

2022

Time : 3 hours

Full Marks : 70

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

The figures in the margin indicate full marks.

*Answer from **all** the Parts as directed.*

Part – A

(Objective Type Questions)

- ✓ 1. Choose the correct answer of the following :

1×5 = 5

(a) TDM stands for _____.

- (i) Time Division Multiplexing
- (ii) Test Division Multiplexing
- (iii) Information Division Multiplexing
- (iv) None of these

(b) What is HUB ?

- (i) Software
- (ii) Computer device
- ~~(iii) Network~~
- ~~(iv) None of these~~

(c) What does a set of rules define ?

- (i) SMTP
- (ii) FTP
- (iii) IMAP
- ~~(iv) Protocol~~

(d) Identify among the following which is mainly used to host website ?

- (i) Mail Server
- ~~(ii) Web Server~~
- (iii) Database Server
- (iv) None of these

(e) Identify the layer which provides service to the user :

- (i) Session layer
- ~~(ii) Application layer~~
- (iii) Presentation layer
- ~~(iv) Physical layer~~

2. Fill up the blanks : 1×5 = 5

- (a) In _____ based network, resources are located on central server or a group of server.
- (b) A _____ is a set of rules that control the Data Communication.
- (c) _____ Cable has single copper conductor at its centre.
- (d) _____ Cable has extremely high bandwidth.
- (e) ISP stands for _____.

Part – B

(Short-answer Type Questions)

3. Answer any four questions of the following :

5×4 = 20

- ✓ (a) What is Network Classification ?
- ✓ (b) Explain the Packet Switching.
- (c) Differentiate between FDM and TDM.
- (d) What is transmission media in Computer Network.
- (e) Explain the WWW and HTTP.
- ✓ (f) Explain the following :
 - (i) Bridges
 - (ii) MODEM
 - (iii) Digital Subscriber Line

Part – C

(Long-answer Type Questions)

4. Answer any four questions of the following :

10×4 = 40

- ✓ (a) Describe the TGP/IP Protocol in Computer Network.
- ✓ (b) Differentiate between Parallel and Serial transmission.
- (c) Describe the Layered Network Architecture with diagram.
- ✓ (d) Differentiate between OSI and TCP/IP Model.
- (e) Describe the framing and flow control of the Data Link Layer.
- (f) Explain the following :
 - ✓ (i) go-back-n ARQ
 - ✓ (ii) DMS Protocol
 - (iii) Internet Control Protocol
- (g) Describe the Routing Algorithm in Network Layer.

TCP

