



Register Number:
Date:21-11-2020

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27
MSc Computer Science - III SEMESTER
END SEMESTER EXAMINATION: NOVEMBER 2020
CSDE9318 - Internet Of Things

Time- 2 1/2 hrs

Max Marks-70

This paper contains two printed pages and one part

PART A

Answer any **SEVEN** of the following questions

10 * 7=70

1. a) List and explain any three Protocols of application layer. (6marks)
b) How Publish subscribe communication model differs from other models? (4marks)
2. a) What are the architectural constraints of REST? Explain in detail. (7 marks)
b) List out any three differences between IOT and M2M. (3 marks)
3. a) With a neat diagram, explain 6LowPan adaptation layer protocol. (6 marks)
b) Why python is preferred as a language for IOT devices? Explain any 2 python package for IOT. (4 marks)
4. List and briefly explain the steps involved in IOT System Design Methodology. (10 marks)
5. a) Illustrate Hadoop Map Reduce technique in detail with all its phases. (7 marks)
b) What is the use of Chef and Puppet in IOT? (3 marks)
6. a) What are the main components of Apache Oozie workflow? Explain. (5 marks)
b) List the Spark eco system components. Explain the role of each component. (5marks)
7. With the help of a neat diagram, explain IOT Reference model. (10 marks)
8. Explain the following:
 - a) Applications of IoT for Retail. (3 marks)
 - b) Applications of IoT for Logistics. (4 marks)
 - c) Applications of IoT in Industry. (3 marks)
9. Explain IMC-AESOP cloud based architecture with a neat diagram. (10 marks)
