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DUMKAL COLLEGE

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Aided, Affiliated to the: University of Kalyani Included under section 2(f) & 12 (B) of UGC Act.)

Date: 01.07.2025

NOTICE

(Department of Physics)

For submission of assignments:

All the student of Semester-VI (Honours & Programme Course) are hereby instructed to submit their assignments according to the following topics. The hard copy of assignments must be submitted to the Department of Physics on 05.07.2025 at 12:00 pm. No assignments will be accepted after that day,

Assignment for Semester-VI CC Course [PHY-H-CC-T-13]: [ELECTROMAGNETIC THEORY]:

Define vector and scalar potentials in electromagnetism, explain how these potentials are related to the electric and magnetic fields. Discuss the advantages of using potentials in solving Maxwell's equations, particularly in simplifying boundary value problems and understanding radiation from moving charges.

Assignment for Semester-VI CC Course PHY-H-CC-T-14 [Solid State Physics]

What are the Miller indices and how are they used to describe crystal planes.


Explain the difference between acoustical and optical phonons.

Describe the Bragg's law of X-ray diffraction and its application in determining the crystal structure of materials. Explain the concept of band theory of solids and its implications for electrical conductivity.

Describe the Meissner effect and its significance in understanding the phenomenon of superconductivity.

Assignment for Semester-VI DSE Course [PHY-H-DSE-T-03]: NANO MATERIALS AND APPLICATIONS]:

Discuss the different types of nanostructures, including 1D, 2D, and 3D nanostructures. Provide detailed descriptions and examples of nanodots, thin films, nanowires, and nanorods. Explain how these structures differ in terms of their dimensionality and potential applications.


Principal
Dumkal College, Basantapur
Murshidabad, W.B.


Head of the Department
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