

ELECTRICIAN(K.S.F.D.C)
EXAM DATE:17-07-2015

1.What is the effect of single phasing in 3 ϕ induction motor while running?

- A.The motor will not run
- B.Burn out due to overheating
- C.No change in running**
- D.Will make humming noise

Ans:C

2.What is the maximum safe temperature of class E insulation?

- A.90 $^{\circ}$ C
- B.130 $^{\circ}$ C
- C.120 $^{\circ}$ C**
- D.150 $^{\circ}$ C

Ans:C

3.Which type of Insulation tape is not suitable for insulation purpose?

- A.Varnished cambric tape
- B.Plastic tape
- C.Rubber tape
- D.Friction tape**

Ans:D

4.Which of the following motor does not have a winding or commutator or brush is?

- A.DC shunt(A)DC shuntmotor
- B.Stepper motor**
- C.Slip ring induction motor
- D.Universal Motor

Ans:B

5.Which colour is recommended for earth connection?

A.Red

B.Black

C.Green

D.Blue

Ans:C

6.Which one is the proper location for mounting main switch gear in a building?

A.In middle position of the building

B.Separate room under stair case

C.Accessible place near the termination of service line

D.Near the gate

Ans:C

7.What is the unit of work done in SI units?

A.Erg

B.KG Meter

C.Dyne

D.Joule

Ans:D

8.The power factor of a purely resistive circuit is”

A.Leading

B.Zero

C .Unity

D.Lagging

Ans:C

9.An alternating current or voltage is that which:

- A.Changes direction only
- B.Changes magnitude only

C.Changes both magnitude and direction

- D.None of the above

Ans:C

10.Primary winding of a transformer:

- A.Is always a high voltage winding
- B.Is always a low voltage winding

C.Could either low voltage or high voltage

- D.None of these

Ans:C

11.Megger is used to measure:

- A.Earth resistance

B.Insulation resistance

- C.Break down voltage of installation

- D.None of these

Ans:B

12.Moving iron type instruments are used on

- A.AC supply only
- B.DC supply only

C.Both AC and DC

- D.None of these

Ans:C

13.Normally the moving iron instruments are provided with:

A.Eddy current damping

B.Air friction damping

C.Fluid friction damping

D.None of these

Ans:B

14.The gas inside the inner discharge tube of a sodium vapour lamp is:

A.Argon

B.Neon

C.Helium

D.Hydrogen

Ans:B

15.Alternators are usually designed to generate:

A.Variable frequencies

B.Definite frequency

C.Definite current

D.Definite power

Ans:B

16.When the speed of the alternator increases the frequency”

A.Increases

B.Decreases

C.Remains constant

D.Changes

Ans:A

**17.In AC circuit the ratio of KW/KVA
represents**

A.Form factor

B.Power factor

C.Load factor

D.None of these

Ans:B

18.The reactance of a 2H choke coil at 100 Hz is:

A.100 Ohm

B.216 Ohm

C.718 Ohm

D.1256 Ohm

Ans:D

19.The path of the magnetic flux in a transformer has:

A.Low resistance

B.High resistance

C.Low reluctance

D.High conductivity

Ans:C

20.The instrument used for measuring a resistance of 100MOhm is:

A.Ohm meter

B.Megger

C.Multi meter

D.VTVM

Ans:B

21.Which of the following meters has the best accuracy?

A.Moving iron meter

B.Moving coil meter

C.Rectifier type

D.Thermocouple meter

Ans:B

22.What is the recommended maximum pre heating temperature allowed in winding?

A.60°C

B.75°C

C.90°C

D.100°C

Ans:-----

23.The frequency generated by a 8 pole alternator rotating at 600 rpm will be:

A.20 Hz

B.40 Hz

C.60 Hz

D.80 Hz

Ans:B

24.As compared to an amplifier ,a transformer cannot:

A.Increase output power

B.Increase output voltage

C.Increase output current

D.None of these

Ans:A

25.Which of the following is known as metal rectifier:

A.Gas tube diode

B.Silicon diode

C.Copper oxide diode

D.All of the above

Ans:B

26.A single machine which can generate AC or DC as well as AC and DC both is called:

A.MG set

B.Synchronous motor

C.Inverter

D.Rotary converter

Ans:D

27.The commercial unit of Electical energy is:

A.Joule

B.Kilo watt hour

C.Watt-hour

D.Ampere hour

Ans:B

28.How many number of positive and negative plates are places in a 9 plate lead acid cell?

