BANKURA UNIVERSITY

B. Sc. (HONOURS) THIRD SEMESTER EXAMINATIONS, 2021

Subject: Computer Science

Course Title: Computer Networks

Full Marks: 25

Time: 1 Hr. 15 min

 $(1 \times 5 = 5)$

Course ID: 31513

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

- 1. Answer *any five* of the following questions:
 - a) What is router?
 - b) What is protocol?
 - c) What is piggy backing?
 - d) What is flooding?
 - e) What is congestion?
 - f) What is web browser?
 - g) What is topology?
 - h) Define Networking.

UNIT II

- 2. Answer *any two* of the following questions: $(5 \times 2 = 10)$
- a) Discuss Frequency-Division-Multiplexing and Time-Division-Multiplexing.
- b) State the differences between Go-back-N and Selective Repeat techniques.
- c) Write short note on Stop and wait protocol.
- d) Compare among LAN, MAN and WAN.

UNIT III

- 3. Answer *any one* of the following questions: $(10 \times 1 = 10)$
 - a) Explain the working principles of different layers in ISO/OSI model. Compare the similarities and dissimilarities of OSI and TCP/IP reference model. (6 + 4)
 - b) Given a 10 bit sequence 1011101111 and a divisor 1101, find the CRC checksum. What is packet switching? Why is it considered more efficient than message switching? (5 + 2 + 3)