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Roll No.

181063/171063/
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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 type of antenna is used for center excited cells? (CO1)
- a) Dipole antenna
 - b) Grid antenna
 - c) Sectorized antenna
 - d) Omni directional antenna
- Q.2 Which two channels are responsible for initiating mobile calls? (CO1)
- a) FCC and RVC
 - b) FVC and FCC
 - c) FVC and RVC
 - d) FCC and RCC
- Q.3 Which of the following is a universally adopted shape of cell? (CO2)
- a) Hexagon
 - b) Square
 - c) Circle
 - d) Triangle
- Q.4 Which of the following multiple access techniques are used by second generation cellular systems. (CO3)
- a) FDMA/FDD and TDMA/FDD
 - b) TDMA/FDD and CDMA/FDD
 - c) FDMA/FDD and CDMA/FDD
 - d) FDMA/FDD only

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- Q.5 How many users or voice channels are supported for each 200 KHz channel in GSM? (CO3)
- a) Eight
 - b) Three
 - c) Sixty four
 - d) Twelve
- Q.6 GSM (Global system for mobile) Was earlier also known as (CO4)
- a) Group system Mobile
 - b) Global special meaning
 - c) Group Special Mobile
 - d) Global special mobile
- Q.7 Which of the following is a universally adopted shape of cell? (CO1)
- a) Square
 - b) Circle
 - c) Triangle
 - d) Hexagon
- Q.8 What is the full form of UMTS? (CO5)
- a) Universal Mobile telephone system
 - b) Ubiquitous mobile telephone system
 - c) Ubiquitous mobile telemetry system
 - d) Universal machine telemedicine system
- Q.9 What is the nominal range of bluetooth? (CO5)
- a) 1 KM
 - b) 10 M
 - c) 1 M
 - d) 10 KM
- Q.10 What is a cell in cellular system? (CO2)
- a) A group of cells
 - b) A group of subscribers
 - c) A small geographical area
 - d) A large group of mobile systems

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SECTION-B

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

- Q.11 What is base station? (CO1)
Q.12 Define cell. (CO2)
Q.13 What is foot print?. (CO2)
Q.14 Extend GSM. (CO3)
Q.15 WCDMA stands for _____. (CO4)
Q.16 Write full form of LTE. (CO5)
Q.17 Write the function of BSC? (CO2)
Q.18 Write the function of flash IC? (CO6)
Q.19 Large cells are called as _____. (CO1)
Q.20 HSPA stands for _____. (CO3)

SECTION-C

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

- Q.21 Write a short note on Doppler Effect. (CO1)
Q.22 What are the advantages of wireless communication? (CO1)
Q.23 Write a short note on Cell splitting. (CO2)
Q.24 What are the differences between Co-Channel and adjacent channel interference? (CO3)

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- Q.25 Write short note on 2G. (CO2)
Q.26 Explain the effect of multipath on wireless communication. (CO1)
Q.27 What is FDMA? Explain. (CO3)
Q.28 What are the features of CDMA. (CO5)
Q.29 Write steps for assembly a mobile phone. (CO6)
Q.30 Explain Hot testing method of mobile testing. (CO6)
Q.31 Explain TDMA. (CO3)
Q.32 Write short note on electromagnetic waves. (CO1)
Q.33 Write a short note on WCDMA. (CO2)
Q.34 Explain Bluetooth technology. (CO3)
Q.35 What are the features of GSM? (CO3)

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 UMTS. (CO3)
Q.37 What are the propagation considerations in wireless communication? Explain. (CO1)
Q.38 Explain various sections of mobile phone. (CO6)

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