No. of Printed Pages : 4 181042/171042/31042/
Roll No..... 105942/106563

4th Sem,

Branch : Electronics & Communication Engg.

Subject : Communication System/Com. Engg.

Time : 3 Hrs. **M.M. : 100**

SECTION-A

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

Q.1 Indicate which one of the following is not an advantage of FM over AM.

a) Better noise immunity is provided
b) Lower bandwidth is required
c) The transmitted power is more useful
d) Less modulated power is required

Q.2 Long wave wave AM broadcast transmitters need

a) Small carrier power
b) Medium carrier power
c) Very largecarrier power
d) No need of carrier power

Q.3 The standard IF valuefor FM receivers is

a) 455 kHz b) 455 MHz
c) 10.7kHz d) 10.7 MHz

Q.4 RF circuit in superhetrodyne radio receiver is used to

a) Select the wanted signal
b) Reject the interference

c) Reduce the noise figure
d) All of above

Q.5 An antenna is synonymous to a

a) Generator b) Reflectore
c) Transformer d) Regulator

Q.6 The director in a Yagi antenna

a) Is longer than the driven element
b) Is shorter than the driven element
c) Can be longer or shorter than the driven element
d) Does not exist

Q.7 The maximum distance of outer atmosphere is

a) 18km b) 400km
c) 100km d) 250km

Q.8 The skip distance for radio wave increase with

a) Increase infrequency
b) Reduction in frequency
c) Temperature of atmosphere
d) None of above

Q.9 Frequency range of MF band.

a) 30-300 MHz b) 30-300 KHz
c) 300-3000 kHz d) 3-30Mhz

Q.10 Various components of VSAT are

a) A dish antenna b) A transceiver
c) A satellite router d) All of above

SECTION-B

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

Q.11 ARMSTRONG FM modulator is _____ method of FM generation.

Q.12 Aloud speaker converts electrical signal into sound. (T/F)

Q.13 FET stands for field effect transistor. (T/F)

Q.14 The process by means of which information is extracted from the modulated signal is called _____.

Q.15 The radiation pattern of Rhombic antenna is unidirectional / bidirectional.

Q.16 Antenna beam width is a measure of directivity of an antenna. (T/F)

Q.17 What is the full form of MUF.

Q.18 VSAT stands for_____.

Q.19 Full form of IF_____.

Q.20 Define the term Perigee.

SECTION-C

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

Q.21 Classify the AM transmitter on the basis of type of modulation involved.

Q.22 Draw the block diagram of Reactance FET transmitter.

Q.23 Define the term FIDELITY.

Q.24 What is AGC? Differentiate between simple and delayed AGC.

Q.25 Explain the difference between broadcast and communication receiver.

Q.26 What do you mean by radio receiver? List the functions of radio receiver.

Q.27 Explain the selection criteria of IF.

Q.28 Write a note on Yagi-Uda antenna.

Q.29 Explain the radiation principle of antenna.

Q.30 Define the directivity and beam width associated with antenna.

Q.31 Explain the summer field equation for field strength.

Q.32 Explain ground wave propagation.

Q.33 Discuss the term multiple hop propagation.

Q.34 What is passive satellite? Explain its functions.

Q.35 Write the advantages and disadvantages of satellite communication.

SECTION-D

Note : Long Answer type question. Attempt any two questions. (2x10=20)

Q.36 Write short note on the following:

a) Folded dipole b) Ferrite rod antenna

Q.37 Draw and explain the block diagram of Communication radio receiver.

Q.38 What are the different modes of radio wave propagation? Explain sky wave propagation.