(Papers) SSC Junior Engineer Exam Paper - 2018 "held on 24 Jan 2018" Afternoon Shift (Elecrical Engineering)

QID : 901 - Which of the following material does not allow the current to flow in it?

Options:

1) Conductor

2) Insulator

3) Semiconductor

4) Superconductor

Correct Answer: Insulator

QID : 902 - How much power (in W) will be dissipated by a 5 Ohm resistor in which the value of current is 2 A?

Options:

1) 10

2) 30

3) 20

4) 40

Correct Answer: 20

QID : 903 - Which property of an electrical conductor opposes a change in the current?

Options:

1) Resistance

2) Capacitance

3) Conductance

4) Inductance

Correct Answer: Inductance

QID : 904 - What is the resistivity (in Ohms-m) of a 2 Ohm cylindrical wire when the length and the diameter of the wire are 10 m and 0.4 m respectively?

Options:

1) 0.025

2) 0.0025

3) 0.25

4) 0.05

Correct Answer: 0.025

QID : 905 - Farad is the S.I unit of _____.

Options:

1) Inductance

2) Resistance

3) Capacitance

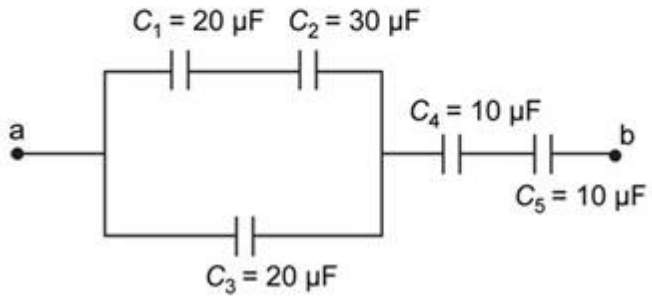
4) Reluctance

Correct Answer: Capacitance

QID : 906 -

What is the equivalent capacitance (in μF) for the circuit given below?

नीचे दिए गए परिपथ की समतुल्य धारिता (μF में) क्या है?



Options:

1) 4.56

2) 4.32

3) 54.65

4) 54.28

Correct Answer: 4.32

QID : 907 - What will be the resistance (in Ohms) of a lamp rated at 220 V, 200 W?

Options:

1) 220

2) 224

3) 244

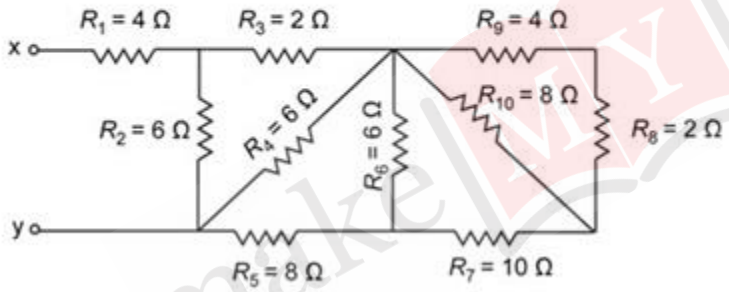
4) 242

Correct Answer: 242

QID : 908 -

What will be the equivalent resistance (in Ω) for the circuit given below?

नीचे दिए गए परिपथ का समतुल्य प्रतिरोध (Ω में) क्या है?



Options:

1) 5

2) 7

3) 10

4) 4

Correct Answer: 7

QID : 909 - Two wires of same resistivity have equal length. The cross sectional area of first wire is two times to the area of the other. What will be the resistance (in Ohms) of the wire that has a large cross sectional area, if the resistance of the other wire is 20 Ohms?

Options:

1) 40

2) 20

3) 30

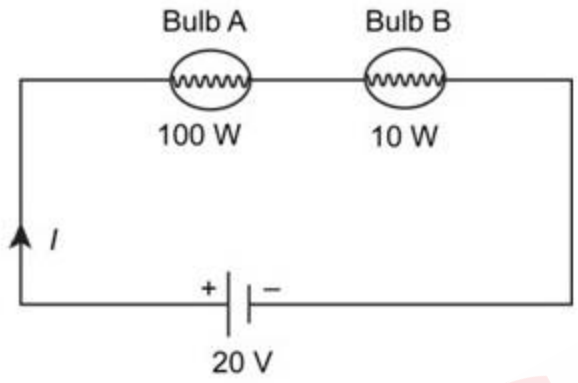
4) 10

Correct Answer: 10

QID : 910 -

What will be the resistance (in Ohms) of bulb A for the circuit given below?

