31-05-2022

K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)
End Semester Exam
April - May 2022 Program: B.Tech
Examination: TY Semester: VI
Course Code:1UEXDLC6052 and Course Name: IoT and Industry 4.0
Duration: 03 Hours   Max. Marks: 60

Instructions:
(1)All questions are compulsory.
(2)Draw neat diagrams wherever applicable.
(3)Assume suitable data, if necessary

		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	Discuss the characteristics of IoT.	2	CO1	U
ii)	List protocols used in Link Layer	2	CO2	U
iii)	Discuss advantages of Hadoop 2.0.	2	CO2	U
iv)	Explain Batch data analysis process for IoT.	2	CO3	U
v)	State applications of Industry 4.0.	2	CO4	U
vi)	Describe Next Generation Sensors for Industry 4.0	2	CO4	U
vii)	List Industrial IoT- Applications in Healthcare domain.	2	CO5	U
viii)	Discuss IoTs Value Creation for smart city concept.	2	CO6	U
Q.2	Solve any four questions out of six.	16		
i)	Explain Physical design of IoT.	4	CO1	U
ii)	Describe the protocols used in the network/Internet layer.	4	CO2	U
iii)	Compare Rest and Restful environment.	4	CO3	U
iv)	Classify Apache Oozie and Apache Spark with respect to their architecture, working and application point of view.	4	CO4	An
v)	List Industrial IoT- Applications in Power Plants domain.	4	CO5	U

vi)	Explain an important for businesses of today and future with respect to Industry 4.0.	4	CO6	U
Q.3	**Solve any two questions out of three.**	16		
i)	Explain IoT Design Methodology with flow diagram.	8	CO1	U
ii)	Define the Conceptual framework for Industry 4.0	8	CO4	U
iii)	Discuss the importance of Artificial Intelligence in IIoT.	8	CO5	U
Q.4	**Solve any two questions out of three.**	16		
i)	Describe the protocols used in the application.	8	CO2	U
ii)	Describe Apache Hadoop architecture with diagram.	8	CO3	U
iii)	Describe the four market drivers which have amplified the integration of IoTs within current economic systems.	8	CO6	U