**Aarambh Classes**

**Class X**

**Physics worksheet**

**Reflection of light**

**2 MARKS QUESTIONS :**

1. If the image formed by a spherical mirror for all positions of the object placed in front of it is always erect and diminished ,what type of mirror is it? Draw alabelled diagram to support your answer .
2. An image is placed at adistance of 30 cm in front of a convex mirror of focal length 15cm .Write four characteristics of the image formed by the mirror .
3. The magnification produced by a spherical mirror is –3.List four informations you obtain from this statement about the mirror/image .
4. Th elinear magnification produced by a spherical mirror is +3.Analyse this value and state the (i)type of mirror and (ii) position of the object with respect to the pole of the mirror .Draw a ray diagram to show the formation of image in this case.
5. The image formed by aconcave mirror is observed to be virtual ,erect and larger than the object.Where should the position of the object be relative to the mirror ?Draw ray diagram to justify your answer .
6. The linear magnification produced by a spherical mirror is –1 .Analysinng this value state the 9i)type of mirror and 9ii)position of the object with respect to the pole of the mirror .Draw a ray diagram to justify your answer .

**5 MARKS QUESTION :**

1. Suppose you have 3 concave mirrors A,B and C of focal lengths 10cm,15 cm and 20 cm.For each concave mirror you perform the experiment of image formation for three values of object distances of 10cm ,20cm and 30 cm.By giving reason,answer the following :

(a)for the three object distances ,identify the mirror /mirrors which will form a magnification of –1.

(b) Out of the three mirrors ,identify the mirror which would be preffered to be used for shaving purpose/makeup .

© For the mirror B draw ray diagram for image formation for object distances 10 cm and 20 cm .