# **Second Year**

**Second Year** (P.C. 312/71)

## Subject : Communicaton Engeering Lab Paper - I

Time: 3 Hours Max. Marks: 50

Section - I  $1 \times 40 = 40 \text{ Marks}$ 

- 1. Study the Servicing tools and Instruments.
- 2. Familiarisation of Electronic Lab Safety precautions.
- 3. Soldering practice on PCBs.
- 4. Testing of Components like Resistors, Capacitors, Inductors, Transformers, Switches, Fuses, Connectors, Contactors, Heat Sinks, Transistors, Diodes, Microphones, Loud Speakers.
- 5. Study of Power Supply stage used in Radio Receivers.
- 6. Study of Output stage used in Radio Receivers. Measurement of Voltages.
- 7. Study of Detector and AF Voltage amplifier stages used in Radio Receivers. Measurement of Voltages.
- 8. Study of IF amplifier stage used in Radio Receivers. Measurement of Voltages.
- 9. Study of RF Voltage amplifier, Mixer and Local Oscillator stages used in Radio Receivers. Measurement of Voltages.
- 10. Study of FM Radio Receivers. Measurement of Voltages.
- 11. Study of IC Version 2 band AM/FM Radio receiver.
- 12. Study of Multi- Band Radio receiver.
- 13. Write the common faults stage wise in Radio Receiver and rectification.
- 14. Measurement of Voltages at various points in a PUBLIC ADDRESS SYSTEM.
- 15. Common faults in a PA SYSTEM and rectification

- 16. Study of Tape Recorder ,Two-in-One and Audio CD Player.
- 17. Rectify the faults in a Tape Recorder and Two-in-One.
- 18. Rectify the faults in a Audio CD Player.
- 19. Rectify the faults in a DVD Player.
- 20. Familiarisation of SMD handling tools used in SMT.

## **Section - II**

Record 5 Marks
Viva 5 Marks

#### **Second Year**

## MODEL QUESTION PAPER

**Subject: Communication Engeering Lab** 

#### Paper - I

Time: 3 hours Max. Marks: 50

#### **Section - I**

 $1 \times 40 = 40 \text{ Marks}$ 

9. Study of RF Voltage amplifier, Mixer and Local Oscillator stages used in Radio Receivers. Measurement of Voltages.

#### **Section - II**

Record 5 Marks

Viva Voce 5 Marks

**Note:** The serial numbers of the questions mentioned in are the serial numbers in question bank. In practical examination only the serial number of the questions will given, the examiner shall decode it with question bank and give the questions.

## **Second Year**

## PRACTICAL SCHEME OF VALUATION

**Subject: Communication Engeering Lab** 

## Paper - I

Time: 3 hours	Max. Marks : 50  1 x 40 = 40 Marks	
Section I		
Instruments and equipment required	:	5 Marks
Block/ Schematic diagram	:	5 Marks
Brief theory	:	5 Marks
Procedure	:	5 Marks
Observations	:	5 Marks
Section - II		
Record	:	5 Marks
Viva	:	5 Marks

**Second Year** (P.C. 312/72)

## Subject: TV Servicing Lab

## Paper - II

Time: 3 Hours Max. Marks: 50

#### **Section - I**

 $1 \times 40 = 40 \text{ Marks}$ 

- 1. Study of Pattern generator and its use.
- 2. Study of Wobbuloscope and alignment of TV receiver.
- 3. Study operating and servicing controls of Block and white TV Receiver.
- 4. Familiarisation and tracing of stages in Black and White TV Receiver.
- 5. Familiarisation of ICs used in Black and White TV Receiver.
- 6. Familiarisation of ICs used in Colour TV Receiver.
- 7. Familiarisation of different stages, transistor, IC wise. Measurement of voltages.
- 8. Measurement of picture tube voltages-B/W and Colour TV receiver
- 9. Assemble and erection of TV antenna (YAAGI UDA).
- 10. Front panel controls and adjustments of B/W TV receiver.
- 11. Adjustment of picture and sound of TV Receiver using Pattern Generator.
- 12. Study the faults in various stages in B/W TV Receiver and rectification.
- 13. Study the faults in various stages in Colour TV Receiver and rectification.
- 14. Study of SMPS and measurement of output Voltages.
- 15. Identify the stages of SMPS and mention the faults and rectification.
- 16. Study of different types of Tuners.
- 17. Study the block diagram of LCD TV.

