

**DIPLOMA IN ELECTRONICS AND
COMMUNICATION ENGINEERING (DECE)**

Term-End Examination

June, 2012

BIEL-033 : Basics Telematics

Time : 2 hours

Maximum Marks : 70

*Note : Attempt **any five** questions in all. Questions No. 1 is compulsory. All questions carry **equal** marks.*

1. State **True** or **False** for the following questions : **7x2=14**
- (a) In telephones, the number unobtainable tone has a frequency of 400 Hz continuous.
 - (b) In a non folded network with N inlets and N outlets, 2N simultaneous information transfers are possible.
 - (c) In the 900 services, the call is free for the caller.
 - (d) The term MODEM is a composite word refers to modulator and demodulator.
 - (e) Tone dialing is faster than pulse dialing.
 - (f) TDM means Time Duration Modulation.
 - (g) If the information transfer in both direction simultaneously, then it is called full duplex communication.
2. Define various signalling tones used in telephone exchange and explain their functions with waveforms and frequency. **14**

3. Draw a block diagram of telecommunication network and explain its working. 14
 4. Draw Architecture of ISDN and explain it in brief. 14
 5. (a) Explain the concept of video conferencing. 7
(b) Describe digital services provided by telephone companies. 7
 6. Explain working of Wireless Telephone System with help of neat suitable diagram. 14
 7. Describe programming and installation procedure of EPABX. 14
 8. Write short notes on *any four* of the following :
 - (a) Analog CMOS cross point switch. $4 \times 3\frac{1}{2} = 14$
 - (b) FAX
 - (c) MODEM
 - (d) Applications of Telecommunication
 - (e) Numbering plan
 - (f) Cordless telephone system
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