BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2018 COURSE) T.Y.B.Sc.(Computer Science) Sem-V : WINTER- 2022 SUBJECT : DATA COMMUNICATION & NETWORKING-I

Time: 02:00 PM-05:00 PM

Day: Monday Max. Marks: 60 W-20123-2022 Date: 19-12-2022<u>&&&</u> **N.B.**: All questions are **COMPULSORY**. 1) Figures to the RIGHT indicate full marks. 2) [12] Answer ANY TWO of the following: **Q.1** Explain Base Band and Broad Band Transmission. a) Differentiate between LAN, WAN, MAN. **b**) With neat diagram explain working of Router and Gateway. c) [12] Answer ANY TWO of the following: **Q.2** a) Draw neat labelled diagram and explain Co-axial Cable and Fiber Optic Cables. b) Illustrate the working of Storage Area Networking. Differentiate between 10/100Mbps and Gigabit Ethernet. Q.3 Answer **ANY TWO** of the following: [12] Elaborate working of Network Interface Card. b) Illustrate -FDDI and Broad Band Technologies. Differentiate between Connection-Oriented and Connectionless Services. **Q.4** Answer ANY THREE of the following: [12] Explain with neat diagram OSI Network Reference Model. a) Illustrate terms -Twisted Pair Cabling, UTP. b) Illustrate Hybrid Network with suitable diagram. Draw and explain the working of Telephone Network. Answer ANY FOUR of the following: **Q.5** [12] Elaborate the role of Repeater and Bridge in Networking. a) Explain any 2 network topologies with suitable diagrams. b) What is Point to Point Communication ?Explain with diagram. c) d) What is the Role of Device Driver Software? Explain. Explain different transmission modes. e) Define - computer network and explain need of networking. f)