7638

BOARD DIPLOMA EXAMINATION, (C-20)

DECEMBER—2022

DCME - FIFTH SEMESTER EXAMINATION

INTERNET OF THINGS

Time : 3 hours]   [*Total Marks* : 80

PART—A   3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1.   Define actuator.

2.   State the purpose of RFID.

3.   List the applications of XMPP.

4.   Define secure MQTT.

5.   What is NFC?

6.   List the features of IEEE 802.15.4.

7.   What is wireless sensor network?

8.   List the applications of M2M.

9.   What is cloud simulator?

10.   State the importance of cloud computing.

PART—B

8×5=40

Instructions : (1) Answer **all** questions.

(2) Each question carries **eight** marks.

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. *(a)* Explain 6LoWPAN protocol stack architecture.

(OR)

(b) List and explain functional components of IoT.

12. *(a)* Explain about AMQP in detail.

(OR)

(b) Explain about CoAP message types.

13. *(a)* Explain about different topologies of ZIGBEE.

(OR)

(b) Explain about Bluetooth technology in detail.

14. *(a)* Explain about stationary wireless sensor networks.

(OR)

(b) Explain about mobile wireless sensor networks.

15. *(a)* Describe different service models in cloud computing.

(OR)

(b) Explain about components of cloud computing.

Instructions : (1) Answer the following question.

(2) The question carries **ten** marks.

(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Justify the role of IoT in health care applications in detail by choosing appropriate case study.

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