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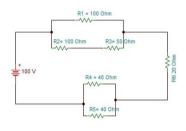


SATISH DHAWAN SPACE CENTRE SHAR Stilentikote

04/06/2022
12:30 PM - 2:30 PM
Electronics and Instrumentation Engineering(E and IE)

Section: Electronics and Instrumentation Engineering E and IE

Q.1 For the circuit shown, current through resistor R6 is



- A. 1 A
- B. 420 mA
- C. 750 mA
- D. 350 mA

Ans

- ✓ A. A
- **★** B. B
- **X** C. C
- **X** D. D

Question ID : 5834935087

Status : Answered

Chosen Option : A

Q.2 E

A. 8.854 x 10⁻¹² F/m

B. 8.854 x 10⁻¹² Fm

C. 8.854 x 10⁻¹² Fm²

D. 8.854 x 10⁻¹² F/m²

Ans 🗼 A. A

X B. B

X C. C

X D. D

Question ID : 5834935050

Status : Answered

Chosen Option : A

Q.3 Assertion (A): The precision instruments are always accurate.

Reason (R): A precision instrument is one where the degree of reproducibility of the measurement is very good.

Which of the following is correct?

A. Both A and R are true and R is correct explanation of A

B. Both A and R are true but R is not correct explanation of A

C. A is true but R is false

D. A is false but R is true

Ans X A. A

X B. B

X C. C

✓ D. D

Question ID : 5834935088

Status : Answered

Chosen Option : D

Q.4 Gauge factor of a strain gauge is

A. (dR/dL) x (L/R)

B. $(dL/dR) \times (R/L)$

C. $(dL/dR) \times (L/R)$

D. (dR/dL)

Ans 🧼 A. A

X B. B

X C. C

X D. D

Question ID: 5834935048

Status: Answered

Chosen Option : $\boldsymbol{\mathsf{A}}$



Q.5 The delay in response of a measuring system is

- A. Speed of response
- B. Lag
- C. Fidelity
- D. Error

X A. A Ans

- **ℯ**⁄⁄ В. В
- X C. C
- **X** D. D

Question ID: 5834935054 Status : Answered

Chosen Option : B

Q.6 Which of the following truly represents the Thevenin's equivalent circuit when a voltage source of 24 V undergoes a voltage drop of 0.6 V due to a load current of 1 A?

- A. $V_{th}=24 \text{ V}$ $R_{th}=0.6 \Omega$
- B. $V_{th}=24 \text{ V}$ $R_{th}=24 \Omega$
- C. V_{th} =23.4 V R_{th} = 0.6 Ω
- D. V_{th} =23.4 V R_{th} = 23.4 Ω

Ans ✓ A. A

- **X** B. B
- **X** C. C
- **X** D. D

Question ID: 5834935084

Status: Answered

Chosen Option : C

Q.7 If both the junctions of a transistor are forward biased, it will be in

- A. Saturation mode
- B. Action mode
- C. Cut-off mode
- D. None of theses

Ans

- ✓ A. A
- **X** B. B
- 🟋 D. D

X C. C

Question ID: 5834935061 Status : Answered

Chosen Option: A

Q.8 Find the area of the shape



- A. 100π
- Β. 25 π
- C. 50 π
- D. 75 π

Ans XA.A

ℯ В. В

X C. C

X D. D

Question ID: 5834935091

Status: Answered

Chosen Option : B

Q.9 If an armature voltage-controlled circuit, the firing angle of the thyristor is decided by the

- A. Phase control circuit
- B. Thyristor bridge
- C. Comparator
- D. Error amplifier

Ans

✓ A. A **⋌** B. B

X C. C

X D. D

Question ID : 5834935070 Status : Answered

Chosen Option : A

Q.10 In an orifice flow meter β ratio is

- A. Inside diameter of the pipe / Diameter of restriction
- B. Diameter of restriction / Inside diameter of the pipe
- C. Outside diameter of the pipe / Inside Diameter of the pipe
- D. Diameter of the restriction / Outside diameter of the pipe

Ans X A. A

ℯ В. В

X C. C

X D. D

Question ID : 5834935034 Status : Answered

Chosen Option : A

Q.11 The 6 V Zener diode shown in figure has zero Zener resistance and a knee current of 5 mA.

