

Electrical

Fundamental of Electricity

- 01.01 Potentiometer is variable:
 (a) Resistor (b) Capacitor (c) Inductor (d) None
- 01.02 Letter notation for switch in Plasser machine electrical drawing is:
 (a) b (b) g (c) S (d) K
- 01.03 Earth/ground is denoted in Plasser machine electrical drawing is:
 (a) G (b) OD/OA (c) E (d) A
- 01.04 Letter notation for circuit breaker in Plasser machine electrical drawing:
 (a) C (b) e (c) b (d) K
- 01.05 Ohm's law is not applicable to:
 (a) DC circuits (b) AC circuits (c) Semiconductor (d) None
- 01.06 Current is measured by:
 (a) Ammeter (b) Voltmeter (c) Energy meter (d) Ohmmeter
- 01.07 Which of the following is not a standard wattage of incandescent lamp in India:
 (a) 15W (b) 25W (c) 40W (d) 50W
- 01.08 Size of power cable depends upon:
 (a) Type of Insulation (b) Current (c) Voltage (d) Power factor
- 01.09 One kilowatt hour/1 unit of electrical energy is same as:
 (a) $6 \times 10^6 \text{W}$ (b) $36 \times 10^5 \text{ergs}$ (c) $36 \times 10^5 \text{Jules}$ (d) $36 \times 10^5 \text{BTU}$
- 01.10 Voltmeter is used in circuit to measure the voltage:
 (a) In series (b) In parallel (c) Both (d) None
- 01.11 Ammeter is used in circuit to measure the current:
 (a) In series (b) In parallel (c) Both (d) None

Answer Sheet


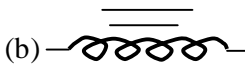
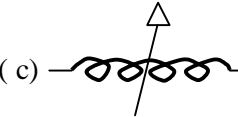
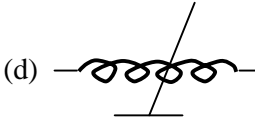
Q. No.	Ans.	Q. No.	Ans.	Q.No.	Ans.
01.01	a	01.05	c	01.09	c
01.02	a	01.06	a	01.10	b
01.03	b	01.07	d	01.11	a
01.04	b	01.08	b		

Electrical Components

- 02.01 Ohmic range of wire wound resistor is:
(a) $200\text{K}\Omega$ to $300\text{K}\Omega$ (b) 1Ω to $100\text{K}\Omega$ (c) $500\text{K}\Omega$ to $1\text{M}\Omega$ (d) $1\text{M}\Omega$ to $10\text{M}\Omega$
- 02.02 Wattage range of carbon composition resistor is:
(a) $1/8$ to 2W (b) 3 to 5W (c) 6 to 10W (d) None
- 02.03 Wattage range of wire wound resistor is:
(a) 405 to 500W (b) 310 to 400W (c) 201 to 300W (d) Upto 200W
- 02.04 Max-value of Resistance of potentiometer which is used in transducer:
(a) $6\text{K}\Omega$ (b) $5\text{K}\Omega$ (c) $1\text{K}\Omega$ (d) None
- 02.05 In short circuit reading ON ohmmeter will be:
(a) Zero (b) Infinite (c) $10\text{M}\Omega$ (d) $100\text{K}\Omega$
- 02.06 In open circuit reading on ohmmeter will be:
(a) Zero (b) Infinite (c) $10\text{M}\Omega$ (d) $100\text{K}\Omega$
- 02.07 What is resistance of $100\text{W}/220\text{V}$ bulb is:
(a) 500Ω (b) 484Ω (c) 848Ω (d) None
- 02.08 Max tolerance value resistor is used generally:
(a) 1% (b) 4% (c) 5% (d) 10%
- 02.09 If temperature is increase the value of resistance Will be:
(a) Decrease (b) Increase (c) No effect (d) None
- 02.10 Ohmic range of carbon composition resistor is:
(a) 30 to $100\text{M}\Omega$ (b) 115 to $220\text{M}\Omega$ (c) Upto $22\text{M}\Omega$ (d) None
- 02.11 Which relation is correct:
(a) $p = \frac{RA}{l}$ (b) $p = \frac{lA}{R}$ (c) $p = RlA$ (d) None
- 02.12 Why should not touch the ohmmeter wire during measurement of Resistance by ohmmeter ?
(a) Can be electric shocked (b) Resistor may be ground
(c) Ohmmeter show less value (d) Resistor may be short circuit
- 02.13 The current following through a resistance is always in phase with the voltage across it irrespective of wave shapes? True/False
- 02.14 Tolerance is the permissible plus or minus resistance deviation in the normal resistance value. True/False
- 02.15 Resistance has polarity. It can not be used in any direction. True/False
- 02.16 The Colour band on the extreme left in general purpose fixed resistor represents:
(a) First significant digit (b) Tolerance (c) Wattage rating (d) Voltage rating
- 02.17 In a $5.6\Omega \pm 10\%$ carbon composition resistor, the colour of last strip from left side is:
(a) Golden (b) Silver (c) Green (d) Black

