



NFL Non Executive Examination

Candidate User ID :

Exam Date : 18/12/2021

Batch Id :

Candidate Exam ID :

Test Centre Name : Sri Ayodhya Singh Memorial Inter Collage

Exam Timing : 4:00 PM - 6:00 PM

Note: Questions answered are highlighted with selection

- 1 Who developed the first Cholera vaccine?
- Edward Jenner
 - Louis Pasteur (Correct Answer)
 - Dr Jonas Salk
 - Alexander Fleming
- 2 In a code word "MOTIVATION" is written as "PNJUBWJUOP". What will be codeword for "KEYBOARD"?
- FLCZBPES (Correct Answer)
 - CQZNAXDJ
 - FMBACQEW
 - DRAOBYEK
- 3 In the given equation what is the value of x? $52 + 15\%900 - 10 \div 5 + (406 \div 2) = 72 \times (52 - x \times 2) + 18$
- 9 (Correct Answer)
 - 5
 - 18
 - 12
- 4 If A + B means A is the husband of B; A - B means A is the son of B; A X B means A is the daughter of B and A / B means A is the brother of B. If relation between a family is such that P + Q, R X Q, S / R and P - J, then what relation R is having with J?
- GRAND SON
 - MOTHER
 - GRAND DAUGHTER (Correct Answer)
 - FATHER
- 5 Choose the best alternative that is similar in meaning to the idiom/phrase used in the given sentence. "He was as happy as a sandboy, when he saw the turtles on the beach."
- boy who sold sand
 - perfectly contented (Correct Answer)
 - make good use of
 - tend to talk
- 6 Who was the founder of revolutionary organisation "Hindustan Socialist Republican Association"?
- Chandrashekhar Azad (Correct Answer)
 - V. D. Savarkar
 - Lal Bahadur Shastri
 - Varindra Kumar Ghosh
- 7 Choose the option that is opposite in meaning to the word- Belligerent.
- neutral (Correct Answer)
 - hostile
 - aggressive

- engaging
 fighting
- 8 Two pipes can fill a tank in 27 minutes and 12 minutes respectively. If both the two pipes are opened simultaneously, then in how much time tank will be filled completely?
- 63/13 minutes
 9 minutes
 64/12 minutes
 84/13 minutes (Correct Answer)
- 9 Identify the sportsperson who is not related to Athletics?
- Sumit Antil
 Arpinder Singh
 Sunil Chhetri (Correct Answer)
 Neeraj Chopra
- 10 Who among the following won the Major Dhyan Chand Khel Ratna Award 2021 in cricket?
- Mithali Raj (Correct Answer)
 Bhawani Devi
 Avani Lekhara
 Lovlina Borgohain
- 11 If Rajesh swims a certain portion of river against the river flow in 1 hour and come back to the start swimming 45min. If the river flows at the rate of 4kmph, then what is the speed of the Rajesh in still water?
- 20kmph
 24kmph
 28kmph (Correct Answer)
 18kmph
- 12 If 4 persons can build a 400 meter running track in 9 days, how many person will be required to build 3 such running tracks in 15 days?
- 18
 15
 22
 20 (Correct Answer)
- 13 Choose the incorrect term from the given series ? B1Z1,E2X8,H3V9,K4T64
- H3V9 (Correct Answer)
 E2X8
 K4T64
 B1Z1
- 14 Choose the option that is opposite in meaning to the word- Trifle.
- nut shell
 rush
 ample (Correct Answer)
 bubble
- 15 Choose the best Active/Passive voice sentence with same meaning as in. "It is time to open the zoo."
- It is time to for the opening of the zoo.
 It is time for the zoo to be opened. (Correct Answer)
 Is it time for the zoo to be opned.
 The time is to get the zoo open.
- 16 Identify the odd one out of the following number?

- 343
- 1728
- 576 (Correct Answer)
- 729

17 If compound interest received on an amount of rupees 9600 is rupees 4224 after 2 years. What is the rate of interest per annum?

- 0.14
- 0.11
- 0.2 (Correct Answer)
- 0.08

18 Which among the following is the capital of Australia?

- Austria
- Canberra (Correct Answer)
- Hobart
- Jakarta

19 Pandit Ravi Shankar is a famous exponent of which musical instrument ?

- Sitar (Correct Answer)
- Veena
- Santoor
- Sarod

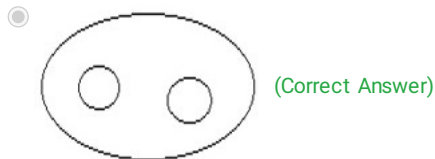
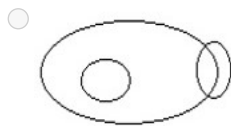
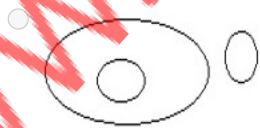
20 If a clock shows time 8 hours and 32 minutes, then what is the angle between hours and minutes hand?

