

Q1: What is a spherical mirror?

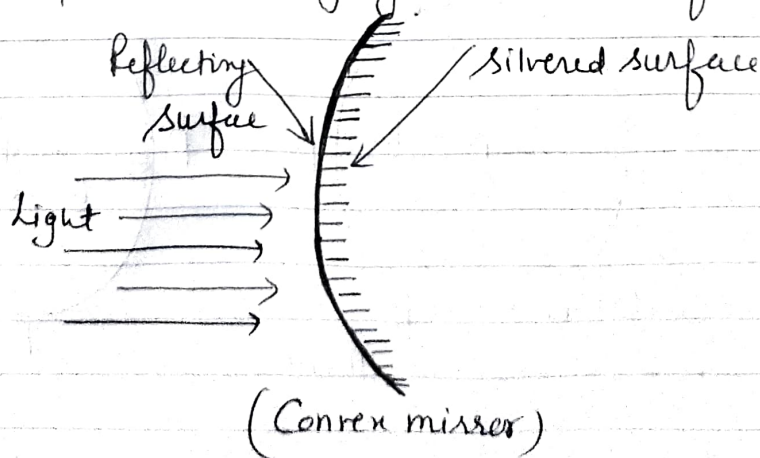
Ans: It is reflecting surface which is a part of a sphere.

Q2: Name two types of spherical mirror.

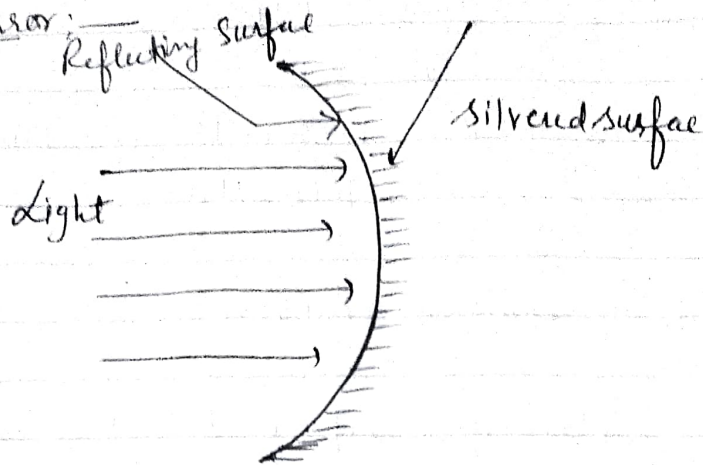
Ans:
Ci) Concave Mirror
Cii) Convex Mirror

Q3: What are Convex and Concave mirrors. Draw their diagrams.

Ans: (i) Convex mirror: It is made by silvering the inner surface of the piece of hollow sphere so that reflection takes place from the bulging (outer) surface.



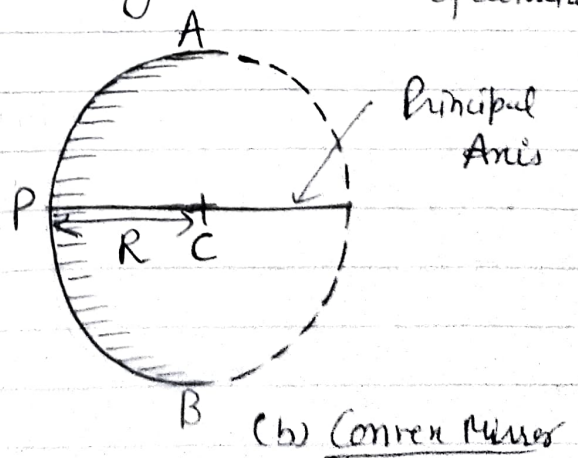
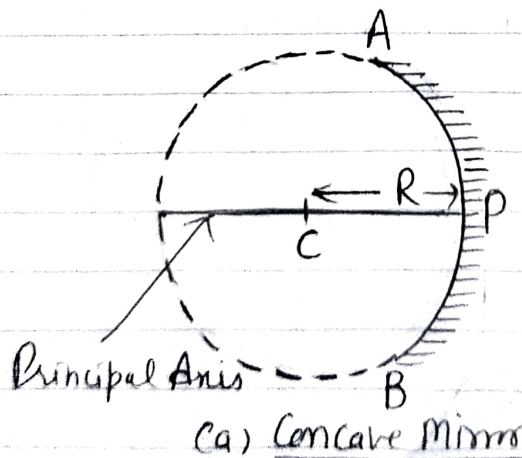
Cii) Concave Mirror: It is made by silvering the bulging (outer) surface of the piece of a hollow sphere so that reflection takes place from the hollow surface.



- Q4:- Define the following terms related to spherical mirror.
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|-------------------------|---------------------|------------------|
| (a) Centre of Curvature | (d) Aperture | (g) Focal length |
| (b) Radius of Curvature | (e) Principal Axis | |
| (c) Pole | (f) Principal focus | |

Ans:- (a) Centre of Curvature:- It is the centre of the sphere of which mirror is a part. It is denoted by a symbol C .

(b) Radius of Curvature (R):- It is the radius of sphere of which the spherical mirror is a part. It is denoted by R . $PC = R$ (radius of curvature)



(c) Pole:- It is the geometrical centre of the spherical mirror surface. It is represented by letter P .