ELECTRONICS ENGINEERING TECHNICIAN

II YEAR

PAPER I Communication Engineering

TIME: 3 Hours Max. Marks: 50

SECTION-A

Note : (i) Answer all questions.

(ii) Each question carries 2 marks 10x2=20

1. Define the Modulation index of AM Signal.
2. What is need of Modulation in Communication system?
3. Classify radio transmitters according to carrier frequency.
4. What is meant by Phase shift keying.
5. Define the Antenna Gain, Directivity.
6. Draw the radiation pattern of Yagi antenna.
7. Define Sensitivity, Fidelity of a Receiver
8. Define noise.
9. What are the advantages of Magnetic Recording?
10. List the advantages of C D's

SECTION-B

Note : (i) Answer any 5 questions.

(ii) Each question carries 6 marks 5x6=30

11. Distinguish between Amplitude and Angle Modulation Techniques.
12. What is the use of pre-emphasis and de-emphasis in FM?
13. Describe about pulse code modulation in detail.
14. Describe the sky wave propagation of EM waves.
15. Explain the function of yagi antenna
16. Draw and explain the block diagram of AM super heterodyne receiver.
17. Draw the Block diagram of P.A. system and explain the function of each block
18. Explain the function of compact disc player with block diagram

ELECTRONICS ENGINEERING TECHNICIAN

II YEAR

PAPER II TV & Modern Communication System

TIME: 3 Hours

Max. Marks:50

SECTION-A

Note: (i) Answer all questions.

(ii) Each question carries 2 marks 2x10=20

1. Explain the formation of Picture.
2. What is the importance of blanking pulses and equalizing Pulses?
3. Name the different types of camera Tubes.
4. Define Term hue and saturation.
5. What are the operating controls of TV Receiver?
6. List the Application of LCD.
7. Draw the block diagram of CATV.
8. Define the terms, Modes and dispersion.
9. Explain repeaters.
10. Explain the principle of DWDM.

SECTION-B

Note : (i) Answer any 5 questions.

(ii) Each question carries 6 marks 5x6=30

11. Draw the block diagram of Basic T.V. System and explain the function of each block.
12. Describe the construction and working of image orthicon camera tube.
13. Draw the Block diagram of Colour T.V, Receiver & Explain the Function of Each Block.
14. Explain the working of LED monitor.
15. Draw and explain the block diagram of CATV.
16. Explain working of PIN diode in optical fiber communication.
17. Explain the basic Fibre Optic Communication system with block diagram.
18. Explain the working of WDM.

ELECTRONICS ENGINEERING TECHNICIAN

II YEAR

PAPER III Measuring Instruments, Consumer & Power Electronics

TIME:3 Hours Max. Marks:50

SECTION-A

Note : (i) Answer all questions.
(ii) Each question carries 2 marks **2x10=20**

1. Mention the applications of relays.
2. Write any two advantages between analogue and digital meters.
3. What are the applications of the connectors and cables?
4. What are the instruments used to measure inductance?
5. Mention the types of CRO's.
6. Write the operating controls of signal generators.
7. Write specification of UPS.
8. Mention the servicing methods of UPS/ Inverters.
9. Write any two differences between Telephone & Cell phone.
10. Mention the applications of the digital Cell Phones.

SECTION-B

Note : (i) Answer any 5 questions.
(ii) Each question carries 6 marks **5x6=30**

11. Draw the block diagram of regulated DC power supply. Explain working of each block.
12. Explain the procedure, how to measure AC/DC voltages, currents and resistance by using the An alogue multimeter.
13. Draw and explain working of loud speaker. Write applications.
14. How do you measure frequency, amplitude & modulation index by using CRO? Explain.
15. Draw the block diagram of three phase inverter. Explain working.
16. Draw the block diagram of intercom. Explain working.
17. Describe operation of Cellular system.
18. Explain the concept of GSM.