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Roll No. 031063

6th Sem / Eltx

**Subject:- Wireless and Mobile Communication/
Digital & Data Communication**

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which of the following is not an example of wireless communication ? (CO1)
- a) Wi-Fi
 - b) Mobiles
 - c) Landline
 - d) Wireless Computer parts
- Q.2 Capacity of a cellular system is directly proportional to _____ (CO2)
- a) Number of cells
 - b) Number of times a cluster is replicated
 - c) Number of Base stations
 - d) Number of users
- Q.3 Which of the following problem occurs due to adjacent channel interference ? (CO2)
- a) Cross talk b) Missed calls
 - c) Blocked calls d) Near-far effect

- Q.4 What are co-channel cells ? (CO2)
- a) Cells having different base stations
 - b) Cells using different frequency
 - c) Cells using adjacent frequency
 - d) Cells using same frequency
- Q.5 The process of subdividing a congested cell into smaller cells is called _____ (CO3)
- a) Cell splitting b) Sectoring
 - c) Micro cell technique d) Repeaters
- Q.6 Which type of antenna is used for edge excited cells ? (CO3)
- a) Omnidirectional antenna
 - b) Grid antenna
 - c) Sectorized directional antenna
 - d) Dipole antenna
- Q.7 What is a cluster in a cellular system ? (CO4)
- a) Group of frequencies
 - b) Group of cells
 - c) Group of subscribers
 - d) Dipole of mobile system
- Q.8 What is the full form of WLAN ? (CO4)
- a) Wide Local Area Network
 - b) Wireless Local Area Network
 - c) Wireless Land Access Network
 - d) Wireless Local Area Node

- Q.9 Bluetooth standard is named after _____ (CO5)
- King Ronaldo Bluetooth
 - Pope Vincent Bluetooth
 - King Herald Bluetooth
 - Pope Francis Bluetooth

- Q.10 What is frequency reuse? (CO3)
- Process of selecting and allocating channels
 - Process of selection of mobile users
 - Process of selecting frequency of mobile equipment
 - Process of selection of number of cells

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Write Full form of TDD. (CO3)
- Q.12 What is MSC? (CO2)
- Q.13 What is hand off? (CO3)
- Q.14 Write is hand of HSPA (CO4)
- Q.15 Define wireless Communication (CO1)
- Q.16 Expand UMTS (CO4)
- Q.17 The smallest cells are calls are called as... (CO1)
- Q.18 Define Cellular network (CO1)
- Q.19 Frequency reuse factor=... (CO2)
- Q.20 Write full form of VCO. (CO6)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write short note on 3G. (CO4)

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- Q.22 What are the differences between cell splitting and cell sectoring? (CO2)

- Q.23 What are the applications of wireless communication? (CO1)

- Q.24 What is fading? Explain types of fading. (CO1)

- Q.25 Draw architecture of GSM. (CO4)

- Q.26 What tools are required to disassemble a mobile phone? (CO6)

- Q.27 Discuss methods of fault finding in cell phone. (CO6)

- Q.28 Write short note on HSPA. (CO5)

- Q.29 Write applications of Bluetooth. (CO4)

- Q.30 What is TDMA? Explain. (CO4)

- Q.31 Write short note on Wi-Fi. (CO4)

- Q.32 write short note on multiple access (CO3)

- Q.33 Write short note on LTE (CO3)

- Q.34 Explain the concept of frequency reuse. (CO2)

- Q.35 Write short on 1G. (CO1)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain in detail, the architecture of GSM. (CO4)

- Q.37 Give comparison between FDMA/TDMA/CDMA (CO3)

- Q.38 Explain interference in detail in cellular telephone system. (CO1)

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