

- Q.25 Give any five feature of LTE.
- Q.26 Write a short note on fading margin.
- Q.27 Describe free space path loss.
- Q.28 Explain in brief adjacent channel interference ?
- Q.29 What are methods of increasing wireless channel capacity?
- Q.30 Write a short note on 5 G
- Q.31 What is CDMA ? Explain
- Q.32 Describe Antenna Diversity.
- Q.33 What is function of HLR ?
- Q.34 Define short range & long range communication.
- Q.35 What is hand off? Explain

SECTION-D

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

- Q.36 Explain in detail multipath fading.
- Q.37 Explain interferences in cellular system.
- Q.38 What is wireless communication ? List down its advantages .

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3rd Sem / Mechatronics Subject:- Mobile and wireless Communication

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 1 G supports _____ types of mobile communication.
- a) Voice b) Audio
c) Video d) both a & b
- Q.2 Base station consist of _____.
- a) Transmitter b) Receiver
c) Radio channel d) All of the above
- Q.3 The shape of cellular cell is _____.
- a) Triangle b) Hexagon
c) Square d) Circle
- Q.4 Large cells are called _____.
- a) Mini cell b) Macro cell
c) Micro cell d) None of the above

(20)

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- Q.5 Fading does not occur when mobile receiver is stationary.
a) True b) False
- Q.6 On which factor the channel capacity depend in the communication system?
a) Bandwidth b) Signal to noise ratio
c) Both a &b d) None of the above
- Q.7 In flat fading , the coherence bandwidth of the channel is smaller than bandwidth of the signal.
a) True b) False
- Q.8 In cellular network which of the following is used to use the same frequency for other .
a) frequency hoping b) frequency Reuse
c) frequency Planning d) None of the above
- Q.9 Which of the following is not an explain of wireless communication ?
a) Infrared Device b) Smart Phone
c) Cable TV d) Bluetooth Device
- Q.10 MIMO was developed in the year _____.
a) 1970 b) 1990
c) 1960 d) 1985

SECTION-B

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

- Q.11 AMPS stands for _____.
Q.12 Write full from ofOFDM.
Q.13 MSC stands for _____.
Q.14 Define a cell.
Q.15 Write relationship between frequency and wave length.
Q.16 Define roaming .
Q.17 Define Diversity
Q.18 Write full form ofMIMO .
Q.19 Expands the term LTE.
Q.20 SIM stands for _____.

SECTION-C

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

- Q.21 Explain the concept of frequency reuse.
Q.22 What is OFDM ? Explain briefly.
Q.23 Write a short note on MIMO.
Q.24 Compression between 2 G and 3 G