

Class X – Science
Model Question Paper
(SET- 10)

Time: 3 Hours

Maximum Marks: 80

QUESTION PAPER STRUCTURE

Section Type	Questions Marks		
A	MCQs	20	20
B	Very Short Answer	5	10
C	Short Answer	6	18
D	Long Answer	5	25
E	Case Based	1	7
Total		37	80

SECTION A – MCQs (1×20 = 20)

1. A solution with pH value 7 is:
 - A. Acidic
 - B. Basic
 - C. Neutral
 - D. Salty
2. Which mirror is used in shaving mirrors?
 - A. Plane mirror
 - B. Convex mirror
 - C. Concave mirror
 - D. Cylindrical mirror
3. SI unit of electric resistance is:
 - A. Volt
 - B. Ampere

- C. Ohm
 - D. Watt
4. Which hormone maintains normal growth and development?
- A. Insulin
 - B. Thyroxine
 - C. Adrenaline
 - D. Testosterone
5. Which metal is extracted from its ore by electrolysis?
- A. Iron
 - B. Zinc
 - C. Aluminium
 - D. Copper
6. The chemical formula of plaster of Paris is:
- A. CaSO_4
 - B. $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
 - C. $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$
 - D. CaCO_3
7. Image formed by concave lens is always:
- A. Real and inverted
 - B. Virtual and erect
 - C. Real and erect
 - D. At infinity
8. Which is a poor conductor of electricity?
- A. Copper
 - B. Aluminium
 - C. Iron
 - D. Rubber
9. The female reproductive part of a flower is:
- A. Stamen
 - B. Carpel
 - C. Anther
 - D. Filament
10. Which gas is essential for aerobic respiration?
- A. Nitrogen
 - B. Carbon dioxide
 - C. Oxygen
 - D. Hydrogen

11. Commercial unit of electrical energy is:
- A. Joule
 - B. Watt
 - C. Ampere
 - D. Kilowatt-hour
12. Which metal is used for making electric cables?
- A. Iron
 - B. Copper
 - C. Lead
 - D. Zinc
13. Which process converts glucose into ethanol?
- A. Respiration
 - B. Fermentation
 - C. Oxidation
 - D. Digestion
14. Power of a convex lens is always:
- A. Negative
 - B. Positive
 - C. Zero
 - D. Infinite
15. Which acid is present in grapes?
- A. Citric acid
 - B. Tartaric acid
 - C. Lactic acid
 - D. Acetic acid
16. Which mirror provides a wide field of view?
- A. Plane mirror
 - B. Concave mirror
 - C. Convex mirror
 - D. Cylindrical mirror
17. The unit of heredity that controls traits is:
- A. Cell
 - B. Chromosome
 - C. Gene
 - D. Nucleus
18. Which organ filters blood in human body?
- A. Heart

- B. Lungs
- C. Kidney
- D. Liver

19. Which metal does not react with dilute hydrochloric acid?

- A. Iron
- B. Zinc
- C. Magnesium
- D. Copper

20. Which device is used to measure electric current?

- A. Voltmeter
- B. Ammeter
- C. Rheostat
- D. Fuse

SECTION B – Very Short Answer (2×5 = 10)

- 21. Define principal focus of a concave mirror.
- 22. What is biodegradable waste?
- 23. Name the hormone that controls blood sugar level.
- 24. Write one use of baking soda.
- 25. Define electric current.

SECTION C – Short Answer (3×6 = 18)

- 26. Explain the importance of pH in soil treatment.
- 27. Draw ray diagram for image formation by convex lens when object is beyond 2F.
- 28. Define electric resistance and state its SI unit.
- 29. Write two functions of human pancreas.
- 30. What is an alloy? Give one example.
- 31. Define food chain and write one example.

SECTION D – Long Answer (5×5 = 25)

32. Explain the process of nutrition in human beings with diagram.
 33. Derive the relation between electric power, current and potential difference.
 34. Describe sexual reproduction in flowering plants.
 35. Write properties and uses of metals.
 36. Explain refraction of light through a glass slab with neat diagram.
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SECTION E – Case Based Question (1×7 = 7)

37. Case Study – Human Eye:

A student is unable to see distant objects clearly but can see nearby objects without difficulty.

- a) Name the defect of vision.
 - b) Which type of lens is used to correct it?
 - c) Why does this defect occur?
 - d) Write one preventive measure.
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