1. Differentiate between concavo-convex lens and convexo-concave lens.

Ans

Concavo-convex lens	Convexo-concave lens
• It is thinner at the edges of the lens.	• It is thicker at the edges of the lens.
• In this lens convex face has a greater degree of curvature than the concave face.	• In this lens the concave face has a greater degree of curvature than the convex face.

2. What is the reason behind the sparkling of a diamond?

Ans Diamond has the highest refractive index of 2.42 w.r.t air which makes their critical angle least (around 24°) due to which the light ray entering diamond goes through multiple internal reflection causing shining of diamond.

3. In which case the converging will be more, Bi - convex or Plano-convex? Justify.

Ans In a bi - convex lens the rays of light suffer two refraction and bend more towards the principal axis and they focus very near to the optical centre. But in a plano-convex lens the rays suffer only one refraction and the ~~refraction~~ ~~angle is~~ converging angle is more so it meet the principal axis far away from the optical centre.

⇒ Bi - convex lens forms a shorter focal length but the plano-convex lens forms a longer focal length.

So, converging is more in bi-convex lens as compared to the plano-convex lens.