

An object is placed in front of a concave mirror - 40 cm away from it. If its focal length is 80 cm, locate the position of image and find the nature of image.

Ans:-

$$f = 80 \text{ cm},$$

$$u = -40 \text{ cm}.$$

$$v = ?$$

$$v = \frac{fu}{u-f}$$

$$= \frac{80 \times -40}{-40 - 80}$$

$$= \frac{-3200}{-120}$$

$$= 2.6.$$

\therefore Image is formed back of concave mirror.