UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Machine to Machine Communication   Semester: 7th
Program: B.Tech CS-TI   Time 03 hrs.
Course Code: CSIB-486   Max. Marks: 100

Instructions: *Attempt ALL questions. The marks for each question are written alongside with the question.*

SECTION A

S. No.		Marks	CO
Q 1	Explain WSN architecture along with their structural challenges.	4	CO5
Q 2	What are the various prerequisites of M2M communication? Explain with the help of the labelled diagram.	4	CO4
Q 3	Explain Zigbee technology with its structural subtleties.	4	CO3
Q 4	Draw a labelled diagram for the M2M service bootstrap technique.	4	CO6
Q 5	Contrast SIM card and USIM card.	4	CO4

SECTION B

Q 6	State and Explain various requirements of M2M communication? **OR** Explain the utilization of M2M communication in the tracing and tagging of RFID vehicle.	10	CO4
Q 7	What are the distinctive M2M network devices? How they vary from conventional system devices?	10	CO3
Q 8	List out different verticals of the machine to machine communication along with their significance.	10	CO2
Q 9	What is the requirement for automation of home? How information gathered from shrewd homes will help in making the future houses more smarter?	10	CO1

SECTION-C

Q 10	(a) What are the security threats for the machine to machine communication? Explain the terms verification and validation in connection to communication between various machines.	10	CO6
	(b) Discuss different API and protocols used in M2M communication.	10	CO2
Q 11	How 3G network architecture contrasts from 4G network architecture. Clarify with the help of the labelled diagram. OR What do you mean by machine to machine communication? Examine diverse communication technologies utilized in M2M interactions.	20	CO5 CO1

Q 11