

Subject Code : 101 ▼

Subject Code	Exam Date	Q Id	Questions	Answer Key
101	21-01-2021	1	<p>World consumer rights day is on</p> <p>(A) March 10</p> <p>(B) March 15</p> <p>(C) May 10</p> <p>(D) May 15</p>	(B)
101	21-01-2021	2	<p>Who among the following is NOT a recipient of Mother Teresa Memorial Awards for Social Justice 2020 (by Harmony Foundation, an international NGO) with the theme for the year being "Celebrating Compassion in times of Covid"?</p> <p>(A) Father Fabio Stevenazzi, Milan, Italy</p> <p>(B) Shri Sanjay Pandey IPS, DG Home Guards, Maharashtra</p> <p>(C) Smt KK Shailaja, Minister of Health, Kerala</p> <p>(D) Shri Vinod Kumar Yadav, Chairman & CEO of Railway Board</p>	(D)
101	21-01-2021	3	<p>India's first indigenous 9mm Machine Pistol named "Asmi" has been jointly developed by and Indian Army, recently, in a record time of four months.</p> <p>(A) DRDO</p> <p>(B) SAIL</p> <p>(C) HAL</p> <p>(D) NTPC</p>	(A)
101	21-01-2021	4	<p>Which country has recently launched Toycathon-2021 and the Toycathon Portal, the project is being organized to develop the country as the global Toy manufacturing hub?</p>	(C)

			<p>(A) China</p> <p>(B) USA</p> <p>(C) India</p> <p>(D) Japan</p>	
101	21-01-2021	5	<p>COVAXIN, India's indigenous COVID-19 vaccine is developed by in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV).</p> <p>(A) CanSino Biologics</p> <p>(B) Bharat Biotech</p> <p>(C) Pfizer</p> <p>(D) Zydus Cadila</p>	(B)
101	21-01-2021	6	<p>Look carefully for the pattern, and then choose which pair of numbers comes next.</p> <p>2 44 4 41 6 38 8</p> <p>(A) 10 12</p> <p>(B) 35 32</p> <p>(C) 34 9</p> <p>(D) 35 10</p>	(D)
101	21-01-2021	7	<p>Five friends A, B, C, D and E travelled from Tamil Nadu to five different states Uttar Pradesh, Maharashtra, Rajasthan, Karnataka and Punjab by 5 different modes of transport: Cycle, Bus, Train, Truck, and Bike. The one who travelled to Rajasthan did not travel by Bike. C went to Karnataka by Truck and B went to Maharashtra by Train. D travelled by Bike and E travelled by Bus. Tamil Nadu is not connected by Cycle to Uttar Pradesh and Rajasthan. Which state did E travel to?</p> <p>(A) Punjab</p> <p>(B) Uttar Pradesh</p> <p>(C) Rajasthan</p>	(C)

			(D) None of the options	
101	21-01-2021	8	<p>Grain : Stock :: Stick : ?</p> <p>(A) Bundle</p> <p>(B) String</p> <p>(C) Collection</p> <p>(D) Heap</p>	(A)
101	21-01-2021	9	<p>Read the following instructions: P \$ Q means P is the brother of Q; P # Q means P is the mother of Q; P * Q means P is the daughter of Q</p> <p>If the code of family is A # B \$ C * D, who is the father among them?</p> <p>(A) D</p> <p>(B) B</p> <p>(C) C</p> <p>(D) A</p>	(A)
101	21-01-2021	10	<p>In a row of persons, the position of Sakshi from the left side of the row is 26th and position of Sakshi from the right side of the row is 35th. Find the total number of students in the row?</p> <p>(A) 67</p> <p>(B) 32</p> <p>(C) 46</p> <p>(D) 60</p>	(D)
101	21-01-2021	11	<p>Arrange in proper sequence to form a meaningful sentence:</p> <p>Since the advent of smartphones</p> <p>A. they are only licensed to use it</p> <p>B. to accept that they do not control</p> <p>C. the software in their devices;</p> <p>D. consumers have been forced</p>	(C)

