



PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF ENGINEERING END TERM EXAMINATION - JAN 2024

Semester: VII

Course Code: CSE3055

Course Name: Wireless communication in IOT

Program & Sem: B.Tech & 7th CIT

Date : 03-JAN-2024

Time : 9:30AM - 12:30 PM

Max Marks : 100

Weightage : 50%

Instructions:

(i) *Read the all questions carefully and answer accordingly.*

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries 2 marks.

(5Qx 2M= 10M)

Q.NO.1 what is energy scavenging?

Q.NO.2 Recall the MAC protocol types?

Q.NO.3 Identify the sensor and actuator examples?

Q.NO.4 Give any four transceivers operational States?

Q.NO.5 Write a neat diagram for DMS?

Part B [Thought Provoking Questions]

Answer all the Questions. Each question carries 10 marks.

(5Qx10M=50M)

Q.NO. 6. With a neat diagram, In WSN the interfaces should be accessible from the protocol implementations in virtual reality system suggest and explain the interface sensor model for this scenario

Q.NO 7 Write a short note on Gateway Concepts and with a help on neat diagram explain in detail about WSN tunneling

Q.NO.8 Illustrate the working principle and its components of MQTT with a neat diagram

Q.NO.9 Write the difference b/w Sensor, Sensor Node, Sensor networks. Sensor architecture?

Q.NO.10 write the High-level QoS attributes in WSN highly depend on the applications, List the applications with the explanation for each

Part C [Problem Solving Questions]

Answer all the Questions. Each question carries 20 marks.

(2Qx20M=40M)

Q.NO.11.a) Illustrate the working principle and its components of RFID with a neat diagram

b) Explain the following in detail. With suitable diagram

a) SPI, b) API c) MDP d) UART

Q.NO.12. a) Explain briefly about the following: (a) Over-hearing (b) Idle-listening
c) Protocol overhead d) Collisions

.b) Illustrate the working principle and its components of IrDA with a neat diagram