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SUBJECT CODE NO: - Y-2105
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y (Sem-VI)
Examination March / April - 2023
Computer Science Paper-CSO-19 (Data Communication & Networking)

[Time: 1:30 Hours]**[Max. Marks: 50]**

Please check whether you have got the right question paper.

N. B

- 1) Attempt all questions.
- 2) All questions carry equal marks.

Q1 a) Explain with neat diagram simplex, half duplex and full duplex data transmission mode. 10

b) Explain with neat diagram ASK and FSK Digital to analog conversion technique 10

OR

a) What is transmission media? Explain in brief different types of transmission media. 10

b) What is network Topology? Explain with neat diagram different network topology. 10

Q2 a) Explain with neat diagram serial and parallel data transmission. 10

b) Explain with neat diagram third generation (3G) mobile system 10

OR

Write short note (any four) 20

- i. Modulation
- ii. Cable modem
- iii. Spectrum Allocation
- iv. PSK
- v. Optical fiber cable
- vi. UTP cable

Q3 Multiple choice questions 10

1) Protocols are set of rules to govern.

- a) Communication
- b) Standards
- c) Metropolitan communication
- d) None

- 2) A _____ connection produces a dedicated link between two devices
 - a) Primary
 - b) Multipoint
 - c) Point-to-Point
 - d) Secondary
- 3) Hybrid network includes combination of
 - a) Nodes
 - b) Devices
 - c) Topologies
 - d) None
- 4) Bus, Ring and star Topologies are mostly used in the
 - a) LAN
 - b) MAN
 - c) WAN
 - d) Internetwork
- 5) Microwaves having frequency between
 - a) 1 and 300 GHZ
 - b) 3 KHZ and 1GHZ
 - c) 300 KHZ and 1 GHZ
 - d) 1GHZ and 300 GHZ
- 6) Most common unshielded twisted pair connector is
 - a) RJ 45
 - b) RG 59
 - c) RG 58
 - d) RG 11
- 7) _____ conversion is process of changing one of characteristics of analog signal into digital data
 - a) Analog to analog
 - b) Digital to digital
 - c) Digital to analog
 - d) Analog to digital
- 8) When the modelling signal control the frequency of carrier, we get
 - a) Phase modulation
 - b) Amplitude modulation
 - c) Frequency modulation
 - d) Any of above
- 9) The Third generation (3G) of mobile phone uses:
 - a) Analog voice
 - b) Digital voice
 - c) Hybrid
 - d) Digital voice and data
- 10) DSL stands for
 - a) Digital subscriber line
 - b) Digital switched line
 - c) Data subscriber line
 - d) Data switched line