

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF MANAGEMENT
MID TERM EXAMINATION - APR 2023**

Semester : Semester IV - 2022 - 23 - BBA E COM - 2021

Course Code : BBA3056

Course Name : Sem IV - BBA3056 - Internet and Related Technologies

Program : BBA E Commerce and Supply Chain Management

Date : 15-APR-2023

Time : 2:00PM - 3:30PM

Max Marks : 50

Weightage : 25%

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 FIVE QUESTIONS

5X2=10M

1. Wireless sensor network is a device with sensors which are used to monitor the environment and physical conditions. It is connected by end nodes _____, _____.
a) Routers and Coordinators (CO1) [Knowledge]
b) Chips and Switches
c) Meters and sensors
d) All the above
2. _____ is more suitable for IoT devices because of its light-weight and high productivity
a) Pull control (CO2) [Knowledge]
b) Push Control
c) both a & b
d) Carrier Technology
3. Big Data is gathered from a variety of sources including social networks videos, digital images, sensors and other records. It analyses data by _____, _____.
a) Cleaning and Manipulating (CO1) [Knowledge]
b) Processing and Visualizing
c) Sensing and Monitoring
d) both a and b

4. Most business applications have to communicate with _____ and third-party applications to perform various tasks hence _____ has been implemented to exchange information securely over the internet
- a) Internal , REST (CO2) [Knowledge]
 - b) Internal , MQTT
 - c) External , SIGFOX
 - d) External, ZIGBEE
5. M2M is used for automated data transmission and measurement between mechanical and electronic devices. _____ and _____ facilitate the communication between the systems
- a) Big Data Analytics and Data science (CO1) [Knowledge]
 - b) Artificial Intelligence and Machine Learning
 - c) Sensors and Embedded systems
 - d) REED and End Nodes

PART B

ANSWER ALL THE TWO QUESTIONS

2X10=20M

6. Sam is the CEO of ASS solutions. Though he has proper concern on the job discretion while assigning it to this staffs. He wants to check the latency of completion and control the unnecessary activities carried out in the workstation. Therefore he wants his manager Reena, a system architect to develop a IOT system to monitor and control the activities in the workstation which will improve the productivity of ASS solutions. **Discuss IOT system and suggest her IOT enabling technologies.**
- (CO1) [Comprehension]
7. Neil is the system architect . he wants to implement the architecture which protocols used by creating personal area networks with small, low-power digital radios, such as for home and office automation. Some the companies have already approached him. But he is more concerned on the consumption of battery and short range only. **Identify any two architectures which fulfill his requirement.**
- (CO2) [Comprehension]

PART C

ANSWER THE ONE QUESTION

1X20=20M

8. Explain the functional blocks of an IOT Ecosystems
- (CO1) [Application]