

Seat No. : _____

AG-140

April-2015

B.Sc., Sem.-VI

ELE-311 : Electronics Science

Modern Communication (Elective)

Time : 3 Hours]

[Max. Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Symbols used here have their usual meanings.
(3) Figures to the right indicate marks.

1. (a) Draw the block diagram of a Telephone set. Explain Ringer, Switch hook & Handset. **7**

OR

With block diagram explain the cordless telephone.

- (b) Explain Subscriber Line Interface Circuit (SLIC) basic functions with block diagram. **7**

OR

Explain private telephone systems with a PBX block diagram.

2. (a) Explain Cellular Telephone System with the help of cellular concepts. **7**

OR

Define Multiple access. Explain FDMA, TDMA & CDMA with diagrams.

- (b) Draw the block diagram of the AMPS & describe its operational procedure. **7**

OR

What makes EDGE faster than GPRS ? Draw polar modulated EDGE transmitter.

3. (a) List & describe primary applications of the Internet. 7
- OR**
- Explain Internet transmission systems. Explain Frame Relay & ATM with block diagram.
- (b) Explain SONET & Routers in detail with diagrams. 7
- OR**
- Discuss Storage Area Networks.
4. (a) Explain Node, WANs, MANs & LANs in detail. 7
- OR**
- Explain Network Topologies in detail.
- (b) Describe Hub, Bridges & Gateways used in LAN. 7
- OR**
- Write a note on wireless LAN.
5. Answer the following : 14
- (1) Define : Subscriber Loop
 - (2) Define : Varistors
 - (3) Give full form of DTMF.
 - (4) Give full form of CBX.
 - (5) What is MTSO ?
 - (6) Define : Frequency Reuse.
 - (7) What is MIN ?
 - (8) Give the full form of GPRS.
 - (9) Give full form of FTP.
 - (10) Give full form of http.
 - (11) What is TCP/IP ?
 - (12) Give full form of PAN.
 - (13) Define : Repeater
 - (14) Give full form of VOIP.