

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

**CLASS: BCA
BRANCH: BCA**

**SEMESTER : Vth
SESSION : MO/2024**

SUBJECT: CA307 INTRODUCTION TO COMPUTER NETWORK

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)	Discuss some of the features of LAN, MAN & WAN?	[5] 1	1
Q.1(b)	For n—devices, how many cable links are required for each of the topologies Mesh, Star, Bus and Ring?	[5] 1	2
Q.2(a)	What is NIC? Discuss the benefits of using fibre optic cable?	[5] 2	1
Q.2(b)	Differentiate OSI reference model and TCP/IP model?	[5] 2	2
Q.3(a)	What is a Null modem? Discuss the use of DTE /DCE interface?	[5] 3	1
Q.3(b)	What is the purpose of Multiplexing? Differentiate TDM & FDM?	[5] 3	2
Q.4(a)	Compare & contrast stop and wait ARQ & continuous ARQ?	[5] 4	2
Q.4(b)	What is routing? How does static routing differ from dynamic routing?	[5] 4	2
Q.5(a)	Discuss CSMA/ CD technique?	[5] 5	1
Q.5(b)	What factors have brought increased emphasis on network security?	[5] 5	1

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