ELECTRICIAN AGRICULTURE(ERNAKULAM)

EXAM DATE:16/11/2016

**1.Transformer core is laminated to---------**

A.Reduce the copper loss

B.Reduces the eddy current loss\*

C.Reduces the core loss

D.Hysteresis loss

Ans:B

**2.Which type of loss is not common to transformer and rotating machines?**

A.Eddy current loss

B.Copper loss

C.Hysteresis loss

D.Windage loss\*

Ans:D

**3.The difference between the synchronous speed and the actual speed of an induction motor is known** **as**

A.Slip\*

B.Regulation

C.Black lash

D.Lag

Ans:A

**4.Three resistances of 30,15,5 ohms are connected in parallel,their combined resistance will be**

A.Greater than 30 ohm

B.Between 30 to 15 ohm

C.Less than 5 ohm\*

D.Between 15 to 5 ohm

Ans:C

**5.Which of the following acts as a depolarizer in a dry cell?**

A.Zinc chloride

B.Carbon powder

C.Ammonium chloride

D.Manganese dioxide\*

Ans:D

**6.Efficiency of a power transformer is of the order of**

A.50%

B.75%

C.98%\*

D.45%

Ans:C

**7.The strongest dia-magnetic material**

A.Sulphur

B.Bismuth\*

C.Glass

D.Graphite

Ans:B

**8.The magnitude of torque developed by a three phase induction motor depends upon**

A.Rotor current,rotor emf,rotor pf\*

B.Supply voltage,stator current,frequency

C.Number of poles,speed,frequency

D.Synchronous speed,rotor speed,frequency

Ans:A

**9.Rheostat method of speed control of induction motor is used in**

A.Squirrel cage

B.Slip ring IM\*

C.Double cage IM

D.All of the above

Ans:B

**10.In a three phase IM the number of poles in the rotor winding are**

A.Zero

B.Less than stator poles

C.Equal to stator poles\*

D.More than stator poles

Ans:C

**11.If the air gap of induction motor is increased**

A.The magnetizing current will increase\*

B.The pf will increase

C.Speed of the motor will increase

D.Friction and windage loss will increases

Ans:A

**12.Isolate fire from the supply of oxygen by blanketing it with foam,sand etc**

A.Starving

B.Cooling

C.Spray water

D.Smothering\*

Ans:D

**13.What is the condition of ohm’s law?**

A.Constant resistance

B.Constant voltage

C.Constant current

D.Constant temperature\*

Ans:D

**14.Power p=**

A.Energy/time\*

B.Energy/voltage

C.Current/voltage

D.Time/voltage

Ans:A

**15.Moving cell instruments are use**

A.AC only

B.Both AC/DC

C.DC only\*

D.None of these

Ans:C

**16.Low resistance means**

A.Up to 10 ohm

B.1 Ohm and below\*

C.1000 ohm

D.500 ohm

Ans:B

**17.Unit of resistivity**A.Ohm\*

B.Ohm-m

C.Ohm m2

D.Ohm/m

Ans:A

**18.Kelvin bridge is used for measure:**

A.Capacitance

B.Low resistance\*

C.Inductance

D.Insulation resistance

Ans:B

**19.Resistivity of eureka at 20oC**

A.2.8x10-8

B.1.72x10-8

C.49x10-8\*

D.20.2x10-8

Ans:C

**20.Application of series parallel combination:**A.Current divider

B.Maximum resistance

C.Power divider

D.Voltage divider\*

Ans:D

**21.An earthing electrode usually made of:**

A.PVC pipe

B.Carbon plate

C.Glass rod

D.Metal plate\*

Ans:D

**22.The color of protective conductor:**

A.Green-yellow\*

B.Green-red

C.Green-blue

D.Green-black

Ans:A

**23.The color of middle wire of 3 wiere Dc circuit is:**

A.Red

B.Black\*

C.Blue

D.Green

Ans:B

**24.Example of primary cell:**

A.Lead acid cell

B.Edison cell

C.Voltaic cell\*

D.Nickel-iron cell

Ans:C

**25.The amp-hour efficiency of lead acid cell:**

A.75%

B.90-95%\*

C.80-85%

