

Multiple Choice Questions' Bank:

1. Visible light's wavelength range _____.

- (a) 0.39 – 0.77 mm (b) 0.39 – 0.77 μm
(c) 0.39 – 0.77 nm (d) 0.39 – 0.77 cm

2. Planck's constant

- (a) 6.62×10^{-34} J.sec (b) 6.62×10^{-34} J.min (c) 6.62×10^{-34} Cal.sec (d) 6.62×10^{-34} Cal.min

3. Sum of these is unity

- (a) Reflectivity (b) Reflectivity + Refractivity
(c) Reflectivity + Refractivity + Transmittivity (d) Any

4. Metals can _____ the light beams.

- (a) Reflect (b) Refract (c) Transmit (d) Any

5. Metals are _____.

- (a) Transparent (b) Opaque (c) Translucent (d) None

6. Metals can transmit these ____.

- (a) Radio ways (b) Visible light (c) Microwaves (d) x-rays

7. Reflectivity of metals

- (a) 0.05 (b) 0.50 (c) 0.95 (d) None

8. Refractive index of materials is approximately equal to square root of

- (a) electrical permittivity (b) magnetic permeability
(c) electrical permittivity x magnetic permeability (d) None

9. Snell's law relates _____.

- (a) Light reflection (b) Light refraction (c) Light transmission (d) Light Absorption

10. Bouguer's law relates _____.

- (a) Light reflection (b) Light refraction (c) Light transmission (d) Light Absorption

11. Sky looks blue because the sun light is subjected to _____.

- (a) Rayleigh scattering (b) Compton scattering (c) Both (d) None

12. Luminescence is because of

- (a) Photons emitted while excited electrons drops down
(b) Knocking out of electrons by photons
(c) Photons stimulated by photons
(d) All

13. Fluorescence occurs within _____.

- (a) 10^{-5} s. (b) 10^{-5} ms. (c) 10^{-5} μs. (d) 10^{-5} ns.

14. Electro-luminescence occurs in _____.

- (a) Electrical conductors (b) Electrical insulators (c) p-n junctions (d) all

15. Pyrometer works based on

- (a) Laser technology (b) Photo-conduction (c) Thermal emission (c) Tyndall effect

16. Solar cell works based on

- (a) Laser technology (b) Photo-conduction (c) Thermal emission (c) Tyndall effect

17. Optical fiber operates on the principle of

- (a) Total internal reflectance (b) Tyndall effect (c) Photo-electric effect (d) Laser technology

Answers:

1. b
2. a
3. c
4. a
5. b
6. d
7. c
8. a
9. b
10. d
11. a

- 12. a
- 13. b
- 14. c
- 15. c
- 16. b
- 17. a