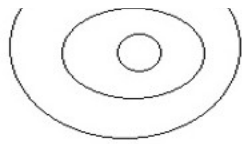
- 54Degree
- 60Degree
- 40Degree
- 48Degree (Correct Answer)

21 A man swims upstream at 12 kmph and swims back downstream at 30 kmph. What is the average rate for the whole swimming?

- 20kmph
- 19kmph
- 22kmph
- 21kmph (Correct Answer)

22 Which of the following diagrams indicates the best relation between RED, LED and LASER?





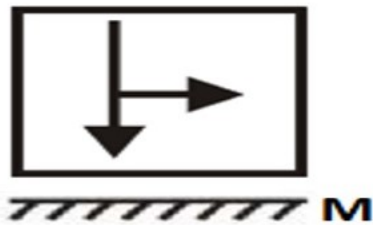
23 Which among the following is the capital of Kerala?





- Thiruvananthapuram (Correct Answer)
- Amaravati
- Visakhapatnam
- Chennai

24 What amount of money will produce rupees 3264 interest in 3.2 year at 6% simple interest?

- Rs. 15000
- Rs. 17000 (Correct Answer)
- Rs. 19400
- Rs. 18500

25 Identify the mirror image of the given figure? Where M represents a mirror.



-  (Correct Answer)
- 
- 
- 

26 Choose the option that is nearest in meaning to the word- Chaffer.

- conclude
- bargain (Correct Answer)
- close
- agree

27 Sum of amount invested by A and B is 8 Lakh. After sometime A gained rupees 4 lakh and B lost rupees 1 lakh. Now product of their money is 10 Lakh. How much money A invested?

- 4 Lakh
- 2 Lakh
- 6 Lakh (Correct Answer)
- 3 Lakh

28 On which day "Rajbhasha Hindi Divas" is celebrated in India?

- 14 September (Correct Answer)
- 14 November
- 14 August
- 14 January

29

What will be the next number of this number series- 5,10,10,29,17,?

- 16
- 26
- 36
- 66 (Correct Answer)

30 Choose the best Active/Passive voice sentence with same meaning as in. "Were you pardoned by him?"

- You were pardoned by him ?
- He did t he pardoning for you
- You were being pardoned by him.
- Did he pardon you? (Correct Answer)

31 Which of the following belongs to Part XV (15th) of the Indian Constitution?

- Union Territories
- Emergency Provision
- Election (Correct Answer)
- The Panchayat s

32 Rambo's age is less than 30 years in year 2021. His birth year's is a prime number and sum of all digits of birth year is 28. What is the age of Rambo?

- 22 (Correct Answer)
- 24
- 20
- 28

33 If two dice are thrown simultaneously, What is the probability that one dice will show 5 and the other will show 6 on it?

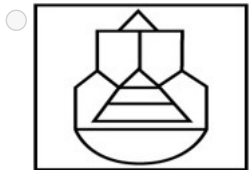
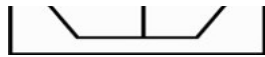
- 4/36
- 2/9
- 2/6
- 1/18 (Correct Answer)

34 Which of the following is the Famous folk theatre form of Gujarat ?

- Dashavatar
- Bhand Pat her
- Jatra
- Bhavai (Correct Answer)

35 Which of the following figure from the given options having the question figure in it?





(Correct Answer)

36 She run very fast ----- she might catch the train.

- sooner
- because
- then
- so (Correct Answer)

37 Choose the most appropriate preposition from the given alternatives. Rohan went there ----- his byke.

- by
- at
- in
- on (Correct Answer)

38 Which of the following pairs of words have the same relationship as FAN : CLOCK?

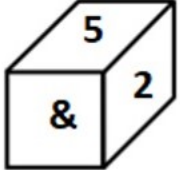
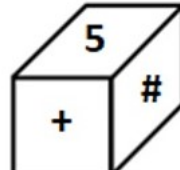
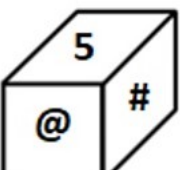
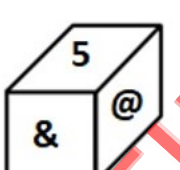
- WAX:OIL
- FUEL:RIVER
- PAPER:KITE
- ELECTRON:CURRENT (Correct Answer)

39 On which date, the signature of the President of the Assembly was appended to the constitution and it was declared as pass?