D.60-65%

Ans:B

**26.High rate discharge tester consists of**

A.Low range ammeter

B.High range voltmeter

C.Low range voltmeter\*

D.High range ammeter

Ans:C

**27.The color of fresh Silica gell is**

A.Blue

B.Red

C.Black

D.Light pink color\*

Ans:D

**28.Imaginary line joining the two poles of a magnet**

A.Magnetic equator\*

B.Magnetic pole

C.Magnetic lines

D.Magnetic field

Ans:A

**29.Rotor copper loss of a three phase induction motor is**

A.Fractional slip x input power to the rotor\*

B.Fractional slip x output of the rotor

C.Input power x output power

D.All the above

Ans:A

**30.1 Metric horse power is:**

A.742 W

B.735 W

C.735.6 W\*

D.746 W

Ans:C

**31.The back emf set up in the stator of a synchronous motor will depend on**

A.Rotor speed only

B.Stator speed only

C.Rotor emf

D.Rotor excitation\*

Ans:D

**32.The armature Wdg of repulsion motor is excited:**

A.Resistively

B.Inductively\*

C.Conductively

D.Capacitively

Ans:B

**33.The main disadvantage of shaded pole motor:**

A.Low starting torque

B.Little over load capacity

C.Low efficiency

D.All the above\*

Ans:D

**34.The armature flux opposes the main flux is in synchronous machine when the PF is:**

A.Unity\*

B.Zero lagging

C.Zero leading

D.0.8 lagging

Ans:A

**35.Dielectric strength of a medium is:**

A.Joules/m2

B.Coulomb/m2

C.kV/mm\*

D.Volt/m2

Ans:C

**36.Electric intensity is expressed as:**

A.Webber

B.Volt/m\*

C.emf

D.Coulomb

Ans:B

**37.Whenever two charges are separated there exist:**

A.Magnetic field

B.Electric field

C.Electrostatic field

D.Emf\*

Ans:D

**38.Potential inside the hollow charged sphere:**

A.Less than its surface

B.Greater than on its surface

C.Same as on its surface\*

D.Zero

Ans:C

**39.Capacitance in any circuit is opposition to:**

A.Voltage\*

B.Current flow

C.Any change in current

D.Any change in power

Ans:A

**40.The simple measuring instrument used to transfer measurement from the steel rule to object**

A.Try-square

B.Calliper\*

C.Scriber

D.Punch

Ans:B

**41.2 Ohm resistance having current of 2 A will dissipate the power of:**

A.8 W

B.8 J

C.2 W

D.4 W\*

Ans:D

**42.If the diameter of a wire is doubled keeping the length constant the resistance:**

A.Become one fourth\*

B.Become twice

C.Remains same

D.Becomes 4 times

Ans:A

**43.Which of the following is linear and bilateral element?**

A.Semi conductor

B.Resistor\*

C.Electron tube

D.Transistor

Ans:B

**44.Why accumulators are preferred to pmy cell in motor car?**

A.They are bulk

B.They have high internal resistance

C.They can be recharged\*

D.All the above

Ans:C

**45.Sedimentation occurs in lead acid cell to:**

A.Over charging at high rate\*

B.Over charging at slow rating

C.No use for longer period

D.Slow charged rate

Ans:A

**46.Kirchhoff’s law are valid for:**

A.Linear circuit

B.Non linear circuit

C.Both linear and non-linear circuit\*

D.Passive circuit

Ans:C

**47.The algebraic sum of all IR drops and emf in any closed loop of a network as per KVL is:**

A.+ve

B.Zero\*

C.-ve

D.+ve or –ve

Ans:B

**48.Form factor is the ratio of**A.Average value/rms value

B.Average value x rms value

C.Instaneous value/rms value

D.Rms value/average value\*

Ans:D

**49.The power factor of the inductive load is:**

A.Leading

B.Lagging\*
C.Unity

D.Zero

Ans:B

**50.A choke coil has:**

A.High inductive,high resistance

