

2020

COMPUTER SCIENCE — GENERAL

Fourth Paper

(Group - A)

Full Marks : 50

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

SET - 1

Answer **question no. 1** and **any five** questions from the rest.

1. Answer **any five** questions : 2×5
- (a) Define Data Rate.
  - (b) What is S/N ratio?
  - (c) What is multiplexing?
  - (d) Differentiate between time domain and frequency domain.
  - (e) Define IP address.
  - (f) What is Ethernet?
  - (g) What are the uses of bridges and routers?
  - (h) What is the functionality of UDP?
2. (a) Write short notes on following media :  
(i) Twisted pair  
(ii) Coaxial cable.
- (b) Explain the concepts of full duplex and half duplex with example. (2+2)+4
3. (a) Differentiate between LAN, MAN and WAN.
- (b) Write down the functionalities of Network and Transport layer in OSI model. 4+4
4. (a) Write short notes on : (i) FSK and (ii) ASK.
- (b) What is Geosynchronous satellite? (3+3)+2
5. (a) Describe the uses of a browser.
- (b) Define logical, physical and port address. 5+3

**Please Turn Over**

6. (a) Describe the principle of Token Ring Technology with diagram.  
(b) What is the functionality of DNS? 6+2
7. (a) Briefly describe the architecture of E-mail service.  
(b) What is PAM? 6+2
8. Explain with diagram TCP/IP protocol suite. 8
9. (a) What do you mean by URL?  
(b) Describe the microwave transmission technique with example. 2+6
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