in humans. (5 marks)

Q20. Discuss the Mendelian laws of inheritance. (5 marks)

Section E - Matching Questions

Q21. Match the following terms with their definitions: A. Photosynthesis B. Respiration C. Transpiration D. Osmosis
1. The process by which plants release water vapor. 2. The process by which plants make their food.
3. The process by which plants absorb water. 4. The process of energy release in cells. (4 marks)

Section F - Case Study

Q22. A farmer observes that his crops are not growing well. The leaves are yellowing, and the plants are stunted. He suspects a nutrient deficiency. Discuss the possible causes of this problem and suggest ways the farmer can improve the health of his crops. (5 marks)