B.Low inductive,low resistance

C.Low inductive,high resistance

D.High inductive,low resistance\*

Ans:D

**51.A choke is used for limiting current in:**

A.AC ckt only\*

B.DC ckt only

C.Both AC and DC

D.Either AC or DC

Ans:A

**52.Impedance at series resonance circuit:**

A.Maximum

B.Average

C.Minimum\*

D.All the above

Ans:C

**53.Power factor is defined as:**

A.kVA/kVAR

B.kVA/kW

C.kW/kVA\*

D.kW/kVR

Ans:C

**54.2 Wattmeter method measuring power,2 meters read equal and opposite reading the load power** **factor:**

A.Zero\*

B.0.5

C.Unity

D.Above 0.5

Ans:A

**55.The secondary current of 400 KVA,11 KV/433 V,3 phase transformer is about:**

A.420 A

B.533 A\*

C.666.5A

D.840 A

Ans:B

**56.The current rating of 400 mm2 AYFY cable is:**

A.400A

B.435A

C.305A

D.335A\*

Ans:D

**57.The maximum efficiency of distribution transformer is:**

A.1/4th load

B.Full load

C.3/4th load

D.Half road\*

Ans:D

**58.Unit of luminous intensity:**

A.Lumen

B.Lux

C.Candela\*

D.Lumen/m

Ans:C

**59.The most efficient lamp:**

A.Graphene\*

B.LED

C.CFL

D.Sodium vapour lamp

Ans:A

**60.The larger transformer stepped core arrangement is used to minimize the use of:**

A.Core

B.Copper\*

C.Hysteresis loss

D.Core loss

Ans:B

**61.Examine the Commutator and brushes:**

A.Weekly maintenance\*

B.Monthly maintenance

C.Daily maintenance

D.Yearly maintenance

Ans:A

**62.In DC generator the voltage drop of copper carbon brush is about**

A.1.6 V

B.2 V

C.1/75 V

D.0.3V\*

Ans:D

**63.Alternator voltage regulation is determined by emf method it is due to:**

A.Rothert

B.Behn-Eschenberg\*

C.Faraday

D.Pointer

Ans:B

**64.The starting torque of capacitor start,capacitor run is about**

A.200% of FL torque

B.50% of FL torque

C.300% of FL torque\*

D.100% of FL torque

Ans:C

**65.The first Director-General of Archaeological Survey of India:**

A.Mountbatten

B.Alexander Cunningham\*

C.Wheeler

D.Ernest Mackey

Ans:B

**66.Name the first Indian to win the World Armateur Billard Title**

A.Wilson Jones\*

B.Kamaljit Sandhu

C.Ravi Shastri

D.K.Malleswari
Ans:A

**67.In which place the Great Victoria Desert is located?**

A.Canada

B.Africa

C.Asia

D.Australia\*

Ans:D

**68.Name the Kerala ruler who gave his country to Sri Padmanabha as Tripadidana**

A.Saktan Thampuran

B.Swati-Tirunal

C.Marthanda Varma\*

D.Rama Varma

Ans:C

**69.Who was known as frontier Gandhi?**

A.Abdul Kalam Azad

B.Muhammed Iqbal

C.Khan Abdul Ghafar Khan\*

D.Patel

Ans:C

**70.In which year Mountbatten Plan was announced in India?**

A.1947\*

B.1946

C.1945

D.1948

Ans:A

**71.Director of the film ‘Tamas’explaining about partition of India:**

A.Satyajit Rai

B.Govind Nihalani\*

C.Mrinali Sen

D.Narain Bharati

Ans:B

**72.In which year Sadhujana Paripalana Yogam established?**

A.1903

B.1905

C.1907\*

D.1910

Ans:C

**73.Name the event which is related to Savarna Jatha**

A.Shannar Agitation

B.Quit India Movement

C.Attingal Revolt

D.Vaikkom Satyagraha\*

Ans:D

**74.What is the name of spice which is called as ‘Yavanapriya’?**

A.Ginger

B.Pepper\*

C.Cinnamon

D.Cardamom

Ans:B

**75.Who was the Viceroy of India during the time of Round Table Conferences?**

A.Lord Canning

B.Ramsay Mac Donald

C.Lord Curzon

D.Lord Irvin\*

Ans:D

**76.The first person who offer Individual Satyagraha in Indian Freedom Movement?**

A.Vinobha Bhave\*

