Roll No.											

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – December 2025

Date: 10- 12- 2025 **Time:** 1.00pm to 04.00pm

School: SOCSE	**Program:** B.Tech (CIT)	
Course Code: CIT2503	**Course Name:** Mobile Application For IOT	
Semester: V	**Max Marks**: 100	**Weightage**: 50%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**26**	**24**	**26**	**24**	**-**

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks. **10Q x 2M=20M**

1.	List any four characteristics of IOT?	**2 Marks**	**L2**	**CO1**
2.	Define cloud computing with an example?	**2 Marks**	**L1**	**CO1**
3.	Define Big Data with a proper example?	**2 Marks**	**L1**	**CO1**
4.	Enlist System Requirement for Android Studio?	**2 Marks**	**L2**	**CO2**
5.	List the different layout view group?	**2 Marks**	**L2**	**CO2**
6.	Define Peripheral cloud computing?	**2 Marks**	**L1**	**CO3**
7.	List any four human made sensors?	**2 Marks**	**L2**	**CO3**
8.	Define Actuators?	**2 Marks**	**L1**	**CO3**
9.	Define software-based sensors?	**2 Marks**	**L1**	**CO4**
10.	Define omnidirectional sensors?	**2 Marks**	**L1**	**CO4**

Part B

Answer the Questions. **Total Marks 80M**

11.	**a.**	With a proper example explain any two-domain specific IOT application? a. Home Automation b. Cities c. Environment d. Energy	**20 Marks**	**L2**	**CO1**
Or					
12.	**a.**	With a neat diagram and proper example explain the Generic Block Diagram of an IoT Device?	**20 Marks**	**L2**	**CO1**
	b.	Explain the structured and unstructured data in big data?		**L2**	**CO1**

13.	**a.**	What is a Layout? Explain different types of Layouts?	**20 Marks**	**L2**	**CO2**
	b.	What is Intent? Explain different types of Intent with example?		**L2**	**CO2**
Or					
14.	**a.**	What is fragment? Explain the Fragment lifecycle?	**20 Marks**	**L2**	**CO2**
	b.	Explain the Android Components Content Provider?		**L2**	**CO2**

15.	**a.**	Explain the performance benefits of Edge Computing with a proper example?	**20 Marks**	**L2**	**CO3**
	b.	You are building a small robot for your project and want to use a compact and affordable computer to control it. Explain what a Single Board Computer (SBC) is and how it is useful in this situation.		**L3**	**CO3**
Or					
16.	**a.**	Explain the difference between sensors and Actuators with a proper diagram and application?	**20 Marks**	**L2**	**CO3**
	b.	Explain the usage of sensors in this IoT system and describe how they help in collecting data and improving efficiency.		**L3**	**CO3**

17.	**a.**	10. Explain the following sensors API in detail. a. Accelerometer Sensor API b. Gyroscope Sensor API c. Magnetometer Sensor API d. Proximity Sensor API	**20 Marks**	**L3**	**CO4**
		Or			
18.	**a.**	Imagine you are designing a smart home system where devices such as lights, thermostats, and security cameras need to communicate with each other and the central controller. With a neat diagram, explain the different ways of connecting smart objects in such an IoT system.	**20 Marks**	**L3**	**CO4**