B. Sc. (IT) (Sem. VI) (CBCS) Examination

March – 2022

CS - 33 : Internet of Things

(New Course)

Faculty Code : 003

Subject Code : 2046003

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

Instruction : Answer the following questions.

1 (A) Answer the following :   4
       (1) What is IOT?
       (2) Full Form: M2M
       (3) Full Form: IETF
       (4) Full Form: XaaS

   (B) Answer in brief :   2
       (1) Explain Gateways.
       (2) What is Knowledge Management?

   (C) Answer in brief :   3
       (1) Differentiate: M2M and IOT.
       (2) Explain Business Process in IOT.

   (D) Answer in brief :   5
       (1) Write short note on XaaS.
       (2) Explain Data Management.

2 (A) Answer the following :   4
       (1) Define: Functional View.
       (2) Full Form: MSBF
       (3) What is RFID?
       (4) What is Sensor?

(B) Answer in brief : 2

    (1) Explain Remote Control.

    (2) Describe Technical Design Constraints in IOT

(C) Answer in brief : 3

    (1) Describe Responsibilities of ETSI M2M.

    (2) Explain Data Representation and Visualization.

(D) Answer in brief : 5

    (1) Explain: Functional View, Information View.

    (2) Explain IOT Reference Model in Detail.

3 (A) Answer the following : 4

    (1) Full Form: 6TiSCH.

    (2) Full Form: CORPL.

    (3) Full Form: IEEE.

    (4) Full Form: CARP.

(B) Answer in brief : 2

    (1) Describe 6TiSCH.

    (2) Explain Z Wave.

(C) Answer in brief : 3

    (1) Write Note on Bluetooth Low Energy.

    (2) Explain IEEE 802.15.

(D) Answer in brief : 5

    (1) Explain RPL, CORPL and CARP in Detail.

    (2) Explain ND and DHCP.

4 (A) Answer the following :   4
       (1) Full Form: AMQP.
       (2) Full Form: UDP.
       (3) Full Form: XMPP.
       (4) Full Form: SCTP.

   (B) Answer in brief :   2
       (1) Describe TCP.
       (2) Describe XMPP.

   (C) Answer in brief :   3
       (1) Write Note on MPTCP.
       (2) Differentiate: TCP and UDP.

   (D) Answer in brief :   5
       (1) Explain TLS and DTLS in Detail.
       (2) Write Note on CoAP and XMPP In Detail.

5 (A) Answer the following :   4
       (1) Full Form: ETSI.
       (2) What is RPL?
       (3) Full Form: MAC.
       (4) Full Form: OMA.

   (B) Answer in brief :   2
       (1) Explain Application Layer.
       (2) Explain RPL.

   (C) Answer in brief :   3
       (1) Explain BBF.
       (2) Explain One M2M.

   (D) Answer in brief :   5
       (1) Write a Note on Service Layer oneM2M.
       (2) Write note on 6LoWPAN.

_____