



**Telematics
(New) (1280)**

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory and carries equal marks.
5. Figures to the right indicate full marks.
6. Assume suitable data if necessary.

UNIT - I

1. Attempt **any two** of the following. **20**
- a) Explain in detail enhanced services provided by SPC.
 - b) How traffic engineering measure the traffic through various term ? Explain in detail.
 - c) With neat sketches, explain the need, basics and elements of switching system.

UNIT - II

2. Attempt **any two** of the following. **20**
- a) What do you mean by time slot interchange ? Explain it how the scheme proves to be advantageous in switching.
 - b) Determine the values of switching elements and their blocking probability of two stage network.
 - c) With neat sketch explain input controlled time division space switch. State design parameter for not folded network using same switch.

UNIT - III

- 3.** Attempt **any two** of the following. **20**
- a) Describe essential components of a cellular telephone network.
 - b) Explain in short, frequency reuse, cell splitting and co - channel interference reduction factor.
 - c) Explain in short various handoff mechanism.

UNIT - IV

- 4.** Attempt **any two** of the following. **20**
- a) Compare and contrast between GSM and IS - 95 architecture along with specifications.
 - b) Explain call processing techniques in GSM system.
 - c) Explain security and Radio aspects of North American CDMA cellular standard.

UNIT - V

- 5.** Attempt **any two** of the following. **20**
- a) Explain SIP components and SIP call setup operation in detail.
 - b) With proper discussion explain the concept of voice activity detection & discontinuous transmission on IP.
 - c) Explain in detail about protocol format of UDP as applicable to voice signaling over IP.