- 02.18 In a resistor colour coding sequence is Brown, Black, Green and Golden, then the value of resistor will be:
 (a) $1K\Omega \pm 10\%$ (b) $10K\Omega \pm 5\%$ (c) $100K \pm 10\%$ (d) $1M\Omega \pm 5\%$
- 02.19 In a $47K\Omega \pm 10\%$ resistor sequence colour band will be:
 (a) Yellow, Violet, Orange and Silver (b) Yellow, Violet, Yellow and Silver
 (c) Yellow, Violet, Brown and Silver (d) Yellow, Violet, Brown and Gold
- 02.20 If three resistance 2Ω , 4Ω & 6Ω is connected in parallel the total value of resistance will be:
 (a) Less than 2Ω (b) More than 2Ω (c) Less than 1Ω (d) More than 6Ω
- 02.21 Two $1K\Omega$, $\frac{1}{2}W$ resistor are connected in series, their combination resistance value and wattage will be:
 (a) $2K\Omega$, $\frac{1}{2}W$ (b) $2K\Omega$, $1W$ (c) $2K\Omega$, $2W$ (d) $1K\Omega$, $\frac{1}{2}W$
- 02.22 100 resistors of 100Ω each are connected in parallel, their equivalent resistance will be:
 (a) 1000Ω (b) 100Ω (c) 1Ω (d) $1/1000\Omega$
- 02.23 A resistor having no tolerance band will have:
 (a) No fixed value of resistance (b) Least variations in value of resistance
 (c) 10% variation in resistance value (d) 20% variation in resistance
- 02.24 What is the multiplier for black colour:
 (a) 1 (b) 10^1 (c) 10^{-1} (d) 10^2
- 02.25 When two resistor R_1 and R_2 is connected in parallel which relation of equivalent resistance (R) is correct:
 (a) $\frac{R_1+R_2}{R_1+R_2}$ (b) $\frac{R_1 \times R_2}{R_1+R_2}$ (c) $R_1 + \frac{1}{R_2}$ (d) $R_2 + \frac{1}{R_1}$
- 02.26 Application of resistor is not in timer circuit True/False
- 02.27 General Trouble in resistor is short circuit/open circuit. True/False
- 02.28 Rheostats is a high wattage potentiometer. True/False
- 02.29 In colour band resistor max band is:
 (a) 3 (b) 4 (c) 5 (d) None
- 02.30 In colour band resistor on extreme right in general purpose fixed resistor is:
 (a) First significant digit (b) Tolerance (c) Wattage rating (d) Voltage rating
- 02.31 What is the unit of capacitance?
 (a) Ohm (b) Henry (c) Farad (d) None
- 02.32 Which relation is correct?
 (a) $C = \frac{\epsilon_0 K A}{d}$ (b) $C = \frac{\epsilon_0 K d}{A}$ (c) $C = \epsilon_0 K d A$ (d) None
- 02.33 Which is polarized capacitor?
 (a) Ceramic (b) Electrolyte (c) Mica (d) Paper
- 02.34 A capacitor when charged to DC Voltage, What is the stored energy across it-
 (a) $\frac{1}{2} CV^2$ (b) CV^2 (c) C^2V (d) CV
- 02.35 Which one is variable capacitor-
 (a) Electrolyte (b) Mica (c) Air gang (d) None

