

Subject Code : 101

Subject Code	Exam Date	Q Id	Questions	Answer Key
101	01-02-2020	1	Who authored the book 'The tunnel of time '? (A) RK Laxman (B) Anthony Browne (C) William H (D) Vikram Seth	(A)
101	01-02-2020	2	Which country topped the 2019 Democracy Index? (A) Norway (B) Iceland (C) Sweden (D) Finland	(A)
101	01-02-2020	3	Defence Acquisition Council (DAC) chaired by Defence Minister approved the construction of _____ conventional submarines for the Navy in India under the Strategic Partnership Model. (A) 3 (B) 4 (C) 6 (D) 8	(C)
101	01-02-2020	4	Which Indian State is having 3 capitals? (A) West Bengal (B) Madhya Pradesh (C) Telangana	(D)

			(D) Andhra Pradesh	
101	01-02-2020	5	When was the Indian National Army formed? (A) 1935 (B) 1938 (C) 1942 (D) 1945	(C)
101	01-02-2020	6	Choose the correct alternative which can be substituted for: <b>The person who knows everything</b> (A) Omnipresent (B) Omnipotent (C) Omniscient (D) Oblivious	(C)
101	01-02-2020	7	Choose the correct word order (A) Why she did leave so early ? (B) Why did she leave so early ? (C) Why did so early she leave ? (D) Why so early did she leave ?	(B)
101	01-02-2020	8	Select correct word (A) Separate (B) Seperate (C) Saparate (D) Separete	(A)

101	01-02-2020	9	<p>What is the antonym of</p> <p><b>" Ally"</b></p> <p>(A) wane</p> <p>(B) enemy</p> <p>(C) bottom</p> <p>(D) west</p>	(B)
101	01-02-2020	10	<p>Fill in the blanks:</p> <p><b>They opposed the motion-----was proposed by the rival group.</b></p> <p>(A) Who</p> <p>(B) Which</p> <p>(C) Where</p> <p>(D) When</p>	(B)
101	01-02-2020	11	<p>If blue means green, green means black, black means white, white means pink, pink means red and red means orange, then what is the colour of blood?</p> <p>(A) Red</p> <p>(B) Black</p> <p>(C) White</p> <p>(D) Pink</p>	(D)
101	01-02-2020	12	<p>Clock : Time : : Thermometer : ?</p> <p>(A) Heat</p> <p>(B) Radiation</p> <p>(C) Energy</p> <p>(D) Temperature</p>	(D)

101	01-02-2020	13	<p>In a row of boys, If A who is 10th from the left and B who is 9th from the right interchange their positions, A becomes 15th from the left. How many boys are there in the row?</p> <p>(A) 23 (B) 31 (C) 27 (D) 28</p>	(A)
101	01-02-2020	14	<p>Find the missing number in the series?</p> <p><b>4, 18, ?, 100, 180, 294, 448</b></p> <p>(A) 48 (B) 50 (C) 58 (D) 60</p>	(A)
101	01-02-2020	15	<p>On an election day Santhosh walked from a place, 10 km towards South to reach the polling station, then turned left upto 2 km, then took a right turn, and took another 4 kms walk. Again he turned right and walked for 12 kms and took a 14 km walk by turning to North, and there he could see the polling station at a 12 km distance after taking a right turn. In which direction is the polling station situated?</p> <p>(A) North (B) East (C) South (D) West</p>	(B)
101	01-02-2020	16	<p>Tanya's grandfather was 8 times older to her 16 years ago. He would be 3 times her age 8 years from now. Eight years ago, what was the ratio of Tanya's age to that of her grandfather?</p>	(D)

