

Course Code: 20MCA281**Course Name: INTERNET OF THINGS**

Max. Marks: 60

Duration: 3 Hours

PART A*Answer all questions, each carries 3 marks.*

Marks

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|----|---|-----|
| 1 | Discuss some Applications of IoT in real life scenario | (3) |
| 2 | Compare the features of Cloud and Fog approaches in current data-analytics | (3) |
| 3 | Explain the Inverse Pyramid for Polyglot Programming | (3) |
| 4 | Explain CoAP web-transfer protocol and its advantages when compare it with HTTP | (3) |
| 5 | Compare the Stream Model and the Batch Model of data processing in IoT | (3) |
| 6 | List the characteristics of stream data in IoT | (3) |
| 7 | Discuss some well-known routing attacks IoT networks | (3) |
| 8 | Discuss about various security threats in IoT | (3) |
| 9 | Explain the component Gateway Device – Gateway hardware and Gateway software | (3) |
| 10 | Discuss about the requirements for IoT gateway hardware. | (3) |

PART B*Answer any one question from each module. Each question carries 6 marks.***Module I**

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| 11 | Explain the taxonomy of resource management in IoT | (6) |
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OR

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| 12 | Draw and explain the state diagram of the open IoT service life cycle | (6) |
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Module II

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| 13 | Explain embedded device programming languages | (6) |
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OR

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| 14 | Explain reference architecture of fog | (6) |
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Module III

- 15 Compare the use cases DSMS and CEP in stream processing. (6)

OR

- 16 Explain anomaly detection and categorise anomalies in the data based on its behaviour (6)

Module IV

- 17 Explain TinyTo protocol for two-way authentication and its shortcomings (6)

OR

- 18 How will you address the reliability issues in IoT (6)

Module V

- 19 Explain the three Key Components to an IOT architecture (6)

OR

- 20 a. Explain Preparation of Raspberry Pi for creating sensor project (6)
b. Write a short note on ZigBee