- 02.36 When two capacitor $2\mu\text{F}$ and $4\mu\text{F}$ is connected in series then total capacitance is-
 (a) $2\mu\text{F}$ (b) Less than $2\mu\text{F}$ (c) $4\mu\text{F}$ (d) $6\mu\text{F}$
- 02.37 What is main function of capacitor:
 (a) To oppose the current flow (b) to emit heat
 (c) To store energy (d) None
- 02.38 Which capacitor is largely used-
 (a) Mica (b) Ceramic (c) Air (d) Electrolyte
- 02.39 What is the trimmer capacitor-
 (a) Variable capacitor (b) Fixed capacitor (c) Variable Register (d) None
- 02.40 What is the die-electric constant of air-
 (a) 0 (b) 1 (c) 4.2 (d) 80
- 02.41 One microfarad (μF) is equal to
 (a) 10^{-5}F (b) 10^{-6}F (c) 10^9F (d) 10^6F
- 02.42 The voltage across an ideal capacitor leads the current through it by 90° (True/False)
- 02.43 Insulating material is not called dielectric (True/False)
- 02.44 Capacitor is used in timer circuit. (True/False)
- 02.45 If three capacitor C_1 , $2C$ & C_3 is connected in parallel then equivalent capacitance is $1/C = 1/C_1 + 1/C_2 + 1/C_3$ (True/False)
- 02.46 Capacitive reactance $X_c = \frac{1}{2\pi fc}$ (True/False)
- 02.47 Capacitance of capacitor can be increase by increasing the area of plates (True/False)
- 02.48 The relation $q = CV$ is (True/False)
- 02.49 Leakage is a trouble in capacitor (True/False)
- 02.50 Variable capacitor is not used in tuning circuit. (True/False)
- 02.51 What is the unit of Inductance?
 (a) Henry (b) Farad (iii) Ohm (iv) Ampere
- 02.52 Choke is an Inductor in which-
 (a) Winding is more (b) Less distance between winding
 (c) Used iron core (d) None
- 02.53 Transformer working depends upon-
 (a) Self induction (b) Mutual Induction (c) Both (d) None.
- 02.54 Variable inductor is used in-
 (a) Radio (b) Transformer (c) Motor (d) None.
- 02.55 Iron core Inductor is used where-
 (a) Small Inductance required (b) Large inductance required (c) Both (d) None.

- 02.56 Which voltage is step up or step down by transformer -
 (a) AC Voltage (b) DC Voltage (c) Both (d) None.
- 02.57 If two inductor L_1 & L_2 is connected in series then equivalent inductance (L) is-
 (a) $L = L_1 + L_2$ (b) $L = \frac{L_1 \times L_2}{L_1 + L_2}$ (c) $L = 1/L_1 + 1/L_2$ (d) $L = L_2 + \frac{1}{L_1}$
- 02.58 Which is iron core inductor-
 (a)  (b)  (c)  (d) 
- 02.59 Which is inductive reactance (X_L) -
 (a) $X_L = 2\pi fL$ (b) $X_L = 2 \pi fC$ (c) $X_L = \pi fL$ (d) πfC
- 02.60 A transformer transfers-
 (a) AC power from one circuit to another circuit
 (b) DC power from one circuit to another circuit
 (c) Both (d) None.
- 02.61 If coil is short circuited what is reading of ohm meter-
 (a) Infinite resistance (b) Zero resistance (c) $100M\Omega$ (d) 100Ω
- 02.62 A choke has 10H Inductance, at 100Hz AC, what is the reactance of choke-
 (a) 628Ω (b) $6.28K\Omega$ (c) 314Ω (d) $314K\Omega$
- 02.63 The voltage across an ideal coil leads the current through it by 90° (True/False)
- 02.64 Inductor is not used in filter circuit (True/False)
- 02.65 Inductor is not used in Relay (True/False)
- 02.66 Alternator works on self induction. (True/False)
- 02.67 Inductance of coil is directly proportional to number of turn of coil. (True/False)
- 02.68 Inductance of coil is not inversely proportional to the length of coil. (True/False)
- 02.69 Inductance is the property of inductor which oppose the change of current flowing through it. (True/False)

Answer Sheet

Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.
02.01	b	02.24	a	02.47	T
02.02	a	02.25	b	02.48	T
02.03	d	02.26	F	02.49	T
02.04	b	02.27	T	02.50	F
02.05	a	02.28	T	02.51	a
02.06	b	02.29	c	02.52	c
02.07	b	02.30	b	02.53	b
02.08	d	02.31	c	02.54	a
02.09	b	02.32	a	02.55	b
02.10	d	02.33	b	02.56	a
02.11	a	02.34	a	02.57	a
02.12	c	02.35	c	02.58	b
02.13	T	02.36	b	02.59	a
02.14	T	02.37	c	02.60	a
02.15	F	02.38	b	02.61	b
02.16	a	02.39	a	02.62	b
02.17	b	02.40	b	02.63	T
02.18	d	02.41	b	02.64	F
02.19	a	02.42	F	02.65	F
02.20	a	02.43	F	02.66	T
02.21	b	02.44	T	02.67	T
02.22	c	02.45	F	02.68	F
02.23	d	02.46	T	02.69	T