A.4 positive plate and 4 negative plate

B.5 positive plate and 4 negative plate

C.5 positive plate and 5 negative plate

D.4 positive plate and 5 negative plate

Ans:D

29.The unit of resistivity is:

A.Ohm

B.Ohm/m

C.20 MOhm

D.mho

Ans:C

30.The resistance of a perfect insulator is:

A.Zero

B.1Ohm

C.20 M Ohm

D.Infinity

Ans:D

31.The form factor is the ratio of:

A.Average value to rms value

B.RMS value to average value

C.Peak value to rms value

D.None

Ans:B

32.Unit of flux density:

A.Weber

B.Tesla

C.AT/m

D.H/m

Ans:B

33.The basic principle of electromagnetic induction is:

A.Fleming's left hand rule

B.Steinmetz law

C.Ohm's law

D.Faraday's law

Ans:D

34.Which one of the following in which instruments is used for measuring specific gravity?

A.Lactometer

B.Barometer

C.Voltmeter

D.Hydrometer

Ans:D

35.Electrolyte used in nickel iron cell is:

A.Dil.HCL

B.Dil.H₂SO₄

C.NAOH

D.KOH

Ans:D

36.A semiconductor in it's purest form is known as:

A.Super conductor

B.Extrinsic conductor

C.Insulator

D.Intrinsic conductor

Ans:D

37.For a silicon PN Junction the barrier potential is about"

A.0.7V

B.0.001V

C.0.07V

D.1.7V

Ans:A

38.The minimum number of diodes needed for a bridge rectifier is:

A.One

B.Two

C.Four

D.Eight

Ans:C

39.The insulating material belongs to class B insulation is:

A.Mica

B.Cotton

C.Silicon

D.Leatheroid paper

Ans:A

40.The unit of self induction is:

A.Weber

B.Henry

C.Volt

D.Coloumb

Ans:B

41.3 phase star connection:

A. I_L is less than $1P_h$

B. $I_L = \sqrt{3}1P_h$

C. I_L more than $1P_h$

D. $I_L = 1P_h$

Ans:D

42.Hysteresis is the phenomenon of-----in a magnetic circuit.

A.Lagging B behind H

B.Lagging H behind B

C.Setting up constant flux

D.None of these

Ans:A

43.The maximum current that can pass through a 2 Ohm 2 watts resister will be:

A. 1 Amps

B.2 Amps

C.3 Amps

D.4 Amps

Ans:A

44.The insulation resistance of an electrical machine working at medium voltage should not be less than

A.1000Ohm

B.10000Ohm

C.100000Ohm

D.1000000Ohm

Ans:D

45.Distribution transformer are designed to have maximum efficiency nearly:

A.At any desired load

B.At full load

C.At 50% of full load

D.At no load

Ans:C

46.To a condenser AC supply is given:

- A.The current will not flow
- B.There is no continuous flow of current
- C.The current flows continuously**
- D.None of these

Ans:C

47.In which type of DC Motor,Two point starter is used?

- A.Series motor**
- B.Shunt motor
- C.Long shunt compound motor
- D.Short shunt compound motor

Ans:A

48.What is the SWG of copper earth conductor if the maximum circuit current is 15?

- A.No.14
- B.No.10
- C.No.12
- D.No.8**

Ans:D

49.What is the effect of single phasing in three phase induction motor?

- A.Motor will not run
- B.Burnt due to overheating
- C.No change in running
- D.Will make humming noise**

Ans:D

50.What will happen to the universal motor when it is started without load?

- A.It will not run

B.Run with very low speed

C.Run with very high speed

D.Run with normal speed

Ans:C

51.Among the following which device cannot be used as a safety device?

A.Fuse

B.Earth tester

C.Circuit breaker

D.ELCB

Ans:B

52.Which type of DC generator is used for battery charging?

