Total No. of Questions : 06]

SEAT No. :

P322

[Total No. of Pages : 2

APR. - 16 /BE/Insem-53

B.E. (Electronics and Telecommunication)

WIRELESS NETWORKS

(2012 Pattern) (Semester - II) (Theory) (Elective - IV(d))

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

Instructions to the candidates:

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Use of non-programmable electronic pocket calculator is allowed.***
5) ***Assume Suitable data if necessary.***

Q1) a) With the help of suitable diagram, explain the evolution of wireless technologies from 1G to 4G. **[7]**

b) Differentiate FDD and TDD techniques used in wireless networks. **[3]**

OR

Q2) a) With the help of suitable diagram, explain and compare FDMA, TDMA and CDMA techniques. **[7]**

b) Enlist the objectives of next generation wireless technologies. **[3]**

Q3) a) Compare the performance of various IEEE 802.11 standards. **[7]**

b) Enlist various communication technologies deployed in ISM band. **[3]**

OR

Q4) a) Discuss various issues and challenges in the design of WiFi networks. **[7]**

b) Explain the WEP in brief. What are the alternatives to that? **[3]**

P.T.O.

Q5) a) Enlist the 3G proposals standardized by IMT2000. Explain the architecture of WCDMA - FDD networks. **[7]**

b) Compare the performance of UMTS, CDMA2000 and TD-SCDMA in terms of spectrum requirements and modulation used. **[3]**

OR

Q6) a) What is the importance of IMS for all IP architecture? Draw architectural diagram of IMS based 3G network. **[7]**

b) Explain the difference between 1XEVDO and 1XEVDV. **[3]**