UNIVERSITY OF NORTH BENGAL

B.Sc. Programme 3rd Semester Examination, 2022

DSC1/2/3-P3-COMPUTER SCIENCE

COMPUTER NETWORKS

Time Allotted: 2 Hours   Full Marks: 60

The figures in the margin indicate full marks.

1. Answer any *four* questions: 3×4 = 12

   (a) Differentiate between analog and digital signals.

   (b) What do you understand by layered network architecture?

   (c) Explain LRC with an example.

   (d) What is a parity checker? Explain in brief.

   (e) Compare IPv4 and IPv6 addressing.

   (f) Discuss parallel and serial mode of transmission.

2. Answer any *four* questions: 6×4 = 24

   (a) Compare different network switching techniques.

   (b) Explain CSMA/CD protocols.

   (c) Discuss TDM and FDM.

   (d) Discuss different data transmission modes.

   (e) Explain any routing algorithm.

   (f) Compare LAN, MAN and WAN.

3. Answer any *two* questions: 12×2 = 24

   (a) Explain router, repeater, bridge and gateways with their usage.

   (b) What is Topology? Discuss different types of topologies with their advantages and disadvantages.

   (c) What is Transmission Media? Discuss different types of guided and unguided media.

   (d) Discuss OSI reference model.

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