Auto Electrical

- 03.01 Cell converts:-
(a) Mechanical energy to electrical energy (b) Chemical energy to electrical energy
(c) Electrical energy to Chemical energy (d) None
- 03.02 Battery gives-
(a) DC voltage (b) AC Voltage (c) Both (d) None
- 03.03 Electrolyte is a mixture of-
(a) H_2SO_4 and H_2O (b) HCL and H_2O (c) $\text{Pb} + \text{H}_2\text{O}$ (d) $\text{H}_2\text{O} + \text{PbO}_2$
- 03.04 Positive terminal of lead Acid Cell is-
(a) PbO_2 (b) Pb (c) PbSO_4 (d) None
- 03.05 Dry Cell is a-
(a) Primary Cell (b) Secondary Cell (c) Both (d) None
- 03.06 Lead Acid Cell is a-
(a) Primary Cell (b) Secondary Cell (c) Both (d) None
- 03.07 Primary Acid Cell is a..... Cell-
(a) Rechargeable (b) Non Rechargeable (c) Both (d) None
- 03.08 Secondary Acid Cell is a..... Cell-
(a) Rechargeable (b) Non Rechargeable (c) Both (d) None
- 03.09 Which cell is used in our track machine battery-
(a) Lead-Acid Cell (b) Dry Cell (c) Ni-cd Cell (d) None
- 03.10 Which gas is produced during charging of battery-
(a) O_2 (b) H_2 (c) H_2S (d) NH_3
- 03.11 What is the unit of battery capacity.
(a) Ampere Hour (b) Watt hour (c) Ampere Meter (d) Kilowatt Hour
- 03.12 Specific gravity is measured by-
(a) Hydrometer (b) Hygrometer (c) Energy Meter (d) Speedometer
- 03.13 A full charge battery has-
(a) 36% acid + 64% water (b) 50% acid + 50% water
(c) 60% acid + 40% H_2O (d) 30% acid + 70% water
- 03.14 How many cells in one battery in track machines-
(a) 8 (b) 6 (c) 12 (d) 5
- 03.15 What is the range of specific gravity of old battery-
(a) 1.26 to 1.28 (b) 1.15 to 1.25 (c) 1.18 to 1.28 (d) 1.10 to 1.30
- 03.16 What is the voltage of a cell of battery in full charge condition-
(a) 2V (b) 1.8V (c) 1.5V (d) 2.1V
- 03.17 What is the capacity rating of general battery in machine-
(a) 180AH/25P (b) 150AH/21P (c) 55AH/9P (d) None

- 03.18 What is the voltage of dry cell-
 (a) 1V (b) 1.2V (c) 1.5V (d) 2V
- 03.19 What is the connection of battery in machine-
 (a) Parallel connection (b) Series connection (c) Both (d) None
- 03.20 How many battery in UN-3S machine-
 (a) 2 (b) 3 (c) 4 (d) 1
- 03.21 During charging more than one battery is connected-
 (a) In parallel (b) In series (c) Both (d) None
- 03.22 A fully charged battery contains a negative plate of-
 (a) Sponge lead (b) Lead oxide (c) Both (d) None
- 03.23 What should be the electrolyte level above the plate in each cell of the battery-
 (a) 8-10mm (b) 40 -50mm (c) 10-15mm (d) 20mm
- 03.24 What should the minimum discharge voltage of each cell of battery
 (a) 2V (b) 1.8V (c) 2.1V (d) 1.5V
- 03.25 Battery should normally charged by-
 (a) High current (b) Low current (c) Medium current (d) None
- 03.26 Numbers of plate in battery is denoted by-
 (a) Even Number (b) Odd number (c) Both (d) None
- 03.27 Battery is charged by -
 (a) AC Voltage (b) DC Voltage (c) Both (d) None
- 03.28 What is the capacity of programmer battery in 09-3X machine -
 (a) 180AH/25P (b) 200AH/27P (c) 70AH/13P (d) 150AH/21P
- 03.29 Open Circuit voltage test of battery is done by -
 Sun VAT-40 tester/Hydrometer
- 03.30 Below 9.6V the battery will defective True/False
- 03.31 We should not apply petroleum jelly on the terminal after cleaning. True/False
- 03.32 We should always use distilled water in battery. True/False
- 03.33 While removing the connections of battery remove the negative terminal first and then the positive terminal True/False
- 03.34 In a fully discharged battery both plates do not cover with lead sulfate(PbSO₄)
 True/False
- 03.35 Ampere hour capacity of a battery is not directly proportional to number of plates and size of plates. True/False
- 03.36 The life of battery can be shorted by long idle period in discharged condition.
 True/False
- 03.37 When cell specific gravity is down to about 1150 the cell is completely discharged.
 True/False