नीचे दिए गए परिपथ के लिए बल्ब A का प्रतिरोध (ओम में) क्या होगा?



Options:

1) 4.65

2) 2.35

3) 3.3

4) 1.33

Correct Answer: 3.3

QID : 911 - Which of the following statement is CORRECT?

Options:

1) Norton's theorem is same as superposition theorem.

2) Norton's theorem is the converse of superposition theorem.

3) Norton's theorem is same as Thevenin's theorem.

4) Norton's theorem is the converse of Thevenin's theorem.

Correct Answer: Norton's theorem is the converse of Thevenin's theorem.

QID : 912 - The algebraic sum of the electric currents meeting at a common point is _____.

Options:

1) Infinity

2) Zero

3) One

4) Negative

Correct Answer: Zero

QID : 913 - Which of the following law is based on the conservation of energy?

Options:

1) Kirchhoff's Current Law

2) Kirchhoff's Voltage Law

3) Ohm's Law

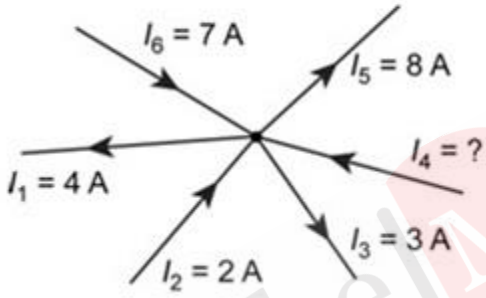
4) Coulomb's Law

Correct Answer: Kirchhoff's Voltage Law

QID : 914 -

What is the value of current I_4 (in A) for the given junction?

दिए गए जंक्शन के लिए विद्युत् धारा I_4 का मान (एम्पेयर में) क्या है?



Options:

1) 4

2) -4

3) 6

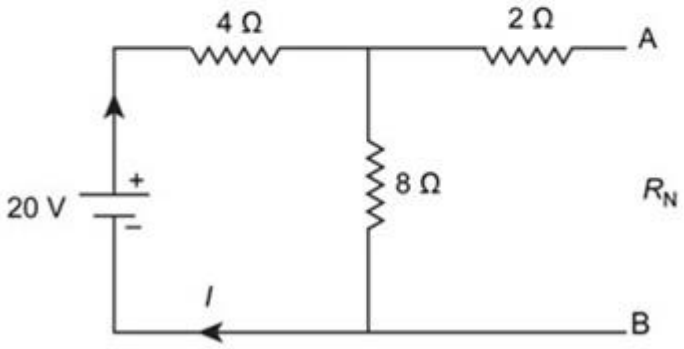
4) -6

Correct Answer: 6

QID : 915 -

What is the value of Norton resistance (in Ω) between the terminal A and B for the given Norton's equivalent circuit?

दिए गए नॉर्टन के समकक्ष परिपथ के लिए टर्मिनल A और B के बीच नॉर्टन प्रतिरोध का मान (ओम में) क्या है?



Options:

1) 2

2) 4

3) 4.66

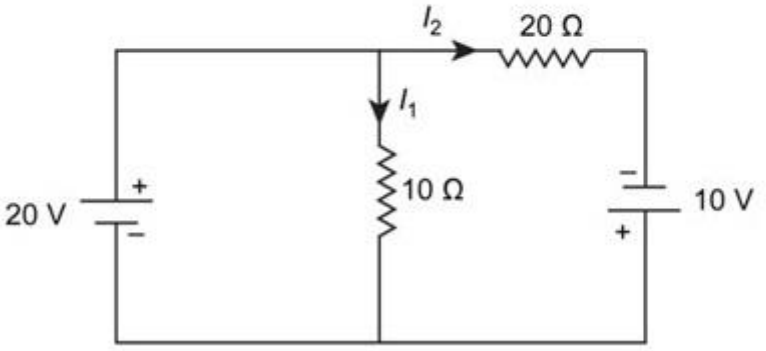
4) 5.6

Correct Answer: 4.66

QID : 916 -

Determine the value of current (in A) through both the resistors of the given circuit.

