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School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering

Mid Term Examination - Nov 2023

Duration : 90 Minutes

Max Marks : 50

Sem V - E2UC513T - Nano Science and Nano Technology

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Summarize the interdisciplinary scope of nanoscience and nano technology. K2 (2)
- 2) Why different size nanomaterials of same element shows different color with suitable examples? K1 (3)
- 3) Identify the process of super saturation. K2 (4)
- 4) Explain the quantum size and quantum confinement effect. K2 (6)
- 5) Utilize the template method for synthesis of carbon nanotube show it diagrammatically. K3 (6)
- 6) Apply the the major steps involves in micro and nanolithography? K3 (9)
- 7) Compare between bulk and nano gold with suitable examples. K4 (8)
- 8) Predict the nanospintronics and nonophotonics in details and show shcamatically. K4 (12)

OR

- Predict the working of high energy ball milling approach with a neat sketch. K4 (12)