- 29 August, 1947
- 26 January, 1950
- 26 November, 1949 (Correct Answer)
- 12 January, 1947

40 Which among the following figure in option can be made using figure given below?

| | | |
|---|---|---|
| & | @ | # |
| | + | |
| | 5 | |

-  (Correct Answer)
- 
- 
- 

41 What is the simplification of the expression $\sqrt{27} + \sqrt{147} - \sqrt{12}$?

- $21\sqrt{7}$
- $50\sqrt{3}$ (Correct Answer)
- $54\sqrt{3}$
- $30\sqrt{5}$

42 Choose the best alternative of joined sentences. "He is not good at speaking. He is not good at writing."

- He ain't good at speaking not at writing.
- He is neither good at speaking nor at writing.
- He is good neither at speaking nor at writing. (Correct Answer)
- He is not good at speaking and also at writing.

43 Where did English East India Company's First head quarter in India was situated?

- Surat (Correct Answer)
- Madras
- Calicut
- Cochin

- 44 Rajul can complete a work in 15 days and Sanjay can complete the same work in 18 days. If they both work together, then how much portion of the work will remain left after 6 days?
- 4/15 (Correct Answer)
 11/15
 1/3
 6/9
- 45 Arrange the jumbled words to form a meaningful sentence from- a) that freedom b) Buddhism teaches c) from desires will lead d) to escape from suffering.
- a,b,c,d.
 b,d,c,a.
 b,a,c,d. (Correct Answer)
 d,c,b,a.
- 46 Who is the author of the book "AZADI: Freedom. Fascism. Fiction."?
- Arundhati Roy (Correct Answer)
 Salman Rushdie
 Chetan Bhagat
 Ruskin Bond
- 47 The age of Rajani is four times that of her son. Eight years ago, the lady was four times as old as her son was at that time. What is the present age of her son?
- 24years (Correct Answer)
 9years
 36years
 18years
- 48 Choose the most appropriate preposition from the given alternatives. _____ to his ill health. He retired from the job.
- amidst
 owing (Correct Answer)
 from
 on
- 49 Choose the option that is nearest in meaning to the word- Asperse.
- defend
 praise
 eulogize
 calumniate (Correct Answer)
- 50 A clock that goes slow by 30 seconds in every 5 minutes were set exactly at 9 a.m. Now the time shown by clock is 3:30 p.m. What is the actual time ?
- 3:06p.m.
 2:51 p.m. (Correct Answer)
 2:50p.m.
 3:05 p.m.
- 51 Which is wrong statement for DC motor commutator?
- It is work as rotatory rectifier.
 It is use to collect the supply form stator of a dc motor. (Correct Answer)
 It is use to collect the supply form rotor of a dc machine.
 It is use to supply the power to rotor of a dc motor.
- 52 Which is represents fractional pitch long chorded winding in AC winding?

- Coil pitch = 2 pole pitch
- Coil pitch < Pole pitch
- Coil pitch > pole pitch (Correct Answer)
- Coil pitch = pole pitch

53 Which sensing unit is used for sensing the line parameter in electric drive?

- Temperature sensing
- Torque sensing
- Speed sensing
- Current sensing (Correct Answer)

54 Which is not a purpose of ballast connected to fluorescent lamp?

- High starting voltage
- Circuit is energised to start the lamp without preheating
- Deliver a normal operating voltage after the lamps are in operation.
- Provide cooling in tube (Correct Answer)

55 Torque of single phase induction motor is not depended to _____.

- Rotor emf
- Rotor power factor
- Rotor current
- Rotor speed (Correct Answer)

56 Which type of method is used in rotor side control in induction motor?

- Changing the number of stator poles
- By changing the applied frequency
- By changing the applied voltage
- Cascade operation (Correct Answer)

57 Which type of derive quadrant provide Generating or braking, forward braking decelerating quadrant with positive speed and negative torque.?

- Quadrant IV
- Quadrant II (Correct Answer)
- Quadrant I
- Quadrant III

58 Preparation of project report which is not mentions in it?

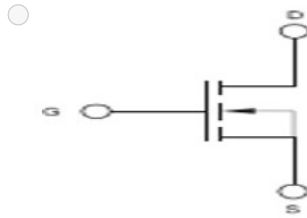
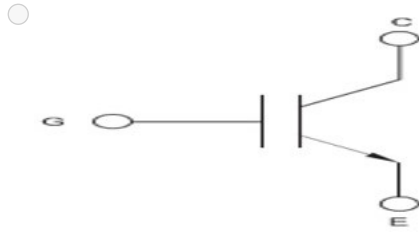
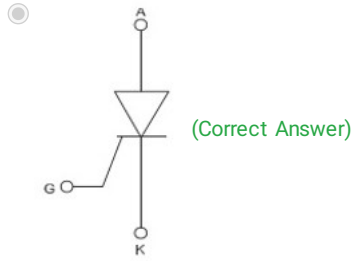
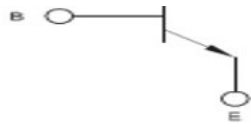
- Introductory information
- Survey to be conducted
- Working principle
- Project types and manpower analysis (Correct Answer)

59 Which is correct formula of rotor gross output in watts of 3 phase induction motor? Where T is gross torque and n is speed in rps.