दिए गए परिपथ में दोनों प्रतिरोधों में विद्युत् धारा का मान (एम्पेयर में) ज्ञात करें।



Options:

1) -2, -1.5

2) 2, 1.5

3) -2, 1.5

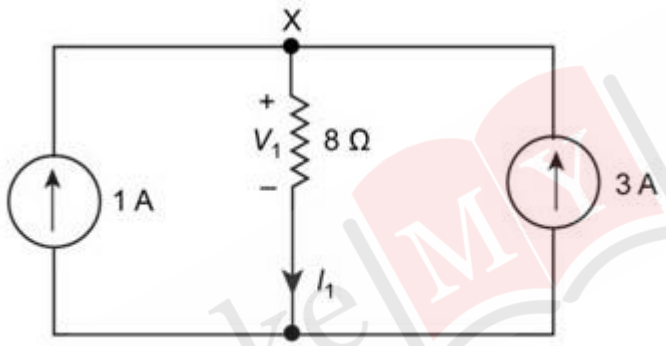
4) 2, -1.5

Correct Answer: 2, 1.5

QID : 917 -

Determine the value of current I_1 (in A) and V_1 (in V) respectively, for the circuit given below.

निचे दिए गए परिपथ में विद्युत् धारा I_1 (एम्पेयर में) और वोल्टेज V_1 (वोल्ट में) का मान क्रमशः ज्ञात करे।



Options:

1) 4, 32

2) -4, 32

3) 6, 30

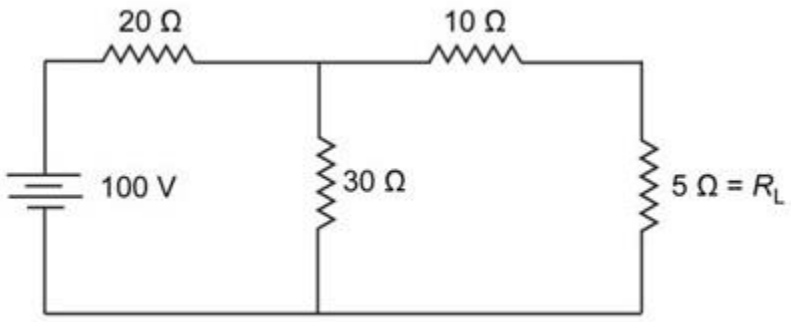
4) -6, 30

Correct Answer: 4, 32

QID : 918 -

What will be the value of Thevenin's voltage (in V), Thevenin's resistance (in Ω) and the load current (in A) respectively, across the load resistor in the given electrical circuit?

नीचे दिए गए विद्युत् परिपथ में लोड प्रतिरोध के पार थेवेनिन वोल्टेज (वोल्ट में), थेवेनिन प्रतिरोध (ओम में) और विद्युत् धारा (एम्पेयर में) का मान क्रमशः ज्ञात करें।



Options:

1) 40, 22, 2.22

2) 50, 32, 1.11

3) 60, 22, 2.22

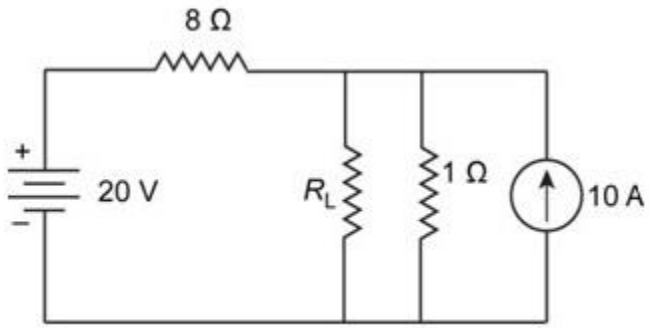
4) 60, 32, 1.50

Correct Answer: 60, 22, 2.22

QID : 919 -

Determine the value of maximum power (in W) transferred from the source to the load in the circuit given below.

दिए गए परिपथ में लोड से स्रोत तक अधिकतम स्थानांतरित शक्ति का मान (वाट में) निर्धारित करें।



Options:

1) 30

2) 25

3) 20

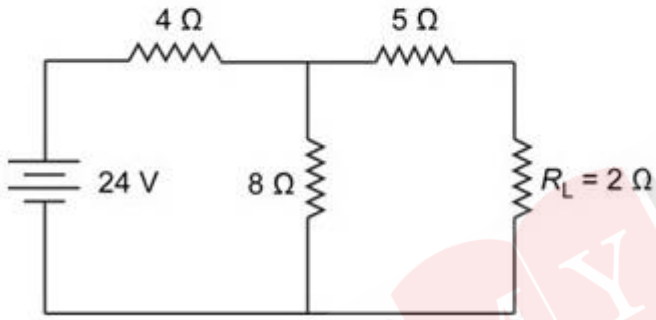
4) 35

Correct Answer: 35

QID : 920 -

Determine the Norton's current (in A) and Norton's resistance (in Ω) respectively, for the given electrical circuit across the load resistance, R_L.

