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MORNING

2 5 JUN 2022

Program: B.Tech. CSE

Semester: 8th

Name of Subject: Internet of Things

Subject Code: PECS-112

Paper ID: 17575

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

1) Parts A and B are compulsory
2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
3) Any missing data may be assumed appropriately

<div align="center">Part – A</div>   [Marks: 02 each]

Q1.

   a) Discuss the major benefits of IoT.

   b) List down the drawbacks of M2M communication.

   c) What are various non-functional requirements of IoT?

   d) Describe the working of NFC.

   e) Differentiate between Cloud and Fog Computing.

   f) Distinguish between arduino and raspberry.

<div align="center">Part – B</div>   [Marks: 04 each]

Q2. Discuss IOT reference Model in brief.

Q3. Explain web connectivity for connected devices.

Q4. What is an IoT agent? Why multiple agents are required? Discuss JSON.

Q5. List out the essential components contributing to the working of an IoT System. Illustrate with suitable example.

Q6. Describe various technical design constraint effecting the design of IoT

Q7. Discuss Privacy and security issues for smart cities in IoT.

P.T.O.

Part – C   [Marks: 12 each]

Q8.   (a) Compare and Contrast IoT and M2M.

      (b) Discuss MIME Type Message Format.

                        OR

      Discuss Light Weight M2M communication Protocol in detail.

Q9.   Describe the Domain Model Specification for Agriculture Applications in IoT system.

                        OR

      Draw the circuit diagram to interface DHT11/DHT22 sensor with Arduino and write a
      program in Python to print Temperature and Humidity readings.

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