The minimum value of R so that the voltage across it does not fall below 6 V is



- Α. 1.2 ΚΩ
- Β. 80 Ω
- C. 50 Ω
- D. 0 Ω

Ans

- X A. A
- **✓** B. B
- X C. C
- **X** D. D

Question ID: 5834935065

Status: Answered

Chosen Option : B

Q.12 The Capacity of the rotameter can be changed by changing the

- A. Pressure
- B. Flow rate
- C. Float
- D. Density

Ans

- **X** A. A
- **X** B. B
- √ C. C

X D. D

Question ID : 5834935023

Status : **Answered**

Chosen Option : C

Q.13 T-type thermocouple is combination of

- A. Iron Constantan
- B. Copper-Constantan
- C. Platinum -Rhodium
- D. Chromel Alumel

Ans

- X A. A
- ✓ B. B.
- X C. C
- **X** D. D

Question ID : 5834935099

Status : Answered

Chosen Option : B

Q.14 Flow meter which offers least resistance to fluid flow A. Venturi tube B. Orifice flow meter C. Vertex flow meter D. All the above Ans ✓ A. A **X** B. B **X** C. C **X** D. D Question ID: 5834935027 Status: Answered Chosen Option: C Q.15 Assertion (A): The Digital to Analog Converter cannot be interfaced to microprocessor in an interrupt driven mode Reason (R): Digital to Analog Converter neither needs a start convert pulse nor it has indication of conversion Which of the following is correct? A. Both A and R are true and R is correct explanation of A B. Both A and R are true but R is not correct explanation of A C. A is true but R is false D. A is false but R is true Ans ✓ A. A **X** B. B X C. C X D. D Question ID: 5834935080 Status: Not Answered Chosen Option: --Q.16 Twisted pair conductors inherently reduces/ cancels; A. Normal mode noise B. Common mode noise C. Ringing noise D. Audio interference noise Ans **✓** B. B X C. C **X** D. D Question ID: 5834935037 Status : Answered Chosen Option : D



Q.17 Consider the following statements

- 1. Low pass filter
- 2. Signal transmission medium
- 3. Amplifier
- 4. Digital to Analog Converter
- 5. Analog to Digital Converter

Which one of the following sequences is the correct sequence for effective signal reconstruction in a data acquisition and processing scheme?

- A. 1-3-5-2-4
- B. 3-1-5-2-4
- C. 1-5-3-2-4
- D. 3-5-1-4-2

Ans XA.A

✓ B. B

X C. C

X D. D

Question ID: 5834935077

Status : Answered

Chosen Option : B

Q.18 A temperature transmitter with thermocouple configuration is re-configured for 4 wire

RTD for a range of 0-100 °C with 4-20 mA output. What will be output of transmitter at

 50° C with α =0.00385 ohms per degree centigrade change?

- A. 8 mA
- B. 10 mA
- C. 12 mA
- D. 14 mA

Ans

X A. A

X B. B

✓ C. C

X D. D

Question ID: 5834935044

Status : Answered

Chosen Option : B

Q.19 The function F=ABC'+ABC+A'BC+A'BC' can be reduced to which one of the following? A. F=AВ. F=AB C. F=ABC F=B X A. A Ans **X** B. B **X** C. C **⊘** D. D Question ID: 5834935082 Status: Answered Chosen Option : D Q.20 For a digital input of 1001, the output is 9 mV. Then for a digital input of 1100, the analog output will be A. 9 mV B. 10.5 mV C. 12 mV D. None of these **X** A. A Ans **X** B. B ✓ C. C **X** D. D Question ID: 5834935075 Status: Answered Chosen Option : C **Q.21** Programmable logic controller works on which mechanism? A. Parallel mechanism B. Sequential mechanism C. Both (A) and (B) D. None **X** A. A Ans **✓** B. B **X** C. C **X** D. D Question ID: 5834935043 Status: Answered Chosen Option : C



