

4738

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE-2019

DECE - SIXTH SEMESTER EXAMINATION

MOBILE COMMUNICATION

Time:3 Hours

Max.Marks:80

## PART-A

10x3=30M

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

- 1) Define Roamer.
- 2) Define uplink and downlink channels in mobile communication.
- 3) What is meant by co-channel interferece?
- 4) Define micro cell and umbrella cell.
- 5) State the need for multiple access techniqes.
- 6) State the near-far effect in CDMA.
- 7) List any three features of digital cellular system.
- 8) State any three features of N-AMPS.
- 9) Give any three advantages of 3G over earlier versions.
- 10) \*Mention any three features of EDGE system.

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## PART-B

5x10=50M

**Instructions:** 1) Answer any five questions  
2) Each question carries ten marks.  
3) The answer should be comprehensive and the criteria for valuation are the content but not the length of the answer

- 11) a) Mention the functions of mobile switching centre(MSC). 3M  
b) Explain the process of call progress in cellular telephone system. 7M
- 12) a) Explain the concept of frequency reuse. 2M  
b) Explain the channel assignment strategies in cellular systems briefly. 8M
- 13) List and explain the methods for improving channel capacity.
- 14) a) Explain TDMA. 7M  
b) List the features of TDMA. 3M
- 15) a) Explain the concept of Soft hand off in CDMA.  
b) Explain the concept of power control in CDMA
- 16) a) Draw the GSM architecture.  
b) Explain GSM radio subsystem.
- 17) a) Compare AMPS and GSM. 6M  
b) Explain security aspects of GSM briefly. 4M
- 18) Draw and explain the DECT system.

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