- 03.38 Alternator converts.....-
 (a) Electrical energy to mechanical energy (b) Mechanical Energy to Electrical energy
 (c) Mechanical Energy to Chemical Energy (d) None
- 03.39 Alternator initially generates-
 (a) A.C. Voltage (b) D.C. Voltage (c) Both (d) None
- 03.40 What is the output of alternator
 (a) 24V dc (b) 12V dc (c) 27V to 28V dc (d) 32V dc
- 03.41 How many alternators used in 09-3X machines-
 (a) 2 (b) 1 (c) 3 (d) 4
- 03.42 Alternator works on-
 (a) Self Induction (b) Mutual induction (c) Both (d) None
- 03.43 What is the current rating of Alternator of New Duomatic Machine -
 (a) 45A (b) 55A (c) 120A (d) 110A
- 03.44 What is the current rating of RM-80 92U machine -
 (a) 120A (b) 140A (c) 55A (d) 110A
- 03.45 How many number of alternator in FRM 80 machine-
 (a) 2 (b) 3 (c) 1 (d) 4
- 03.46 What is the position of warning lamp during charging of battery -
 (a) ON position (b) OFF position (c) Flickering position (d) None
- 03.47 How many diodes in alternator rectifier pack-
 (a) 4 (b) 6 (c) 9 (d) 2
- 03.48 Alternator is not used to charge the battery. True/False
- 03.49 Alternator is connected in parallel in engine circuit. True/False
- 03.50 Three alternators are used in UNI-4S machine. True/False
- 03.51 Three alternators are used in DGS machine. True/False
- 03.52 Stator does not have three phase winding. True/False
- 03.53 Self Starter converts-
 (a) Electrical energy to mechanical energy (b) Mechanical Energy to Electrical energy
 (c) Chemical energy to Electrical energy (d) None
- 03.54 Self Starter used in machine having-
 (a) 12V (b) 24v (c) 6v (d) 18V
- 03.55 Self starter works in-
 (a) One Stage (b) Two Stage (c) Three Stage (d) None
- 03.56 How many power capacity of self starter-
 (a) About 5HP (b) About 4HP (c) About 6HP (d) None
- 03.57 The drive end bearing is lubricated by-

