

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

**CLASS: BCA
BRANCH: COMPUTER SCIENCE**

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

SUBJECT: CA307 INTRODUCTION TO 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)	How do you differentiate a LAN, a MAN and a WAN.?	[5] 1	2
Q.1(b)	Which topology in your opinion is most reliable. Why .?	[5] 1	2
Q.2(a)	Discuss the benefits of using fibre optic cables.?	[5] 2	1
Q.2(b)	How do OSI reference model differ from TCP/IP model.?	[5] 2	2
Q.3(a)	Discuss the functions and services provides by physical layer.?	[5] 3	1
Q.3(b)	What is multiplexing. Compare FDM and TDM.?	[5] 3	2
Q.4(a)	Discuss stop and wait sliding window protocol.?	[5] 4	1
Q.4(b)	Explain why congestion in a network occurs.?. How do we control it.?	[5] 4	2
Q.5(a)	How does TOKEN RING network differ from FDDI network.?	[5] 5	2
Q.5(b)	What is a firewall. Discuss some of the limitations of a firewall.?	[5] 5	1

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