Q.22 The horizontal range of a projectile fired at an angle of 15° is 50m. If it is fired with the same speed at an angle of 45°, its range will be, A. 60 m B. 71 m C. 100 m D. 141 m Ans **X** A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935097 Status: Not Answered Chosen Option: --Q.23 A Darlington pair is mainly used for A. Impedance matching B. Wide band voltage amplification C. Power amplification D. Reducing distortion Ans ✓ A. A **X** B. B **X** C. C **X** D. D Question ID: 5834935071 Status: Answered Chosen Option: A Q.24 What is the Boolean expression $A \oplus B$ equivalent to? A. AB+(AB)' B. A'B+AB' C. D. A' Ans X A. A **✓** B. B **X** C. C **X** D. D Question ID: 5834935074 Status: Answered Chosen Option : B



Q.25 In a pitot static tube, assuming a steady one-dimensional flow of an incompressible fluid

flow velocity V =

- A. $\sqrt{(2 (P_{\text{Stagnation}} + P_{\text{Static}})/\rho)}$
- B. $\sqrt{(2 (P_{\text{Stagnation}} P_{\text{Static}})/\rho)}$
- C. $\sqrt{(2 \rho / (P_{Stagnation} + P_{Static}))}$
- D. $\sqrt{(2 (P_{\text{Static}} P_{\text{Stagnation}})/\rho)}$

Ans X A. A

- **✓** B. B
- X C. C
- **X** D. D

Question ID: 5834935031

Status: Answered

Chosen Option : A

Q.26 The transfer function of a PI controller is

- A. $K_p + K_i S$
- B. $K_p + (K_i/S)$
- C. $(K_p/S) + K_iS$
- D. $K_pS + (K_i/S)$

Ans X A. A

- **X** C. C
- 🗙 D. D

Question ID : 5834935049

Status: Answered

Chosen Option : B

Q.27 Scan time is the time taken by the PLC to

- A. Read the inputs
- B. Execute the logics
- C. Write the outputs
- D. All of the above

Ans X A. A

- **X** B. B
- X C. C
- **✓** D. D

Question ID: 5834935052

Status : Answered

Chosen Option : D

Q.28 The impurity commonly used for realizing the base region of a silicon NPN transistor is A. Gallium B. Indium C. Boron D. Phosphorous **X** A. A Ans **X** B. B ✓ C. C **X** D. D Question ID: 5834935062 Status: Answered Chosen Option : C Q.29 In a cascaded amplifier the overall gain of the amplifier is A. Product of individual amplifiers in the configuration B. Equal to the last stage gain of the amplifier C. Sum of all stage gain D. None of the above ✓ A. A Ans **X** B. B **X** C. C **X** D. D Question ID: 5834935063 Status: Answered Chosen Option: A **Q.30** A 0-100 Voltmeter has 200 Scale divisions which can read to $\frac{1}{2}$ division. Determine the resolution of the meter in volts. A. 0.5 V B. 0.75 V C. 0.25 V D. 1 V Ans X A. A **X** B. B ✓ C. C X D. D Question ID: 5834935057 Status : Answered Chosen Option : C



```
Q.31 What is the output of the following snippet?
      Int main ()
      Int sum = 10 + 12 / 6 + 6 \times 3;
      Printf ("%d", sum);
      Return 0;
      A. 30
      B. 40
      C. 50
      D. 60
Ans

✓ A. A

      X B. B
      X C. C
       X D. D
                                                                                    Question ID : 5834935041
                                                                                         Status : Answered
                                                                                  Chosen Option : A
Q.32
           P&ID Symbol indicates
       A. Liquid column
       B. Liquid Container
       C. Level Controller
       D. Level Container
      X A. A
Ans
      X B. B

✓ C. C

       X D. D
                                                                                    Question ID: 5834935039
                                                                                         Status: Answered
                                                                                 Chosen Option : C
```