(a) Grease (b) Shell Tellus 33 oil (c) 15W40 Oil (d) HLP-68 oil

- 03.58 Solenoid switch is similar to a Relay- True/False
- 03.59 Self starter is used for charging the battery True/False
- 03.60 Solenoid switch pushes out the drive pinion to engine flywheel. True/False
- 03.61 Two self starter are not used in BCM Machine True/False
- 03.62 Two self starter are used in 09-3X machine. True/False
- 03.63 Relay is a-
(a) Electrical switch (b) Mechanical switch (c) Hydraulic Switch (d) Pneumatic Switch
- 03.64 EL-T-663 is a.....-
(a) 11Pin Relay (b) 12Pin Relay (c) 8 Pin Relay (d) 5 Pin Relay
- 03.65 Which relay is used in lighting & Horn circuit-
(a) EL-T 663 (b) EL-T 1218 (c) EL-T 7010 (d) None
- 03.66 Which relay used in tamping unit position circuit-
(a) EL-T 7045 (b) EL-T 7002/S4 (c) EL-T 277 (d) EL-T 7010
- 03.67 Which Relay used in Engine Circuit-
(a) EL-T 663 (b) EL-T 277 (c) EL-T 7010 (d) None
- 03.68 Which relay operated by 12V and 24V -
(a) EL-T 7010 (b) EL-T 7045 (c) EL-T 277 (d) EL-T 663
- 03.69 Which relay pin diagram is same-
(a) EL-T 7010 & EL-T 7045 (b) EL-T 663 & EL-T 277
(c) EL-T 7002/S4 & EL-T 7002/S2 (d) None
- 03.70 Which relay is used in over slew circuit.
(a) EL-T 7002/S₄, (b) EL-T 7002/S₂ (c) EL-T 7002/S₂-L₂ (d) EL-T663
- 03.71 Which Relay is used to operate the Hydraulic Solenoid-
(a) EL-T 7002/S₂, (b) EL-T 7002/S₄ (c) EL-T 7045 (d) EL-T277
- 03.72 Relay works on Electromagnetic principle- True/False
- 03.73 A relay has NC and NO contacts- True/False
- 03.74 EL-T 7002/S₄ relay do not have all No Contacts True/False
- 03.75 Relay EL-T 7002/S₂ and Relay EL-T 7002/S₂-L₂ do not have opposite contact. True/False
- 03.76 Relay EL-T 7010 does not have 3NC and 3 NO contacts. True/False
- 03.77 At which lube oil pressure engine will shut down. -
(a) at $\overline{2.5}$ (b) below $\overline{1.5}$ (c) at $\overline{5.5}$ (d) at $\overline{3.5}$
- 03.78 In CSM Engine circuit lube oil pressure switch is
(a) NO type (b) NC type (c) Both (d) None

- 03.79 In new Duomatic engine circuit by pass switch is
 (a) NO type (b) NC type (c) Both (d) None
- 03.80 In CSM machine at 95⁰C & above, engine will..... -
 (a) Not stop (b) Stop (c) Only Indication will come (d) b & c both
- 03.81 What is the function of time delay circuit in new Duomatic Engine Circuit-
 (a) During starting separate the programmer battery and working light
 (b) To start the engine hour meter.
 (c) To safe the self starter
 (d) To safe the alternator
- 03.82 In CSM Engine Circuit which is directly connected to Battery-
 (a) Mechanical Recorder (b) GVA
 (c) Laser Charging System and Techograph (d) None
- 03.83 In CSM Engine Circuit. How many numbers of stopper switch is provided.
 (a) 5 (b) 8 (c) 7 (d) 4
- 03.84 In Latch type engine circuit hold relay are used- True/False
- 03.85 Non Latch type engine circuit is in CSM machine. True/False
- 03.86 Latch type engine circuit is used in WST- True/False
- 03.87 To charge the battery is not function of engine circuit- True/False
- 03.88 If ZF switch is ON then engine will not start. True/False
- 03.89 If engine is running mechanically then engine circuit is not by passed. True/False
- 03.90 If main switch is ON engine can not be started. True/False
- 03.91 When emergency stopper switch is ON position engine can be started. True/False
- 03.92 During engine running if battery switch OFF then engine will..... -
 (a) Not stop (b) Stop (c) Cease (d) None
- 03.93 Ignition key in CSM in
 (a) Front cabin (b) Working cabin (c) B13 Panel (d) None
- 03.94 What is the function of bypass switch in CSM machine.
 (a) To bypass shutdown coil (b) To switch OFF Engine
 (c) To by pass pressure switch (d) None
- 03.95 Name of 13d1 Relay in CSM engine circuit is
 (a) EL-T663 (b) EL-T7010 (c) EL-T277 (d) EL-T7045
- 03.96 When ZF key and main key are ON which Relay is energized-
 (a) 5u5 (A) (b) 5u5 (D) (c) 5u5 (E) (d) 13d1
- 03.97 What will happen in engine if by pass switch is released before coming lube oil pressure
 (a) Engine will not shutdown (b) Engine will shutdown
 (c) Engine will overheat (d) none