B.Dr.B.R.Ambedkar

C.Vallabhai Patel

D.Narendra Dutta

Ans:A

**77.In which Year Historic Lahore session of Indian National Congress held?**

A.1919

B.1929\*

C.1930

D.1942

Ans:B

**78.Which is the Name of Commission sent to India to enquire about the work of Govt.of India Act of** **1919?**

A.Crips Mission

B.Wardha Commission

C.Simon Commission\*

D.Cabinet Commission

Ans:C

**79.Which is the birth place of Markuriakose Elias Chavara?**

A.Bharanaganam

B.Mannanam

C.Mezhathur

D.Kainakari\*
Ans:D

**80.Pattanam was situated in the banks of river---------**

A.Pamba

B.Bharatapuzha

C.Periyar\*

D.Kurumalipuzha

Ans:C

**81.The Yarkungzangbo river in India is known as----------**

A.Brahmaputra\*

B.Mahanadi

C.Kaveri

D.Sindhu

Ans:A

**82.The Power to Prorogue the Lok Sabha rests with---------**

A.Speaker

B.President\*

C.Supreme Court

D.Prime Minister

Ans:B

**83.Who is the Founder of Samatwa Samaj?**

A.Chattampi Swamikal

B.Ayyankali

C.Vaghbhatananda

D.Vaikunda Swamikal\*

Ans:D

**84.The Political Guru of Mahatma Gandhi:**

A.Gokhale\*

B.Tilak

C.Surendra Nath Banerjee

D.Dadabhai Naoroji

Ans:A

**85.Repulsion motor is provided with:**

A.Commutator\*

B.Centrifugal switch

C.Capacitor

D.Squirrel cage rotor

Ans:A

**86.Whenever a poly phase motor is loaded the:**

A.Induced emf in the rotor increases and its frequency falls

B.Induced emf in the rotor increases and its frequency rises\*

C.Induced in the rotor remains constant

D.Induced emf in the rotor decreases and its frequency increases

Ans:B

**87.For three resistance are connected in three phase,the power consumed will be more??-------connection**

A.Star delta

B.Star

C.Delta\*

D.Delta star

Ans:C

**88.Synchronous motors run on leading power factor when connected in:**

A.Under excitation

B.Rated excitation

C.Fully loaded

D.Over excitation\*

Ans:D

**89.The output voltage of a solar cell is approximately:**

A.1.2 V

B.0.5 V\*

C.2.1 V

D.3 V

Ans:B

**90.Slip rings are generally made of:**

A.Phosphoric bronze\*

B.Alumini

C.Copper

D.Carbon

Ans:A

**91.The hydrometer reading of fully charged lead acid battery:**

A.1.2

B.1.5

C.1.11

D.1.26\*

Ans:D

**92.In induction motor percentage slip is maximum at:**

A.Low speed

B.Medium speed

C.Stand still condition\*

D.Synchronous speed

Ans:C

**93.Economiser is a part of:**

A.Hydel PS

B.Nuclear PS

C.Thermal PS\*

D.Diesel PS

Ans:C

**94.The crawling in an induction motor is caused by:**

A.Improper design of the machine

B.Low voltage supply

C.High load

D.Harmonics developed in the motor\*

Ans:D

**95.The commutator segments are placed in:**

A.Rotor\*

B.Stator

C.Armature

D.Field

Ans:A

**96.Reduction in the capacitance of capacitor start motor results in reduced:**

A.Noise

B.Starting torque\*

C.Speed

D.Armature reaction

Ans:B

**97.In an ac circuit the ratio of kW/kVA represents:**

A.Power factor\*

B.Load factor

C.Starting torque

D.Diversity factor

Ans:A

**98.The unit of inductance is:**

A.OHM

B.MHO

C.HENRY\*

D.FARAD

Ans:C

**99.Ear to ear resistance of human body:**

A.400

B.1 Kilo ohms

C.650 ohms

D.100 ohms\*

Ans:D

**100.Centrifugal switches is provided for disconnecting the auxiliary winding in a:**

A.Capacitor run motor

B.Capacitor start motor\*

C.Reluctance motor

D.Hysteresis motor

Ans:B