निचे दिए गए विद्युत परिपथ में लोड प्रतिरोध R_L के आर-पार नॉर्टन विद्युत् धारा (एम्पेयर में) और नॉर्टन प्रतिरोध (ओम में) का मान क्रमशः निर्धारित करें।



Options:

1) 2.09, 7.66

2) 2.34, 3.45

3) 4.43, 3.26

4) 2.34, 2.55

Correct Answer: 2.09, 7.66

QID : 921 - The S.I unit of magnetic flux is _____.

Options:

1) Henry

2) Coulomb

3) Tesla

4) Weber

Correct Answer: Weber

QID : 922 - The relative permeability of diamagnetic materials is _____.

Options:

1) Greater than 1

2) Greater than 10

3) Less than 1
4) Greater than 100
Correct Answer: Less than 1

QID : 923 - Which of the following is the reciprocal of reluctance?
Options:
1) Permeability
2) Susceptibility
3) Permeance
4) Reluctivity
Correct Answer: Permeance

QID : 924 - Which of the following is the CORRECT formula for permeance?
Options:
1)
$\frac{I}{H}$
2)
$\frac{B}{H}$
3)
$\frac{\phi}{F_m}$
4)
$\frac{F_m}{L}$
Correct Answer:

QID : 925 - Determine the intensity of magnetization (in A/m) of a magnet when it has a pole strength of 60 A-m and a pole area of 20 sq. m.
Options:
1) 9
2) 4
3) 6
4) 3

Correct Answer: 3

QID : 926 - What will be the magnitude of induced EMF (in V) in a coil that has 200 square loops, each of side 5 cm and placed normal to a magnetic field? The magnetic field increases at the rate of 4 Weber per sq. meter.

Options:

1) 1

2) 2

3) 3

4) 4

Correct Answer: 2

QID : 927 - What will be the value of current (in A) in a 40 cm long solenoid in free space, if it has 400 turns, 2 cm of diameter and produces a magnetic field of 4 mT at its center?

Options:

1) 4.23

2) 5.15

3) 3.18

4) 2.34

Correct Answer: 3.18

QID : 928 - What will be the self-inductance (in H) of a 2 m long air-core solenoid, if the diameter of the solenoid is 25 cm and has 600 turns?

Options:

1) 0.011

2) 0.045

3) 0.132

4) 0.645

Correct Answer: 0.011

QID : 929 -

What will be the mutual inductance (in mH) between the two coils, if a current of $2\sin(100\pi t)$ passes through one of the coil, which induces a maximum EMF of 10π V in the second coil?

दो कुंडलियों के बीच अन्योन्य प्रेरकत्व (mH में) क्या होगा यदि एक कुंडली की ओर से $2\sin(100\pi t)$ की विद्युत् धारा बहती है, जो दूसरी कुंडली में अधिकतम 10π V ईएमएफ उत्पन्न करती है?

Options:

1) 40

2) 20

3) 50

4) 60

Correct Answer: 50

QID : 930 - Determine the magnitude of the EMF (in V) induced between the axis of rotation and the rim of the disc, when the disc of diameter 40 cm rotates with an angular velocity of 40 revolutions per second and placed in a magnetic field of 1 T acting parallel to the rotation of the disc.

Options:

1) 6

2) 3.6

3) 4.8

4) 5

Correct Answer: 5

QID : 931 -

What will be the instantaneous value of the alternating current (in A) which is represented by $i(t) = 20\sin(13t - 20)$ A, when the value of t is 5?

एक प्रत्यावर्ती विद्युत् धारा $i(t) = 20\sin(13t - 20)$ A, का तात्कालीन मान (एम्पेयर में) क्या होगा जब t का मूल्य 5 है?

Options:

1) 0

2) 10

3) 14.14

4) 17.32

Correct Answer: 14.14

QID : 932 - What is the peak value of the alternating voltage (in V) having an average value of 180 V?

Options:

1) 254.59

2) 282.57

3) 333.34

4) 359.96

Correct Answer: 282.57

QID : 933 - The capacitive reactance of a circuit is 60 Ohms, when it is supplied with a 50 Hz supply. What will be the value of capacitive reactance (in Ohms) of the same circuit, if it is supplied with a 60 Hz supply?