## **Electronic Engineering Technician**

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- 18. Familiarisation of block wise Voltages LCD TV.
- 19. Familiarisation of block wise Voltages LED TV.
- 20. Study the connections and tuning of Cable TV.

## **Section - II**

Record 5 Marks
Viva 5 Marks

#### **Second Year**

### MODEL QUESTION PAPER

**Subject: TV Servicing Lab** 

#### Paper - II

Time: 3 hours Max. Marks: 50

#### **Section - I**

 $1 \times 40 = 40 \text{ Marks}$ 

11. Adjustment of picture and sound of TV Receiver using Pattern Generator.

#### **Section - II**

Record 5 Marks
Viva 5 Marks

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## **Second Year**

## PRACTICAL SCHEME OF VALUATION

**Subject: TV Servicing Lab** 

## Paper - II

Time: 3 hours	Max. Marks: 50		
Section I		$1 \times 40 = 40 \text{ Marks}$	
Instruments and equipment required	:	5 Marks	
Block/ Schematic diagram	:	5 Marks	
Brief theory	:	5 Marks	
Procedure	:	15 Marks	
Observations	:	10 Marks	
Section - II			
Record	:	5 Marks	
Viva :	5 M	5 Marks	

**Second Year** (P.C. 312/73)

## **Subject: Measuring Instruments and Servicing Lab**

## Paper - III

Time: 3 Hours Max. Marks: 50

Section - I  $1 \times 40 = 40 \text{ Marks}$ 

- 1. Convert the given Ammeter in to Voltmeter.
- 2. Study and use of Analogue Multimeter.
- 3. Study and use of Digital Multimeter.
- 4. Study and use of Audio Frequency Oscillator.
- 5. Study and use of AMSSG.
- 6. Study and use of Digital LCR metre.
- 7. Measurement of AC,DC Voltages using CRO.
- 8. Measurement of frequency and phase using CRO.
- 9. Measurement of Modulation index using CRO.
- 10. Study and use of Pattern Generator.
- 11. Study and use of Battery Eliminator. Measure the stage Voltages at Transformer Primary/Secondary, Rectifier output, Filter output.
  - 12. Rectify the faults in Battery Eliminator.
  - 13. Study and use of Electronic Stabiliser. Measure the stage Voltages.
  - 14. Rectify the faults in Electronic Stabiliser.
  - 15. Study and use of Emergency Light.. Measure the stage Voltages.
  - 16. Rectify the faults in TV Remote controllers.
- 17. Identify the different stages of TV remote control Transmitter and receiver.
  - 18. Identify the different faults in cordless telephone and cellphone

#### Section - II

Record 5 Marks
Viva 5 Marks

#### **Second Year**

## MODEL QUESTION PAPER

**Subject: Measuring Instruments and Servicing Lab** 

#### Paper - III

Time: 3 hours Max. Marks: 50

#### **Section - I**

 $1 \times 40 = 40 \text{ Marks}$ 

11. Study and use of Battery Eliminator. Measure the stage Voltages at Transformer Primary/Secondary, Rectifier output, Filter output.

#### **Section - II**

Record 5 Marks

Viva 5 Marks

**Note:** The serial numbers of the questions mentioned in are the serial numbers in question bank. In practical examination only the serial number of the questions will given, the examiner shall decode it with question bank and give the questions.

#### **Second Year**

#### PRACTICAL SCHEME OF VALUATION

**Subject: Measuring Instruments and Servicing Lab** 

## Paper - III

Time: 3 hours Max. Marks: 50

Section - I  $1 \times 40 = 40$  Marks

Instruments and equipment required : 5 Marks

Block/ Schematic diagram : 5 Marks

Brief theory : 5 Marks

Procedure : 15 Marks

Observations : 10 Marks

**Section - II** 

Record : 5 Marks

Viva : 5 Marks