

Exam.Code:0923
Sub. Code: 6847

1129

B.E. (Information Technology)

Fifth Semester

IT-502: Wireless Communication Technologies

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:-
- Is UMTS a 2.5G technology? (T/F)
 - CDMA stand for _____.
 - Define cell splitting.
 - How capacity of cellular system be enhanced?
 - Explain Mess wireless N/W.
 - How foliage effects long distance communication?
 - What are control channels in GSM?
 - Define hand off.
 - WLAN stand for _____.
 - IOT stand for _____.
- (10x1)

UNIT – I

- II. a) Explain various types of wireless communication systems.
b) Compare 3G and 4 G wireless communication technologies. (5.5)
- III. a) Explain in brief the factors that are responsible to enhance the coverage in cellular systems.
b) If a total of 33MHz of BW is allocated to a particular FDD cellular telephone system which uses two 25 KHz channels (simplex) to provide full duplex voice and control channels, compute the number of channels available per cell, if a system uses (I) 4-cell reuse (II) 12 cell reuse. (5.5)
- IV. a) Explain characteristics of IS-95.
b) What is the duration of a bit in the normal burst of GSM? If a user is allocated one time slot per frame, what is the delay between successive transmission successive frames? (5,5)

P.T.O.