



C14-EC-604

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BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2018
DECE—SIXTH SEMESTER EXAMINATION
MOBILE COMMUNICATION

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions** : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State any three functions of mobile switching centre.
2. Define uplink channel and downlink channel in mobile communication.
3. Define the term co-channel interference in mobile communication.
4. Write a short note on micro-cell concept.
5. State the need for multiple access techniques.
6. List any three features of TDMA.
7. Mention the advantages of GSM over AMPS.

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8. Write any three ^{*} specifications of AMPS.
9. List the features of EDGE.
10. Mention the features of GPRS.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (a) Explain the evolution of cellular mobile phone systems. 6
 (b) Draw the block diagram of basic cellular system. 4
12. (a) Explain the cell splitting. 5
 (b) Explain the concept of frequency reuse. 5
13. (a) Describe the channel assignment strategies. 7
 (b) Define system capacity. 3
- * 14. Explain about the concept of CDMA and mention the advantages. 6+4=10
15. (a) Compare between TDMA and CDMA. 4
 (b) Explain the frequency hopped spread spectrum (FHSS). 6
16. (a) Describe the frame structure of GSM system with necessary diagram. 7
 (b) List the features of Digital Cellular System. 3

- 17.** (a) Explain GSM architecture with neat sketch. 6
(b) List the features of narrow band AMPS. 4
- 18.** Draw the architecture of DECT and explain. 5+5=10
