

**B.Sc.(IT) Semester - 6 (CBCS) Examination**  
**April/May-2022 (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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|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Q.1(A) | Attempt following questions.                                                                                                                                                          | (04) |
|        | <ol style="list-style-type: none"><li>1. what is IOT?</li><li>2. M2M stands for _____.</li><li>3. XaaS stands for _____.</li><li>4. CoAP stands for _____.</li></ol>                  |      |
| Q.1(B) | Attempt following. (Attempt Any One)                                                                                                                                                  | (02) |
|        | <ol style="list-style-type: none"><li>1. What is Gateway?</li><li>2. List out XaaS Service Models.</li></ol>                                                                          |      |
| Q.1(C) | Attempt following. (Attempt Any One)                                                                                                                                                  | (03) |
|        | <ol style="list-style-type: none"><li>1. Explain Data Management.</li><li>2. what is Knowledge Management?</li></ol>                                                                  |      |
| Q.1(D) | Attempt following. (Attempt Any One)                                                                                                                                                  | (05) |
|        | <ol style="list-style-type: none"><li>1. Explain outline architecture layer.</li><li>2. Discuss in brief different applications of IoT.</li></ol>                                     |      |
| Q.2(A) | Attempt following questions.                                                                                                                                                          | (04) |
|        | <ol style="list-style-type: none"><li>1. List out Domain Model types.</li><li>2. 3GPP stands for _____.</li><li>3. ETSI stands for _____.</li><li>4. RFID stands for _____.</li></ol> |      |
| Q.2(B) | Attempt following. (Attempt Any One)                                                                                                                                                  | (02) |
|        | <ol style="list-style-type: none"><li>1. Explain use of Reference Model.</li><li>2. Explain M2M area network.</li></ol>                                                               |      |
| Q.2(C) | Attempt following. (Attempt Any One)                                                                                                                                                  | (03) |
|        | <ol style="list-style-type: none"><li>1. Explain function view.</li><li>2. Explain Interaction and Remote Control.</li></ol>                                                          |      |
| Q.2(D) | Attempt following. (Attempt Any One)                                                                                                                                                  | (05) |
|        | <ol style="list-style-type: none"><li>1. Explain IoT domain model in detail.</li><li>2. Explain network domain contains elements.</li></ol>                                           |      |
| Q.3(A) | Attempt following questions.                                                                                                                                                          | (04) |
|        | <ol style="list-style-type: none"><li>1. MAC stands for _____.</li><li>2. MTC stands for _____.</li><li>3. ICMP stands for _____.</li><li>4. DHCP stands for _____.</li></ol>         |      |
| Q.3(B) | Attempt following. (Attempt Any One)                                                                                                                                                  | (02) |
|        | <ol style="list-style-type: none"><li>1. What is DASH7?</li><li>2. Explain Routing Protocol.</li></ol>                                                                                |      |
| Q.3(C) | Attempt following. (Attempt Any One)                                                                                                                                                  | (03) |
|        | <ol style="list-style-type: none"><li>1. write note on IEEE 802.15.</li><li>2. Write note on Z-Wave.</li></ol>                                                                        |      |

- Q.3(D) Attempt following. (Attempt Any One) (05)
1. Explain Network Layer IPV-4 in detail.
  2. Explain wireless HART Protocol in detail.
- Q.4(A) Attempt following questions. (04)
1. AMQP stands for \_\_\_\_\_.
  2. DCCP stands for \_\_\_\_\_.
  3. TLS stands for \_\_\_\_\_.
  4. MQTT stands for \_\_\_\_\_.
- Q.4(B) Attempt following. (Attempt Any One) (02)
1. Describe DCCP.
  2. Describe SCTP.
- Q.4(C) Attempt following. (Attempt Any One) (03)
1. Explain MPTCP.
  2. explain CoAP.
- Q.4(D) Attempt following. (Attempt Any One) (05)
1. Explain Session Layer – HTTP in detail.
  2. Explain Transport Layer in detail.
- Q.5(A) Attempt following questions. (04)
1. OMA stands for \_\_\_\_\_.
  2. RPL stands for \_\_\_\_\_.
  3. SSL stands for \_\_\_\_\_.
  4. OMADM stands for \_\_\_\_\_.
- Q.5(B) Attempt following. (Attempt Any One) (02)
1. what is MAC?
  2. Explain RPL.
- Q.5 (C) Attempt following. (Attempt Any One) (03)
1. Explain BBF security in IoT Protocols.
  2. Explain 6LoWPAN in context to security.
- Q.5(D) Attempt following. (Attempt Any One) (05)
1. Discuss Security in MAC 802.15.4 Protocol.
  2. Explain Application Layer in detail.

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