

Class X – Science
Model Question Paper
(SET -7)

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 3 is:
 - A. Strong base
 - B. Weak base
 - C. Acidic
 - D. Neutral
2. Which mirror is used in torch lights?
 - A. Plane mirror
 - B. Convex mirror
 - C. Concave mirror
 - D. Cylindrical mirror
3. The SI unit of electric charge is:
 - A. Coulomb
 - B. Ampere

- C. Volt
 - D. Watt
4. Which hormone is secreted by adrenal glands?
- A. Insulin
 - B. Thyroxine
 - C. Adrenaline
 - D. Estrogen
5. Which metal is used for coating iron to prevent rusting?
- A. Copper
 - B. Zinc
 - C. Aluminium
 - D. Tin
6. The chemical formula of bleaching powder is:
- A. CaOCl_2
 - B. CaCl_2
 - C. CaCO_3
 - D. CaSO_4
7. A concave lens always forms an image that is:
- A. Real and inverted
 - B. Virtual and erect
 - C. Real and erect
 - D. At infinity
8. Which metal is the best conductor of heat?
- A. Iron
 - B. Aluminium
 - C. Copper
 - D. Silver
9. The male reproductive part of flower is:
- A. Carpel
 - B. Ovary
 - C. Stamen
 - D. Stigma
10. Which gas is required for respiration?
- A. Nitrogen
 - B. Oxygen
 - C. Carbon dioxide
 - D. Hydrogen

11. Electrical energy consumed is measured in:
- A. Ampere
 - B. Volt
 - C. Kilowatt-hour
 - D. Joule
12. Which metal is used in making aircraft body?
- A. Iron
 - B. Copper
 - C. Aluminium
 - D. Lead
13. Which process leads to formation of curd?
- A. Respiration
 - B. Fermentation
 - C. Digestion
 - D. Oxidation
14. Power of a concave lens is always:
- A. Positive
 - B. Negative
 - C. Zero
 - D. Infinite
15. Which acid is present in orange?
- A. Acetic acid
 - B. Citric acid
 - C. Lactic acid
 - D. Oxalic acid
16. Which mirror gives erect image always?
- A. Plane mirror
 - B. Convex mirror
 - C. Concave mirror
 - D. Both A and B
17. The unit of heredity is:
- A. Chromosome
 - B. Gene
 - C. Cell
 - D. Nucleus
18. Removal of excess water from body is done by:
- A. Lungs

- B. Kidneys
- C. Heart
- D. Liver

19. Which metal is least reactive?

- A. Sodium
- B. Magnesium
- C. Copper
- D. Potassium

20. Which device converts electrical energy into mechanical energy?

- A. Generator
- B. Electric motor
- C. Transformer
- D. Battery

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

- 21. Define principal axis of a spherical mirror.
- 22. What is non-biodegradable waste?
- 23. Name the hormone responsible for stress response.
- 24. Write one use of bleaching powder.
- 25. Define electric energy.

SECTION C – Short Answer (3×6 = 18)

- 26. Explain the importance of pH in our daily life.
- 27. Draw ray diagram for image formed by convex lens when object is at F.
- 28. State Ohm's law and define resistance.
- 29. Write two differences between aerobic and anaerobic respiration.
- 30. What is mineral? Give one example.
- 31. Define food chain and its length.

SECTION D – Long Answer (5×5 = 25)

32. Describe the structure and functions of human kidney.
 33. Explain electric power and derive its formula.
 34. Explain reproduction in humans.
 35. Write properties and uses of non-metals.
 36. Explain scattering of light and state its two applications.
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SECTION E – Case Based Question (1×7 = 7)

37. Case Study – Environment:

A forest area was cleared to build a factory. After some years, floods and soil erosion were observed in the area.

- a) Name the phenomenon responsible for this situation.
- b) State one effect of deforestation.
- c) How does deforestation affect water cycle?
- d) Write one measure to prevent this.