Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023

Semester : Semester VI - 2020
Course Code : CSE3066
Course Name : Sem VI - CSE3066 - Mobile Application for IOT
Program : CIT

Date : 14-JUN-2023
Time : 9.30AM - 12.30PM
Max Marks : 100
Weightage : 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS **(10 X 2 = 20M)**

1.	What would be an ideal scenario for using edge computing solutions?	(CO3) [Knowledge]
2.	Differentiate between Sensors and Actuators in IOT.	(CO4) [Knowledge]
3.	What are the Software Requirement for Android Studio?	(CO2) [Knowledge]
4.	Define Wireless Sensor Networks with respect to IOT.	(CO3) [Knowledge]
5.	Name any two SQLite cursor methods.	(CO2) [Knowledge]
6.	What is an SBC?	(CO3) [Knowledge]
7.	Compare Android OS with Any Other OS.	(CO1) [Knowledge]
8.	Differentiate between JVM and DVM.	(CO1) [Knowledge]
9.	Define Software sensors used in IOT.	(CO4) [Knowledge]
10.	What is a multisensor system?	(CO3) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(5 X 10 = 50M)**

11. Design a simple calculator using table layout.

(CO1) [Comprehension]

12. Motion sensors are used primarily in home and business security systems, but they can also be found in phones, paper towel dispensers, game consoles, and virtual reality systems. Suggest and explain the low-cost sensor model for this scenario.

(CO3) [Comprehension]

13. Explain the various Sensor APIs supported in Android.

(CO4) [Comprehension]

14. With neat diagram, explain sensor network of IOT.

(CO3) [Comprehension]

15. How the event management achieved in android? Explain with an example.

(CO2) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS **(2 X 15 = 30M)**

16. A door to a store that opens automatically whenever a human is in front of it. It should not open for other moving things such as pigeons, making the traditional motion sensing solution infeasible. Obtain the detailed solution for this scenario.

(CO3) [Application]

17. Electronic visual display enabled by touchscreen technologies evolves as one of the universal multimedia output methods and a popular input intermediate with touch–interaction. As a result, we can always gain access of an intelligent machine by obtaining control of its display contents. Since remote screen sharing systems are also increasingly prevalent, we propose a cross-platform middleware infrastructure which supports remote monitoring and control functionalities based on remote streaming for networked intelligent devices such as smart phone, computer and smart watch, etc. and home appliances such as smart refrigerator, smart air-conditioner and smart TV, etc. We aim to connect all these devices with display screens, so as to make possible remote monitoring and controlling a certain device by whichever one (usually the nearest one) of display screens among the network. The system is a distributed network consisting of multiple modular nodes of server and client, and is compatible to prevalent operating systems such as Windows, macOS, Unix-like/Linux and Android, etc. Suggest the suitable connection pattern for this case and also elaborate on the same.

(CO4) [Application]