

Total No. of Questions : 8]

SEAT No. :

P3121

[Total No. of Pages : 2

[5670]-221
B.E. (E & TC)
WIRELESS NETWORKS (Elective - IV)
(2012 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*
- 5) *Assume Suitable data if necessary.*

- Q1)** a) Explain in short History and Growth of mobile communication. [7]
b) Explain with neat diagram concept of Hand off. Describe various types.[7]
c) Compare 3G technology with 4G technology. [6]

OR

- Q2)** a) Draw and explain the basic GSM network architecture. [7]
b) Differentiate between R3, R4 and R5 3GPP Network architectures. [7]
c) List advantages and disadvantages of Bluetooth technology. [6]

- Q3)** a) Draw and explain LTE architecture. [9]
b) Explain role of MIMO in LTE. [9]

OR

- Q4)** a) Write a short note on SONs. [9]
b) Write a short note on WiMAX spectrum. [9]

- Q5)** a) Write a short note on frequency planning in WiMAX networks and spectrum used in WiMAX Technology. [8]
b) Describe the evolution of WiMAX. Compare different variations of IEEE 802.16. [8]

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OR

- Q6)** a) List features of WiMAX. Explain QoS. [8]
b) Draw and Explain generic WiMAX architecture. [8]

- Q7)** a) What are the advantages of VoIP? [8]
b) Compare Distributed architecture and Media Gate Control. [8]

OR

- Q8)** a) Write a short note on : [8]
i) SS7
ii) VoIP challenges
b) Compare in detail the various protocols such as 4.323, SIP, and MEGACO used for VoIP. [8]

