

UG 2ND SEMESTER EXAMINATION 2021

DEPARTMENT OF PHYSICS

KANDI RAJ COLLEGE

UNIVERSITY OF KALYANI

SEMESTER: 2ND

STREAM: Programme

PAPER CODE: PHY-G-CC-P-02

Paper: Waves and Optics

Full marks: 10

Answer any five questions:

5X2=10

1. How you can determine the frequency of an electric tuning fork by Melde's experiment?
2. What is Lissajous Figures? Explain. Write the name of the apparatus to observe Lissajous Figures.
3. How you can determine refractive index of the Material of a prism using sodium source in laboratory? Explain it using working formula.
4. How you can determine the dispersive power of the material of a prism using mercury source? Explain it using working formula.
5. How can you determine wavelength of sodium light using Fresnel Biprism? Explain it using working formula.
6. How the wavelength of sodium light can be calculated by using Newton's Rings? Write the working formula with explanation of each term.
7. How can you determine the dispersive power and resolving power of a plane diffraction grating?