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School of Computing Science and Engineering

BCA with Industry Oriented Specialization in Computer Networks and Cyber Security

Mid Term Examination - Nov 2023

Duration : 90 Minutes

Max Marks : 50

Sem III - E1UD301B - Wireless Sensor NetworksGeneral 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) Explain how sensor nodes communicate with each other in a WSN K2 (2)
- 2) List the characteristics based on which the transceiver is selected for a wireless sensor node. K1 (3)
- 3) Explain the node architecture in detail. K2 (4)
- 4) Interpret the concept of protocol layers and their hierarchy in WSNs K2 (6)
- 5) Present the transceiver tasks and characteristics in a sensor node in a wireless sensor network K3 (6)
- 6) Illustrate the sensor network architecture and describe the components in detail K3 (9)
- 7) Distinguish sensor networks from the mobile ad hoc network K4 (8)
- 8) Derive the expression for energy consumption in a sensor node with an appropriate diagram K4 (12)

OR

- Categorize the sensor network scenario with diagrams and also explain how mobility can appear in WSN? K4 (12)