

B.Sc.(IT) Semester - 6 (CBCS) Examination
March/April-2024 (OLD COURSE)
CS-33 INTERNET OF THINGS (IOT)(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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| Que-1(A) | Attempt following questions. | (04) |
| | <ol style="list-style-type: none">1. XaaS stands for _____.2. CoAP stands for _____.3. What is Knowledge Management?4. M2M stands for _____. | |
| Que-1(B) | Attempt following. (Attempt Any One) | (02) |
| | <ol style="list-style-type: none">1. List out XaaS Service Models.2. What is data validation in context to management of M2M data? | |
| Que-1(C) | Attempt following. (Attempt Any One) | (03) |
| | <ol style="list-style-type: none">1. Differentiate sensor V/S actuator.2. Differentiate M2M V/S IoT. | |
| Que-1(D) | Attempt following. (Attempt Any One) | (05) |
| | <ol style="list-style-type: none">1. Explain outline architecture layer.2. Discuss in brief Business processes in IoT. | |
| Que-2(A) | Attempt following questions. | (04) |
| | <ol style="list-style-type: none">1. 3GPP stands for _____.2. ETSI stands for _____.3. What is functional view?4. RFID stands for _____. | |
| Que-2(B) | Attempt following. (Attempt Any One) | (02) |
| | <ol style="list-style-type: none">1. Define term "Safety, privacy and trust".2. Explain M2M area network. | |
| Que-2(C) | Attempt following. (Attempt Any One) | (03) |
| | <ol style="list-style-type: none">1. Explain use of IoT Reference Model.2. Explain Interaction and Remote Control. | |
| Que-2(D) | Attempt following. (Attempt Any One) | (05) |
| | <ol style="list-style-type: none">1. Explain IoT domain model in detail.2. Write note on ETSI high level architecture. | |
| Que-3(A) | Attempt following questions. | (04) |
| | <ol style="list-style-type: none">1. MTC stands for _____.2. ICMP stands for _____.3. MAC stands for _____.4. DHCP stands for _____. | |
| Que-3(B) | Attempt following. (Attempt Any One) | (02) |
| | <ol style="list-style-type: none">1. Differentiate RPL V/S CORPL.2. What is DASH7? | |
| Que-3(C) | Attempt following. (Attempt Any One) | (03) |
| | <ol style="list-style-type: none">1. What is Bluetooth Low Energy?2. Write note on Z-Wave. | |

- Que-3(D) Attempt following. (Attempt Any One) (05)
1. Explain Network Layer IPV-4 in detail.
 2. When should we use Zigbee Smart Energy? Explain in detail.
- Que-4(A) Attempt following questions. (04)
1. MPTCP stands for _____.
 2. TCP protocol is trusted in compare to UDP. (True / False)
 3. AMQP stands for _____.
 4. DCCP stands for _____.
- Que-4(B) Attempt following. (Attempt Any One) (02)
1. Describe SCTP.
 2. Describe DCCP.
- Que-4(C) Attempt following. (Attempt Any One) (03)
1. Differentiate TLS V/S DTLS.
 2. Explain XMPP.
- Que-4(D) Attempt following. (Attempt Any One) (05)
1. Explain and differentiate TCP and UDP.
 2. Write note on MQTT.
- Que-5(A) Attempt following questions. (04)
1. SSL stands for _____.
 2. OMADM stands for _____.
 3. OMA stands for _____.
 4. RPL stands for _____.
- Que-5(B) Attempt following. (Attempt Any One) (02)
1. What is MAC?
 2. What is BBF?
- Que-5(C) Attempt following. (Attempt Any One) (03)
1. Explain 6LoWPAN in context to security.
 2. Explain BBF security in IoT Protocols.
- Que-5(D) Attempt following. (Attempt Any One) (05)
1. Explain Application Layer in detail.
 2. Discuss Security in MAC 802.15.4 Protocol.
