



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

कक्षा /Class: VII विषय /Subject: Science माह/ Month: _____ अंक/Marks: 40
दिया गया पाठ्यक्रम/Portion covered: Ch -11 – Light : Shadows and Reflection Answer key

MCQ Answers

1. (b) Sun
2. (b) Non-luminous
3. (c) Sun
4. (d) LED lamp
5. (b) Light travels in a straight line
6. (b) Passes almost completely
7. (c) Partially
8. (b) Opaque
9. (a) Opposite side to light source
10. (b) Bounces off a shiny surface

Assertion Reason Answers

- 11.(d) Assertion false, Reason true
- 12.(c) Assertion true, Reason false
- 13.(c) Assertion true, Reason false
- 14.(c) Assertion true, Reason false

Case Based Answers

15. (b) Light travels in a straight line
16. (b) Light travels in a straight line
17. (c) Image is faint
18. (b) Opaque object

Two Mark Answer

19. Luminous objects emit their own light; examples: Sun, fire.
20. A shadow forms when there is a source of light, an opaque object, and a screen or surface behind the object.
21. A shadow is formed when light is blocked; reflection occurs when light bounces off a surface.

22. In a pinhole camera, light travels in a straight line and crosses the pinhole, forming an inverted image.

23. Transparent objects let most of the light pass through and do not form clear shadows.

Three Mark Answers

24. Shadows shift position and size as the angle of the Sun changes during the day; long shadows in the morning and evening, shorter at noon.

25. Lateral inversion is when a mirror image is reversed left to right; for example, writing appears reversed.

26. The outline of a shadow corresponds to the shape of the object blocking light, helping us identify the object's shape.

27. Reflection is essential in devices like mirrors, periscopes, and in everyday activities such as driving and using flashlights.