



Seat No. \_\_\_\_\_

**HB-003-1046003**

**B. Sc. (I.T.) (Sem. VI) Examination**

**April - 2023**

**Internet of Things : CS-33**

*(Old Course)*

**Faculty Code : 003**

**Subject Code : 1046003**

Time :  $2\frac{1}{2}$  / Total Marks : 70

- 1 (a) Answer the following : 4
- (1) What is IOT ?
  - (2) Full form : ITU
  - (3) Full form : IETF
  - (4) Explain Gateway
- (b) Answer in brief : 2
- (1) Explain Data Management.
  - (2) What is WAN ?
- (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) Full form : ITU
  - (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 : ICMP.  
 (3) Full form : IEEE.  
 (4) Full form : MAC.
- (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 : DCCP.  
 (2) Full Form UDP.  
 (3) Full form : MQTT.  
 (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 one M2M.  
    (2) Write note on 6LoWPAN.
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