

Total No. of Questions : 8]

SEAT No. :

P2034

[Total No. of Pages : 2

[5059] - 640 - A
B.E. (E & TC) (Semester - II)
WIRELESS NETWORKS (Theory)
(2012 Pattern) (Elective - IV(d))

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 indicates full marks.*
- 4) Use of Non-Programmable electronic pocket calculator is allowed.*
- 5) Assume suitable data, if necessary.*

- Q1)** a) What is OFDM? Discuss advantages and disadvantages of OFDM for wireless networks. [7]
b) Explain in detail different protocols for WiFi. [7]
c) With the help of suitable diagram explain in detail 3GPP release 4 network architecture. [6]

OR

- Q2)** a) List in tabular form mobile data supported by 2G and 3G technologies [6]
b) Describe with neat diagram basic components of WLAN with their characteristics. [7]
c) Explain speech and data services supported by UMTS. [7]

- Q3)** a) Describe downlink and uplink LTE channels. [9]
b) What is Handover? With suitable diagram explain X2 Handover mechanism. [9]

OR

- Q4)** a) Explain the function of LTE scheduler. [9]
b) Write notes on : [9]
i) Self Organizing Networks (SONs)
ii) Hetrogeneous Networks (HetNET)

P.T.O.

- Q5)** a) Give the functions of ASN, ASN - GW, CSN and different interfaces used in WiMAX. [8]
b) Explain 802.16m FDD and TDD frame formats. [8]

OR

- Q6)** a) What is meant by Interface mitigation? With suitable diagram explain frequency planning with fractional frequency Reuse (FFR). [8]
b) Explain Mesh network for WiMAX technology. [8]

- Q7)** a) What are challenges of VoIP? Explain VoIP protocol layers. [8]
b) Explain the process of SIP call establishment and release. [8]

OR

- Q8)** a) With neat diagram describe H.323 network architecture. [8]
b) Write short note on SS7 protocol stack. [8]