			<p>(A) ABCD</p> <p>(B) DABC</p> <p>(C) DBCA</p> <p>(D) CBAD</p>	
101	21-01-2021	12	<p>Choose the synonym of the word "Incur"</p> <p>(A) Misunderstand</p> <p>(B) Push</p> <p>(C) Gain</p> <p>(D) Discourage</p>	(C)
101	21-01-2021	13	<p>Find out whether there is any Grammatical error in the underlined part of the below sentence. If yes, indicate the correct answer among the given options, else indicate "No correction":</p> <p>They <u>were all shocked</u> at his failure in the competition.</p> <p>(A) were shocked at all</p> <p>(B) had all shocked</p> <p>(C) had been all shocked on</p> <p>(D) No correction</p>	(D)
101	21-01-2021	14	<p>Fill up with the correct preposition:</p> <p>When we get ready for dinner, I have to take my books _____ the table.</p> <p>(A) Off</p> <p>(B) From</p> <p>(C) Out</p> <p>(D) Of</p>	(A)
101	21-01-2021	15	<p>Complete the following sentence meaningfully:</p>	(A)

			<p>"The employer appeared to be in such an affable mood that Rohit</p> <p>(A) decided to ask for a raise in his salary</p> <p>(B) was scared to talk to him about his leave</p> <p>(C) felt very guilty for his inadvertent slip</p> <p>(D) promised him that he would not commit mistake again</p>	
101	21-01-2021	16	<p>What is the correct meaning of the underlined phrase in the following sentence:</p> <p>I met him for help, but he sent me away to <u>a place that provides refuge.</u></p> <p>(A) Sanatorium</p> <p>(B) Shelter</p> <p>(C) Orphanage</p> <p>(D) Asylum</p>	(D)
101	21-01-2021	17	<p>Antonym of crestfallen</p> <p>(A) cheerful</p> <p>(B) disturbed</p> <p>(C) indignant</p> <p>(D) dismayed</p>	(A)
101	21-01-2021	18	<p>Select the correct sentence.</p> <p>(A) I have got my M.Sc. degree in 1988.</p> <p>(B) I got my M.Sc. degree in 1988.</p> <p>(C) I have my M.Sc. degree in 1988.</p> <p>(D) I get my M.Sc. degree in 1988.</p>	(B)
101	21-01-2021	19	<p>Choose the option that completes the sentence most meaningfully and appropriately:</p>	(B)

			<p>They were amazed at the turn of events.</p> <p>(A) quiet</p> <p>(B) quite</p> <p>(C) solemn</p> <p>(D) rightful</p>	
101	21-01-2021	20	<p>Choose the correct alternative which can be substituted for the below given sentence:</p> <p>'A person of good understanding knowledge and reasoning power'</p> <p>(A) Expert</p> <p>(B) Snob</p> <p>(C) Literate</p> <p>(D) Intellectual</p>	(D)
101	21-01-2021	21	<p>39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work?</p> <p>(A) 10</p> <p>(B) 13</p> <p>(C) 16</p> <p>(D) 18</p>	(B)
101	21-01-2021	22	<p>A person walking at 4 Kmph reaches his office 8 minutes late. If he walks at 6 Kmph, he reaches there 8 minutes earlier. How far is the office from his house?</p> <p>(A) 4 $\frac{1}{5}$ Km</p> <p>(B) 2 $\frac{1}{5}$ Km</p> <p>(C) 3 $\frac{1}{5}$ Km</p> <p>(D) 5 $\frac{1}{5}$ Km</p>	(C)
101	21-01-2021	23	<p>The length of a rectangular plot is 20 metres more</p>	(A)

