

- ① Explain Short Notes
- ① Acceptance angle
 - ② Numerical Aperture
 - ③ Acceptance cone.

① Acceptance Angle :- It is defined as the maximum angle of incidence, at the end face of an optical fibre for which the ray can be propagated in the optical fibre. This angle is also called acceptance cone or half angle.

② Numerical Aperture :-

① It represents the light-gathering capacity of an optical fibre.

② Light-gathering capacity is proportional to the acceptance angle, θ_0 .

So numerical aperture can be the sine of acceptance angle of the fibre i.e., $\sin \theta_0$.