

3. A non-conducting medium whose properties are same in all directions is called \_\_\_\_\_ dielectric

- (a) Anisotropic      (b) Isotropic  
(c) Polar              (d) Maxwell's.

4. Scattering depends on the nature of the incident \_\_\_\_\_

- (a) radiation          (b) frequency  
(c) velocity            (d) phase.

5. E.B. is \_\_\_\_\_ under Lorentz transformation

- (a) variant            (b) covariant  
(c) invariant          (d) zero.

Fill up the blanks :

6. Force between two parallel wires is \_\_\_\_\_, if the current flow is in the same direction.

7. Poynting vector at any arbitrary point in the field varies \_\_\_\_\_ as the square of the distance from the point source of radiation.

8. The angle of reflection is \_\_\_\_\_ to the angle of incidence.

9. The index of refraction \_\_\_\_\_ as the frequency increases.

10. Tensor equations are \_\_\_\_\_ under co-ordinate transformations.

Match the following :

11. Current density      (a) molar refractivity

12. Radiation resistance (b) invariant  $\mu^5$

13. Good conductors    (c) 73.1 ohms  $\mu^2$

14.  $A_m$                     (d) irrotational

15. Tensor equations    (e) opaque to light.  $\mu^2$

Give short answers :

16. Define Coercivity.

17. What are Yogi arrays?

18. Define Cerenkov-radiation.

19. What are resonance scattering?

20. Mention the differential form of Maxwell's equations.