Total No. of Questions : 6]

SEAT No. :

P481

[Total No. of Pages : 2

APR - 18/BE/Insem. - 48

B.E. (E & TC)

MOBILE COMMUNICATION

(2012 Pattern) (Semester - II) (404189)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.***
2) ***Figures to the right indicate full marks.***
3) ***Neat diagrams must be drawn whenever necessary.***

Q1) a) State and explain switching functions of switching system? **[4]**

b) A group of servers carry a traffic of 10E. If average duration of calls is 3 minutes, calculate the number of calls put through by a single server and a group as a whole in 1 hr period. **[6]**

OR

Q2) a) Explain Circuit, Message & Packet Switching. **[6]**

b) Over a 20 minutes observation interval 40 subscribers initiates a call. Total duration of calls is 4800 sec. Calculate load offered to network by the subscribers and average subscriber traffic? **[4]**

Q3) a) For 4 group gradient system, find out possible grading for 29 trunks with availability of 10? **[5]**

b) Draw and explain sequential write / Random read control with phase operation. **[5]**

OR

Q4) a) Define Avg. Holding time, CCR, Erlang, CCS, Busy Hour. (1 each) **[5]**

b) Design of two stage switching network for connecting 200 incoming trunks to 200 outgoing trunks. **[5]**

P.T.O.

Q5) a) Write short note on : **[4]**

i) Frequency Reuse.

ii) Cell Splitting.

b) Explain Mobile to Mobile call Procedure? **[6]**

OR

Q6) a) Explain Reflection. **[6]**

b) In a FDMA based system, for deployment of analog cellular system with every simplex channel occupying 50 KHz. Bandwidth. Calculate number of simultaneous calls possible in system, if total spectrum of cellular System is 10 MHz. **[4]**