Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

| | | <u></u> | | 100 | | | <u> </u> | | _ | | _ | | |
|--|--|---------|-------|------|-----|-----|----------|-------|------|------|------|-------|-----|
| | | I | 7irst | /Sec | ond | Sem | estei | r B.F | . De | gree | Exar | ninat | ion |

TIME: 03 Hours Max. Marks: 100

Note: 01. Answer any FIVE full questions, choosing at least ONE question from each MODULE.

| | | Module -1 | *Bloom's Taxonomy Level | Marks |
|-------|---|--|-------------------------------|-------|
| Q.01 | a | Name the four broad categories of computer network based on | L1 | 8 |
| | | reachability and explain them briefly. | | |
| | b | Differentiate between IoT and M2M. | L1 | 6 |
| | c | With a neat diagram explain the network communication between two | | 6 |
| | | hosts following the OSI model. | L1 | |
| | | OR | | |
| Q.02 | a | What is IoT? Write the characteristics of IoT System. | L1 | 5 |
| S | b | With a neat diagram explain the inter dependency technology for IoT | L2 | 10 |
| | | Planes. | | |
| | c | With a neat diagram explain Internet protocol suite. | L1 | 5 |
| | 1 | Module-2 | | |
| Q. 03 | a | With a neat diagram explain the working mechanism of actuator. | L1 | 6 |
| | b | Explain the types of actuators. | L1 | 8 |
| | c | Define sensor and explain the characteristics of sensor. | L2 | 6 |
| | | OR | | |
| Q.04 | a | List and explain the characteristics of Actuators. | L2 | 8 |
| | b | Explain the major factors influence the choice of sensors in IoT-based | L1 | 8 |
| | | sensing solutions. | | |
| | c | With a neat diagram explain scalar and Multimedia sensing technics. | L1 | 4 |
| | | Module-3 | | |
| Q. 05 | a | List and explain common data types in IoT applications | L1 | 5 |
| | b | With a neat diagram explain offsite processing topology. | L1 | 10 |

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| | c | Write a short note on offloading considerations. | L1 | 5 |
|-------|---|---|----|---|
| | 1 | OR | | |
| Q. 06 | a | With a neat diagram explain onsite processing topology. | L1 | 5 |
| | b | Explain IoT Device Design and Selection Considerations | L2 | 8 |
| | c | Write a short note on offload location and offload decision making. | L1 | 7 |
| | | Module-4 | | |
| | | | | |
| Q. 07 | a | Define Virtualization. Discuss advantages of virtualization | L1 | 8 |
| | b | Summarize the case study related to Smart irrigation management system. | L2 | 5 |
| | c | With the help of neat diagrams explain the of cloud models. | L1 | 7 |
| | | OR | | |
| Q. 08 | a | With a neat diagram explain Architecture of a sensor-cloud platform | L1 | 8 |
| | b | With a neat diagram explain Components of an agricultural IoT | L1 | 5 |
| | c | With the help of neat diagrams describe the difference between Network | L1 | 7 |
| | | computing and cloud computing | | |
| | | Module-5 | | |
| Q. 09 | a | With a neat diagram explain the Architecture of vehicular IoT. | L1 | 7 |
| | b | Define Machine learning and explain the advantages of ML. | L1 | 6 |
| | c | With a neat diagram explain Architecture of healthcare IoT. | L1 | 7 |
| | | OR | | |
| Q. 10 | a | List the advantages of vehicular IoT. | L1 | 7 |
| | b | With a neat diagram explain the types of Machine learning. | L1 | 6 |
| | c | Write note on advantages and risk of healthcare IoT. | L1 | 7 |
| 1 | 1 | | 1 | 1 |