A.Cumulative compound generator

B.Shunt generator

C.Differential compound generator

D.Series generator

Ans:B

53.What is the thickness of copper plate used for earth electrode?

A.6.3 mm

B.3 mm

C.3.3 mm

D.3.15 mm

Ans:A

54.The core loss in a transformer is constant during:

A.Quarter load

B.Half load

C.Full load

D.All load

Ans:D

55.The equivalent resistance of the parallel circuit is than the smallest single resistance:

A.Greater

B.Smaller

C.Equal

D.Half

Ans:B

56.Which is the working principle of an instrument transformer?

A.Self –induction

B.Lenz’s law

C.Mutual induction

D.Fleming’s Right hand rule

Ans:C

57.Switch board is fixed at a height of as per IE rules.

A.1.5 M

B.2.5 M

C.2 M

D.3 M

Ans:A

58.The rating of fuse is expressed In terms of:

A.KVA

B.Current

C.Voltage

D.None

Ans:B

59.A lead acid cell is rechargeable because:

A.It is a wet cell

B.Its electrolyte has high specific gravity

C.Its chemical reaction is reversible

D.Its electrolyte is H_2SO_4

Ans:C

60.Breather De-hydrating material

A.Copper Sulphate

B.Sodium chloride

C.Calcium chloride

D.Sodium silicate

Ans:C

61.Instruments which must not be used in the circuit when the power is ON are:

A.OHM meter and Megger

B.Phase sequence meter and energy meter

C.Frequency meter and long tester

D.Watt meter and PF meter

Ans:A

62.Which of the following can be called as integrating instrument?

A.Volt meter

B.Watt meter

C.Power factor meter

D.Energy meter

Ans:D

63.Buchholz's relay is:

A.Current sensitive device

B.A frequency sensitive device

C.A gas actuated device

D.Voltage sensitive device

Ans:C

64.Capacitance is not affected by:

A.Plate area

B.Distance between plates

C.Di-electric material

D.Frequency

Ans:D

65.The back emf of a DC motor depends on the:

A.Shape of conductors

B.Field flux

C.Type of commutator

D.Brush material

Ans:B

66.The flux of a DC motor approaches zero,its speed will approaches:

A.Infinity

B.Zero

C.A stable value nearer to the rated speed

D.None of the above

Ans:A

67.In Scott connections the teaser transformer has tapping on:

A.86.6% of primary

B.58% of primary

C.58% of secondary

D.50% of secondary

Ans:A

68.IF a six nos of lamps are to be installed in Godown wiring we require:

A.One SPT and 6 two way switches

B.Two SPT and 6 two way switches

C.One SPT and 5 two way switches

D.Two SPT and 5 two way switches

Ans:C

69.In small capacity DC machines the yoke is made up of:

A.Cast iron

B.Brass

C.Fabricated steel

D.Aluminium

Ans:A

70.Soldering is done on joints to improve:

A.Tensile strength

B.Conductivity

C.Resistivity

D.Ductility

Ans:B

71.Short circuited field coils are located effectively by the use of a:

A.Mega Ohm meter

B.Ohm meter

C.Growler

D.Clamp on meter

Ans:C

72.The body resistance value of a human being with normal health is about:

A.20 kilo ohm

B.30 Kilo ohm

C.1 kilo ohm

D.5 kilo ohm

Ans:A

73.One lamp cab be controlled from five location by using intermediate switches and two way switches .How many number of intermediate switches and two switches are require to control a lamp from 5 positions?

A.Intermediate switches 2 and two way switches 3

B.Intermediate switch 4 and two way switches 1

C.Intermediate switch 1 and two way switches 4

D.Intermediate switch 3 and two switches 2

Ans:A

74.What happen if the output filter capacitor is opened in a battery charger?

A.It will not work

B.Make humming noise

C.High output

D.Take more output current

Ans:D

75.The metal used for the control spring in an electrical instrument is:

- A.Steel
- B.Nichrome
- C.Hard drawn copper

D.Phosphor bronze

Ans:D

76.In a slip ring induction motor slip rings are connected to the:

A.Rotor

- B.Stator
- C.Exciting field
- D.Centrifugal switch

Ans:A

77.Which motor is used for electric traction?