Q.33 Instrument used for very low pressure is

- A. Manometer
- B. Barometer
- C. Mcleod Gauge
- D. Multimeter

Ans X A. A

X B. B

✓ C. C

X D. D

Question ID: 5834935024

Status: Answered

Chosen Option : ${\bf C}$

Q.34 The internationally accepted reference standard is called ___

- A. Unit
- B. Measurement
- C. Both A & B
- D. None

Ans



🗙 B. B

X C. C

X D. D

Question ID: 5834935094

Status : Answered

Chosen Option : A

Q.35 The operation of the heat transfer flow meter is based on

A.
$$Q = W.C_P (T_2 - T_1)$$

B.
$$Q = W.C_P (T_2 + T_1)$$

C.
$$Q = W (T_2 - T_1)$$

D.
$$Q = W (T_2 + T_1)$$

Ans 🗳 A. A

X B. B

X C. C

🗙 D. D

Question ID: 5834935030

Status : Answered

Chosen Option : A

Q.36 Dynamic range for a linear n-bit Digital to Analog Converter is A. 20 log(2ⁿ) B. 10 log(2ⁿ) C. 2ⁿ-1 D. 0 ✓ A. A Ans **X** B. B **X** C. C **X** D. D Question ID: 5834935079 Status: Not Answered Chosen Option: --Q.37 In a K-map, a group of eight adjacent ones leads to a term with less than the total number of variables of A. One Two B. C. Three D. Four Ans XA.A **X** B. B ✓ C. C **X** D. D Question ID: 5834935073 Status: Answered Chosen Option : D Q.38 If $(84)_X$ (in base-x number system) is equal to $(64)_Y$ (in base-y number system), then possible values of $_{\rm X}$ and $_{\rm Y}$ are A. 12, 9 B. 6, 8 C. 9, 12 D. 12, 18 Ans X A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935072 Status: Answered Chosen Option : B



Q.39 A dam has usable height of 20m and water was available up to 15-meter height. What will be the pressure the bottom of the dam? Consider $g=10 \text{ m/s}^2$ and density $=10^3 \text{ Kg/m}^3$. A. 150 KPa B. 200 KPa C. 100 KPa D. 50 KPa Ans ✓ A. A **X** B. B **X** C. C **X** D. D Question ID: 5834935060 Status: Answered Chosen Option : D Q.40 An object with temperature co-efficient of resistance has a value of 300, its initial resistance is 25 Ω at 50 °C. For an increase in 50° to 60 °, what will be the final resistance value? Α. 75 ΚΩ Β. 75 Ω C. 25 KΩ D. 25 Ω ✓ A. A Ans **X** B. B X C. C **X** D. D Question ID: 5834935036 Status: Answered Chosen Option : A Q.41 A zero to 300 V voltmeter has an error of \pm 2% of the full scale deflection. If the true voltage is 30 V, then the range of readings on this voltmeter would be A. 20 V to 40 V B. 24 V to 36 V C. 29.4 V to 30.6 V D. 29.94 V to 30.6 V Ans X A. A **✓** B. B **X** C. C **X** D. D Question ID: 5834935089 Status: Answered



Chosen Option : B

Q.42 Thermocouples used in nuclear reactor is

A. Boron

B. Beryllium

C. Copper

D. Nickel

Ans

Question ID : 5834935101
Status : Answered
Chosen Option : C

Q.43 In water, light travels at a speed, v_w =2.26x10⁸ m/s. But the speed of light in vegetable oil is v_o =2.04x10⁸ m/s. What is the refractive index of water with respect to vegetable oil, n_{wo} ?

A. $n_{\text{wo}} = 1.11$ B. $n_{\text{wo}} = 0.903$

C. $n_{wo} = 1.33$

D. $n_{\text{wo}} = 0.753$

Ans X A. A

₩ B. B

X C. C

🗙 D. D

Question ID : 5834935095 Status : Answered Chosen Option : A

Q.44 What is the standard form of CRC?

