

(Choice based)

Q. P. Code : 09941

(3 hours)

[80 Marks]

N.B.:

1. Question No.1 is compulsory.
2. Attempt any **Three** questions out of remaining **Five** questions.
3. Figures to the right indicate full marks.
4. Assume any suitable data wherever required but justify the same.

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|-----|----|--|----|
| Q.1 | a) | Write a note to give abstract view of Internet of Things.  | 5  |
|     | b) | Explain in short steps involved in Prototype design of IoT.  | 5  |
|     | c) | Write a note on Arduino Programming for IoT  | 5  |
|     | d) | Write a short note on Business Processes in IOT.   | 5  |
| Q.2 | a) | Write a detail note on RFID sensors and its use in IoT applications.                                   | 10 |
|     | b) | Explain Raspberry Pi and Programming for IoT application with example.                                 | 10 |
| Q.3 | a) | Explain Wireless Sensor Network in IoT paradigm.   | 10 |
|     | b) | Explain in detail IP addressing protocol MQTT.   | 10 |
| Q.4 | a) | Write a note on importance of networking protocol LoWIPv6 in IoT context.                              | 10 |
|     | b) | Write a note on the concept of Cloud of Things.  | 10 |
| Q.5 | a) | Explain importance of data analytics using different platforms to develop smart objects.               | 10 |
|     | b) | Write a detail note on secured communication in IoT applications for data transfer and its importance. | 10 |
| Q.6 |    | Write a detail note on (any two)   | 20 |
|     | a) | Smart homes and IoT technologies.  |    |
|     | b) | Industrial IoT (IIoT).   |    |
|     | c) | Composition Models for Web of Things.  |    |