



Name :

Roll No. :

Invigilator's Signature :

CS/M.Tech (ECE)/SEM-2/MCE-203/2013

2013

MOBILE COMMUNICATIONS

Time Allotted : 3 Hours

Full Marks : 70

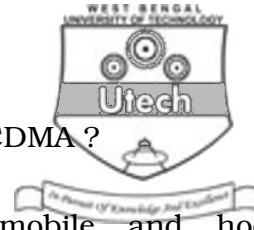
The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer Q. No. 1 and any *four* from the rest. $5 \times 14 = 70$

1. Answer the following questions : $7 \times 2 = 14$

- i) What are effects of fading ?
- ii) What are frequencies used in forward and reverse links in GSM ?
- iii) What is co-channel interference ?
- iv) What is the meaning of self jamming problem in CDMA system ?
- v) What is the meaning of hard handoff and soft handoff call strategies ?
- vi) What is the advantage of umbrella cell approach ?
- vii) What is frequency reuse factor ?



2. a) What are main parameters of 3G W-CDMA ? 7
b) Describe the characteristics of mobile and hoc network. 7
3. a) Explain GSM architecture. 7
b) State different types of GSM channel. 7
4. a) Briefly explain W-CDMA. 7
b) Make a comparison between GSM and CDMA. 7
5. a) Explain the different approaches to increase the overage of a cellular system in noisy environment. 8
b) List the features of HiperLAN wireless networks. 6
6. a) Give the frequency and channel specification of IS 95 system. 7
b) Why 3G is more effective than 2G ? 3
c) State the difference between 2G and 3G. 4

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