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MASTER OF SCIENCE (M.SC) IN COMPUTER APPLICATIONS

EXAMINATION : JUNE - 2022 SEMESTER - III

Sub: Internet of Things (MSC -304 -19)

Date: 14/06/2022 Total Marks: 60 Time: 10.00 am to 12.30 pm

Instruction:

- 1. All questions are compulsory unless and otherwise stated.
- 2. Bold figures to the right of every question are the maximum marks for that question.
- 3. Candidates are advised to attempt questions in order.
- 4. Answers written illegibly are likely to be marked zero.
- 5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
- 6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2-3 lines. (Any 5)

(10)

- 1. What is use of LoRaWan protocol?
- 2. Define star and mesh topology.
- 3. What two functions are used in Arduino IDE? Explain with syntax.
- 4. Define wireless HART.
- 5. Elaborate working of sensor device.
- 6. Define term: public and private cloud.
- 7. Define XMPP.

O. 2. Answer the following in short. (Any 4)

(20)

- 1. Explain IoT Data Protocols with its types.
- 2. Explain different topologies used in Zigbee.
- 3. Write a short note on wireless sensor network.
- 4. Explain different services provided by cloud computing in IOT environment.
- 5. Explain RFID? How it applicable to IOT.
- 6. Explain Connectivity technologies Bluetooth in detail.

Q. 3. Answer the following in detail. (Any 3)

(30)

- 1. Define IOT. Explain characteristics of it.
- 2. Describe Machine-to-machine communication with its features and application in IOT.
- 3. Explain Mobile cloud computing architecture in detail.
- 4. Explain Vulnerabilities of IoT.
- 5. List out IOT application. Explain any one in detail.
