Time: 10:30 adm. to 1:30 p.m.
Subject: Telecommunication Switching System Paper No. PS04CELC03

## Instructions:

Marks: 70
--Figures to the right indicate marks.

## Q-1 Choose the correct answer.

1. If the codes values are transferred during the same time interval from input to output, the technique is called $\qquad$ .
a) space switching
b) time switching
c) combination switching
d) analog switching
2. In telephone conversion, the one who initiates the all is referred as the $\qquad$ .
a) calling subscriber
b) subscriber
c) source
d) destination
3. Full form of DIVA is $\qquad$ .
a) delay in voice answer
b) data in voice answer
c) data in valid answer
d) delay in valid answer
4. The switching time of miniswitching is $\qquad$ .
a) $6-8 \mathrm{~ms}$
b) $10-12 \mathrm{~ms}$
c) $8-10 \mathrm{~ms}$
d) $12-14 \mathrm{~ms}$
5. When the network is expanding the traffic?
a) $\mathrm{N}>\mathrm{M}$
b) $\mathrm{N}<\mathrm{M}$
c) $\mathrm{N}=\mathrm{M}$
d) none
6. The time slot duration $\mathrm{t}_{\mathrm{TS}}$ is given by $\qquad$ .
a) $\mathrm{t}_{\mathrm{TS}}=\frac{126}{N}$
b) $\mathrm{t}_{\mathrm{TS}}=\frac{120}{M}$
c) $\mathrm{t}_{\mathrm{TS}}=\frac{125}{M}$
d) $\mathrm{t}_{\mathrm{TS}}=\frac{125}{N}$
7. Full form of LCC is $\qquad$ .
a) lost calls cleared
b) lost calls return
c) lost cleared calls
d) none
8. The ratio of the number of successful calls to the number of call attempts is
$\qquad$ .
a) BHCA
b) LCR
c) CCITT
d) CCR

## Q-2 Answer in short. (Any SEVEN)

1. What are the three different forms of a signaling?
2. Explain busy hour traffic.
3. What do u meant by decoder-marker?
4. Define : Call charging and Call priority
5. Give the difference between single stage and multistage network.
6. Explain synchronous duplex mode of operation.
7. Explain Busy hour and peak busy hour.
8. What are points for handling the overflow traffic?
9. Enlist three models of loss system.

Q-3 (a) Give the classification of switching system in detail.
(b) Write a short note on: Signaling tones.

## OR

(b) Explain Strowger switching component in detail.

Q-4 (a) Explain block diagram of common control switching system.
(b) Explain principle of crossbar switching.

## OR

(b) Give the complete notation on Cross point technology.

Q-5 (a) Explain centralized SPC in (i) standby mode (ii) Synchronous duplex mode.
(b) Explain time multiplexed time switching in detail.

OR
(b) Write short note on Distributed SPC.

Q-6 (a) Explain Blocking models and loss estimates in detail.
(b) Explain Incoming Traffic and Service Time Characterization with diagram.

## OR

(b) Write a short note on Switching Hierarchy and Routing.

