

FINAL ANSWER KEY

Question 130/2024/OL

Paper Code:

Category 693/2023

Code:

Exam: Technical Supervisor

Date of Test 10-12-2024

Department Travancor Sugars and Chemicals Ltd

Question1:-The center of pressure on a submerged surface is located _____ the centroid of the surface.

A:-Above

B:-Below

C:-Middle

D:-None of the above

Correct Answer:- Option-B

Question2:-What is the point in a submerged object where the buoyant force acts?

A:-Center of buoyancy

B:-Centre of gravity

C:-Centre of pressure

D:-Centroid

Correct Answer:- Option-A

Question3:-Which of the following is the correct form of Bernoulli's equation for incompressible fluid flow?

A:- $P_1 + \rho V_1 = P_2 + \rho V_2$

B:- $P_1 + \rho gh_1 = P_2 + \rho gh_2$

C:- $P + \frac{1}{2}\rho v^2 + \rho gh = \text{constant}$

D:- $\frac{1}{2}mv^2 + mgh = \text{constant}$

Correct Answer:- Option-C

Question4:-Assertion (A) : Bernoulli's equation is derived from the conservation of energy principle.

Reason (R) : Bernoulli's equation assumes that the fluid flow is compressible and viscous.

A:-Both (A) and (R) are true, and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true, but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-C

Question5:-Assertion (A) : The metacentric height is an indicator of a ship's stability.
Reason (R) : A floating body is said to be in stable equilibrium when its metacentric height is positive.

A:-Both (A) and (R) are true, and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true, but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-A

Question6:-Pelton turbines are classified as _____ turbines.

A:-Impulse

B:-Reaction

C:-Mixed

D:-None of the above

Correct Answer:- Option-A

Question7:-What is the term for the phenomenon where vapor bubbles form and collapse in a hydraulic turbine?

A:-Erosion

B:-Surging

C:-Cavitation

D:-Stagnation

Correct Answer:- Option-C

Question8:-Which of the following hydraulic turbines is best suited for low head and high discharge applications?

A:-Pelton turbine

B:-Kaplan turbine

C:-Francis turbine

D:-Impulse turbine

Correct Answer:- Option-B

Question9:-Assertion (A) : A draft tube is used in a hydraulic turbine to recover the kinetic energy of the fluid.

Reason (R) : The draft tube increases the velocity of water exiting the turbine.

A:-Both (A) and (R) are true, and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true, but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-C

Question10:-Assertion (A) : Specific speed of a turbine helps in the selection of the most suitable type of turbine for a given head and discharge.

Reason (R) : Higher specific speed turbines are suitable for low heads and high discharge conditions.

A:-Both (A) and (R) are true, and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true, but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-A

Question11:-Universe is an example for

A:-Open System

B:-Closed System

C:-Isolated System

D:-None of the above

Correct Answer:- Option-C

Question12:-Extensive properties of system depend on

A:-Mass of the system

B:-The process followed by the system

C:-The boundaries of the system

D:-Specific volume of the system

Correct Answer:- Option-A

Question13:-The ratio C_p/C_v is _____.

A:-Equal to one

B:-Less than one

C:-More than one

D:-None of these

Correct Answer:- Option-C

Question14:-Which thermodynamic law among the following is known as the law of degradation of energy?

A:-Zeroth law

B:-First law

C:-Second law

D:-Third law

Correct Answer:- Option-C

Question15:-Which among the following is known as constant volume cycle?

A:-Carnot cycle

B:-Otto cycle

C:-Diesel cycle

D:-Ericsson cycle

Correct Answer:- Option-B

Question16:-Which among the following is considered as an unwanted element of the fuel as it can destroy the metal parts of boilers?

A:-Sulphur

B:-Sodium

C:-Hydrogen

D:-Nitrogen

Correct Answer:- Option-A

Question17:-Calorific value of Gaseous fuel can be determined by:

A:-Bomb calorimeter

B:-Flash point apparatus

C:-Junker's calorimeter

D:-Fire point apparatus

Correct Answer:- Option-C

Question18:-The specific volume of water when heated from 0°C

A:-First increases and then decreases

B:-First decreases and then increases

C:-Increases steadily

D:-Decreases steadily

Correct Answer:- Option-B

Question19:-The work done by the turbine in a Rankine cycle is equal to

A:-Change of internal energy between inlet and outlet

B:-Change of enthalpy between inlet and outlet

C:-Change of entropy between inlet and outlet

D:-Change of temperature between inlet and outlet

Correct Answer:- Option-B

Question20:-Which among the following is a simple impulse turbine?

