

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

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

Course: Impact of IoT & Smart Services on Society	Semester: 7th
Program: B.Tech. (CSE spl IoTSC)	Time 03 hrs.
Course Code: CSEG478	Max. Marks: 100

Instructions: All questions are compulsory. This question paper contains 11 questions.

SECTION A

S. No.	Question	Marks	CO
Q 1	Define the term <i>Internet of Things</i> by giving various application areas of it.	4	CO1
Q 2	What effects the Internet of Things (IoT) has on our daily lives? Explain by taking one example of smart device.	4	CO1
Q 3	How WSN and IoT are correlated? Take one practical daily life example in support of your answer.	4	CO3
Q 4	Give a brief sketch of few Data collections and analysis tools used for IoT.	4	CO4
Q 5	Name and discuss major IoT protocols and standards.	4	CO1

SECTION B

Q 6	Discuss CoAP security. What different security modes are available in CoAP?	10	CO4
Q 7	How do you see The future of IoT? Give ten predictions about the Internet of Things in next coming few years with hardware requirements especially of sensors.	10	CO2
Q 8	Discuss by taking suitable case scenario: MQTT, DDS, REST.	10	CO4
Q 9	How to set up an IoT environment for basic applications? Take your own application as example as if an IoT engineer. Give hardware and software requirements for the above. <p style="text-align: center;">OR</p> In terms of security, scalability and integration; how as an IoT engineer you see the Potential success factors of IoT? Take suitable examples in support of your answer by paying attention to the IoT today and IoT tomorrow.	10	CO3

SECTION-C

Q 10	Discuss in detail either building automation applications of IoT or smart agriculture applications of IoT. Give hardware and software requirements for the above.	20	CO3
Q 11	Trust, Security and Privacy of IoT are the major bottleneck today for IoT products. Comment on this statement. What plans you would have to overcome from these aspects for your IoT product. Support answer by taking one IoT product of you as IoT engineer. <p style="text-align: center;">OR</p> How would you utilize the Cloud Computing and Big Data concepts for developing an IoT projects of any two of these: Smart Cities, Smart home, Smart Building, Smart health? Give a complete sketch of hardware and software requirements for the above along with their uses as an engineer.	20	CO4