Options:

1) 50

2) 60

3) 75

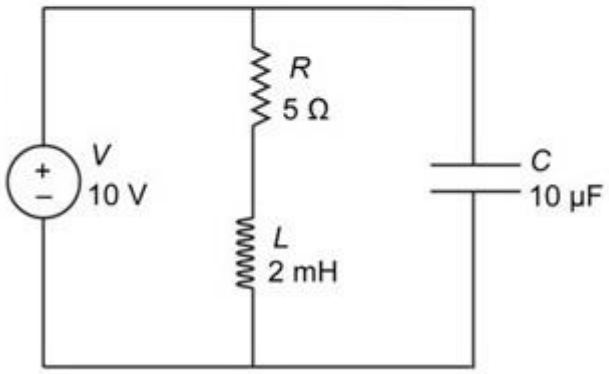
4) 125

Correct Answer: 50

QID : 934 -

A parallel RLC circuit is being supplied by a DC source as shown in the figure below. What is the value of current flowing through the capacitor (in A)?

एक समानांतर आरएलसी परिपथ को एक दिष्ट धारा स्रोत द्वारा संचालित किया जाता है, जैसा कि नीचे दिए गए चित्र में दिखाया गया है। संधारित्र के माध्यम से बहने वाली विद्युत् धारा का मान (एम्पेयर में) क्या है?



Options:

1) 0

2) 0.5

3) 1

4) 2

Correct Answer: 0

QID : 935 - Calculate the value of phase angle (in Degrees) in a series RC circuit having a resistance of 50 Ohms and a capacitive reactance of 86.6 Ohms, when supplied with a frequency of 50 Hz.

Options:

1) 15

2) 30

3) 45

4) 60

Correct Answer: 60

QID : 936 - What is the value of the total impedance (in ohms) of a tank circuit working at resonant frequency having a capacitance of 0.01 mF and an inductance of 0.01 mH?

Options:

1) 0

2) 10

3) 100
4) ∞
Correct Answer: ∞

QID : 937 - Calculate the time (in seconds) taken by a series RL circuit having inductance of 0.6 H and resistance of 30 Ohms to reach a steady state value.
Options:
1) 0.02
2) 0.05
3) 0.1
4) 0.5
Correct Answer: 0.1

QID : 938 - Which of the following is NOT correct about a star connected balanced 3-phase circuit?
Options:
1) The phase current is equal to the line current.
2) The phase voltage is less than the line voltage.
3) The system does not contain a neutral point.
4) It is a four wire system.
Correct Answer: The system does not contain a neutral point.

QID : 939 - A 3-phase delta connected system is supplied by a line voltage of 400 V. The value of phase current is 70 A. What is the power (in kW) consumed by the system, if the current lags the voltage by 60 degrees?
Options:
1) 16.8
2) 42
3) 67.2
4) 84
Correct Answer: 42

QID : 940 - What is the apparent power of a 3-phase star connected system having a line voltage of 250 V and a line current of 40 A and the phase difference between the voltage and current is 36.87 degrees?
Options:
1) 13.856 kW

2) 13.856 kVA
3) 17.32 kW
4) 17.32 kVA
Correct Answer: 17.32 kVA

QID : 941 - Which of the following is the dimension of resistance?
Options:
1)
$\frac{ML^2}{Q^2T}$

2)
$\frac{Q^2T^2}{ML^2}$

3)
$\frac{ML^2}{QT^2}$

4)
$\frac{ML}{QT^2}$

Correct Answer:

QID : 942 - A factory runs in 3 shifts of 8 hours each, in which it consumes 30 kW, 15 kW and 25 kW in each shift respectively. Calculate the energy (in kWh) consumed by the factory per day.
Options:
1) 186.67
2) 373
3) 560
4) 746.67
Correct Answer: 560

QID : 943 - In two wattmeter method of power calculation of a 3-phase balanced star connected system, what is the power factor of the system if one of the wattmeter shows zero reading and the other shows a positive reading?

Options:

1) 0
2) Greater than 0 but less than 0.5
3) 0.5
4) Greater than 0.5 but less than 1

Correct Answer: 0.5

QID : 944 - Which of the following is NOT an advantage of PMMC type instruments?

Options:

1) Frictional error is low.
2) Single instrument can be used for multi range measurements of voltage and current.
3) Uniformly divided scale.
4) Stray magnetic field error is small.

Correct Answer: Frictional error is low.

QID : 945 - Which of the following quantities cannot be measured using a multimeter?

