

BE (ETTC) SEM III (OLD) / 14/5 May 2017
mobile comm. sys.

P4-RT-Exam.-Con No.-Feb.-13-31

Con. 8307-13.

(OLD COURSE)

GS-4354

(3 Hours)

[Total Marks : 100

- N.B. :** (1) Question No. 1 is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.
(3) Assumptions made should be **clearly** stated.
(4) Illustrate answers with **sketches** wherever **required**.

- Q. No. 1) Attempt any four: [20]
a) How early mobile telephone system is different from cellular communication system?
b) What are the different mobile identifiers? Explain
c) Explain the difference between soft handoff and hard handoff.
d) Explain large scale and small scale fading.
e) Explain frequency reuse concept.
- Q. No. 2)
a) Explain method of locating co-channel cells. [10]
b) Explain micro cell zone concept. [10]
- Q. No. 3)
a) Explain GSM signaling protocol architecture. [10]
b) Explain the frame structure for GSM [10]
- Q. No. 4)
a) Explain free space propagation model. [10]
b) Explain the call processing in CDMA. [10]
- Q. No. 5)
a) What is AMPS? Explain the call procedures in AMPS. [10]
b) Explain common control channels in GSM. [10]
- Q. No. 6)
a) Sketch block diagram of forward CDMA channel modulation process and explain functions of each block. [10]
b) Explain open loop and closed loop power control. [10]
- Q. No. 7) Write short notes (Any two) [20]
i) Narrowband AMPS(N-AMPS)
ii) Co-channel interference and adjacent channel interference.
iii) Antenna at cell site.
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