

SUBSCIT sem III Reg & A.T.K.T. Exam Oct-2022

MALINI KISHOR SANGHVI COLLEGE

12/10/22

**Sub-Computer Network**

Class-Sy (BSc).IT

(2½ Hours)

[Total Marks: 75]



**N. B.: (1) All questions are compulsory.**

**(2) Make suitable assumptions wherever necessary and state the assumptions made.**

**(3) Answers to the same question must be written together.**

**(4) Numbers to the right indicate marks.**

**(5) Draw neat labelled diagrams wherever necessary.**

**(6) Use of Non-programmable calculators is allowed.**

**1. Attempt any three of the following:**

15

1. Explain OSI model.
2. Explain different topologies in Computer network.
3. Explain Digital to digital conversion.
4. Explain Transmission modes (Parallel and Serial) in Networking.
5. Explain different network models in Computer network.
6. Explain Digital to Analog conversion.

**2. Attempt any three of the following:**

1. Write and explain CRC with example
2. Explain multiplexing and demultiplexing
3. Explain time division multiplexing and its types
4. Explain transmission medium in computer network
5. Explain modes of transmission of data (multi and single)
6. Comparison between wire and wireless media

**3. Attempt any three of the following:**

15

1. Explain Bluetooth and its architecture
2. Explain packet switching.
3. Explain Piggybacking.
4. Explain HUB
5. Explain thick or thin network
6. Explain characteristic of wireless LAN

**4. Attempt any three of the following:**

15

1. Explain RIP.
2. Explain OSPF.
3. State and explain network layer and its services.
4. Explain IPV4 Datagram.
5. Explain ICMP message.
6. Explain mobile IP.

5. Attempt any three of the following:

15

1. Explain TCP and explain its packet format.
  2. Explain UDP and explain its packet format.
  3. Explain 3-way hand shaking for its TCP connection.
  4. Write a short note on WWW and URL.
  5. Explain File Transfer Protocol.
  6. Write a note on HTTP.
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