



সামান্য মন্ত্র: সমিতি: সামান্য  
UNIVERSITY OF NORTH BENGAL  
B.Sc. Honours 3rd Semester Examination, 2022

### CC7-COMPUTER SCIENCE (33)

#### COMPUTER NETWORKS

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

#### GROUP-A

Answer any *five* questions

1×5 = 5

1. What is reference model?
2. What is encoding?
3. What is intranet?
4. Expand TDM.
5. What is a packet?
6. What is unguided media?
7. Expand OSI.
8. Name one error detection method.

#### GROUP-B

Answer any *three* questions

5×3 = 15

9. Discuss the advantages and disadvantages of tree topology.
10. Discuss different types of coaxial cable.
11. How is cat5 cable better than cat3? Justify.
12. Discuss the function of data link layer of OSI reference model.
13. Discuss different protocols present in OSI reference model.

#### GROUP-C

Answer any *two* questions

10×2 = 20

14. Explain the different phases of circuit switching technology.
15. Generate the transmitted bit pattern for the unit '1110110010' where the predetermined divisor is '110110' using Cyclic Redundancy Check (CRC).
16. Explain the difference between computer networks and distributed system.
17. Explain the operation of HDLC.

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