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Question Paper Code: 99426

B.E./B.Tech. DEGREE EXAMINATION, MAY 2022

Elective

Electronics and communication Engineering

19UEC926- Sensors for Iot

(Regulations 2019)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (10x 2 = 20 Marks)

1. Differentiate between sensors and actuators CO1- U
2. How is sensor resolution different from its accuracy? CO1- U
3. Differentiate between LoRa and NB-IoT. CO3- U
4. Depending on the urgency of data processing, how are IoT data classified? CO3- U
5. Provide a few examples of Capacitive and Magnetic Sensing. CO4- U
6. Explain the use of basic sensing principles in RFID technology. CO4- U
7. Categorize two types of environmental sensors CO5- U
8. Explain On-road Sensors CO5- U
9. Mention few IoT devices available in Cisco Packet Tracer CO2- U
10. List the types of program blocks CO2- U

PART – B (5 x 16= 80 Marks)

11. (a) Analyze the various approaches related to Multi homing in IoT Networks. Identify the Best approach. Justify it CO4-Ana (16)
Or
(b) Apply the fundamentals in Sensors to classify the various types of sensors CO3-App (16)
12. (a) Select and Identify the various processing topologies used in IoT and SIoT by applying the the various considerations in sensor networks CO3-App (16)

Or

- (b) Explain the processing method that can be used in development of densely deployable sending tasks CO3-App (16)
13. (a) Explain the fundamental anatomy and classification of sensors CO1-U (16)
- Or
- (b) Explain the various sensing principles used in IoT CO1-U (16)
14. (a) Create and evaluate a useful wearable sensor system CO5-E (16)
- Or
- (b) Design a research roadmap to implement the wearable in daily life. CO5-E (16)
15. (a) Discuss the IoT devices available in Cisco Packet Tracer to create a project in packet tracer programming environment CO2- U (16)
- Or
- (b) Discuss the visual coding blocks in packet tracer environment that can be used to implement Hello world Program in packet tracer. CO2- U (16)