

## 11<sup>th</sup> Unit Test-2024 (SUB: Science-I) (20M)

### Q.1.A Multiple Choice Question. (3M)

1. A concave mirror is a ..... mirror  
1) Plane            2) Converging            3) Diverging            4) Constant
2. A ..... image cannot be obtained on a screen.  
1) Virtual            2) Real            3) Inverted            4) Magnified.
3. Sound does not travel through .....  
1) Solid            2) liquid            3) gas            4) Vacuum

### B. Fill in the blanks:

(2M)

(Concave, Convex, hertz, longitudinal)

1. The S.I Unit of frequency is the .....
2. Sound waves are ..... in nature.
3. The focal length of a ..... mirror is positive
4. Mirror used by a dental surgeon is .....

### Q.2 Answer the following:

(5M)

1. State the type of mirror used in floodlights
2. What is sound?
3. What is the audible range of sound for human beings?
4. What type of mirror used in torches and headlights?
5. State the range of frequency of infrasound?

### Q.3 Attempt (any two).

(4M)

1. Define:  
1. Pole            (b) Centre of curvature
2. Why can we not hear echo produced in our classroom?
3. State the uses of Sonography.
4. Draw a neat and labelled diagram of image formed "When the object is at infinity".

### Q.4 Attempt (any two).

(6M)

1. Concave mirror are used in solar device.(Give reason)
2. Explain the difference between a plane mirror, concave mirror and convex mirror with respect to the type of size of the images produced.
3. The speed of sound in air at 0°C is 332 m/s. If it increases at the rate of 0.6 m/s per degree, what will be the temperature when the velocity has increased to 344 m/s?
4. State the laws of reflection of light.