

# Home Assignment

Subject: Physics (Major)

B.Sc 2<sup>nd</sup> Semester (CBCS)

Paper: PHY-HC-2026

(Waves & Optics)

## **Read the Instructions carefully before submission**

1. The Assignment contains 20 numbers of Multiple Choice Questions (MCQs), each having one correct answer. Out of 20 you have to attempt only 16 numbers of questions.
2. Please take your time and read each question carefully, because once you submit it you can't modify the answers.
3. Students are directed to submit the assignment by any one of the following methods

(i) Copy the link and past in the browser to get the assignment

<https://forms.gle/RQLAXhWq7TyckBos8>

(ii) Send the scan copy of the assignment to the email id: [majorcbcs2sem@gmail.com](mailto:majorcbcs2sem@gmail.com) mentioning their Name, Roll Code and Roll No., Registration No.

**4. Last date of submission is 08/08/2020**

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**Total Marks = 16**

1. The number of cycles or vibrations undergone during one unit of time by a body in periodic motion is called
  - a. Frequency
  - b. Wavelength
  - c. None of the above
2. The distance between two successive crests or troughs of a wave, measured in the direction of the wave is called
  - a. Wavelength
  - b. Frequency
  - c. None of the above
3. Time taken to complete a complete cycle is termed as
  - a. Period
  - b. Duration
  - c. None of the above

4. Direction of waves is parallel to the direction of vibration in
  - a. Longitudinal waves
  - b. Transverse waves
  - c. None of the above
5. Sound is a good example of
  - a. Longitudinal waves
  - b. Transverse waves
  - c. None of the above
6. The motion is repeated at regular intervals of time is termed as
  - a. Periodic motion
  - b. Vibration
  - c. None of the above
7. A pendulum bob is a good example of
  - a. Periodic motion
  - b. Vibration
  - c. Oscillation
8. If we increase the wavelength the frequency would
  - a. decrease
  - b. increase
  - c. remain same
9. Waves transfer energy from one point to the other.
  - a. It's true
  - b. Its false
  - c. its neutral
10. Light wave is a good example of
  - a. transverse waves
  - b. longitudinal waves
  - c. both transverse and longitudinal waves
11. Direction of waves is perpendicular to the direction of vibration in
  - a. transverse waves
  - b. longitudinal waves
  - c. both transverse and longitudinal waves
12. Ups and downs in the transverse waves are termed as
  - a. crests and troughs
  - b. compression and rarefaction
  - c. crests and rarefactions
13. A source of any wave is
  - a. Oscillation
  - b. Energy
  - c. Force

14. Height of crest or depth of trough from center is called
- amplitude
  - wave distance
  - wavelength
15. Types of waves is/are
- transverse and longitudinal
  - transverse and latitudinal
  - transverse only
16. When we decrease the wavelength the frequency
- increases
  - decreases
  - remains same
  - may increase or decrease
17. Two points on same line at same distance and speed are said to be in
- phase
  - displacement
  - pair
18. One oscillation is also known as
- One vibration
  - One ventilation
  - None of the above
19. A wave is made up of
- periodic motions
  - air molecules
  - None of the above
20. When two or more waves cross at a point, the displacement at that point is equal to the sum of the displacements of the individual waves, this phenomenon is called
- Superposition of wave
  - Beats
  - None of above