- $T \times 2\pi n$ (Correct Answer)
- $2\pi n/T$
- $T / 2\pi n$
- $2\pi n/3T$

60 Identify the symbol of SCR?

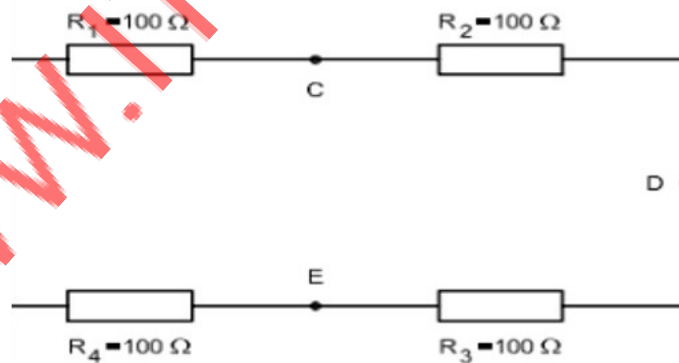




61 What is the rotor speed of an induction motor if the torque is 50 Newton meter and the power output of the motor is 7850W?

- 2450 RPM
- 1500 RPM (Correct Answer)
- 1250 RPM
- 1000 RPM

62 What is the total voltage drop in above circuit if 1A current is flow?



- 50
- 400 (Correct Answer)
- Zero
- 100

63 Which is not an Applications of parallel circuits?

- House wiring
- Complex circuits of television

- Multiplier resistance of a volt meter (Correct Answer)
 An automobile electric system
- 64 _____ of the source will be available at open circuit terminals
- Full voltage (Correct Answer)
 Full current
 Zero voltage
 Half current
- 65 A 5 HP 220V, 50 Hz four-pole, three-phase induction motor has output is 3677.5W and it produces the constant loss 318.77 W and copper loss 430W then what is the efficiency of motor?
- 0.95
 0.83 (Correct Answer)
 0.65
 0.78
- 66 Which represents MV lamp with auxiliary electrode and bayonet cap?
- MB type (Correct Answer)
 MAT type
 MA type
 MAB type
- 67 This is the difference in phase between the primary voltage and the secondary voltage vectors known as_____.
- Power regulation
 Phase displacement (Correct Answer)
 Voltage difference
 Current difference
- 68 Which type of motor works on ac and dc supply?
- DC shunt motor
 AC single phase motor
 Universal motor (Correct Answer)
 Fractional motor
- 69 Which is disadvantage of use of instant circuit in fluorescent lamp?
- Higher power factor
 Used only in two lamps lighting unit for starts
 Work with no current module (Correct Answer)
 Reduces the phase displacement between two lamps
- 70 Which is not an effect of short circuit?
- Excess voltage (Correct Answer)
 Intense heat generated in the conductors
 Excess current
 Burn the insulation
- 71 Which of the following is correct for HPMV lamps?
- Operates at high pressure (Correct Answer)
 Produce effect of supply transients on performance of meter.
 Start the discharge, an indirect electrode
 It does not require any auxiliary supply
- 72 Which type of test will be done when any open in the winding of a motor?

- Polarity test
- Unbalanced current test
- Resistance test (Correct Answer)
- No load test

73 Which is correct for neon sign lamp?

- Electrode is cylindrical-shaped and is made of tungsten, coated with an electrode emitting material.
- Electrode is cylindrical-shaped and is made of nickel, iron or copper (Correct Answer)
- Electrode is of a spiral form and is made of nickel, iron or copper.
- Electrode is of a spiral form and is made of tungsten, coated with an electrode emitting material.

74

In three-phase winding, the starting end of one phase winding to the starting end of the second phase winding should have a distance of ____

- 90 electrical degrees
- 360 electrical degrees
- 180 electrical degrees
- 120 electrical degrees (Correct Answer)

75 Which winding has two or more than two coils in a group, and each group, the coil pitch is not equal, and, do not overlap each other?

- Concentric winding (Correct Answer)
- Chain winding
- Skein winding
- Diamond coil winding

76 What is the equivalent impedance per phase of a three phase induction motor if the line voltage is 54 V and the phase current is 7.5A?

