

Seat
No.

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DFI1361

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. Answersheet 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. Assume suitable data if necessary.

UNIT - I

1. Attempt **any two** of the following.
 - a) What is SPC ? How SPC system is classified ? Explain centralised SPC with block diagram. List the features of application software in SPC. **10**
 - b) Explain the term in details. **10**
 - i) Traffic measurement units.
 - ii) Grade of service.
 - iii) Blocking probability.
 - c) Explain in details dialing mechanism and various signalling tones in automatic exchange. **10**

UNIT - II

2. Attempt **any two**.
 - a) Draw a neat diagram of digital switching system compare single stage and multistage switching networks. **10**
 - b) Explain 3 stage combination switches. **10**
 - i) TST switch.
 - ii) STS switch.
 - c) Derive the expression of blocking probability of a two stage network. **10**

UNIT - III

3. Attempt **any two** of the following.
- a) Explain with neat diagram basic cellular system state the limitation of conventional mobile telephone system. **10**
 - b) Write a short note on : **10**
 - i) Cell splitting.
 - ii) Hand off.
 - c) What is the necessary of frequency reuse in any mobile operation ? Explain frequency reuse concept with reuse factor in details. **10**

UNIT - IV

4. Attempt **any two** of the following.
- a) Explain with neat block diagram the architecture of Global System for Mobile (GSM). **10**
 - b) With a neat diagram Authentication and ciphering key generation process in GSM. Why it is necessary. **10**
 - c) Explain forward and Reverse link structure of IS-95 CDMA system. **10**

UNIT - V

5. Attempt **any two** of the following.
- a) With an appropriate diagram. Explain H323 protocol standard in details. Give its specification. **10**
 - b) What is VOIP ? Explain the application of VOIP in details. **10**
 - c) List the QoS requirement of IP Telephony. How does RSVP Works ? **10**