Options:

1) AC Voltage
2) DC Current
3) Phase Angle
4) Resistance

Correct Answer: Phase Angle

QID : 946 - Which of the following can measure the resistance having value below 1 Ohms most precisely?

Options:

1) Kelvin's Double Bridge
2) Megger
3) Multimeter
4) Wheatstone Bridge

Correct Answer: Kelvin's Double Bridge

QID : 947 - Which of the following materials when used as the viewing surface of a CRO gives a bluish glow?

Options:

1) Zinc Sulfide with copper as impurity
2) Zinc Sulfide with silver as impurity
3) Yttrium Oxide

4) Pure Zinc Sulfide

Correct Answer: Zinc Sulfide with silver as impurity

QID : 948 - What is the percentage voltage error of a potential transformer with system voltage of 11,000 V and having turns ratio of 100, if the measured secondary side voltage is 105 V?

Options:

1) 2.75

2) 3.55

3) 4.54

4) 9.09

Correct Answer: 4.54

QID : 949 - Which of the following is the cause of a speed error in induction type energy meter?

Options:

1) Incorrect position of brake magnets.

2) Incorrect adjustment of the position of shading bands.

3) Slow but continuous rotation of aluminum disc.

4) Temperature variations

Correct Answer: Incorrect position of brake magnets.

QID : 950 - A circuit having power factor of 0.8 consumes 20 W. What is the value of reactive power (in VAR) of the circuit?

Options:

1) 10

2) 15

3) 20

4) 25

Correct Answer: 15

QID : 951 - During plugging, external resistance is also introduced into a circuit to limit the flowing_____.

Options:

1) current

2) voltage

3) current and voltage both

4) none of these
Correct Answer: current

QID : 952 - A Transformer
Options:
1) Changes AC to DC.
2) Changes DC to AC.
3) Steps up or down DC Voltages & Current.
4) Steps up or down AC Voltages & Current.
Correct Answer: Steps up or down AC Voltages & Current.

QID : 953 - The overall power factor of an On-load transformer_____,.
Options:
1) depends on the power factor of the load.
2) is always lagging.
3) is always unity.
4) is always leading.
Correct Answer: depends on the power factor of the load.

QID : 954 - Dynamic braking can be used for which of the following?
Options:
1) Shunt motors
2) Series motors
3) Compound motors
4) All options are correct
Candidate Answer: [NOT ANSWERED]

QID : 955 - The parts of the armature electric circuit which take active part in e.m.f. generation are _____.
Options:
1) The coil sides inside the slots
2) The overhangs
3) both the coil sides inside the slots and the overhangs
4) the commutator segments
Correct Answer: The coil sides inside the slots

QID : 956 - The interpoles in dc machines have a tapering shape in order to

Options:

1) reduce the overall weight
2) reduce the saturation in the interpole
3) economise on the material required for interpoles
4) increase the acceleration of commutation

Correct Answer: reduce the saturation in the interpole

QID : 957 - Maximum efficiency will occur, when copper loss and iron loss are

Options:

1) unity
2) zero
3) unequal
4) equal

Correct Answer: equal

QID : 958 - The higher the voltage in the transmission line, the current which will flow through the transmission line for a given power to be transmitted will be

Options:

1) higher
2) equal
3) lower
4) Unity

Correct Answer: lower

QID : 959 - No-load test on induction motor is conducted to find which of the following losses?

Options:

1) stator core loss
2) rotational loss
3) Stator copper loss
4) All options are correct

Correct Answer: All options are correct

QID : 960 - If the torque of the induction motor decreases, the_____.

Options:

1) speed of rotor increases
2) speed of rotor decreases
3) current of the rotor decreases

4) power of the motor decreases
Correct Answer: speed of rotor increases

QID : 961 - Reduction in the capacitance of a capacitor- start motor results in reduced_____.
Options:
1) Noise
2) Speed
3) Starting torque
4) Armature reaction
Correct Answer: Starting torque

QID : 962 - A single-phase induction motor with only the main winding excited would exhibit the following response at synchronous speed
Options:
1) Rotor current is zero
2) Rotor current is non-zero and is at slip frequency
3) Forward and backward rotating fields are equal
4) Forward rotating field is more than the backward rotating field
Correct Answer: Forward rotating field is more than the backward rotating field

QID : 963 - The electric motor used in portable drills is_____.
Options:
1) capacitor run motor
2) hysteresis motor
3) universal motor
4) repulsion motor
Correct Answer: universal motor

QID : 964 - In which single-phase motor, the rotor has no teeth or winding ?
Options:
1) Split phase motor
2) Reluctance motor
3) Hysteresis motor
4) Universal motor
Correct Answer: Hysteresis motor

QID : 965 - The range of efficiency for shaded pole motors is

Options:

1) 95% to 99%

2) 80% to 90%

3) 50% to 75%

4) 5% to 35%

Correct Answer: 5% to 35%

QID : 966 - The direction of rotation of universal motor can be reversed by reversing the flow of current through_____.