- A.DC compound motor
- B.Three phase induction motor

C.DC series motor

D.DC shunt motor

Ans:C

78.How many slip rings are there in a slip ring induction motor?

A.2

B.3

C.4

D.6

Ans:B

79.The stator winding of a 3 ϕ slip ring induction motor has 4 poles ,How many number of poles in the rotor winding?

A.2

B.4

C.6

D.8

Ans:B

80.Which type of capacitor is used in single phase capacitor type motor?

A.Ceramic capacitor

B.Mica capacitor

C.Electrolytic capacitor

D.Paper capacitor

Ans:C

81.Who won the Pulitzer Prize on Poetry in 2014?

A.Vijay Seshadri

B.Gobind Beharilal

C.Geetha Anand

D.Mahmood Darwish

Ans:A

82.Whose goal is selected goal of the 2014 FIFA World Cup Brazil?

A.Lionel Messi

B.James Rodriguez

C.Gotze

D.Christine Ronald

Ans:B

83.Which countries share border with'Gaza'?

A.Syria-Egypt

B.Labanon –Isarel

C.Israel-Egypt

D.Syria-Iraq

Ans:C

84.Overall GDP growth of India during 2013-2014:

A.Less than 5%

B.5 to 8 %

C.8 to 10 %

D.Above 10%

Ans:A

85.Who is known as”Vidhyadhiraja”?

A.Vaghbhatananda

B.Chattampi Swamikal

C.Sree Narayana Guru

D.Ayyankali

Ans:B

86.The background of the novel “The Kite Runner”took place in which country?

A.Iraq

B.Sudan

C.Syria

D.Afghanistan

Ans:D

87.Venue of the Samadhi of Sree Narayana Guru:

A.Sivagiri

B.Arunipuram

C.Varkala

D.Alway

Ans:A

88.The Wagon tragedy was related to:

A.Quite India Movement

B.Non Co-operation Movement

C.Malabar Rebellion

D.Khilafath Movement

Ans:B

89.Spiritual father of Indian national Movement:

A.Vivekananda

B.Rajaram Mohan Roy

C.Dayananda Saraswathi

D.Ramaswami Naikkar

Ans:A

90.Which neighbouring country sharing longest boundary with India?

A.China

B.Bangladesh

C.Pakistan

D.Nepal

Ans:B

91.World Health Organization warns against new epidemic broke out at West Africa in 2014:

A.AIDS

B.Dengue fever

C.MERS

D.Ebola

Ans:D

92.The author of the Sree Buddha Charitham:

A.Kalidasan

B.Cherusseri

C.Kumaranasan

D.Changapuzha

Ans:C

93.The period of 11th five year plan:

A.2007-2012

B.2006-2011

C.2005-2010

D.2008-2013

Ans:A

94.Gandhiji entered Indian Politics in connection with:

A.Rowlat Act agitation

B.Khilafath movement

C.Non co-operation movement

D.Lucknow –pact

Ans:A

95.India govt plan to construct new corridor for high speed train with speed range 300-350 kmph.What is the present maximum speed of long distance train in India?

A.100-120 kmph

B.70-80 kmph

C.90-100 kmph

D.80-90 kmph

Ans:A

96.Who presided the Congress Session held at Belgram in 1924?

A.Jawaharlal Nehru

B.Mahatma Gandhi

C.Subash Chandra Bose

D.Tilak

Ans:B

97.One of the conditions required for maintaining National Party Status is among three states a party should win at least:

A.10 seats

B.11 seats

C.12 seats

D.13 seats

Ans:B

98.Which river is known as"Ganga of the South"?

A.Godavari

B.Mahanadi

C.Krishna

D.Kaveri

Ans:D

99.The Secret Code of Germany to attack Russia is second world war:

A.Little Boy

B.Operation Sea

C.Lend Lease

D.Operation Barbarosa

Ans:D

100.The upper most solid layer of the earth:

A.Biosphere

B.Atmosphere

C.Hydro sphere

D.Lithosphere

Ans:D