- 6.89 ohm
- 3.89 ohm
- 4.1 ohm (Correct Answer)
- 2.8 ohm

77 Which of the following is shown the apparent power of three phase system?

- $\sqrt{3} V I \cos \phi$
- $\sqrt{3} V I \tan \phi$
- $\sqrt{3} V I$ (Correct Answer)
- $\sqrt{3} V I \sin \phi$

78 Which is represented the dynamic braking of motor?

- Reduced solely by mechanical process
- Speed of the motor exceeds the synchronous speed.
- Speed of the motor exceeds the synchronous speed.
- Disconnected from the source and connected across a resistance (Correct Answer)

79 Which is the full load copper loss in 3 phase induction motor if the equivalent resistance and current per phase is 2.5 ohm and 7.5 A respectively?

- 421.87 watt (Correct Answer)
- 240.23 watt
- 140.62 watt
- 635.45 watt

80 Which type of power modulator is a control the DC to AC power supply?

- AC voltage controllers
- Inverters (Correct Answer)

- Inverters (Correct Answer)
 Cyclo-converters
 Controlled rectifiers
- 81 Which type of winding is not considered in AC winding
- Involute coil winding
 Skein winding
 Lap winding (Correct Answer)
 Basket winding
- 82 What is capacity of capacitor if the capacitor tested at 100Hz supply by ammeter (I) and volt meter (V) readings are 5A and 220 V and the resistor is completely cut out from the circuit?
- 0.96 μF
 0.76 μF
 0.56 μF
 0.36 μF (Correct Answer)
- 83 Which type of lamp are provide greenish blue light?
- Sodium vapour lamp
 Halogen lamp
 Mercury vapour lamp (Correct Answer)
 Incandesce lamp
- 84 How many times of the total resistance of circuit to 100 Ω resistance, if 50 resistance of 100 Ω connected in parallel?
- 25
 18264 (Correct Answer)
 44221
 50
- 85 Which condition makes the life is shorter of CFL?
- Turned on and off frequently (Correct Answer)
 Fluctuation of voltage
 Rise voltage up to rated
 Long time on the lamp
- 86 A 3 phase induction motor has 8 poles and operates at 220V, 50Hz than what is the speed of motor?
- 1050
 750 (Correct Answer)
 625
 400
- 87 Which type winding type use each slot contains only one coil side?
- Unbalanced winding
 Double layer winding
 Single layer winding (Correct Answer)
 Balanced winding
- 88 Which type of colour LED has lowest forward voltage drop?
- Red (Correct Answer)
 Yellow
 Green
 Orange
- 89 Which appliance does not use the series connection?

- Cells in torch light
- Street lights (Correct Answer)
- Fuse in circuit
- Multiplier resistance of a voltmeter

90 What is the number of pole of a motor if the number of slots is 36 and slots distance is 200?

- 20
- 16
- 4 (Correct Answer)
- 8

91 $6I_1 + 5I_2 = 6$ Eqn.(1) $5I_1 + 7I_2 = 9$ Eqn. (2) According to above two loop equation what is the value of I_1 ?

- 0.658A
- 3A
- 6A
- 0.175A (Correct Answer)

92 What is lumens per watt of Metal Halide Lamps?

- 45 to 65
- 115 to 180
- 20 to 45
- 65 to 115 (Correct Answer)

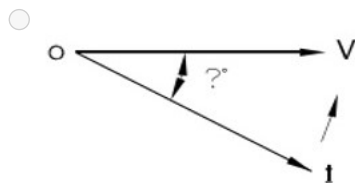
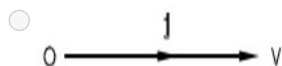
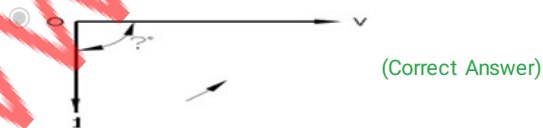
93 In which condition is correct for power factor less than 0.5?

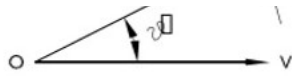
- Both watt meter reading is equal
- One of the watt meter will give negative indication (Correct Answer)
- One watt meter's reading is zero and other reads total power
- Both watt meter reading is positive

94 A 5 HP 400V, 50 Hz, four pole, three-phase induction motor was tested and the following data were obtained. Blocked rotor test: $V_s = 54$, $P_s = 430$, $I_s = 7.5$ A What is the power factor?

