

MANIPAL INSTITUTE OF TECHNOLOGY MANIPAL

(A constituent unit of MAHE, Manipal)

SEVENTH SEMESTER BTECH. (E & C) DEGREE END SEMESTER EXAMINATION **DECEMBER 2021-JANUARY 2022 SUBJECT: INTERNET OF THINGS (ECE-4054)**

TIME: 75 MINUTES

MAX. MARKS: 20

Instructions to candidates

- Answer ALL questions. •
- Missing data may be suitably assumed. •

Q. No.	Questions	Marks
1A.	When Fog computing is essential in IoT? Using necessary diagrams, explain the functioning of Fog and the way it deals with different time-sensitive data.	4
1B.	What is Big data? Explain its characteristics in detail.	4
1C.	Describe the features of CoAP.	2
2A.	Identify any FIVE techniques for performing quantitative analysis in Data analytics and explain them.	4
2B.	Compare the features of smart grid and a traditional electrical grid. Also, mention the benefits of using smart grid for customers and stakeholders.	4
2C.	Draw the architecture of sensor cloud and explain it.	2