



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
उत्तर कुंजी / Answer Key (2025-26)

कक्षा /Class: VIII विषय/Subject: Science माह/Month: July 2025 अंक/Marks: 40
दिया गया पाठ्यक्रम/Portion covered: Chapter: 1, Exploring the Investigative World of science

I) Multiple Choice Questions

(1X10=10)

1. b) Observing and changing one factor at a time
2. c) Watching Moon phases and sun movements
3. c) Becoming investigators and exploring through experiments
4. d) Vaccines and nutritious food
5. c) Force of gravity
6. d) Magnetic effect
7. a) It provides real data to interpret
8. d) Oxygen
9. c) The positions of the Earth, Moon, and Sun
10. a) It has liquid water and the right atmosphere

II) Assertion-Reason Type Questions

(1X4=4)

11. (c) Assertion (A) is true but the Reason (R) is false.
12. (a) Both assertion (A) and reason (R) are true and reason is the correct explanation of the assertion.
13. (c) Assertion (A) is true but the Reason (R) is false.
14. (c) Assertion (A) is true but the Reason (R) is false.

III Case Based Questions

(1X 4= 4)

- 15 a) Microorganisms are tiny living organisms that cannot be seen with the naked eye.
b) By eating nutritious food, doing exercises, taking proper medicines and vaccines helps us to fight against diseases.
c) They help in digestion, making food items, producing medicines
d) Vaccines train our body to fight infections by making it ready to respond to certain harmful microbes

IV Short Answer Type Questions

(2X5=10)

16. .The heating effect of electric current is used in electric heaters and toasters.
The magnetic effect is used to run electric motors in appliances like mixers and refrigerators.
17. A puri puffs up due to the water in the dough turning into steam when heated. The steam gets trapped inside, making the puri swell like a balloon.
18. Observation helps us understand the real world accurately, while creative thinking helps us form new ideas and explore possibilities. Both are necessary for meaningful scientific investigation.
19. A force is a push or pulls that change the motion of an object. For example, kicking a football applies force and makes it move.

20. Science helps us fight diseases, generate electricity, use machines, and understand natural phenomena like winds and motion etc.

V Long Answer Questions

(3X4=12)

21. The “Investigative World of Science” means exploring science by asking questions, doing experiments, making observations, and finding answers. It is about learning how to discover new facts, not just memorizing them.

22. 1. Light reflects from smooth surfaces like mirrors. 2. It refracts or bends when passing through lenses. 3. Rough surfaces also scatter light. 4. These properties help in vision and optical devices.

23. Element: Pure substance made of one kind of atom (e.g., Iron). Compound: Two or more elements chemically combined (e.g., Water). Mixture: Two or more substances physically combined (e.g., Air).

24. Earth is at the perfect distance from the Sun, allowing water to exist in liquid form. Its atmosphere contains oxygen needed for breathing and protects us from harmful ultraviolet rays. However, human activities like pollution and deforestation are increasing Earth's temperature, leading to climate changes with dangerous consequences.
