

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

**CLASS: BCA
BRANCH: COMPUTER SCIENCE**

**SEMESTER: V (Add.)
SESSION : MO/2025**

SUBJECT: CA307 INTRODUCTION TO COMPUTER NETWORKS

TIME:02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
-

		CO	BL
Q.1(a)	Discuss how computer networks are part of your life.	[2] 1	1
Q.1(b)	What are the factors that differentiate a LAN, a MAN, and a WAN?	[3] 1	2
Q.2(a)	Differentiate physical topology and logical topology.	[2] 1	2
Q.2(b)	Which topology do you think is the most reliable? Justify your answer.	[3] 1	2
Q.3(a)	What are the advantages of using fibre optic cable?	[2] 2	1
Q.3(b)	How do you differentiate a HUB and a SWITCH?	[3] 2	2
Q.4(a)	What is the importance of NIC?	[2] 2	1
Q.4(b)	Compare the OSI reference model and the TCP/IP model.	[3] 2	2
Q.5(a)	Explain the purpose of the DTE/DCE interface.	[2] 3	1
Q.5(b)	Discuss the function and services of the physical layer.	[3] 3	1

:::19/09/2025:::M