UNIVERSITY OF NORTH BENGAL

B.Sc. Programme 3rd Semester Examination, 2020

DSC3-COMPUTER SCIENCE

COMPUTER NETWORKS

Full Marks: 60

ASSIGNMENT

The figures in the margin indicate full marks.
answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

Answer any *three* Assignments from the following   20×3 = 60

1. Explain layered network architecture. Explain and compare OSI reference model and TCP/IP protocol suite.   10+10

2. Explain digital to digital line encoding schemes and pulse code modulation. Differentiate between parallel and serial transmission. Discuss digital to analog modulation and explain different multiplexing techniques.   8+5+7

3. What is switching? Discuss different types of switching technologies used in Computer Networking.   2+18

4. Explain different Error detection and error correction techniques.   20

5. Explain data-link control-framing and flow control and different error recovery protocols like stop and wait ARQ, go-back-n ARQ.   20

6. What is CSMA/CD? Explain different CSMA/CD protocols.   10+10

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