

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer 2022

Course: B. Tech.

Sem: VIII

Subject Name: Introduction to Internet of Things

Subject Code: BTETPE802A

Max Marks: 60

Date: 07/07/2022

Duration: 3.45 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
Q.1 Solve Any Two of the following.		
A) Define IoT. List out the Features of IoT and also State the characteristics of IoT.	(L1/CO1)	6
B) Explain various link layer protocols of IoT.	(L1/CO1)	6
C) Describe an example of an IoT system in which information and knowledge are inferred from the data.	(L2/CO1)	6
Q.2 Solve Any Two of the following.		
A) With a neat sketch, explain the request-response communication model of IoT.	(L2/CO1)	6
B) Compare the protocols associated with transport layer of IoT.	(L2/CO2)	6
C) Explain the functional blocks of an IoT ecosystem.	(L2/CO1)	6
Q.3 Solve Any Two of the following.		
A) Describe the following steps involved in IoT system design methodology: (i) Purpose & Requirements Specification (ii) Process Specification	(L2/CO3)	6
B) Describe the following steps involved in IoT system design methodology: (i) Information model Specification (ii) Service Specifications	(L2/CO3)	6
C) Write a note on Security adopted for IEEE 802.15.4	(L2/CO2)	6
Q.4 Solve Any Two of the following.		
A) Explain in brief all the protocol stacks based on 802.15.4	(L2/CO3)	6
B) Explain the characteristics of Python programming language.	(L1/CO3)	6
C) Describe various features of a Raspberry Pi device.	(L2/CO4)	6
Q.5 Solve Any Two of the following.		
A) List and explain IoT Applications for home appliances in detail.	(L2/CO6)	6
B) Write a note on IoT Application Layer Protocols CoAP and MQTT with their	(L2/CO5)	6

message format

C) Explain all the steps of IoT Design Methodology

(L2/CO6)

6

*** End ***

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