

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MCA DEGREE EXAMINATION DECEMBER 2022  
(First Semester)

Branch – COMPUTER APPLICATIONS

COMPUTER NETWORKS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Routing process is managed by \_\_\_\_\_ layer.  
(i) Physical (ii) Data Link  
(iii) Network (iv) Transport
- 2 A 16-bit number local to a host in TCP is called as \_\_\_\_\_.  
(i) Socket (ii) Session  
(iii) Protocol (iv) Port
- 3 Dividing the packet as small packets is known as \_\_\_\_\_.  
(i) Segmentation (ii) Fragmentation  
(iii) Partition (iv) Division
- 4 The process of data communication that can be done simultaneously in both ends is called as \_\_\_\_\_.  
(i) Simplex (ii) Half Duplex  
(iii) Full Duplex (iv) Prolix
- 5 \_\_\_\_\_ is performed at the receiver with the help of the training sequence transmitted in the midamble of every time slot.  
(i) Equalization (ii) Hopping  
(iii) Demodulation (iv) Synchronization

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Compare LAN and MAN networks.  
OR  
b Organize the five basic functions of e-mail systems.
- 7 a Justify the use of Berkeley Sockets.  
OR  
b Prepare a basic note on the TCP Service Model.
- 8 a Explain about the Choke Packets concepts in Congestion Control Algorithm.  
OR  
b Produce the salient features of Open Shortest Path First Gateway Protocol.

Cont...

- 9 a State about Time Division Multiple Access in detail.  
OR  
b Classify the difference between Circuit and Packet Switching.
- 10 a Explain about Forward CDMA Channel.  
OR  
b Illustrate in brief about Reverse CDMA Channel.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Classify the layers and its functions in the OSI Reference Model.  
OR  
b Elucidate about the usage of the World Wide Web.
- 12 a Compare the difference between Connection Establishment and Connection Release.  
OR  
b Develop a concept analysis on TCP Connection Management Modeling.
- 13 a Survey on Quality of Service need for network layer.  
OR  
b How Internet Control Protocols plays a vital role in data transfer? Explain.
- 14 a Survey about the Frequency Division Multiple Access.  
OR  
b Interpret the necessity of Wireless Data Service in data communication.
- 15 a Elaborate about GSM with neat diagram.  
OR  
b Design and develop any one of the Wireless Technologies in Industrial Application.

Z-Z-Z

END