Options:

1) armature winding

2) field winding

3) either armature winding or field winding

4) None of these

Correct Answer: either armature winding or field winding

QID : 967 - Which of the following statement is incorrect?

Options:

1) As the temperature rises, the tension in the transmission line decreases

2) As temperature rises, the sag in transmission lines reduces

3) Tension and sag in transmission lines are complementary to each other

4) None of these

Correct Answer: As temperature rises, the sag in transmission lines reduces

QID : 968 - Series capacitors in transmission lines are of little use when

Options:

1) the load VAR requirement is small

2) the load VAR requirement is large

3) the load VAR requirement is fluctuating

4) None of these

Correct Answer: the load VAR requirement is small

QID : 969 - Stability of a system is not affected by____.

Options:

1) reactance of line

2) losses

3) reactance of generator

4) output torque

Correct Answer: losses

QID : 970 - Which of the following is not a constituent for making porcelain insulators?
Options:
1) Silica
2) Kaolin
3) Feldspar
4) Quartz
Correct Answer: Silica

QID : 971 - Name the generating station where electrical energy is generated through steam.
Options:
1) Thermal power station
2) Diesel power station
3) Hydro power station
4) Nuclear power station
Correct Answer: Thermal power station

QID : 972 - In a 3-phase 4-wire cable, the cross-sectional area of neutral conductor is
Options:
1) equal to phase conductor
2) more than phase conductor
3) half the phase conductor
4) None of these
Correct Answer: half the phase conductor

QID : 973 - Fuse is always made up of alloys and metals having
Options:
1) high resistance and high melting points
2) High resistance and low melting points
3) low resistance and low melting points
4) low resistance and high melting points
Correct Answer: High resistance and low melting points

QID : 974 - In case of stair case wiring which type of switch is used?
Options:
1) 2 one way switches

2) 1 one way switch
3) 2 two way switch
4) 1 two way switch
Correct Answer: 2 two way switch

QID : 975 - Two incandescent lamps of wattage 40W, 60W are connected in series with voltage of 230 V. Which out of the two lamps will glow brighter?
Options:
1) 40W
2) 60W
3) both brightly
4) both dim
Correct Answer: 40W

QID : 976 - Rating of fuse wire is expressed in terms of____.
Options:
1) ohms
2) mhos
3) amperes
4) watts
Correct Answer: amperes

QID : 977 - If a live wire comes in contact with metal casing, excess current moves to_____.
Options:
1) power house
2) dynamos
3) earth
4) transformers
Correct Answer: earth

QID : 978 - A 3-phase, 4 wire system is commonly used on____.
Options:
1) primary transmission
2) secondary transmission
3) primary distribution
4) Secondary distribution

Correct Answer: Secondary distribution

QID : 979 - Insulator that is used in low voltage distribution lines is known as_____.

Options:
1) shackle
2) strain
3) pin
4) suspension
Correct Answer: shackle

QID : 980 - Which of the following type of lamp gives more illumination from low wattage ?
Options:
1) Incandescent lamp
2) Fluorescent lamp
3) Compact fluorescent lamp
4) LED lamp
Correct Answer: LED lamp

QID : 981 - The fuse is installed in which of the following wire?
Options:
1) Neutral
2) Phase
3) earth
4) All options are correct
Correct Answer: Phase

QID : 982 - The wave form of the armature m.m.f. in DC machine is _____.
Options:
1) square
2) rectangular
3) triangular
4) sinusoidal
Correct Answer: triangular

QID : 983 - Light waves travel with a velocity of____.

Options:

1) 3X1010cm/s

2) 3X1012cm/s

3) 3X1015cm/s

4) 3X1018cm/s

Correct Answer: 3X1010cm/s

QID : 984 - Light is produced in electric discharge lamps by_____.

