



DCK-003-2046003

Seat No. _____

B. Sc. I. T. (Sem. VI) (CBCS) (W.E.F. 2019)

Examination

July - 2022

CS-33 : Internet of Things - IOT BSCIT 2019

Faculty Code : 003

Subject Code : 2046003

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1 (a) Objective type questions : 4
- (1) Full form of IETF.
 - (2) Define: Information.
 - (3) Full form of ITU.
 - (4) Define: IOT Business process.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain devices in IOT.
 - (2) Explain benefits of IOT.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Write a note on IOT architecture outline.
 - (2) Explain M2M data management in detail.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Write a short note on XaaS.
 - (2) Explain architecture building process in IoT.
- 2 (a) Objective type questions : 4
- (1) Full form of ARM.
 - (2) Full form of CRUD.
 - (3) What is reference architecture?
 - (4) Define: Actuators.

- (b) Answer in brief : (any 1 out of 2) **2**
- (1) Explain Data representation and visualization.
 - (2) Explain Interaction and remote control.
- (c) Answer in detail : (any 1 out of 2) **3**
- (1) Explain functional model.
 - (2) Explain Communication model.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) Explain Functional view and Information view in detail.
 - (2) Write a short note on ETSI reference architecture in detail.
- 3** (a) Objective type questions : **4**
- (1) Full form of ICMP.
 - (2) Give the normal frame size of IEEE 802.11 protocol.
 - (3) Full form of RFID.
 - (4) Full form of ND and DHCP.
- (b) Answer in brief : (any 1 out of 2) **2**
- (1) Explain Z wave.
 - (2) Explain Zigbee smart energy.
- (c) Answer in detail : (any 1 out of 2) **3**
- (1) Explain RPL, CORPL and CARP in detail.
 - (2) Write a note on Wireless HART and DASH 7.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) Explain 6LoWPAN and 6TiSCH in detail.
 - (2) Explain following in detail.
 - (i) IEEE 802.15
 - (ii) IEEE 802.11.

- 4 (a) Objective type questions : 4
- (1) Define Session layer.
 - (2) Full form of AMQP.
 - (3) Full form of CoAP.
 - (4) Full form of DCCP.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Write a note on UDP.
 - (2) Write a note on SCTP.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Explain TLS and DTLS.
 - (2) Write a note on XMPP.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain TCP and MPTCP.
 - (2) Write a note on MQTT and SMQTT.
- 5 (a) Objective type questions : 4
- (1) Full form of ETSI.
 - (2) OMA stands for _____.
 - (3) MAC stands for _____.
 - (4) In 6LoWPAN meaning of 6 is.....
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain One M2M Protocol.
 - (2) Explain BBF.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Explain Application layer.
 - (2) Write a note on RPL.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Explain IEEE 802.15.4 MAC.
 - (2) Write a note on ETSI M2M protocol.