A:-De Laval Turbine

B:-Parson's Turbine

C:-Curtis Turbine

D:-Rateau Turbine

Correct Answer:- Option-A

Question21:-The ratio of modulus of rigidity to the modulus of elasticity for a Poisson's ratio of 0.25 would be

A:-0.4

B:-0.5

C:-0.3

D:-1.0

Correct Answer:- Option-A

Question22:-A worker has cut a triangle sheet of base 100 mm and height 120 mm. The Moment of Inertia (mm^4) about an axis passing through the base of the triangle is

A:- 72×10^5

B:- 144×10^5

C:- 288×10^5

D:- 576×10^5

Correct Answer:- Option-B

Question23:-The volumetric strain of a cylindrical rod is

A:-Linear strain - the strain of diameter

B:-Equal to the strain of diameter

C:-Strain of diameter - twice the linear strain

D:-Linear strain - twice the strain of diameter

Correct Answer:- Option-D

Question24:-A simply supported beam of span (l) carries a uniformly distributed load over the whole span. The shear force diagram will be:

A:-A rectangle

B:-A triangle

C:-Two equal and opposite triangles

D:-Two equal and opposite rectangles

Correct Answer:- Option-C

Question25:-The ratio of crippling load for column of length (l) with both ends fixed to the crippling load of the same column with one end fixed and the other end free is

A:-16

B:-4

C:-8

D:-2

Correct Answer:- Option-A

Question26:-The steel used to make rails under heavy traffic and on sharp curves is

A:-Cast steel

B:-Mild steel

C:-Manganese steel

D:-Chrome steel

Correct Answer:- Option-C

Question27:-The % of Chromium in the stainless steel used to make cutlery is in the range of

A:-0.5% to 1.1%

B:-10% to 20%

C:-20% to 30%

D:-1.2% to 2.7%

Correct Answer:- Option-B

Question28:-A steel specimen is heated to a temperature of 780°C and cooled at a slowest possible rate in the furnace itself. The property which the steel piece obtains is

A:-Tempering

B:-Hardness

C:-Softness

D:-Toughness

Correct Answer:- Option-D

Question29:-The upper critical temperature for steel

A:-Remains constant

B:-Varies according to the carbon content

C:-Depends on the rate of heating

D:-None of these

Correct Answer:- Option-B

Question30:-18/8 steel contains

A:-18 percent nickel and 8 percent chromium

B:-18 percent vanadium and 8 percent nickel

C:-18 percent chromium and 8 percent nickel

D:-18 percent nickel and 8 percent vanadium

Correct Answer:- Option-C

Question31:-In resistance welding, a current of _____ voltage and _____ ampere is passed between the electrodes.

A:-Low, Low

B:-High, High

C:-Low, High

D:-High, Low

Correct Answer:- Option-C

Question32:-Which part of the lathe has a long shaft with the keyway extending from the feed box across and in front of the bed?

A:-Feed rod

B:-Sliding Gear Shaft

C:-Head stock spindle

D:-Lead screw

Correct Answer:- Option-A

Question33:-Which of the following mechanism is used in shaper machine?

A:-Slider crank mechanism

B:-Quick return mechanism

C:-Oscillating mechanism

D:-Rotary mechanism

Correct Answer:- Option-B

Question34:-Which of the following is a characteristic of the climb milling operation?

A:-The work piece is fed in the opposite direction

B:-High rigidity of the machine tool is required

C:-Chip thickness is maximum at the end of the cut

D:-Forces are less

Correct Answer:- Option-D

Question35:-Shrinkage allowance is also called

A:-Taper allowance

B:-Camber allowance

C:-Contraction allowance

D:-Camber allowance

Correct Answer:- Option-C

Question36:-The transverse fillet welded joints are designed for

A:-Tensile strength

B:-Shear strength

C:-Compressive strength

D:-Bending strength

Correct Answer:- Option-A

Question37:-The power transmitted by means of a belt depends upon

A:-Tension under which the belt is placed on the pulleys

B:-Arc of contact between the belt and smaller pulley

C:-Velocity of the belt

D:-All of the above

Correct Answer:- Option-D

Question38:-The relation between the pitch of the chain (p) and pitch circle diameter of the sprocket (D) is given by

A:- $p = D \sin (90^\circ/T)$

B:- $p = D \sin (120^\circ/T)$

C:- $p = D \sin (180^\circ/T)$

D:- $p = D \sin (320^\circ/T)$

Correct Answer:- Option-C

Question39:-The internal angle of a regular pentagon is

A:- 72°

B:- 108°

C:- 120°

D:- 150°

Correct Answer:- Option-B

Question40:-Which of the following statement is/are correct?

