

Course: B. Tech. Branch: Artificial Intelligence and Data Science Semester : V

Subject Code & Name: BTAIC501 Computer Network and Cloud Computing

Max Marks: 60

Date: 28.01.2023

Duration: 3 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of 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.		12
A) What is Computer Network? Explain uses of Computer Network	BL2 & CO1	6
B) Explain ISO OSI Model?	BL2 & CO1	6
C) Define the Network Topology. Enlist the different types of Network Topologies. Explain any two network topologies with neat diagram.	BL2 & CO1	6
Q.2 Solve Any Two of the following.		12
A) What do you mean by network Protocol and How it works	BL3& CO2	6
B) Explain TCP/IP Model?	BL2& CO2	6
C) Explain Carrier Sense Multiple Access and Collision Avoidance (CSMA/CA) Protocol.	BL3& CO2	6
Q. 3 Solve Any One of the following.		12
A) Explain services provided by transport layer.	BL3& CO3	6
B) Explain TCP and UDP Protocol.	BL2& CO3	6
C) Explain DNS.	BL3& CO3	6
Q.4 Solve Any Two of the following.		12
A) Define Cloud Computing with Example of Service Providers.	BL1& CO4	6
B) Explain Advantages of Cloud Computing.	BL2& CO4	6
C) Explain Challenges and Risks in Cloud Computing.	BL3& CO4	6
Q. 5 Solve Any One of the following.		12
A) Explain Cloud Deployment Models with suitable diagrams.	BL3& CO5	6
B) Explain Cloud Services with Examples.	BL3& CO5	6
C) Write in Details about Data Centre Components	BL3& CO5	6