TED (21) 6131A (Revision - 2021)

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER - 2024

INTERNET OF THINGS

[Maximum marks: 75]

[Time: 3 Hours]

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark.

		(9 x 1 = 9 Marks)		
		Module outcome	Cognitive level	
1	Define "Things" in IOT.	M1.01	R	
2	Write any two examples for cloud service provider.	M1.03	R	
3	What is Bluetooth smart?	M2.03	R	
4	List two transport protocols in IOT.	M2.03	R	
5	Define SLA.	M3.03	R	
6	Name two cloud deployment models.	M3.01	U	
7	Write two control structures of Python.	M4.04	U	
8	What is the usage of packages in Python?	M4.04	U	
9	List two application area of sensors.	M4.01	U	

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

		<u>(8 x 3 = 24 Marks)</u>		
		Module outcome	Cognitive level	
1	List any three applications of IOT.	M1.01	R	
2	What are the challenges in building an application with IOT?	M1.05	U	
3	Write any three IOT enabling technologies.	M1.03	R	
4	Differentiate COAP and MQTT.	M2.02	U	
5	What are the classifications of cloud services?	M3.01	R	
6	List the security aspects of cloud computing.	M3.05	U	
7	Write the benefits of using fog computing.	M3.04	R	
8	Write the role of sensors in IOT.	M4.01	U	
9	List different looping statements in Python.	M4.04	R	
10	Write short notes on modules in Python.	M4.04	U	

PART C Answer all questions. Each question carries seven marks. $(6 \times 7 - 42 \text{ Marks})$

		(6 x 7 = 42 Marks)		
		Module outcome	Cognitive level	
III	With a neat diagram explain IOT stack.	M1.02	R	
	OR			
IV	Explain various levels in IOT.	M1.04	U	
V	Explain MQTT.	M2.02	U	
	OR			
VI	With the help of a neat diagram explain the packet format of IPv4.	M2.04	R	
VII	Explain BLE stack with a neat diagram.	M2.03	U	
	OR			
VIII	Explain Uniform Resource Identifier (URI).	M2.04	U	
IX	Explain challenges of cloud with IOT.	M3.02	U	
	OR			
Х	Explain various criteria for the selection of cloud service provider.	M3.03	U	
XI	Explain the features of Raspberry PI.	M4.02	R	
	OR			
XII	Explain any one application building with IOT.	M4.06	U	
XIII	Explain the features and characteristics of Arduino.	M4.02	U	
	OR			
XIV	With examples explain different data types of Python.	M4.04	U	
