

11. Stopping potential for a metal surface in case of photoelectric emission depends on

- A. the threshold frequency for the metal surface B. the intensity of incident light
- C. the frequency of incident light and work function of the metal surface D. all of the above

Answer: Option c

12. Select an alternative from of uncertainly principle from the following

- A. $\Delta x \Delta p = h/m\lambda(1-\cos \theta)$ B. $\Delta E \cdot \Delta t = h$
- C. $mc^2 = hv$ D. any of above

Answer: Option B

13. The existence of Ether wind was experimentally rejected by

- A. equal to its rest mass B. double of its rest mass
- C. infinite D. zero

Answer: Option c

14. If a material object moves with speed of light its mass becomes

- A. equal to its rest mass B. double of its rest mass
- C. infinite D. zero

Answer: Option c

15. As the temperature of black body is raised the wavelength corresponding to maximum intensity

- A. shifts towards longer wavelength B. shifts towards shorter wavelength
- C. remain the same D. shifts towards longer as well as shorter wavelengths

Answer: Option B

16. Rest mass of a photon is

- A. infinite B. zero
C. very small D. 1.67×10^{-27} kg

Answer: Option B

17. The name of the photon for quantum of light was proposed by

- A. Ampere B. Plank
C. Thomson D. Einstein

Answer: Option D

18. Einsteins photoelectric equation is given by

- A. $\frac{1}{2} mv_{\max}^2 = hf + ?$ B. $\frac{1}{2} mv_{\max}^2 - hf = ?$
C. $\frac{1}{2} mv_{\max}^2 = hf - ?$ D. all of above are correct

Answer: Option c

19. In Compton scattering the change in wave length is max if

- A. angle of scattering is 90° B. angle of scattering is 60°
C. angle of scattering is 180° D. angle of scattering is zero

Answer: Option c

20. Davison Germer experiment indicates

- A. interference B. polarization
C. election diffraction D. refraction

Answer: Option c

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