

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024  
(Fourth Semester)

Branch – COMPUTER SCIENCE

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. Physical or logical arrangement of network is \_\_\_\_\_.  
(i) Topology (ii) Routing  
(iii) Networking (iv) Control
2. In \_\_\_\_\_ the chance of collision can be reduced if a station senses the medium before trying to use it.  
(i) FDMA (ii) CDMA  
(iii) CSMA (iv) TDMA
3. Flooding broadcast packets create loops in the \_\_\_\_\_.  
(i) Systems (ii) Domains  
(iii) Group (iv) Station
4. UDP expands \_\_\_\_\_.  
(i) User Data in process (ii) Unified Datagram process  
(iii) User Datagram protocol (iv) Unique development procedure
5. Which of the following is an example of user agents for e-mail?  
(i) Microsoft Outlook (ii) Facebook  
(iii) Google (iv) Instagram

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. (a) Compare OSI and TCP/IP models.  
OR  
(b) Summarize the working procedure of Repeaters.
7. (a) Explain the ALOHA protocols.  
OR  
(b) Outline the features of Multiplexing.
8. (a) State the importance of IPV6 protocols.  
OR  
(b) Bring out the advantages of classless addressing.
9. (a) Discuss about the flow control in data link layer.  
OR  
(b) Analyze the nature of socket programming.
10. (a) Narrate the importance of IMAP in application layer.  
OR  
(b) Describe the features of firewall.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. (a) Identify the various layers involved in OSI reference model.  
OR  
(b) Elucidate the various transmission media involved in networks.
12. (a) Summarize the working principle of CSMA.  
OR  
(b) Enumerate the Go Back N protocol in detail.
13. (a) Summarize the features of Dijkstra algorithm.  
OR  
(b) Discuss about the Network address translation.
14. (a) Examine the design issues in protocols at different layers.  
OR  
(b) Compare UDP with TCP in transport layer.
15. (a) Point out the significant characteristics of Domain Name System.  
OR  
(b) Highlight the importance of RSA algorithm.

Z-Z-Z      END