REFLECTION OF LIGHT ON PLANE SURFACES

9. The ratio of Sin i to Sin r is constant. This constant is called ( )
   A) Speed B) Momentum C) Energy D) Refractive index

10. $n_{21} = \frac{\text{Sin } i}{\text{Sin } r}$ is called ( )
    A) Joule's law B) Snell's law C) Newton's law D) Fermat's law

11. Which of the following statement is true regarding laws of refraction? ( )
    A) $\angle i = \angle r$ B) Sin i = Sin r
    C) $\frac{\text{Sin } i}{\text{Sin } r}$ = Constant D) Sin i x Sin r = constant

5. Light will undergo total internal reflection only when it is ( )
   i) Travelling from denser medium to rarer medium
   ii) Travelling from rarer medium to denser medium
   iii) Travelling from Medium in which it travels slowest to medium where it travels fastest.
   A) i and ii correct B) i and iii correct C) ii and iii correct D) All are correct.

6. The value of angle of refraction when the incident angle is equal to critical angle ( )
   A) 45^0 B) 30^0 C) 90^0 D) 100^0

7. The refractive index of water - air media is 4/3 and glass - air media is 3/2 then ( )
   A) The critical angle for water - air media is more than glass - air media
   B) The critical angle for water – air media is less than glass – air media
   C) The critical angle for glass – air media is greater than water – air media
   D) The critical angle for glass – air media same as water – air media.

8. Total Internal Reflection is most likely occur when ( )
   A) angle of incidence is equal to angle of refraction
   B) angle of incidence is equal to critical angle
   C) angle of incidence is less than critical angle
   D) angle of incidence is greater than critical angle.

6. The image formed by mirage is ( )
   A) Real B) Virtual C) Neither real nor virtual D) Both A and B

7. The formation of mirage is based on the principle of ( )
   A) Dispersion B) Refraction C) total Internal Reflection D) Both B and C

8. You see water (or) a ship in the desert hen it isn't really there is an example of ( )
   A) Mirage B) Rainbow C) Dispersion D) None

3. Explain the applications of Optical fibres in our daily life.

4. The sparkling of diamond is due to the principle of ( )
   A) Reflection B) Dispersion
   C) Refraction D) Total Internal Reflection

5. The prisms which are used in binoculars are ( )
   A) Acute angled prisms B) Obtuse angled prisms
   C) Right angled prisms D) Equilateral prisms

6. The cables used in telecommunications are ( )
   A) Copper B) Silver C) Fibre optic D) Aluminium

7. Which of the following phenomenon takes place inside an optical fibre ( )
   A) Reflection B) Dispersion C) Total Internal Reflection D) Scattering