A. Cyclic Redundancy Check

B. Code Redundancy Check

C. Cyclic Redundancy Code

D. Code Redundancy Count

Ans 🕜 A. A

X B. B

X C. C

🗙 D. D

Question ID: 5834935046 Status: Answered Chosen Option: A **Q.45** PLC timer whose timing value is not reset by loss of power is A. ON delay timer B. OFF delay timer C. Non-retentive timer D. Retentive timer **X** A. A Ans **X** B. B **X** C. C **৵** D. D Question ID: 5834935042 Status: Answered Chosen Option : D Q.46 LM35 is a A. Pressure sensor B. Temperature sensor C. Humidity sensor D. Touch sensor Ans X A. A **✓** B. B **X** C. C **X** D. D Question ID: 5834935033 Status: Not Answered Chosen Option: --Q.47 The line containing process fluid that run between instrument and process is called as A. Static line B. Dynamic line C. Impulse line D. Pipe Ans X A. A **X** B. B √ C. C **X** D. D Question ID: 5834935029 Status: Not Answered



Chosen Option: --

Q.48 Let the universal set "U" be the set of students who appeared for the exam. Let A be the set of students who failed the exam. Find A^I A. Set of students who did not appear for the exam B. Set of students who passed the exam C. Set of students who failed the exam D. Set of students who terribly failed in the exam **X** A. A Ans **ℯ** В. В **X** C. C **X** D. D Question ID: 5834935090 Status: Answered Chosen Option : B Q.49 Which flow meter works on faradays law A. Turbine B. Ultrasonic C. Electromagnetic D. Orifice Ans X A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935025 Status: Answered Chosen Option : C Q.50 The value of temperature at which both °C and °F are same A. -20° B. 20° C. -40° D. 40° Ans X A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935053 Status: Answered Chosen Option: A



Q.51 In which one of the following types of ADC's the conversion time is practically independent of the amplitude of the analog signal. The dual slope integrating type A. B. Successive approximation type C. Counter ramp type D. Tracking type Ans ✓ A. A **X** B. B **X** C. C **X** D. D Question ID: 5834935081 Status: Answered Chosen Option : B Q.52 Relaxation Oscillator form is basis of waveform. A. Sinusoidal waveform generation B. Triangular waveform generation C. Square waveform generation D. None of the above Ans X A. A **✓** B. B **X** C. C **X** D. D Question ID: 5834935064 Status: Answered Chosen Option : B Q.53 A strain gauge is attached to a bar of length 20 cm which is subjected to a tensile force. The nominal resistance of strain gauge is $100~\Omega$. The change in resistance and elongation in the bar measured are 0.35 Ω and 0.2 mm respectively. The gauge factor of the strain gauge is A. 2 B. 3.5 C. 10 D. 100 Ans **X** A. A **⊘** B. B X C. C **X** D. D Question ID: 5834935032 Status: Answered Chosen Option: B



Q.54 A control system composed of two loops where the set point of the inner loop is the output

of the controller of the outer loop is a

- A. Cascade control
- B. Ratio control
- C. Floating control
- D. Split range control

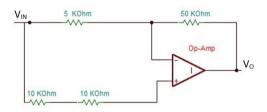
Ans

- **✓** A. A **X** B. B
- **X** C. C
- **X** D. D

Question ID : 5834935038 Status : Answered

Chosen Option : A

Q.55 The value of the output voltage in the circuit shown below with $V_{\rm IN}$ = 1 V is



- A. 1 V
- B. 21 V
- C. 10 V
- D. None of the above

Ans

- **✓** A. A **⋌** B. B
- **X** C. C
- **X** D. D

Question ID: 5834935068

Status: Not Answered

Chosen Option : --

Q.56

Mcleod gauge working principle is

- A. Pascal's Law
- Charles's law
- C. Boyle's Law
- D. Ohms Law

Ans

- **X** A. A **X** B. B
- ✓ C. C
- **X** D. D

Question ID: 5834935100

Status: Answered

Chosen Option: B

Q.57 For 'n' readings in a measurement system, how to calculate arithmetic mean \bar{x}

