Reg No.:_____ Name:_____

0520MCA281122102

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester MCA (2 Year) Degree Examination December 2021

Course Code: 20MCA281

Course Name: INTERNET OF THINGS

Max. Marks: 60 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

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

11	Explain the taxonomy of resource management in IoT	(6)
	OR	
12	Draw and explain the state diagram of the open IoT service life cycle	(6)

Module II

13	Explain embedded device programming languages	(6)
	OR	
14	Explain reference architecture of fog	(6)

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 b. Write a short note on ZigBee	(6)

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