

B.Sc. Sem-6 Examination

CC 311

Electronics (A) Modern Commu.

Time : 2-00 Hours]

April 2022

[Max. Marks : 50

SECTION - I

- Q.I** (A) Explain with diagram receive and transmit mode functions in a basic telephone set. 7
(B) Draw the block diagram of a cordless telephone. Explain Cordless telephone concepts and frequency allocations. 7
- Q.II** (A) Explain BORSCHT functions in the Subscriber Interface at the central office with block diagram. 7
(B) Explain PBX in detail with the help of block diagram. 7
- Q.III** (A) Explain TDMA and CDMA with diagrams. 7
(B) Draw block diagram of typical AMPS unit. Give the sequence of operations that occur when a person initiates a cellular telephone call. 7
- Q.IV** (A) Explain cellular concepts and frequency allocation in detail with diagram. 7
(B) Write short note on advanced cell phones. 7
- Q.V** (A) Explain FR and ATM packet with figure. 7
(B) With simplified diagram of the Internet explain Internet Backbone. 7
- Q.VI** (A) With general block diagram explain routers. 7
(B) Explain the sequence of operations for accessing data by using the iSCSI protocol. 7
- Q.VII** (A) Explain the term Node. Explain WANs, MANs and LANs in detail. 7
(B) Explain E-mail, Internet Access, Groupware, Client-server and Peer-to-peer LANs. 7
- Q.VIII** (A) With block diagram explain bus topology, mesh topology & other topologies. 7
(B) With diagram explain how Repeaters and Hubs are used in LAN. 7

SECTION – II

- Q.IX** Attempt any **EIGHT** 8
- (A) A basic telephone set is an _____ baseband transceiver.
(B) A switch hook is a _____ pole mechanical switch.
(C) Many POPs are connected to multiple IXCs, but in many areas, only one IXC serves a ____.
(D) An alternative to the PBX is known as _____.
(E) CDMA is just another name of _____ spectrum.
(F) In FDD, _____ frequency channels are assigned for transmit and receive functions.
(G) GPRS system is designed to work with _____ phones.
(H) EDGE is sometimes referred to as _____ GPRS.
(I) SONET is by far most widely used _____ data transmission network in the United States.
(J) NAPs provide the links between _____.
(K) The host-to-host layer is really _____.
(L) IP determines the format of the _____.
(M) PANs are referred to as _____ networks that are set up for a specific single purpose.
(N) MANs are usually fiber-optic rings encircling a city that provide _____ access to users.
(O) In a peer-to-peer configuration, any PC can serve as either client or _____.
(P) Fiber-optic cable is a nonconducting cable consisting of a _____ or plastic center cable.