(i) Object is kept in the third quadrant under the first angle projection.

(ii) In the first angle projection, the object lies between the observer and the plane of projection.

A:-Only (i) is correct

B:-Only (ii) is correct

C:-Both (i) and (ii) are correct

D:-Both (i) and (ii) are incorrect

Correct Answer:- Option-B

Question41:-Which type of boiler is generally used in high pressure applications?

A:-Water tube boiler

B:-Fire tube boiler

C:-Electric boiler

D:-Locomotive boiler

Correct Answer:- Option-A

Question42:-What would be the likely effect of using a fuel with a low cetane number in diesel engine?

A:-Improved acceleration

B:-Reduced emission

C:-Increase in ignition delay

D:-All of these

Correct Answer:- Option-C

Question43:-What is one major advantage of Lamont Boiler?

A:-Simple Construction

B:-High Pressure Steam Generation

C:-Low Maintenance Cost

D:-Low Initial Cost

Correct Answer:- Option-B

Question44:-Thermal efficiency of a typical diesel engine is in the range of

A:-80 to 90%

B:-60 to 70%

C:-30 to 40%

D:-3 to 10%

Correct Answer:- Option-C

Question45:-Which part of the Babcock and Wilcox boiler collects impurities from the water?

A:-Super heater

B:-Economiser

C:-Chimney

D:-Mud box

Correct Answer:- Option-D

Question46:-Which mode of heat transfer requires a medium to transfer heat?

A:-Conduction only

B:-Convection only

C:-Radiation only

D:-Conduction and Convection

Correct Answer:- Option-D

Question47:-According to newton's law of cooling as the reciprocal of temperature difference between an object and its surrounding fluid decreases, the rate of cooling

A:-Increases

B:-Decreases

C:-Remains constant

D:-Becomes Zero

Correct Answer:- Option-A

Question48:-Which device is used to transfer heat to the inside of a room during winter?

A:-Refrigerator

B:-Heat Pump

C:-Heat Engine

D:-All of these

Correct Answer:- Option-B

Question49:-Which of the following is a common drawback of using NH_3 as refrigerant?

A:-High GWP

B:-Low latent heat of vaporization

C:-Low Efficiency

D:-High Toxicity

Correct Answer:- Option-D

Question50:-Psychrometry is the study of thermodynamic properties of _____.

A:-Pure water

B:-Refrigerants

C:-Moist air

D:-Combustion gas

Correct Answer:- Option-C

Question51:-A capacitor with a capacitance of $4\mu F$ is charged using a steady current of $3\mu A$ for a duration of 8 seconds. Calculate the voltage that will appear across the capacitor at the end of this charging period.

A:- $\frac{3}{32}V$

B:- $6V$

C:- $12V$

D:- $\frac{32}{3}V$

Correct Answer:- Option-B

Question52:-A parallel plate capacitor is charged to Q, with a plate separation of d. When d is increased, which of the following statements are correct?

(i) Q decreases

(ii) Capacitance decreases

(iii) Voltage decreases

(iv) Voltage increases

A:-(i), (iii) and (ii) are correct

B:-(ii) and (iv) are correct

C:-(ii) and (iii) are correct

D:-All are correct

Correct Answer:- Option-B

Question53:-In a uniform electric field:

(i) The field lines are always perpendicular to the equipotential surfaces.

(ii) Moving a charge along an equipotential surface requires no work.

(iii) Moving a charge between two different equipotential surfaces requires no work.

Which of the above statement is correct?

A:-Only statement (i)

B:-Only statement (ii)

C:-Statements (i) and (ii) only

D:-Statements (i) and (iii) only

Correct Answer:- Option-C

Question54:-A solid conducting sphere with radius R carries a total charge Q. What is the magnitude of the electric field intensity E at a distance r (where $0 < r < R$) inside the sphere?

