

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCA DEGREE EXAMINATION MAY 2023
(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 Synchronization is one of the function of _____ layer.
(i) Network (ii) Session
(iii) Presentation (iv) Application
- 2 A TCP segment consists of a fixed _____ byte header followed by zero or more data bytes.
(i) 8 (ii) 10
(iii) 16 (iv) 20
- 3 When too many packets are present in the subnet, performance degrade and the is situation is called as _____.
(i) Deviation (ii) Flooding
(iii) Congestion (iv) Colloidation
- 4 The first component supports traffic between the end-user and the network is called as _____ signalling.
(i) access (ii) traffic
(iii) digital (iv) network
- 5 Expansion of GSM is _____
(i) Global System for Mobile (ii) Global Server for Mobile
(iii) General System for Mobile (iv) General Server for Mobile

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Determine the functions of Physical and Data Link layers of OSI reference model.
OR
b State about URL functionalities.
- 7 a Discuss about the techniques used for error and flow control in Transport Protocol.
OR
b Prepare a basic note on the TCP Protocol.
- 8 a Show the importance of the Token Bucket Algorithm.
OR
b Produce the salient features of Border Gateway Protocol.

Cont...

- 9 a State about Spatial Division Multiple Access.
OR
b Discuss about Integrated Services Digital Network (ISDN).
- 10 a Sketch about Frame Structure of GSM.
OR
b Write a short notes on GSM Control Channels.

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 TCP/IP Model.
OR
b Develop a note about the functionality of Domain Name System.
- 12 a Elucidate about User Datagram Protocol.
OR
b Construct a neat note on TCP Segment Header.
- 13 a Recommend Distance Vector Routing algorithm for routing process with its highlights.
OR
b How IP Addresses plays a vital role in data transfer? Explain.
- 14 a Survey about the Code Division Multiple Access.
OR
b Enumerate the salient features of traffic routing in Wireless Network.
- 15 a Criticize on Reverse CDMA Channel.
OR
b Design and develop any one of the Wireless Technologies in Industrial Application.

Z-Z-Z

END