- 0.85
- 0.61 (Correct Answer)
- 0.78
- 0.42

95 Which diagram is representing the zero power factor?





96 What is the number of slots if a motor is design 8 poles with 16 pole pitch?

- 128 (Correct Answer)
- 32
- 64
- 256

97 Which type of losses does not considered in 3 phase induction motor?

- Temperature losses (Correct Answer)
- Stator copper loss
- Friction losses
- Core losses

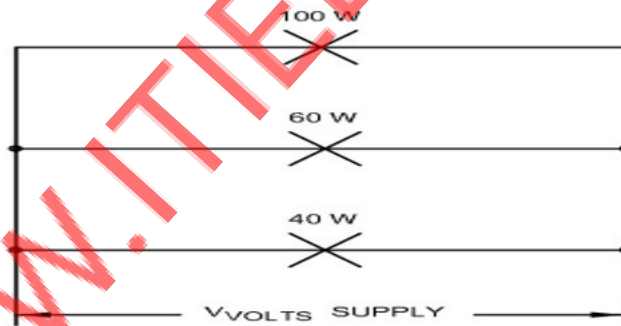
98 If three resistance 36Ω, 24Ω, 50Ω are connected in series with 220V batteries. What is the voltage value across the 36Ω resistance?

- 72 V (Correct Answer)
- 48 V
- 100V
- 36V

99 Which is a power modulators function in electric drive?

- It is increasing the current when transient operation is performed
- It is change the power from the motor
- It is not selects the mode of motoring and braking operation
- It is reduces the motor current with permissible limit. (Correct Answer)

100 In above the circuit diagram three lamp 50Ω, 30Ω and 20Ω connected in parallel than what is the total power consumption by the circuit?



- 32W
- 90W
- 200W (Correct Answer)
- 400W

101 Which type of work cannot be done by Autotransformer?

- Reduced the output voltage
- Increase the output power to input power (Correct Answer)
- Used as speed control devise by single phase motor
- Increase the output voltage to input

102 Which is correct statement for LED?

- LED are always heated

- LED are always heated
- LED life is much smaller
- LED required lower voltage than the conventional bulbs (Correct Answer)
- LED have filament to heat
- 103 Which number of slots is used to start the C phase if in three phase winding A phase starts from first slots and the phase displacement in slots is 6?
- 7th
- 18th
- 13th (Correct Answer)
- 2nd
- 104 To prevent the evaporation of tungsten filament in incandescent lamp use small amount of _____
- Hydrogen
- Neon
- Nitrogen
- Halogen gas (Correct Answer)
- 105 What is states the Kirchhoff's first law?
- The algebraic sum of all branch voltage in a closed loop is zero'
- The algebraic sum of all branch voltage meeting at a point/node is zero'
- The algebraic sum of all branch currents meeting at a point/node is zero' (Correct Answer)
- The algebraic sum of all branch currents in a closed loop is zero'
- 106 Which is represented the type of DC current?
- Pulsating (Correct Answer)
- Sinusoidal
- Trapezoidal
- Square
- 107 What is the total current flowing the circuit if circuit content three resistors 26 Ω , 36 Ω , 48 Ω , in series with 220V cell?
- 0.5A
- 1A
- 2A (Correct Answer)
- 4A
- 108 Find the energy consumption per month of june by a tube light if 10 tubes light of 50W are use 12 hours per day?
- 180 unit (Correct Answer)
- 250 unit
- 2400 unit
- 150 unit
- 109 The stator resistance R_s per phase obtained from a resistance measurement at the stator terminal for star connection is _____
- $(2/3)R$
- $2R$
- $(3/2)R$
- $R/2$ (Correct Answer)
- 110 What is the equivalent reactance per phase of a winding of induction motor if the impedance per phase 4.1 ohm and resistance per phase is 2.5 ohm?
- 9.25 ohm
- 7.65 ohm
- 3.24 ohm (Correct Answer)

12.56 ohm

111 Which is correct statement for dc drive?

- Speed and design ratings have upper limits
- Requires frequent maintenance (Correct Answer)
- The power circuit and control circuit are complicated
- Solid state control the speed range is wide

112 Which is not use as single phasing preventers?

- Mechanical
- Current balancing method (Correct Answer)
- Voltage sensing
- Current sensing

113 An electric system in which one section can fail and other sections continue to operate has _____

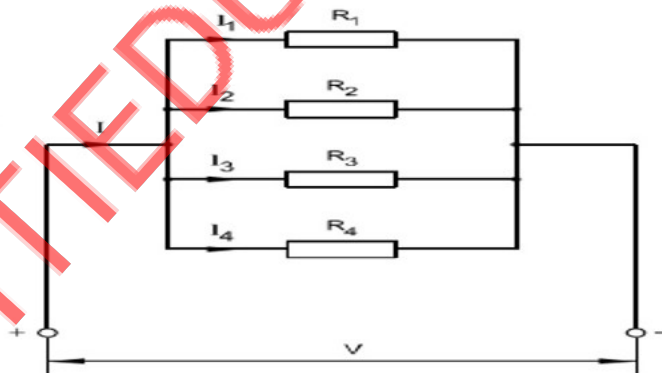
- Series circuits
- Compound circuit
- Parallel and series both type of circuit
- Parallel circuits (Correct Answer)