			<p>(A) 1:2</p> <p>(B) 1: 5</p> <p>(C) 3: 8</p> <p>(D) None of the options</p>	
101	01-02-2020	17	<p>A train, 130 metres long travels at a speed of 45 km/hr crosses a bridge in 30 seconds. The length of the bridge is</p> <p>(A) 235 metres</p> <p>(B) 245 metres</p> <p>(C) 270 metres</p> <p>(D) 220 metres</p>	(B)
101	01-02-2020	18	<p>A and B together can do a piece of work in 8 days. If A alone can do the same work in 12 days, then B alone can do the same work in?</p> <p>(A) 20 days</p> <p>(B) 16 days</p> <p>(C) 24 days</p> <p>(D) 28 days</p>	(C)
101	01-02-2020	19	<p>The cost price of 20 articles is the same as the selling price of <math>x</math> articles. If the profit is 25%, then the value of <math>x</math> is</p> <p>(A) 15</p> <p>(B) 16</p> <p>(C) 18</p> <p>(D) 25</p>	(B)
101	01-02-2020	20	<p>The volume of a sphere is <math>4851 \text{ cm}^3</math>. Its diameter</p>	(D)

			<p>is</p> <p>(A) 3.5 cm</p> <p>(B) 7 cm</p> <p>(C) 14cm</p> <p>(D) 21cm</p>	
101	01-02-2020	21	<p>In a CRO which of the following is not a part of electron gun</p> <p>(A) cathode</p> <p>(B) accelerating anode</p> <p>(C) grid</p> <p>(D) X - Y plates</p>	(D)
101	01-02-2020	22	<p>A moving iron instrument gives correct reading when used at</p> <p>(A) low frequencies</p> <p>(B) only one frequency</p> <p>(C) high frequencies</p> <p>(D) all frequencies upto a certain value</p>	(B)
101	01-02-2020	23	<p>A data signal having frequency components from dc to 50 Hz is to be sent through pulse code modulation using an 8 digit code. The minimum carrier channel bandwidth is</p> <p>(A) 1 kHz</p> <p>(B) 4 kHz</p> <p>(C) 2 kHz</p> <p>(D) 8 kHz</p>	(B)
101	01-02-2020	24	<p>The temperature coefficient of resistance for a</p>	(B)

			<p>thermistor is</p> <p>(A) low and positive</p> <p>(B) high and negative</p> <p>(C) low and negative</p> <p>(D) high and positive</p>	
101	01-02-2020	25	<p>A linear displacement digital transducer generally uses</p> <p>(A) straight binary code</p> <p>(B) gray code</p> <p>(C) BCD</p> <p>(D) hexadecimal code</p>	(B)
101	01-02-2020	26	<p>The term 'Poisson's ratio' is connected with</p> <p>(A) strain gauge</p> <p>(B) Bourden tube</p> <p>(C) LVDT</p> <p>(D) capacitance transducer</p>	(A)
101	01-02-2020	27	<p>The coding system generally used in digital telemetry is</p> <p>(A) PPM (Pulse position modulation)</p> <p>(B) PCM (Pulse code modulation)</p> <p>(C) PAM (Pulse amplitude modulation)</p> <p>(D) PDM (Pulse duration modulation)</p>	(B)
101	01-02-2020	28	<p>The effect of adding poles and zeros can be determined quickly by</p> <p>(A) Nichols chart</p>	(B)

			<p>(B) Bode plot</p> <p>(C) Nyquist plot</p> <p>(D) Root locus</p>	
101	01-02-2020	29	<p>The ionization gauge is an instrument used for the measurement of .....</p> <p>(A) Very low pressure</p> <p>(B) Medium pressure</p> <p>(C) High pressure</p> <p>(D) Very high pressure</p>	(A)
101	01-02-2020	30	<p>An instrument transformer is used to extend the range of</p> <p>(A) Induction instrument</p> <p>(B) Electrostatic instrument</p> <p>(C) Moving coil instrument</p> <p>(D) Any of the options</p>	(A)
101	01-02-2020	31	<p>An ammeter of 0-25 A range has a guaranteed accuracy of 1% of full scale reading. The current measured is 5 A. The limiting error is</p> <p>(A) 2%</p> <p>(B) 2.50%</p> <p>(C) 4%</p> <p>(D) 5%</p>	(D)
101	01-02-2020	32	<p>The basic storage element in a digital system is</p>	(A)