- A. $\bar{x} = (x_1^2 + x_2^2 + ... + x_n^2)/n$
- B. $\bar{x} = (x_1 + x_2 + ... + x_n)/n$
- C. $\bar{x} = (x_1 + x_2 + ... + x_n)/(n-1)$
- D. None of Above

- Ans X A. A
 - ✓ B. B.
 - X C. C

X D. D

Question ID: 5834935058

Status : Answered

Chosen Option : B

A temperature reading is recorded as 23.25° C. The reading has

- A. Two significant figures
- B. Three significant figures
- C. Four significant figures
- D. None of the above

Ans

- X A. A
- **X** B. B
- ✓ C. C
- 🟋 D. D

Question ID: 5834935055

Status: Answered

Chosen Option: B

Q.59 In a BJT transistor to maintain a fixed operating point, the bias stabilisation/compensation is achieved by using A. Diode Compensation B. Resistor Compensation C. Thermistor Compensation D. Both diode and Thermistor compensation **X** A. A Ans **X** B. B **X** C. C **৵** D. D Question ID: 5834935069 Status: Answered Chosen Option : D Q.60 ON-OFF keying is used in which type of modulation? A. ASK B. BPSK C. FSK D. QPSK ✓ A. A Ans **X** B. B **X** C. C **X** D. D Question ID: 5834935035 Status : Answered Chosen Option : A Q.61

An 8-bit DAC has a full-scale output of 15 V. The output voltage when the input is "10111010"

is

A. 10.89 mV

B. 12 mV

C. 12 V

D. 10.89 V

Ans X A. A

X B. B

X C. C

✓ D. D

Question ID : 5834935078 Status : Answered

Chosen Option : D



Q.62 Find the value of x in the isosceles triangle shown below



- A. x = 10
- B. x = 48
- C. $x = \sqrt{80}$
- D. $x = \sqrt{96}$

Ans

- ✓ A. A
- **X** B. B
- **X** C. C
- **X** D. D

Question ID: 5834935092

Status: Not Answered

Chosen Option : --

Q.63 Twisted pair signal lines are used to reduce the effect of

- A. Electric field coupling
- B. Magnetic field coupling
- C. Transient voltages
- D. Formation of ground loops

Ans

- **X** A. A
- **✓** B. B
- X C. C
- **X** D. D

Question ID: 5834935083

Status : Answered

Chosen Option : D

Q.64 A signal of maximum frequency of 10 KHz is sampled at Nyquist rate. The time interval

between two successive samples is

- Α. 50μs
- B. 100μs
- C. 500µs
- D. 1000μs

Ans

- ✓ A. A✗ B. B
- **X** C. C
- **X** D. D

Question ID: 5834935098

Status : Answered

Chosen Option : A

Q.65 A process controller (PID) essentially is a A. Amplifier B. Clipper C. Sensor D. Comparator X A. A Ans **X** B. B **X** C. C **৵** D. D Question ID: 5834935040 Status: Answered Chosen Option : D Q.66 For a second order system, if both the roots of the characteristic equation are real, then the value of the damping ratio will be A. Less than unity B. Equal to unity C. Equal to zero D. Greater than unity X A. A Ans **X** B. B **X** C. C ✓ D. D Question ID: 5834935085 Status : Answered Chosen Option : B Q.67 A differential amplifier has a differential gain of 20,000 and CMRR is 80 dB. The common mode gain is: A. 2 B. 1 C. 1/2 D. 0 Ans ✓ A. A **X** B. B **X** C. C **X** D. D Question ID: 5834935066 Status: Answered Chosen Option: A