Options:

1) Heating effect of current

2) Magnetic effect of current

3) Ionisation in a gas or vapour

4) Carbon electrodes

Correct Answer: Ionisation in a gas or vapour

QID : 985 - A DC generator can be termed as_____.

Options:

1) rotating amplifier

2) prime mover

3) power pump

4) None of these

Correct Answer: rotating amplifier

QID : 986 - Arc blow is a welding defect which is encountered in

Options:

1) Arc welding using DC current

2) Arc welding using AC current

3) Gas welding

4) Thermit welding

Correct Answer: Arc welding using DC current

QID : 987 - Which of the following has the highest value of thermal conductivity?

Options:

1) Aluminium

2) Brass

3) Copper

4) Iron

Correct Answer: Copper

QID : 988 - During resistance welding heat produced at the joint is proportional to_____.

Options:

1) Current

2) Voltage

3) I2R

4) Volt-amperes

Correct Answer: I2R

QID : 989 - Which of the following is tetravalent?

Options:

1) Quartz

2) Diamond

3) Germanium

4) Antimony

Correct Answer: Germanium

QID : 990 - The acceptor type of impurity is_____.

Options:

1) phosphorous

2) aluminium

3) boron

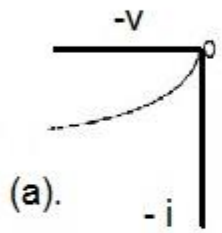
4) iron

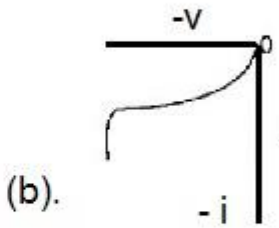
Correct Answer: boron

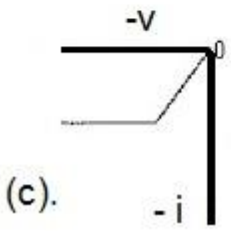
QID : 991 -

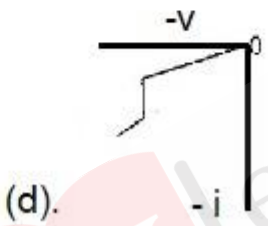
The reverse bias characteristics of a semiconductor diode is shown in

अर्धचालक डायोड के पश्चदिशिक बायस गुण किसमें दिखाए गए हैं









Options:

1) (a)

2) (b)

3) (c)

4) (d)

Correct Answer: (b)

QID : 992 - The peak inverse voltage, in case of a bridge rectifier, for each, diode is: (where, Em = Peak value of input voltage)

Options:

1) Em

2) 2Em

3) 3Em

4) 4Em

Correct Answer: Em

QID : 993 - In an electronic circuit transistor is used for switching ON and OFF a relay, when the transistor switches OFF the relay, a higher voltage appears across the transistor. How can a transistor be protected from this voltage?

Options:

1) A capacitor in series to the relay
2) A resistor in series to the relay
3) An inductor parallel to the relay
4) A diode parallel to the relay

Correct Answer: A diode parallel to the relay

QID : 994 - The efficiency of the class B amplifier is approximately:

Options:

1) 10% to 30%
2) 30% to 50%
3) 50% to 60%
4) 70% to 100%

Correct Answer: 70% to 100%

QID : 995 - The oscillations in a synchronous motor can be damped out by

Options:

1) maintaining constant excitation
2) providing damper bars in the rotor pole faces
3) running the motor on leading power factors
4) oscillations cannot be damped

Correct Answer: providing damper bars in the rotor pole faces

QID : 996 - An over excited synchronous motor is used for_____.

Options:

1) variable speed loads
2) low torque loads
3) power factor corrections
4) high torque loads

Correct Answer: power factor corrections

QID : 997 - Synchronous motors are_____.

Options:

1) essentially self-starting
2) not-self starting
3) self-starting
4) None of these

Correct Answer: not-self starting

QID : 998 - When any one-phase of a 3-phase synchronous motor is short-circuited, the motor_____.

Options:

1) will overheat in spots

2) will refuse to start

3) will not come upto speed

4) will fail to pull into step

Correct Answer: will overheat in spots

QID : 999 - Which of the following can be measured by conducting insulation resistance test on a synchronous motor ?

Options:

1) Phase to phase winding resistance

2) Rotor winding to earthed shaft

3) Stator winding to earthed frame

4) All options are correct

Correct Answer: All options are correct

QID : 1000 - The under-excited synchronous motor takes_____.

Options:

1) leading current

2) lagging current

3) both leading current and lagging current

4) None of these

Correct Answer: lagging current