

- Q.30 Shows that how 5G is better than 4G?
- Q.31 Explain in brief about selection diversity.
- Q.32 Describe shadowing margin.
- Q.33 What are the different type of path loss? Explain in brief.
- Q.34 What are the different type of path loss? Explain in brief.
- Q.35 Write the function of VLR

SECTION-D

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

- Q.36 Explain the evolution of cellular system.
- Q.37 What is CDMA? Explain in detail.
- Q.38 Write short note on following
- a) Noise figure b) Shadowing

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202431

3rd Sem.

Branch : Mechatronics

Sub.: Mobile & Wireless Communication

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 OFDM is a technique for 3G communication
- a) True b) False
- Q.2 Which of the following technology does not use MIMO?
- a) 4G b) Wi-fi
- c) EDGE d) AMPS
- Q.3 LTE is a 2G technology.
- a) True b) False
- Q.4 MIMO is a smart antenna.
- a) True b) False
- Q.5 The atmosphere does not affect the performance of the antenna and transmission path.
- a) True b) False

- Q.6 The 1G cellular system is general use ____ technique.
- a) TDMA b) CDMA
c) FDMA d) All of the above
- Q.7 Cells are always hexagonal in shape.
- a) True b) False
- Q.8 The forward band in FDD provides traffic from the mobile to base station.
- a) True b) False
- Q.9 Which of the following is not a standard of 3G?
- a) UMTS b) CDMA2000
c) TD-SDMA d) LTE
- Q.10 Interference on voice channels causes ____.
- a) Queuing b) Crosstalk
c) Missed Calls d) None

SECTION-B

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

- Q.11 Write the formula for co-Channel reuse ratio ____.
- Q.12 What is microcell.
- Q.13 Write full form of WCDMA.

- Q.14 Full form of MIN ____.
- Q.15 BSC stands for ____.
- Q.16 Define a cluster.
- Q.17 Define Cell area.
- Q.18 There are two types of fading ____ and ____.
- Q.19 Define transceiver.
- Q.20 Frequency reuse factor is inversely proportional to the number of cells in this cluster. (True/False)

SECTION-C

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

- Q.21 Explain in brief 4G Technology.
- Q.22 Give the difference between MIMO and CDMA.
- Q.23 Explain the concept of fading.
- Q.24 Which factor affects propagation of signal? Explain them in detail.
- Q.25 What are the advantages of wireless communication?
- Q.26 Explain cellular concept.
- Q.27 Write short note on Co-Channel interference.
- Q.28 Compare 2G and 3G.
- Q.29 List LTE Features.