Q.68 The large distances like distance of a planet from the earth is measured by A. Meter scale B. Parallax method C. Laser method D. Cannot be measured X A. A Ans **ℯ** В. В X C. C **X** D. D Question ID: 5834935096 Status: Answered Chosen Option : C Q.69 ----- flow meter works on the principle of dividing up the flowing fluid in to known volume pockets A. Positive displacement B. Orifice C. Turbine D. Mass Ans ✓ A. A **X** B. B X C. C X D. D Question ID: 5834935026 Status: Answered Chosen Option : A Q.70 Assertion (A): A 64-bit MUX can be built by using eight 8 input multiplexers Reason (R): Any six variable function can always be implemented by a multiplexer with six address lines Which of the following is correct? A. Both A and R are true and R is correct explanation of A B. Both A and R are true but R is not correct explanation of A C. A is true but R is false D. A is false but R is true X A. A Ans **X** B. B X C. C ✓ D. D Question ID: 5834935076 Status: Answered Chosen Option : A



Q.71 A 5 V voltage source has 50Ω internal resistance. It transfers maximum power of A. 125 mW to 100Ω load B. 25mW to 50Ω load C. 125mW to 50Ω load D. 25mW to 100Ω load Ans **X** A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935086 Status: Answered Chosen Option: C Q.72 Transportation lag is also known as A. Phase margin B. Dead time C. Gain margin D. None of the above Ans **Ø** B. B **X** C. C **X** D. D Question ID: 5834935051 Status: Answered Chosen Option: B Q.73 Points P, Q, R, S in the order divide a line segment AB into 5 equal parts. A is at (1,2) and B is at (6,7). P is the closest to A. Find the coordinate of Q. A. 2,3 B. 3,4 C. 4,5 D. 5,6 Ans X A. A ✓ B. B. **X** C. C **X** D. D Question ID: 5834935093 Status: Not Answered Chosen Option: --



Q.74 Seismic transducer is used for the measurement of A. Linear velocity B. Angular velocity C. Acceleration D. Pressure Ans X A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935028 Status: Answered Chosen Option: A Q.75 Poisson's ratio is _____ (ϵ_a -Axial Strain, ϵ_t - Transverse strain) A. $-(\epsilon_t/\epsilon_a)$ B. ϵ_t / ϵ_a C. $-(\epsilon_a / \epsilon_t)$ $D. \quad \epsilon_a \, / \, \epsilon_t$ ✓ A. A Ans **X** B. B **X** C. C **X** D. D Question ID : 5834935047 Status: Not Answered Chosen Option: --Q.76 The maximum error of 0-25 °C range temperature sensor is 0.2° C. What is the accuracy of the sensor in percent span? A. 1% B. > 1% C. 0.8% D. 0.5% Ans X A. A **X** B. B ✓ C. C **X** D. D Question ID: 5834935022 Status: Answered Chosen Option : C



Q.77 While using a BJT as an amplifier, the collector and emitter terminals got interchanged mistakenly. Assuming that the amplifier is a common emitter amplifier and the biasing is suitably adjusted, the interchange of terminals will result in to which one of the following? A. Zero gain B. Infinite gain C. Reduces gain D. No change in gain at all X A. A Ans **X** B. B ✓ C. C **X** D. D Question ID: 5834935067 Status: Answered Chosen Option : C The process of combining uncertainties is called as A. Root mean square B. Sum square C. Root sum square D. Mean square **X** A. A Ans **X** B. B ✓ C. C

Q.79 The units of absolute viscosity is

A. Pascal - Second

 $B. \quad Kg/\ M^3$

X D. D

C. Pascal - Kg

D. gm/cc

Ans 🗼 A. A

X B. B

X C. C

🟋 D. D

Question ID : 5834935059 Status : Not Answered

Question ID : **5834935056** Status : **Answered**

Chosen Option : D

Chosen Option : --



Q.80 A watchdog timer is a device or programmed routine used for what purpose in a control system?

- A. To signal the start of a new program cycle
- B. To provide time delay for critical function
- C. To monitor the operation of the microprocessor
- D. To control timer functions.

Ans X A. A

X B. B

7 D. D

✓ C. C

X D. D

Question ID: 5834935045

Status : Answered

Chosen Option : B

