

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc (SS) DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – **SOFTWARE SYSTEMS (five year integrated)**

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. Which layer is responsible for process delivery?
 i) Network layer ii) Transport layer iii) Session layer iv) Datalink layer
2. Why do we require hamming codes?
 i) Error correction ii) Encryption iii) Decryption iv) None
3. Ethernet frame consist of _____.
 i) IP address ii) Default address iii) MAC address iv) Network address
4. TCP/IP is related to _____.
 i) ARPANET ii) ISO-OSI iii) DECNET iv) None
5. HTTP is _____ protocol.
 i) Application layer ii) Transport layer iii) Network layer iv) Data link layer

SECTION - B (15 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks

(5 x 3 = 15)

- 6.a) List out the Network goals.
(OR)
b) Write a short note on Sampling Rate.
- 7.a) Explain about FDM.
(OR)
b) Explain about Hamming code.
- 8.a) Write a short note on spanning tree.
(OR)
b) Explain about hubs and routers.
- 9.a) Discuss about internet protocol.
(OR)
b) Explain about TCP/IP.
- 10.a) Write a note on congestion control.
(OR)
b) Give a note on HTTP, FTP.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

11.a) Explain about OSI reference model.

(OR)

b) Discuss about network topologies.

12.a) Illustrate about packet and circuit switching.

(OR)

b) Explain about error correction and detection.

13.a) What is sliding window protocol.

(OR)

b) Ellobrate the process of LAN network.

14.a) Explain about TCP/IP protocol with neat diagram.

(OR)

b) Give a note on link state routing.

15.a) Explain about the port number in transport layer.

(OR)

b) Explain about DNS, SMTP AND MIME.

Z-Z-Z

END