

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 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 ‘one’ marks.

(9 x 1 = 9 Marks)

Module Outcome Cognitive level

1	List any two applications of IoT.	M1.01	R
2	List any two V's of Big Data Analysis.	M1.03	R
3	Expand MQTT.	M2.02	R
4	List any two link layer protocols for IoT.	M2.01	R
5	What is meant by URI in IoT?	M2.04	R
6	The devices in fog computing are called	M3.04	R
7	Cloud computing is a pay-as-you-go service. True or false?	M3.01	R
8	Which category does the Arduino Uno belong to, - a microcontroller based board or a microprocessor based board?	M4.02	R
9	Name the native original operating system for Raspberry Pi.	M4.02	R

PART - B

II. Answer *any eight* questions from the following. Each question carries ‘Three’ marks.

(8 x 3 = 24 Marks)

Module Outcome Cognitive level

1	Explain the basic concept of IoT.	M1.01	U
2	What is a <i>thing</i> in IoT? List two examples.	M1.03	R
3	Summarize the features of LiFi.	M2.03	U
4	Outline the features of CoAP protocol.	M2.01	U

5	Outline the differences between IPv4 and IPv6.	M2.04	U
6	Describe any three challenges of cloud computing.	M3.02	U
7	Explain any three parameters for selecting cloud service.	M3.03	U
8	Differentiate sensors and actuators.	M4.01	U
9	Summarize any one loop statement in Python with an example.	M4.03	U
10	Explain how a moisture sensor can be used in agriculture.	M4.06	U

PART - C

Answer all the questions from the following. Each question carries 'seven' marks.

(6 x 7 = 42 Marks)

Module Outcome Cognitive level

III.	Explain IoT enabling technologies. OR	M1.04	U
IV.	Explain IoT Stack.	M1.02	U
V.	Explain the characteristics of IoT. OR	M1.04	U
VI.	Summarize the challenges in IoT.	M1.05	U
VII.	Explain MQTT protocol with a diagram. OR	M2.02	U
VIII.	Outline the concept of BLE protocol.	M2.03	U
IX.	Explain cloud computing. OR	M3.01	U
X.	Explain fog computing.	M3.04	U
XI.	Illustrate the features of Arduino Uno. OR	M4.02	U
XII.	Explain any three sensors and their applications.	M4.01	U
XIII.	Illustrate the features of Raspberry Pi. OR	M4.02	U
XIV.	Outline the application of IoT in Healthcare.	M4.06	U