114 Which is not possible in Fluorescent light when ends of the tube are glow but centre does not glow?

- Fixture wired incorrectly
- Filament nearly burnt out (Correct Answer)
- Fixture not adequately grounded
- Defective starter

115 What is the value of current flowing through R3 resistance?

$V=220V$
 $R_1=100\ \Omega$
 $R_2=55\ \Omega$
 $R_3=40\ \Omega$
 $R_4=200\ \Omega$



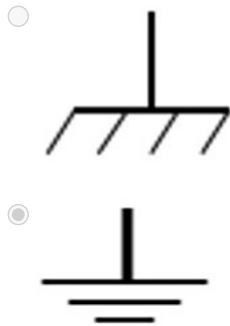
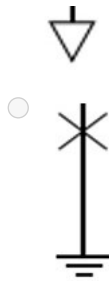
- 2.2A
- 4.8A
- 5.5A (Correct Answer)
- 4A

116 Which condition is correct for resonance condition in an AC circuit?

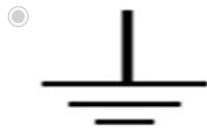
- $X_L < X_C$
- $X_L > X_C$
- $X_L > X_C = X$
- $X_L = X_C$ (Correct Answer)

117 Which is represents the chassis ground symbol?





(Correct Answer)



118 Which statement is correct for Neon sign lamp?

- Only gas such as neon or helium and a small quantity of argon gas (Correct Answer)
- Colour can be obtained by using chemical coating on the tube walls.
- Only straight or circular tube.
- The tube contains a small amount of mercury

119 Which type of classification of electric drive is come according to number of machines?

- Group drive (Correct Answer)
- Reversible and non - reversible
- Manual
- Semi-automatic

120 Series voltage sources are added when their polarities are in the _____ .

- Same direction (Correct Answer)
- Opposite direction
- Negative terminal
- Positive terminal

121 LEDs are not typically doped with_____

- Gallium arsenic
- Gallium silicate (Correct Answer)
- Gallium arseno-phosphate
- Gallium phosphate

122 Which effect is not done by open circuit in series circuit?

- Excessive heat produce (Correct Answer)
- No current flows in the circuit.
- Source voltage appear across the open terminal.
- No device in the circuit will function.

123 LEDs require _____ voltage level than conventional bulbs.

- lower (Correct Answer)
- Higher
- Same
- Depends on filament

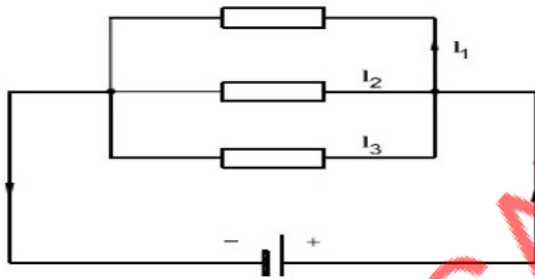
124 Which type of sensors is rotary type and used to measure RPM of motor?

- Photoelectric
- Magnetic rotational speed
- Rechrometer
- Shaft encoders (Correct Answer)

125 Which type of controllers is not used to drive an AC motor?

- Choppers (Correct Answer)
- Inverters
- Cyclo converter
- Phase controllers

126 What is the total current I if the 3 branches currents are $I_1 = 2.2A$, $I_2 = 4A$, and $I_3 = 5.6A$ shown in figure?



- 11.8 A (Correct Answer)
- 10.5 A
- 14.8A
- 12.9A

127 What is the Reactive power if the apparent power is 13 kVI and the active power is 12 kW?

- 5 kVAR (Correct Answer)
- 1 kVAR
- 3 kVAR
- 11 kVAR

128 Which commutator motor in single phase induction motor?

- Capacitor start induction run motor
- Shaded pole motor
- Series motors (Correct Answer)
- Stepper motor

129 Which type of method is used to control the speed of squirrel cage induction motor?

- Rotor rheostat control
- By injecting EMF in rotor circuit
- By changing the applied frequency (Correct Answer)
- Cascade operation

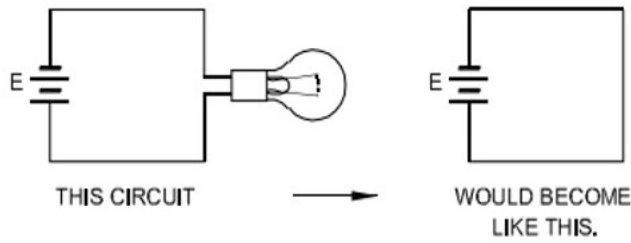
130 Which is not causes the open circuit?

