

11. A point source of light placed in a homogeneous medium gives rise to
- [A.](#) a cylindrical wave front
 - [B.](#) an elliptical wave front
 - [C.](#) a spherical wave front
 - [D.](#) a plane wave front

Answer: Option c

12. The locus of all points in a medium having the same phase of vibration is called
- [A.](#) crest
 - [B.](#) trough
 - [C.](#) wavelength
 - [D.](#) wave front

Answer: Option D

13. Which one of the following is nearly monochromatic light ?
- [A.](#) light form fluorescent tube
 - [B.](#) light form neon lamp
 - [C.](#) light form sodium lamp
 - [D.](#) light form simple lamp

Answer: Option c

14. Two sources of light are coherent if they emit rays of
- [A.](#) same wavelength
 - [B.](#) same amplitude of vibration
 - [C.](#) same wave length with constant phase difference
 - [D.](#) same amplitude and wavelength

Answer: Option C

15. When crest of one wave falls over the trough of the other wave this phenomenon is known as
- [A.](#) polarization
 - [B.](#) constructive interference
 - [C.](#) destructive interference
 - [D.](#) diffraction

Answer: Option c

16. In Young's double slit experiment the fringe spacing is equal to

- A. d/D B. $2d/D$
C. $\lambda D/d$ D. $\lambda d/D$

Answer: Option C

17. In Young's double slit experiment, if white light is used

- A. alternate dark and bright fringes will be seen B. coloured fringes will be seen
C. no interference fringes will be seen D. impossible to predict

Answer: Option B

18. The velocity of light was determined accurately by

- A. Newton B. Michelson
C. Huygen D. Young

Answer: Option B

19. The condition for constructive interference of two coherent beams is that the path difference should be

- A. integral multiple of $\lambda/2$ B. integral multiple of λ
C. odd integral multiple of $\lambda/2$ D. even integral multiple of λ

Answer: Option B
