

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2023
(Fourth Semester)

Branch – SOFTWARE SYSTEMS (Five Years Integrated)

COMPUTER NETWORKS & TCP/IP

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL question

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. For large networks, which topology is used _____.
(i) Bus (ii) Tree
(iii) Ring (iv) Mesh
2. CRC stands for _____.
(i) cyclic redundancy check (ii) code repeat check
(iii) code redundancy check (iv) cyclic repeat check
3. A subset of a network that includes all the routers but contains no loops is called _____.
(i) spanning tree (ii) spider structure
(iii) spider tree (iv) special tree
4. Which of the following routing algorithms can be used for network layer design?
(i) shortest path algorithm (ii) distance vector routing
(iii) link state routing (iv) all of the mentioned
5. Which protocol does HTTP use for transferring web pages at the Transport layer?
(i) IP (ii) UDP
(iii) TCP (iv) ARP

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) Discriminate types of Networks.
OR
b) Explain about the Data Encoding.
7. a) Difference between Synchronous and Asynchronous Transmission.
OR
b) Discuss about the CRC code.
8. a) Describe the Random Access Protocol.
OR
b) Illustrate the Spanning Tree.

Cont...

- 9 a) Elaborate ICMP Protocol with example.
OR
b) Discuss about Distant Vector routing protocol.
- 10 a) Narrate Port number with example.
OR
b) Discuss about the HTTP Protocol.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a) Explain about the Analog and Digital data transmission.
OR
b) Explain about the OSI Reference Model with neat sketch.
- 12 a) Compare packet switching and circuit switching.
OR
b) Illustrate the concept of Hamming code.
- 13 a) Demonstrate Sliding window protocol.
OR
b) Discuss about the Wireless LAN's.
- 14 a) Discuss about the IP Addressing.
OR
b) Elaborate Link state routing with example.
- 15 a) Describe about the Congestion Control.
OR
b) Elaborate DNS with example.

Z-Z-Z

END