- Burnt out fuses
- Line touch with other line (Correct Answer)
- Improper contacts of switches
- Burnt out resistors

131 In LED have two terminal first short lead and second is long lead, what is represent the short lead in lead terminal?

- Anode terminal
- Cathode terminal (Correct Answer)
- High current terminal
- Base terminal

132 Which type of activity represents the above circuit conversion effects?



- Open circuit
- Fuse the blub
- Burnout the blub
- Short circuit (Correct Answer)

133 Which type of winding shown in figure?



- Concentric winding
- Skein winding
- Box type winding
- Basket winding (Correct Answer)

134 Which type of multivibrator has one stable state?

- The power circuit and control circuit are simple
- The power circuit and control circuit are complicated (Correct Answer)
- Speed and design ratings are limited due to commutations
- Requires frequent maintenance

135 Halogen is the name given to group of gaseous elements like_____.

- Phasporse
- chlorine (Correct Answer)
- Hydrogen
- Nitrogen

136 Which parameter has the unit of joule?

- Power
- Charge flow

- Charge flow
- Energy (Correct Answer)
- Power factor

137 What speed control method is easiest and cheapest but still rarely used?

- Rotor rheostat control
- Cascade operation
- By changing the applied frequency
- By changing the applied voltage (Correct Answer)

138 Which type of sensing unit is used to find the heat in electric drive system?

- Torque sensing
- Speed sensing
- Position sensing
- Temperature sensing (Correct Answer)

139 The starting torque is ____ in squirrel cage motor comparison to slip ring motor?

- Equal
- less (Correct Answer)
- Very high
- Medium

140 What is the voltage across the load if the load resistance is 6.856Ω and the load current is 2A?

- 20.65V
- 15.68V
- 10.86V
- 13.71V (Correct Answer)

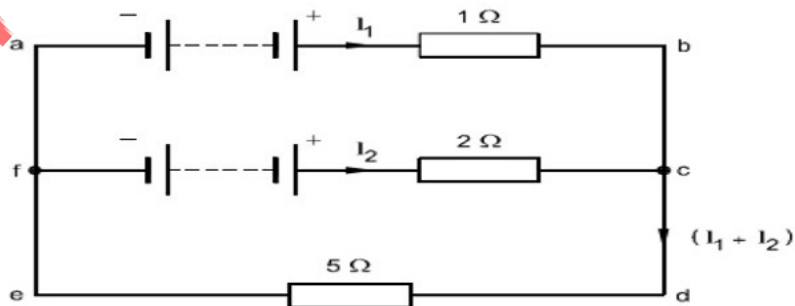
141 Which type of test is not done for winding of a motor?

- Torque test (Correct Answer)
- Resistance test
- Continuity test
- Polarity test

142 Which type of cables voltage operated in extra super voltage cables?

- Up to 1100V
- Upto 11000V
- Beyond 132 KV (Correct Answer)
- 33 to 66 KV

143 According to above circuit diagram which is correct loop equation of loop abcdefa?



- $5I_1 + 7I_2 = 9$
- $6 - I_1 - 5(I_1 + I_2) = 0$ (Correct Answer)
- $9 - 2I_2 - 5(I_1 + I_2) = 0$
- $30I_1 + 42I_2 = 54$

- 144 In three-phase winding, A phase start in the 1st slot then the C phase should be start from_____
- 1st slot +1200
 - 2nd slot +1200
 - 1st slot +1200 + 1200 (Correct Answer)
 - 2nd slot +1200 + 1200
- 145 Which type of starting torque produce by class E type of a squirrel cage motor?
- Very high
 - Normal
 - High
 - Low (Correct Answer)
- 146 What is the phase displacement in terms of slots if the electrical displacement is 1200 and slot distance is 200?
- 6 (Correct Answer)
 - 4
 - 8
 - 2
- 147 Which is used to showing the coil group and end connection?
- Winding diagram
 - Line diagram
 - Development diagram (Correct Answer)
 - Production diagram
- 148 In three-phase winding, A phase group (1-9, 2-10, 3-11) with pitch factor or 8 fractional short corded winding than which is correct group of the C phase if the total slots of a motor is 36 and pole is 4?
- 16-24,17-25,18-26
 - 7-15, 8-16, 9-17.
 - 13-21,14-22,15-23 (Correct Answer)
 - 10-18, 11-9, 12-20.
- 149 The _____ is not considered to fix the potential-raise or potential-drop across a source of emf.
- Voltage positive direction
 - Current direction (Correct Answer)
 - Power produce direction
 - Voltage negative direction
- 150 Which type of lamp has similar working principle of fluorescent lamp?
- CFL (Correct Answer)
 - Incandesce lamp
 - LED
 - Neon sign lamp