

Home Assignment

Subject: Physics (General)

B.Sc 4th Semester (Both Regular and Arrear)

Paper: 401

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 7 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/2oC7PfY2CbQmfoPQA>
 - (ii) Send the scan copy of the assignment to the email id: bsc4thsemg@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 = 7

- 1) Optics is the branch of Physics that studies the behavior and properties of____
 - a) Light
 - b) Matter
 - c) Gas
- 2) When light travelling in a certain medium falls on the surface of another medium, a part of it turns back in the same medium. This phenomenon is called
 - a) Reflection
 - b) Refraction
 - c) Transmission
- 3) A water tank appears shallower when it is viewed from top due to
 - a) Refraction
 - b) Reflection
 - c) Total internal reflection
- 4) An optical instrument designed to make distant objects appear nearer is called
 - a) Telescope
 - b) Microscope
 - c) Electroscope
- 5) An optical instrument used for viewing very small objects is called

- a) Microscope
 - b) Telescope
 - c) Electroscope
- 6) The spectrum observed when white light is passed through a prism is best explained by
- a) Dispersion
 - b) Diffraction
 - c) Distortion
- 7) Unit of measurement of the optical power of a lens is
- a) Dioptre
 - b) Watt
 - c) It has no unit
- 8) Visible light's wavelength range is
- a) 380 to 700 nanometers
 - b) 100nm to 200 nanometers
 - c) 800 to 1000 nanometers
- 9) Planck's constant is
- a) 6.62×10^{-34} J.sec
 - b) 6.62×10^{-34} Cal.min
 - c) 6.62×10^{-34} Cal. Sec
- 10) Total internal reflection occurs when
- a) Light passes from a denser to a lighter medium.
 - b) Light comes into air from vacuum.
 - c) Light goes to vacuum from air.
- 11) Lens in which light rays are brought to focal point is
- a) Converging lens
 - b) Diverging lens
 - c) None of above
- 12) Angle between incident ray and normal is called angle of
- a) incident
 - b) reflection
 - c) transmission
- 13) Propagation of light quanta may be described by
- a) Photons
 - b) Protons
 - c) Electrons
- 14) Refraction is
- a) Change of direction of propagation of light at the interface of two media as light passes from one medium to another
 - b) The change of direction of propagation of light.
 - c) None of the above

- 15) What causes the twinkling of stars?
- a) Atmospheric refraction of starlight
 - b) Scattering of starlight
 - c) Dispersion of starlight
- 16) The wave nature of light is explained by
- a) Interference
 - b) Photo Electric effect
 - c) Compton effect
- 17) Which of the following is true about light?
- a) It is an electromagnetic wave
 - b) It does not propagate in vacuum
 - c) It needs medium to propagate
- 18) Polarisation of light proves
- a) Transverse wave nature of light
 - b) Quantum nature of light
 - c) Corpuscular nature of light
- 19) Refractive index of air is
- a) 1
 - b) 1.5
 - c) 3
- 20) Refractive index of glass is
- a) 1.5
 - b) 1
 - c) 3
