

Time: 2 ½ Hours
Maximum Marks: 80

General Instructions:

- The question paper consists of 34 questions and is divided into four sections, A, B, C, and D.
 - All questions are compulsory.
 - Section A comprises of question numbers 1 to 15. These are multiple choice questions which carry one mark each. You are to select the one most appropriate answer out of the four provided options.
 - Section B comprises of question numbers 16 to 22. These are short answer questions that carry two marks each.
 - Section C comprises of question numbers 23 to 31. These are short answer questions carrying four marks each.
 - Section D comprises of question numbers 32 to 34. These are short answer questions carrying five marks each.
-

Section A

Q#1: How many chambers does a human heart have?

- a. One
- b. Two
- c. Four
- d. Six

Q#2: Blood gets its red color due to: a.

Red blood cells

- b. Hemoglobin
- c. White blood cells
- d. Platelets

Q#3: The reproductive part of a flower is:

- a. Branch
- b. Root
- c. Flower
- d. Leaf

Q#4: The cell which is formed from the fusion of gametes is called:

- a. Zygote
- b. Embryo
- c. Seed
- d. Fruit

Q#5: The time taken by a pendulum to complete one oscillation is called:

- a. Time frame
- b. Oscillation time
- c. Completion time
- d. Time period

Q#6: The device which measures the distance moved by the vehicle is called:

- a. Odometer
- b. Speedometer
- c. Travel meter
- d. Distance meter

Q#7: When an electric current flows through a wire, the wire is heated. This is called:

- a. Boiling effect of current
- b. Heating effect of current
- c. The hot temperature effect of current
- d. Magnetic effect of current

Q#8: The electric bell works with the help of : a.

Heating effect of current

- b. Magnetic effect of current
- c. Both (a) and (b)
- d. None of the above

Q#9: The change in the direction of light when it hits a mirror is called: a.

Refraction of light

- b. Tyndall Effect
- c. Reflection of light
- d. None of the above

Q#10: A stainless steel spoon can act as a :

- a. Concave mirror
- b. Convex mirror
- c. Both (a) and (b)
- d. None of the above

Q#11: Which of the following DO NOT cause the depletion of the water table? a.

Deforestation

- b. Overpopulation
- c. Industrial Activities
- d. Rainwater Harvesting

Q#12: Which of the following is NOT a good water management practice? a.

Drip irrigation

- b. Rainwater Harvesting

- c. Leaving the leaking taps and pipes unattended.
- d. Judicious use of water while bathing.

Q#13: Which of the following is FALSE?

- a. Forests help in preventing soil erosion
- b. Forests cannot grow and regenerate
- c. Forests can influence climate
- d. Forests can improve the quality of air.

Q#14: Which of the following products are NOT forest products?

- a. Gum
- b. Polythene bags
- c. Honey
- d. Catechu

Q#15: Which of the following are good Wastewater management practices a. Leaving drains open

- b. Throwing chemicals like paints into the drains
- c. Building more Wastewater treatment plants
- d. Throwing cooking oils and fats down into the drains.

Section B

Q#16: What are the functions of (i) white blood cells (ii) Platelets **Q#17:**

What is Pollination?

Q#18: What is the heating effect of electric current?

Q#19: What is the magnetic effect of electric current?

Q#20: What are (i) concave mirrors and (ii) convex mirrors?

Q#21: Give two causes for water table depletion.

Q#22: What is a Forest? Describe it.

Section C

Q#23: Draw and label a diagram of the pistil and stamen of a plant.

Q#24: Draw a diagram to represent the reproduction of yeast by budding.

Q#25: What is a simple pendulum? Define its time period.

Q#26: What are the units of (i) time, (ii) distance, and (iii) speed?

Q#27: Write the electric components corresponding to the following symbols.



Q#28: Draw a diagram to show the splitting of light by a prism. What are the colors obtained from the splitting of white light?

Q#29: What are the differences between concave and convex lenses?

Q#30: List any four uses of forests.

Q#31: How is water treated at a wastewater treatment plant?

Section D

Q#32: Draw and label a diagram of the human excretory system.

Q#33: What are the forms in which water can be found on the Earth? Give examples for each.

Q#34: List 3 housekeeping practices which can help reduce the load on wastewater treatment plants.