

**ANURAG Engineering College**

(An Autonomous Institution)

II B.Tech I Semester Regular/Supplementary Examinations, December–2024

**INTRODUCTION TO IOT  
(INFORMATION TECHNOLOGY)****Time: 3 Hours****Max. Marks: 60****Section – A (Short Answer type questions)****(10 Marks)****Answer All Questions**

	<b>Course Outcome</b>	<b>B.T Level</b>	<b>Marks</b>
1. Define Internet of Things.	CO1	L1	1M
2. State the characteristics of IoT.	CO1	L2	1M
3. Mention the communication protocols used for M2M LAN.	CO2	L1	1M
4. Mention Arduino analog pins.	CO2	L1	1M
5. List available models in Raspberry Pi.	CO3	L1	1M
6. How to run Raspberry pi in headless mode.	CO3	L2	1M
7. Define Software Defined Network.	CO4	L1	1M
8. Mention Raspberry Pi GPIO Pins.	CO4	L1	1M
9. Define Cloud Computing.	CO5	L1	1M
10. Mention Industry IOT4.0 Standards.	CO5	L2	1M

**Section B (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Illustrate the generic block diagram of an IoT device and explain it briefly.	CO1	L3	10M
<b>OR</b>			
B) Discuss the role of communication protocols and embedded systems in IoT.	CO1	L3	10M
12. A) With the help of neat diagrams, explain the M2M system architecture.	CO2	L3	10M
<b>OR</b>			
B) Explain the differences between Machines in M2M and Things in IOT.	CO2	L3	10M
13. A) a) Describe various features of a Raspberry Pi device.	CO3	L3	5M
b) List out various versions of raspberry pi devices till date.	CO3	L3	5M
<b>OR</b>			
B) a) Explain Packages and modules used in python.	CO3	L3	5M
b) What are the advantages of using Python programming language for IOT applications?	CO3	L3	5M
14. A) Describe how SDN can be used for various levels of IoT.	CO4	L3	10M
<b>OR</b>			
B) Explain implementation of IoT with Rasoberry Pi.	CO4	L3	10M
15. A) a) Explain a smart home automation system using IoT With mode REST service.	CO5	L3	10M
<b>OR</b>			
B) Explain how IoT technology can used in healthcare.	CO5	L3	10M