A:- $\frac{1}{4\pi\epsilon_0} \frac{Q}{r^2}$

B:- $\frac{1}{4\pi\epsilon_0} \frac{Q}{R^2}$

C:- $\frac{1}{4\pi\epsilon_0} \frac{QR}{r^3}$

D:-Zero

Correct Answer:- Option-D

Question55:-A coil with 6Ω resistance and 0.3H inductance is connected to a 12V DC voltage source. Under steady state condition, calculate the energy stored in the magnetic field of the coil.

A:- 0.6 J

B:- 21.6 J

C:- 0.9 J

D:- 0.3 J

Correct Answer:- Option-A

Question56:-Two resistors, 25Ω and 50Ω , are connected in parallel. If the current through the 25Ω resistor is 4A , what is the current through the 50Ω resistor?

A:- 8A

B:- 2A

C:- 1A

D:- 4A

Correct Answer:- Option-B

Question57:-In a network containing linear resistors and an ideal voltage source, what happens to the voltage across each resistor if all resistor values are doubled?

A:-It becomes half of the original value.

B:-It becomes twice the original value.

C:-It increases by four times.

D:-It remains the same.

Correct Answer:- Option-D

Question58:-Three resistors, each of $R\Omega$, are connected in a triangular (delta) configuration. What is the equivalent resistance between any two terminals?

A:- $R\Omega$

B: $-\frac{3}{2}R\Omega$

C: $-3R\Omega$

D: $-\frac{2}{3}R\Omega$

Correct Answer:- Option-D

Question59:-Two incandescent light bulbs rated at 40 W and 60 W are connected in series to a mains power supply. Which of the following statements is correct?

A:-The total power consumed by the bulbs is 100 W.

B:-The total power consumed by the bulbs is 50 W.

C:-The 60 W bulb is brighter than the 40 W bulb.

D:-The 40 W bulb is brighter than the 60 W bulb.

Correct Answer:- Option-D

Question60:-Assertion (A) : Kirchoff's current law states that the algebraic sum of the currents entering any node is zero.

Reason (R) : This law is based on the principle of conservation of charge.

Which of the following statements is correct?

A:-Both (A) and (R) are true, and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true, but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-A

Question61:-If the maximum value of AC input voltage is 200V, the R.M.S. value of output voltage of Half wave rectifier is

A:-200 V

B:-100 V

C:- $\frac{200}{\pi}$

D:- $\frac{100}{\pi}$

Correct Answer:- Option-B

Question62:-If the average value of a waveform is 30 V and R.M.S. value is 50 V, the form factor is

A:-1.67

B:-0.833

C:-0.6

D:-0.3

Correct Answer:- Option-A

Question63:-A pure sinusoidal voltage is applied across a pure resistor. If the maximum value of voltage is 100V and maximum value of current is 50V the average power developed in the resistor is

A:-10000 W

B:-2500 W

C:-5000 W

D:-1250 W

Correct Answer:- Option-B

Question64:-Three coils of equal impedance are connected in star. If each coil has resistance of 4Ω and inductive reactance of 3Ω , the current through any branch if Line voltage of 200V is applied to the star connected coil is

A:-40A

B:-20A

C:- $\frac{40}{\sqrt{3}}$

D:- $\frac{20}{\sqrt{3}}$

Correct Answer:- Option-C

Question65:-If a single-phase AC voltage of 240V, 50Hz is applied across a pure capacitor of $2\mu\text{F}$, the current through the capacitor is

A:- $240\pi \mu\text{A}$

B:- $480\pi \mu\text{A}$

C:- $720\pi \mu\text{A}$

D:- $960\pi \mu\text{A}$

Correct Answer:- Option-D

Question66:-High value of Torque to weight ratio in an analog type indicating instrument shows

A:-High value of friction loss

B:-Low value of friction loss

C:-No relation with friction loss

D:-None of the above

Correct Answer:- Option-B

Question67:-An ammeter which can measure upto 2 mA has an internal resistance of 200Ω which is to be converted to measure 2A. The value of shunt resistance connected is

A:-0.2002

B:-0.1001

C:-0.05

D:-None of the above

Correct Answer:- Option-A

Question68:-If the Lissajous pattern has the shape of an ellipse and if the major axis of ellipse lies in the first and third quadrants, the phase angle is between

A:- 0° to 90°

B:- 0° to 180°

C:-0° to 270°

D:-None of the above

Correct Answer:- Option-A

Question69:-Stray-conductance effect in AC bridges is due to

A:-Magnetic coupling between various component

B:-Electrostatic fields between conductors at different potential

C:-Imperfect insulation

D:-None of the above

Correct Answer:- Option-C

Question70:-A megger is usually used to measure

A:-Low value resistance

B:-Medium value resistance

C:-High value resistance, particularly insulation resistance

D:-None of these

Correct Answer:- Option-C

Question71:-Determine the number of batteries required to develop a battery system of voltage 24 V and energy 10.8 kWh. Each battery is of voltage 12 V and 150 Ah capacity.

