

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: BBA  
BRANCH: BBA**

**SEMESTER : V  
SESSION : MO/2025**

**SUBJECT: MN414 COMPUTER NETWORKS**

**TIME: 3 Hours**

**FULL MARKS: 50**

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Explain advantages and disadvantages of computer network.	[5] 1	Understand
Q.1(b)	Describe the application of wireless network in different real life scenarios.	[5] 1	Understand
Q.2(a)	Differentiate between Bus, Ring, Star and Mesh topologies.	[5] 2	Analyse
Q.2(b)	Explain the functionality of guided and unguided media for data transmission in a network.	[5] 2	Understand
Q.3(a)	Explain the functionality of data link layer and physical layer.	[5] 3	Understand
Q.3(b)	Classify the following IP addresses.	[5] 4	Understand
	a) 178.89.78.15	[5]	
	b) 110.23.93.2		
	c) 11011011.00011100.11110100.00010001		
	d) 10110001. 00001110.10100010.11100011		
Q.4(a)	Differentiate between Circuit Switching and Packet Switching	[5] 4	Analyse
Q.4(b)	Explain multiplexing for data transmissions in a network with an example.	[5] 4	Understand
Q.5(a)	Explain the methodology of SMTP with a diagram.	[5] 5	Understand
Q.5(b)	Evaluate the significance of digital certificates and digital signature with an example.	[5] 5	Evaluate

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