- 03.98 What is the name of 5b8 or 11b8 switch in CSM Engine Circuit
 (a) Starting switch (b) By pass switch (c) Pressure switch (d) Temp. Switch
- 03.99 What is function of 5u5 (D) relay in CSM engine circuit-
 (a) To start the engine (b) To stop the Engine
 (c) To Indicate the running system (d) none
- 03.100 Lube oil pressure switch is safety component of engine circuit- True/False
- 03.101 Alternator is connected in series in engine circuit- True/False
- 03.102 Engine hour meter is run by alternator in CSM engine circuit- True/False
- 03.103 Relay 5u5 (E) is used for Indication engine running system True/False
- 03.104 Clutching and declutching operation in Z.F. Gear Box is controlled by
 (a) Electrical system (b) Mechanical System (c) Hydraulic System (d) Pneumatic System
- 03.105 How many numbers of solenoids for clutch operation in Z.F. Gear Box
 (a) 5 (b) 4 (c) 6 (d) 3
- 03.106 Which solenoid is common for forward direction in all gears-?
 (a) M_4 (b) M_1 (c) M_3 (d) M_2
- 03.107 If break pressure is $\bar{3}$ and more what will happen in Z.F. Gear Box -
 (a) Z.F. will Neutral (b) Z.F. will not Neutral
 (c) Z.F. Gear will be damage (d) No any action
- 03.108 Which solenoid will energized when two no. gear is selected in reverse direction -
 (a) M_1 & M_4 (b) M_2 & M_4 (c) M_1 & M_3 (d) M_1 & M_4
- 03.109 What is the name of 5b26 & 11b26 switch in Z.F. Circuit--
 (a) Pressure switch (b) Pneumatic switch (c) Hydraulic by pass switch (d) Limit Switch
- 03.110 In working position which LED will glow on B19 panel in CSM machine..-
 (a) Green LED (b) Red LED (c) Both (d) None
- 03.111 What is the function of lock up solenoid
 (a) To operate forward clutch (b) To operate reverse clutch
 (c) To operate converter clutch (d) none
- 03.112 Where is fitted RPM sensing transducer in Z.F. gear box-
 (a) On impeller (b) On stator (c) On turbine (d) None
- 03.113 In which assembly of Z.F. gear box solenoid is fitted-
 (a) Torque converter (b) Shifter assembly (c) In B28 panel (d) gear assembly
- 03.114 At which Z.F. pressure fault indicator shows red indication-
 (a) Less than $\bar{12}$ (b) Less than $\bar{10}$ (c) At $\bar{14}$ (d) At $\bar{12}$
- 03.115 At which Z.F. temperature fault indicator show red indication-
 (a) At 100°C (b) More than 110°C (c) At 80°C (d) none
- 03.116 Z. F. Gear Box is a Hydrostatic gear box. . True/False
- 03.117 Shifter Assembly is a brain of Z.F. Gear Box. True/False
- 03.118 In Z.F. circuit from G32 supply goes to engine circuit . True/False

Answer Sheet

Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.
03.01	b	03.41	c	03.81	a
03.02	a	03.42	a	03.82	c
03.03	a	03.43	b	03.83	c
03.04	a	03.44	a	03.84	T
03.05	a	03.45	c	03.85	T
03.06	b	03.46	b	03.86	T
03.07	Non-rechargeable	03.47	c	03.87	F
03.08	Rechargeable	03.48	F	03.88	T
03.09	a	03.49	T	03.89	F
03.10	b	03.50	T	03.90	T
03.11	a	03.51	F	03.91	F
03.12	a	03.52	F	03.92	a
03.13	a	03.53	a	03.93	b
03.14	b	03.54	b	03.94	b
03.15	c	03.55	b	03.95	b
03.16	d	03.56	c	03.96	a
03.17	a	03.57	b	03.97	b
03.18	c	03.58	T	03.98	a
03.19	b	03.59	F	03.99	b
03.20	c	03.60	T	03.100	T
03.21	b	03.61	F	03.101	F
03.22	a	03.62	T	03.102	T
03.23	c	03.63	a	03.103	T
03.24	b	03.64	c	03.104	a
03.25	b	03.65	b	03.105	b
03.26	b	03.66	c	03.106	b
03.27	b	03.67	c	03.107	a
03.28	c	03.68	b	03.108	b
03.29	Sun VAT-40 tester	03.69	b	03.109	c
03.30	T	03.70	c	03.110	b
03.31	F	03.71	b	03.111	c
03.32	T	03.72	T	03.112	c
03.33	T	03.73	T	03.113	b
03.34	F	03.74	F	03.114	b
03.35	F	03.75	T	03.115	b
03.36	T	03.76	F	03.116	F
03.37	T	03.77	b	03.117	T
03.38	b	03.78	a	03.118	T
03.39	a	03.79	b		
03.40	c	03.80	d		