A:-4

B:-6

C:-8

D:-9

Correct Answer:- Option-B

Question72:-Choose the correct option regarding the following statements:

Assertion (A) : Contacts of lead acid batteries should be cleaned regularly every month.

Reason (R) : When a battery is fully charged, its specific gravity rises to its maximum value.

A:-Both (A) and (R) are true and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true but (R) is not the correct explanation of (A)

C:- (A) is true, but (R) is false

D:- (A) is false, but (R) is true

Correct Answer:- Option-B

Question73:-At maximum power point under standard test conditions, a solar cell generates a voltage 0.9 times of its open circuit voltage. Calculate the current at maximum power point if the fill factor of given cell is 75%

A:-0.83 times of short circuit current

B:-0.75 times of short circuit current

C:-1.2 times of short circuit current

D:-0.9 times of short circuit current

Correct Answer:- Option-A

Question74:-Among the following statements, identify those safety practices to be adopted in the event of fire due to electric origin:

- (i) Throw plenty of water over fire affected areas.
- (ii) Use class C type fire extinguishers over fire affected areas.
- (iii) Disconnect electric supply immediately to the affected area.

A:-(i) and (ii) only

B:-(ii) and (iii) only

C:-(i) and (iii) only

D:-(i), (ii) and (iii)

Correct Answer:- Option-B

Question75:-Among the following, select those statements which affect the severity of electric shock on human body

- (i) Duration of current flow.
- (ii) Magnitude of current through human body
- (iii) Path of current flow through human body

A:-(i) and (ii) only

B:-(ii) and (iii) only

C:-(i) and (iii) only

D:-(i), (ii) and (iii)

Correct Answer:- Option-D

Question76:-Lamps of rating 230 V, 100 W are used for illuminating a 30 m × 12 m room. Determine minimum number of lamps required to achieve illumination of 100 lux if lamp efficacy is 36 Lumens/watt. Coefficient of utilization is 0.6 and Depreciation Factor is 1.2

A:-20

B:-18

C:-19.5

D:-21

Correct Answer:- Option-A

Question77:-Select the correct order of installing protective devices in a single-phase consumer electrical wiring, after the installation of energy meter.

A:-Energy meter → Double Pole Isolator → MCB → RCCB

B:-Energy meter → MCB → RCCB → Double Pole Isolator

C:-Energy meter → RCBO → Double Pole Isolator → MCB

D:-Energy meter → Double Pole Isolator → RCCB → MCB

Correct Answer:- Option-D

Question78:-In pipe earthing, depth at which pipe should be buried depends on

A:-Fault current

B:-Ground Moisture

C:-Effective area of earth

D:-Pipe Thickness

Correct Answer:- Option-B

Question79:-When compared to single stranded wires, which of the following statement is/are correct about multi stranded wires used for electrical wiring?

- (i) More flexible
- (ii) Less chance of corrosion
- (iii) Require Simple manufacturing process
- (iv) More heat dissipation

A:-(i), (ii) and (iii)

B:-(i), (iii) and (iv)

C:-(ii) and (iv)

D:-(i) and (iv)

Correct Answer:- Option-D

Question80:-The purpose of filling powder used within a High Rupturing Capacity Cartridge fuse is to act as a

A:-Current Sensor

B:-Fusing medium

C:-Temperature Sensor

D:-Arc quenching medium

Correct Answer:- Option-D

Question81:-The current drawn by a 230V d.c. motor having armature resistance of 0.5 ohm and back emf of 200V will be

A:-30A

B:-60A

C:-40A

D:-20A

Correct Answer:- Option-B

Question82:-The voltmeter connected across a generator reads voltage same at no load and rated load. Then the generator is the type of

