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

**1.What is the effect of single phasing in 3**$∅$ **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.900C

B.1300C

**C.1200C**

D.1500C

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.600C

B.750C

C.900C

D.1000C

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.IL is less than 1Ph

B.IL=$√$31Ph

C.IL more than 1Ph

**D.IL=1Ph**

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 electode?**

**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 H2SO4

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**$∅$ **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