



WEST BENGAL STATE UNIVERSITY
B.Sc. General Part-III Examination, 2019

COMPUTER SCIENCE
PAPER-CMSG-IVA

Time Allotted: 2 Hours

Full Marks: 50

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

Answer Question No. 1 and any five from the rest

1. Answer any **five** questions from the following: 2×5 = 10
 - (a) How a Switch is different from a Hub?
 - (b) Differentiate broadband and baseband.
 - (c) Define Shannon capacity.
 - (d) What is FDM?
 - (e) What is Paging?
 - (f) What do you mean by flow control?
 - (g) Define selective repeat ARQ.
 - (h) How ring topology is different from star topology?

2.
 - (a) What is slotted ALOHA? 2
 - (b) What is buffering? 3
 - (c) Write about Stop and Wait protocol. 3

3.
 - (a) What do you mean by error control? 2
 - (b) Describe the components of a data communication system. 6

4.
 - (a) Explain FSK briefly. 3
 - (b) What is HTTP and what port does it use? How does it differ from HTTPS? 2+1+2

5.
 - (a) What is Go-Back-N ARQ? 2
 - (b) Write a short note on Selective Repeat Protocol. 3
 - (c) What is the frame format of HDLC? 3

6. (a) What is CSMA/CD? 2
(b) Write a short note on Token Bus. 2
(c) Write any one routing algorithm. 4
7. (a) Discuss coaxial cable. 5
(b) What are the advantages of optical fiber over coaxial cable? 3
8. Write short notes on any *two* of the following: 4+4 = 8
- (a) Sliding window protocol
 - (b) Email system
 - (c) Routing
 - (d) IP addressing.

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