A:-Flat compound generator

B:-Series generator

C:-Shunt generator

D:-Differential compound generator

Correct Answer:- Option-A

Question83:-While running at light load the field circuit of DC shunt motor gets

opened. Then the motor will

- A:-Stop running
- B:-Rotate in opposite direction
- C:-Pick up high speed
- D:-Rotate at same speed

Correct Answer:- Option-C

Question84:-The motor having characteristics of increase in speed with increase in load torque

- A:-Series motor
- B:-Shunt motor
- C:-Cumulative compound motor
- D:-Differential compound motor

Correct Answer:- Option-D

Question85:-A transformer to be tested at full load conditions but consuming only losses from the mains, then the test should be

- A:-No-load test
- B:-Short circuit test
- C:-Back-to-back test
- D:-None of the above

Correct Answer:- Option-C

Question86:-The armature reaction effect in a synchronous machine depends on

- A:-Speed of the machine
- B:-Magnitude of load current
- C:-Power factor of the load
- D:-Both (2) and (3)

Correct Answer:- Option-D

Question87:-For satisfying performance of a 300V, 60 Hz induction motor, the supply voltage of 50 Hz should be equal to

- A:-250 V
- B:-300 V
- C:-350 V
- D:-230 V

Correct Answer:- Option-A

Question88:-A 8 pole, 50 Hz single phase induction motor running at 700 rpm. Its slip will be

- A:-1
- B:-0.066

C:-0.033

D:-0.08

Correct Answer:- Option-B

Question89:-For which type of transformer, the secondary winding should not be left open in any circumstances?

A:-Potential transformer

B:-Auto-transformer

C:-Current transformer

D:-Isolation transformer

Correct Answer:- Option-C

Question90:-A synchronous motor is operating at no load with unity power factor. If the field excitation current is increased, then

A:-Power factor will be leading and current will decrease

B:-Power factor will be leading and current will increase

C:-Power factor will be lagging and current will decrease

D:-Power factor will be lagging and current will increase

Correct Answer:- Option-B

Question91:-The semiconductor Germanium is not used for the fabrication of thyristors because of

- (i) Ge has low thermal conductivity.
- (ii) Ge has high thermal resistance.
- (iii) Ge has low break down voltage.
- (iv) Ge has high cost.

A:-(i) and (ii) only

B:-(ii) and (iv) only

C:-(iii) and (iv) only

D:-All the above

Correct Answer:- Option-D

Question92:-The angle measured from the instant that gives the largest average output voltage to the triggering instant of a SCR is called _____.

A:-Conduction angle

B:-Firing angle

C:-Extinction angle

D:-Commutation angle

Correct Answer:- Option-B

Question93:-Which of the following statement is/are correct regarding SCR?

- (i) If the anode voltage is less than forward break over voltage a forward leakage current flows through the SCR.
- (ii) When anode voltage of a forward biased SCR is greater than forward break

over voltage it

switches from reverse blocking mode to forward blocking mode.

(iii) A forward biased SCR switches from forward conducting state to forward blocking state if

the anode reduced below holding current.

A:-Only (iii)

B:-Only (i) and (ii)

C:-Only (i) and (iii)

D:-All of the above (i), (ii) and (iii)

Correct Answer:- Option-C

Question94:-The unijunction transistor is used as a relaxation oscillator because it exhibits

A:-Transfer characteristics

B:-Reverse characteristics

C:-Negative Resistance characteristics

D:-Positive Resistance characteristics

Correct Answer:- Option-C

Question95:-Mc Murray inverter is a _____.

A:-Current commutated VSI

B:-Force commutated VSI

C:-Line commutated CSI

D:-Load commutated CSI

Correct Answer:- Option-A

Question96:-Which of the following logic gate performs logical multiplication?

A:-AND

B:-OR

C:-EX OR

D:-NOT

Correct Answer:- Option-A

Question97:-The 2's Complement of 10111001 is _____.

A:-10111010

B:-01010101

C:-01000111

D:-01010100

Correct Answer:- Option-C

Question98:-How many JK flip.flops are required to build a Mode 6 synchronous counter?

A:-2

B:-3

C:-6

D:-4

Correct Answer:- Option-B

Question99:-How many clock pulses are required to enter an 8 bit data in a serial shift register?

A:-1

B:-4

C:-16

D:-8

Correct Answer:- Option-D

Question100:-Which of the following is not involved in analog to digital conversion?

A:-Modulation

B:-Holding

C:-Encoding

D:-Sampling

Correct Answer:- Option-A