

Total No. of Questions : 8]

SEAT No. :

P3112

[Total No. of Pages : 2

[5670]-212

B.E. (Electronics & Telecommunication)

MOBILE COMMUNICATION

(2012 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Answer Q.1 OR Q.2, Q.3 OR Q.4, Q.5 OR Q.6, Q.7 OR Q.8*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figure to the right indicate full marks.*
- 4) *Use of electronic pocket calculator is allowed.*
- 5) *Assume suitable data, if necessary.*

Q1) a) Explain electronics switching system. [6]

b) What is switching? Explain the different switching functions in digital switching System. [8]

c) Draw and explain cell splitting and sectoring in detail. [6]

OR

Q2) a) Explain in detail the space division switching systems. [8]

b) Calculate the availability and unavailability of single and dual processor system with MTBF=10000 HRS. and MTTR=20 HRS. in 25 years. [6]

c) Explain different channel Assignment strategies. [6]

Q3) a) Explain the GSM architecture in detail. [8]

b) Explain the handover mechanism in AMPS. [8]

OR

Q4) a) Explain the radio transmission parameters in GSM. [8]

b) Explain call procedure in completing a call from mobile (cellular) to mobile (cellular). [8]

P.T.O.

- Q5)** a) Write a short note on GMSK Modulation. [6]
b) Draw a neat diagram and explain block scheme of GSM full rate encoder. [6]
c) Explain different data services used in GSM. [6]

OR

- Q6)** a) Draw and explain the architecture of SMS service. [6]
b) Explain the different services offered by GPRS. [6]
c) Explain speech coding used in GSM system. [6]

- Q7)** a) Explain in detail Rake Receiver used in CDMA. [8]
b) Explain different motivations for use of CDMA system. [8]

OR

- Q8)** a) Explain the importance of 3G mobile system. List the different services used in 3G mobile system. [8]
b) Compare WCDMA and CDMA 2000 system. [8]

