

# PUBLIC EXAMINATION

1. The ratio of the focal length of spherical mirror to its radius of curvature is ( )  
 A) 0.5      B) 1      C) 2      D) 3
2. The object distance  $u$ , image distance  $v$  and focal length  $f$  for a spherical mirror are related as ( )  
 A)  $\frac{1}{v} - \frac{1}{u} = \frac{1}{f}$       B)  $\frac{1}{u} + \frac{1}{v} = \frac{1}{f}$   
 C)  $v - u = f$       D)  $u + v = f$
3. The image formed by a concave mirror  
 A) is always real      ( )  
 B) is always virtual  
 C) can be both real and virtual  
 D) none of these
4. The image formed by a convex mirror is always  
 A) real and magnified  
 B) real and diminished  
 C) virtual and diminished  
 D) virtual and magnified
5. The mirror which has a wide field of view must be ( )  
 A) concave      B) convex  
 C) plane      D) none of these
6. A real and inverted image of the same size is formed by a concave mirror when the object is placed ( )  
 A) between the mirror and its focus  
 B) between the focus and the centre of curvature  
 C) at the centre of curvature  
 D) beyond the centre of curvature
7. The driver's mirror used in automobiles is ( )  
 A) convex      B) concave  
 C) plane      D) none of these
8. A concave mirror always forms real and inverted image except when the object is placed ( )  
 A) at infinity  
 B) between F and C  
 C) at F  
 D) between F and pole of the mirror
9. An object is placed at a distance of 30 cm from a concave mirror of focal length 15 cm. The image will be ( )  
 A) real and same size  
 B) real and magnified  
 C) real and diminished  
 D) virtual and magnified
10. Starting from a long distance, a flame is moved towards a convex mirror. Then the image  
 A) Decreases in size and moves towards pole  
 B) Increase in size and moves towards pole  
 C) Decrease in size and moves away from pole  
 D) Increase in size and moves away from pole
11. The law of reflection of light are valid for ( )  
 A) plane mirrors only  
 B) concave mirrors only  
 C) convex mirrors only  
 D) all reflecting surfaces
12. The ratio of the size of the image to the size of object is called ( )  
 A) magnification      B) power  
 C) focal length      D) radius of curvature
13. In the case of ..... mirror the magnification is always positive. ( )  
 A) concave      B) plane  
 C) convex      D) all the above