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FOR AP CLASS 11 EXAM PREPARATION

AP Class 11 2027 Model Paper · Electrical Technician

EXAM	YEAR	TYPE	SUBJECT
AP Class 11	2027	Model Paper	Electrical Technician

MODEL QUESTION PAPER

ELECTRICAL TECHNICIAN
PAPER –I ELEMENTS OF ELECTRICAL ENGINEERING
I YEAR

Time:3hours **Max Marks:50**

SECTION -A **10 x 2=20**

NOTE: 1. Answer ALL questions.
2. Each question carries TWO Marks.

1. Write the laws of Resistance.
2. State Kirchhoff"s Current Law.
3. Define Power and state its unit.
4. State the properties of magnet.
5. State Inverse Square law.
6. State Lenz's law.
7. Write the types of EMF"s.
8. Define Ampere- Hour and Watt-Hour efficiency of a Battery.
9. State Joul's Law.
10. Write the types of Capacitors.

SECTION-B 6 x 5=30

NOTE: 1. Answer any FIVE questions.
2. Each question carries SIX Marks.

11. Find the equivalent resistance of the circuit below and also find the current flowingthrough thecircuit.
12. (a). State Ohm"slaw.

(b). Find the values of the resistance in STAR system for a given DELTA system as shown below.

13. A domestic Consumer has the following electrical loads.

(a). Six numbers of 60 watts lamps each working for 10 hours per day.
(b). Three numbers of 40 watts tube lights each working for 6 hours per day.
(c). Four numbers of Ceiling Fans 80 Watts each working for 14 hour per day.
(d). One number of Electric Iron 350 Watt capacity working for 2 hours per day.
Calculate the monthly Electricity bill for the month of March at the rate of Rs 1.50 paise per unit . The meter rent per month is Rs20/-.

14. Compare Electrical Circuit with Magnetic Circuit in sixaspects.

15. State and explain Faradays laws of Electro MagneticInduction.

16. Explain the working of Lead-Acid Battery with neatdiagram.

17. Explain the applications of heating effect of Electriccurrent.

18. (a). State Coulombs Law.

(b). write short notes on dielectric loss in dielectric material.

MODEL QUESTION PAPER

ELECTRICAL TECHNICIAN

PAPER –II ELECTRICAL ENGINEERING MATERIALS AND WIRING

I YEAR

Time:3hours **Max Marks:50**

SECTION -A **10 x 2=20**

NOTE: 1. Answer ALL questions.

2. Each question carries TWO Marks.

1. Write the Properties of Tungsten.
2. Define Semi-conductor and give two examples.
3. State the applications of MICA.
4. Write the different types of Cutting Pliers.
5. Define Fuse.
6. State the different types of Switches.
7. Write the advantages of Looping System.
8. State the requirements of wiring system.
9. State the different types of Lamps.
10. What is the purpose of Earthing.

SECTION-B 6 x 5=30

NOTE: 1. Answer any FIVE questions.
2. Each question carries SIX Marks.

11. (a). Classify the Electrical Engineering materials.

(b). Explain the making of T-Joint with 7/20 PVC wire with neat sketch.

12. Compare Aluminium with Copper in six aspects.
13. Explain B-H curve with a neat sketch.
14. Classify the insulating materials on the basis of temperature.
15. Write short notes on the following.

(a).MCB (b).Switchboard (c). Plug Sockets

16. Compare Conduit wiring System with Casing and Capping System.
17. Draw and explain the Go-Down wiring circuit.
18. Explain the pipe earthing with a neat sketch.

MODEL QUESTION PAPER

ELECTRICAL TECHNICIAN

PAPER –III ELECTRICAL MEASURING INSTRUMENTS & ELECTRONIC DEVICES

I YEAR

Time:3hours **Max Marks:50**

SECTION -A **10 x 2=20**

NOTE: 1. Answer ALL questions.
2. Each question carries TWO Marks.

1. What is SI system?
2. State the different types of errors in Single Phase Energy Meter.
3. Write the uses of Multimeter.
4. Write the advantages of digital instruments.
5. State the applications of Zener diode.
6. Draw the symbols of the following.

   (i).LED ii). SolarCell
7. State the applications of SCR.
8. Draw the Block diagram of simple Inverter Circuit.
9. Classify the Amplifiers on the Basis of Frequency ranges.
10. State the advantages of IC's.

SECTION-B 6 x 5=30

NOTE: 1. Answer any FIVE questions.
2. Each question carries SIX Marks.

11. (a). List the fundamental quantities in SI system.

    (b). Draw the block diagram of Digital Frequency meter.
12. Explain the construction and Working of single phase Energy meter with a neat sketch.
13. Compare Moving Coil and Moving Iron Instruments in six aspects.
14. 14 (a). Define SHUNT and MULTIPLIER.

    (b). write short notes on Control torque.
15. Explain the working of MEGGER with a neat sketch.
16. Draw and explain the characteristics of P-N junction diode.
17. Explain the operation of Transistor in Common –Base configuration.
18. Explain the working of Full- wave bridge rectifier with a neat sketch.