

1. (a) – (iii), (b) – (iv), (c) – (vi), (d) – (vii), (e) – (i), (f) – (v), (g) – (ii), (h) – (vii)

2. (i) luminous (ii) screen (iii) shadow (iv) upside down
(v) erect (vi) lateral inversion (vii) Transparent (viii) big, small
(ix) straight line (x) three dimensional

3. (i) True (ii) True (iii) False (iv) True
(v) False (vi) False (vii) True (viii) False
(ix) True (x) True (xi) True.

4. (i) (a) A shadow is formed when an opaque object comes in the way of light.
(ii) (b) A shadow is formed when an opaque object comes in the way of light.
(iii) (c) Opaque objects do not allow the light to pass through them while translucent object allow only a part of light to pass through them.
(iv) (a) Glass slab is transparent and iron sheet is opaque.
(v) (a) When a ray of light fall on a smooth and polished surface, whole of light is return back in the same medium. It is called reflection of light.
(vi) (c) Right side of the object appears as left side in the mage formed by a plane mirror.
(vii) (a) Z and E will show lateral inversion.
(viii) (b) Sun can be imaged by using a pinhole camera.
(ix) (a) Firefly (Jugnu) emit short bursts of light due to photochemical reaction, which take place in its body temperature.
(x) (c) Firefly (Jugnu) is a natural body.