

Roll No.

Total No. of Pages : 02

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MCA (Sem.-4)
IOT AND BLOCKCHAIN TECHNOLOGY

Subject Code : PGCA-1967

M.Code : 91862

Date of Examination : 19-07-22

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

1. Write briefly :

- a) ZigBee
- b) Bluetooth
- c) CoAP
- d) Bitcoin
- e) Crypto Currency
- f) MQTT
- g) KYC
- h) Block Relay
- i) Block Mining
- j) Big Data Analytics.

SECTION-B

2. Discuss the various characteristics of IoT and explain the physical as well as logical design of IoT.
3. Explain these concepts with suitable diagrams.
 - a) Cloud Computing
 - b) Wireless Sensor Networks.
4. Define and describe the various hardware and software components of IoT.
5. Write a detailed note on the IoT applications in the areas of home automation, cities, retail and logistics.

SECTION-C

6. Define block chain. Why it came into existence? Discuss the terms- public ledgers, smart contracts, block in a block chain, transactions, distributed consensus and public vs. private block chain.
7. Explain the Bitcoin P2P network and how transactions in bitcoin networks are processed.
8. Write a detailed note on the enterprise applications of blockchain such as cross border payments, KYC, Food Security and Mortgage over Blockchain.
9. Explain the issues and challenges associated with cryptocurrency. Also, discuss the security aspects of blockchain.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.