

Class X: Science
Model Question Paper (MQP)
(SET-1)

Time: 3 Hours

Maximum Marks: 80

QUESTION PAPER STRUCTURE

Section	Question Type	No. of Qs	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 marks)

1. Which of the following is a strong acid?
 - A. Acetic acid
 - B. Carbonic acid
 - C. Hydrochloric acid
 - D. Citric acid
2. The image formed by a concave mirror for an object placed beyond C is:
 - A. Virtual and erect
 - B. Real and inverted
 - C. Virtual and inverted
 - D. Real and erect
3. The unit of electric current is:
 - A. Volt

- B. Ohm
 - C. Ampere
 - D. Watt
4. Which hormone regulates blood sugar level?
- A. Thyroxine
 - B. Insulin
 - C. Adrenaline
 - D. Estrogen
5. The functional unit of kidney is:
- A. Neuron
 - B. Nephron
 - C. Alveoli
 - D. Heart
6. The chemical formula of washing soda is:
- A. NaHCO_3
 - B. $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$
 - C. NaCl
 - D. CaCO_3
7. Which mirror is used in headlights of vehicles?
- A. Plane mirror
 - B. Convex mirror
 - C. Concave mirror
 - D. Cylindrical mirror
8. A good conductor of electricity is:
- A. Plastic
 - B. Rubber
 - C. Copper
 - D. Glass
9. The process of transfer of pollen grains from anther to stigma is called:
- A. Fertilization
 - B. Pollination
 - C. Germination
 - D. Reproduction
10. Which gas is released during respiration?
- A. Oxygen
 - B. Nitrogen

- C. Carbon dioxide
 - D. Hydrogen
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Section B – Very Short Answer (2×5 = 10 marks)

- 21. Define focal length of a spherical mirror.
 - 22. What is meant by biodegradable waste?
 - 23. Name the alloy used for making heating elements.
 - 24. Write one function of bile juice.
 - 25. What is electric power?
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Section C – Short Answer (3×6 = 18 marks)

- 26. Explain the process of neutralization with an example.
 - 27. Draw a ray diagram for image formation by a convex lens when object is placed at 2F.
 - 28. What is resistance? On what factors does it depend?
 - 29. Write two differences between aerobic and anaerobic respiration.
 - 30. Explain reactivity series of metals.
 - 31. What is artificial ecosystem? Give one example.
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Section D – Long Answer (5×5 = 25 marks)

- 32. Describe the process of digestion of food in human beings.
 - 33. Derive Ohm's Law with suitable experiment and graph.
 - 34. Explain the process of reproduction in flowering plants.
 - 35. Write the properties and uses of acids.
 - 36. Explain the process of reflection of light by spherical mirrors with diagrams.
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Section E – Case Based Question (1×7 = 7 marks)

37. Case Study (Light – Reflection):

A student performed an experiment using a concave mirror. When the object was placed between F and C, the image formed was real, inverted and larger in size.

- a) Name the type of mirror used.
 - b) Where is the image formed?
 - c) Is the image real or virtual?
 - d) State two uses of this mirror.
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