

[3 Hours]

[80 Marks]

- Note :
1. Question 1 is compulsory
 2. Answer any three out of remaining questions
 3. Assume suitable data where required

Q1 Solve any 4

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|---|----------|
| a) Define IOT with Conceptual Framework | 5 |
| b) Compare and contrast RFID with Bluetooth | 5 |
| c) What are the four big data strategies? | 5 |
| d) Explain IoT Data Analytics importance | 5 |
| e) Illustrate the components of IEEE 802.11 architecture. | 5 |

Q2

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| a) Describe IoT World Forum (IoTWF) Standardized Architecture. | 10 |
| b) Explain the concept of Fog Computing with Diagram. | 10 |

Q3

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| a) Draw and explain Architecture of MQTT with diagram. | 10 |
| b) Explain the role of NoSQL in IoT Data Analytics Challenges. | 10 |

Q4

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| a) Discuss Various IoT Application Transport Methods. | 10 |
| b) Design the Forest Fire Detection system using IoT sensors. | 10 |

Q5

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| a) Explain the architecture of LoRaWAN with its major Characteristics. | 10 |
| b) What is the purpose of using a dashboard for data visualization? | 10 |

Q6

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| a) Explain ecosystem for IoT enabled Smart Home with respect to sensors, actuators, framework, protocols, storage, data analysis, security etc. | 10 |
| b) Write short note on i) CoAP ii) Internet of Behaviour. | 10 |