			<p>(A) flip flop</p> <p>(B) counter</p> <p>(C) multiplexer</p> <p>(D) encoder</p>	
101	01-02-2020	33	<p>The output of a half adder is</p> <p>(A) SUM</p> <p>(B) CARRY</p> <p>(C) SUM and CARRY</p> <p>(D) All of the options</p>	(C)
101	01-02-2020	34	<p>A device which converts BCD to seven segment is called</p> <p>(A) encoder</p> <p>(B) decoder</p> <p>(C) multiplexer</p> <p>(D) de-multiplexer</p>	(B)
101	01-02-2020	35	<p>The household energy meter is</p> <p>(A) indicating instrument</p> <p>(B) recording instrument</p> <p>(C) integrating instrument</p> <p>(D) None of the options</p>	(C)
101	01-02-2020	36	<p>For accurate operation, orifice plate flowmeters require:</p> <p>(A) Laminar flow</p> <p>(B) Fully-developed turbulent flow</p>	(B)

			<p>(C) Swirls and eddies in the flow stream</p> <p>(D) Transitional flow</p>	
101	01-02-2020	37	<p>A magnetic flowmeter will not properly measure the flow rate of:</p> <p>(A) Dirty water</p> <p>(B) Milk</p> <p>(C) Oil</p> <p>(D) Caustic</p>	(C)
101	01-02-2020	38	<p>Buffer solutions are used with pH probes for the purpose of:</p> <p>(A) Cleaning</p> <p>(B) Linearization</p> <p>(C) Purging embedded sodium ions</p> <p>(D) Calibration</p>	(D)
101	01-02-2020	39	<p>Reference junction compensation is necessary in thermocouple-based temperature instruments because:</p> <p>(A) Copper extension wire has a tendency to corrode</p> <p>(B) Thermocouples are inherently nonlinear</p> <p>(C) The reference junction generates a temperature-dependent voltage</p> <p>(D) The junction's electrical resistance varies with temperature</p>	(C)
101	01-02-2020	40	<p>If the pressure applied to the "low" side of a <math>\Delta P</math> transmitter increases while the pressure applied to the "high" side remains steady, the transmitter output should:</p>	(D)

			<p>(A) Fail low</p> <p>(B) Remain the same</p> <p>(C) Increase</p> <p>(D) Decrease</p>	
101	01-02-2020	41	<p>Capacitive transducers can be used by _____</p> <p>(A) Measuring change in distance between plates</p> <p>(B) Measuring change in area of plates</p> <p>(C) Change in a dielectric material</p> <p>(D) All of the options</p>	(D)
101	01-02-2020	42	<p>Which of the following adjustments is usually adjusted first in an instrument requiring calibration?</p> <p>(A) Deadband</p> <p>(B) Span</p> <p>(C) Hysteresis</p> <p>(D) Zero</p>	(D)
101	01-02-2020	43	<p>Which of the following is an analog transducer?</p> <p>(A) Encoders</p> <p>(B) Strain gauge</p> <p>(C) Digital tachometers</p> <p>(D) Limit switches</p>	(B)
101	01-02-2020	44	<p>What is the principle of operation of LVDT?</p> <p>(A) Mutual inductance</p> <p>(B) Self-inductance</p>	(A)

			(C) Permanence (D) Reluctance	
101	01-02-2020	45	Which of the following can be measured using Piezo-electric transducer? (A) Velocity (B) Displacement (C) Force (D) Sound	(C)
101	01-02-2020	46	Which of the following is not a characteristic of an ideal op-amp? (A) Zero slew rate (B) Infinite bandwidth (C) Infinite input impedance (D) Zero output impedance	(A)
101	01-02-2020	47	Which of the following represents Laplace transform of ramp signal? (A) $1/S^3$ (B) $1/S^2$ (C) $1/S$ (D) 1	(B)
101	01-02-2020	48	_____ is the example of photo emissive cell (A) LDR (B) Photo diode (C) Photo transistor	(A)

			(D) Photo multiplier	
101	01-02-2020	49	The command used in Auto CAD to equally arrange objects in a outer periphery of a circle is  (A) Copy (B) Move (C) Array (D) Mirror	(C)
101	01-02-2020	50	Size of A3 Paper is  (A) 297x210 (B) 420x594 (C) 297x420 (D) None of the options	(C)