

Class 10 – Science
Model Question Paper
(SET- 9)

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 that does not change the colour of litmus paper is:
 - A. Acidic
 - B. Basic
 - C. Neutral
 - D. Saline
2. The image formed by a convex mirror is always:
 - A. Real and inverted
 - B. Virtual and erect
 - C. Real and erect
 - D. Virtual and inverted

3. The SI unit of electric power is:
 - A. Joule
 - B. Watt
 - C. Volt
 - D. Ampere

4. Which hormone controls growth and development in humans?
 - A. Insulin
 - B. Thyroxine
 - C. Growth hormone
 - D. Adrenaline

5. Which metal is extracted from its ore by reduction with carbon?
 - A. Aluminium
 - B. Sodium
 - C. Iron
 - D. Potassium

6. Baking soda is chemically known as:
 - A. Sodium carbonate
 - B. Sodium bicarbonate
 - C. Calcium carbonate
 - D. Sodium chloride

7. A concave mirror forms real image when the object is placed:
 - A. Between pole and focus
 - B. At focus
 - C. Beyond focus
 - D. At infinity only

8. Which material is used as an electrical insulator?
 - A. Copper
 - B. Aluminium
 - C. Plastic
 - D. Iron

9. Which part of flower receives pollen grains?
 - A. Ovary
 - B. Stigma
 - C. Anther
 - D. Filament

10. Which gas is taken in during respiration?
 - A. Oxygen

- B. Carbon dioxide
 - C. Nitrogen
 - D. Hydrogen
11. Electrical energy consumed by an appliance is measured in:
- A. Watt
 - B. Joule
 - C. Kilowatt-hour
 - D. Ampere
12. Which metal is used in making food cans?
- A. Iron
 - B. Copper
 - C. Tin
 - D. Zinc
13. The process by which plants lose excess water is called:
- A. Respiration
 - B. Transpiration
 - C. Photosynthesis
 - D. Excretion
14. Power of a concave lens is:
- A. Positive
 - B. Negative
 - C. Zero
 - D. Infinite
15. Which acid is present in curd?
- A. Citric acid
 - B. Acetic acid
 - C. Lactic acid
 - D. Oxalic acid
16. Which mirror is used by shopkeepers to detect theft?
- A. Plane
 - B. Concave
 - C. Convex
 - D. Cylindrical
17. The hereditary material present in nucleus is:
- A. Protein
 - B. RNA

- C. DNA
 - D. Lipid
18. Which organ removes urea from blood?
- A. Liver
 - B. Kidney
 - C. Lungs
 - D. Heart
19. Which metal reacts least with dilute acids?
- A. Zinc
 - B. Iron
 - C. Copper
 - D. Magnesium
20. Which device is used to convert mechanical energy into electrical energy?
- A. Motor
 - B. Generator
 - C. Battery
 - D. Transformer
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SECTION B – Very Short Answer (2×5 = 10)

- 21. Define focal length of a concave mirror.
 - 22. What is non-biodegradable waste? Give one example.
 - 23. Name the hormone secreted by pancreas.
 - 24. Write one use of baking soda.
 - 25. Define electric current.
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SECTION C – Short Answer (3×6 = 18)

- 26. Explain the role of bases in daily life.
- 27. Draw a ray diagram for image formation by concave mirror when object is beyond C.
- 28. Define electric power. Write its SI unit.
- 29. Write two functions of red blood cells.
- 30. What is corrosion? State one preventive method.

31. Define pyramid of energy.

SECTION D – Long Answer (5×5 = 25)

32. Explain the process of photosynthesis with a labelled diagram.

33. State and explain Ohm's law. Draw V-I graph.

34. Describe the structure and functions of human brain.

35. Write properties and uses of non-metals.

36. Explain the working of human eye with neat diagram.

SECTION E – Case Based Question (1×7 = 7)

37. Case Study – Electricity:

A student connected different resistors in an electric circuit and observed that current changed with change in resistance.

a) Name the physical quantity that opposes flow of current.

b) State its SI unit.

c) How does length of conductor affect it?

d) Write one application of this concept in daily life.
