

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 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. OSI stands for _____
(i) Operating system interface (ii) Optical service implementation
(iii) Open service Internet (iv) Open system interconnection
2. In layering, n layers provide service to _____
(i) n layer (ii) n-1 layer
(iii) n+1 layer (iv) nx2 layer
3. Most packet switches use this principle _____
(i) Stop and wait (ii) Store and forward
(iii) Store and wait (iv) Stop and forward
4. Which of the following protocol is not belongs to sliding window protocol.
(i) Stop and wait (ii) User Datagram Protocol
(iii) Go Back N (iv) Selective Repeat
5. _____ is the science and art of transforming messages to make them secure and immune to attacks
(i) Cryptography (ii) Calligraphy
(iii) Cryptanalysis (iv) Cartography

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. (a) Mention the names of network topologies.
OR
(b) Summarize the concept of attenuation and its types.
7. (a) Explain the advantages of Wimax in networking.
OR
(b) Outline the features of Multiplexing.
8. (a) Bring out the advantages of Circuit switching.
OR
(b) State the importance of Distance Vector routing algorithm.

Cont...

9. (a) Discuss about the TCP connection establishment.

OR

- (b) Analyze the nature of timers in TCP model.

10. (a) Narrate the importance of SMTP in application layer.

OR

- (b) Describe the features of Pretty Good Privacy (PGP) in brief.

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

11. (a) Identify the various layers involved in TCP/IP reference model.

OR

- (b) Elucidate the various Data encoding techniques in networks.

12. (a) Summarize the working principle of Geostationary Earth Orbit (GEO) satellite.

OR

- (b) Enumerate the stop and wait protocol in detail.

13. (a) Summarize the features of TCP connection termination.

OR

- (b) Discuss about the Subnetting in networking.

14. (a) Examine the design issues in protocols at different levels.

OR

- (b) Difference between Flow Control and Congestion Control.

15. (a) Point out the significant characteristics of HTTP.

OR

- (b) Highlight the importance of Diffie Hellman algorithm.

Z-Z-Z

END