Reg No.:_____ Name:_____

0520MCA281122103

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester MCA (Two Year) Degree Regular and Supplementary Examination December 2022

Course Code: 20MCA281

Course Name: INTERNET OF THINGS

Max. Marks: 60 Duration: 3 Hours

PART A

Answer all questions, each carries3 marks. Marks

1	Explain all active threats in IOT Security.	(3)
2	Write all the advantages associated with Fog Computing.	(3)
3	Explain CoAP. List out the advantages of CoAP.	(3)
4	Explain the categories of protocols in IOT.	(3)
5	Write all the characteristics of stream data in IOT.	(3)
6	Explain all IOT programming approaches.	(3)
7	Write all the TinyTO's goals.	(3)
8	List and explain device/cloud collaboration framework.	(3)
9	List and explain IOT data-transmission requirements.	(3)
10	With the help of diagram explain types of anomalies considering the topology of a network.	(3)

PART B

Answer any one question from each module. Each question carries 6 marks.

Module I

11	With the help of neat diagram explain OpenIOT Architecture for IOT/Cloud Convergence.	(6)

OR

12	With the help of neat diagram explain state diagram of OpenIOT services Lifecycle.	(6)

Module II

13 Draw and explain Fog Computing Reference Architecture. Illustrate the services required to achieve Fog Computing. (6)

OR

14 Explain the minimum set of features to be fulfilled by the programming frameworks for IOT. (6)

Module III

15 Draw and explain in detail the general architecture of stream-processing system in IOT. (6)

OR

16 Explain in detail distributed anomaly detection and hyper ellipsoidal anomaly detection. (6)

Module IV

17 What is error detection in IOT? Explain different techniques for error detection in IOT. (6)

OR

18 Explain different methods for evaluation of TinyTO. (6)

Module V

19 List and explain the features to select the gateway hardware. (6)

OR

20 List and explain the characteristics of wired gateway interfaces. (6)

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