			<p>than its breadth. If the cost of fencing the plot @ 26.50 per metre is Rs. 5300, what is the length of the plot in metres?</p> <p>(A) 60 (B) 50 (C) 40 (D) 30</p>	
101	21-01-2021	24	<p>A is twice as good as workman B and together they finish a piece of work in 18 days. In how many days will B alone finish the work?</p> <p>(A) 27 days (B) 68 days (C) 56 days (D) 54 days</p>	(D)
101	21-01-2021	25	<p>The least number, which when divided by 12, 15, 20 and 54 leaves in each case a remainder of 8 is:</p> <p>(A) 544 (B) 548 (C) 504 (D) 536</p>	(B)
101	21-01-2021	26	<p>Find the number which when multiplied by 15 is increased by 196.</p> <p>(A) 10 (B) 12 (C) 14 (D) 16</p>	(C)
101	21-01-2021	27	<p>If the length of a rectangle is halved and its breadth is tripled, what is the percentage change in its area?</p> <p>(A) 50% increase</p>	(A)

			<p>(B) 25% increase</p> <p>(C) 25% decrease</p> <p>(D) 50% decrease</p>	
101	21-01-2021	28	<p>A man takes twice as long to row a distance against the stream as to row the same distance in favour of the stream. The ratio of the speed of the boat (in still water) and the stream is:</p> <p>(A) 3 : 1</p> <p>(B) 3 : 2</p> <p>(C) 4 : 3</p> <p>(D) 2 : 1</p>	(A)
101	21-01-2021	29	<p>Average of 10 matches is 32. How many runs one should score to increase his average by 4 runs?</p> <p>(A) 70</p> <p>(B) 78</p> <p>(C) 80</p> <p>(D) 76</p>	(D)
101	21-01-2021	30	<p>Ten years ago, P was half of Q's age. If the ratio of their present ages is 3:4, what will be the total of their present ages?</p> <p>(A) 45</p> <p>(B) 40</p> <p>(C) 35</p> <p>(D) 30</p>	(C)
101	21-01-2021	31	<p>For a voltage source</p> <p>(A) terminal voltage is equal to the source emf.</p> <p>(B) terminal voltage cannot exceed source emf.</p> <p>(C) terminal voltage is always lower than source emf.</p>	(B)

			(D) terminal voltage is higher than the source emf.	
101	21-01-2021	32	<p>In a synchronous Alternator, which of the following coils will have emf closer to sine wave form?</p> <p>(A) concentrated winding in full pitch coils</p> <p>(B) concentrated winding in short pitch coils</p> <p>(C) distributed winding in full pitch coils</p> <p>(D) distributed winding in short pitch coils</p>	(D)
101	21-01-2021	33	<p>In a steam power plant, heat from the flue gases is recovered in</p> <p>(A) condenser</p> <p>(B) chimney</p> <p>(C) economiser and air pre-heater</p> <p>(D) a de-super-heater</p>	(C)
101	21-01-2021	34	<p>The pressure ratio in a gas turbine power plant is</p> <p>(A) 5 to 6</p> <p>(B) 9 to 12</p> <p>(C) 2 to 3</p> <p>(D) 13 to 19</p>	(A)
101	21-01-2021	35	<p>Industrial measuring equipments are of accuracy classes</p> <p>(A) 0.5 and 1.</p> <p>(B) 0.5, 1, 1.5, 2.5 and 5.</p> <p>(C) 1, 1.5, 2.5 and 5.</p> <p>(D) 1.0, 0.2 and 0.5.</p>	(C)
101	21-01-2021	36	<p>A first order instrument is characterized by</p> <p>(A) time constant only</p>	(B)

			<p>(B) static sensitivity and time constant</p> <p>(C) static sensitivity and damping coefficient</p> <p>(D) static sensitivity and damping coefficient and natural frequency of oscillations</p>	
101	21-01-2021	37	<p>Which of the following instruments will have poorest overloading capacity?</p> <p>(A) Moving-Coil Instruments</p> <p>(B) Induction type Instruments</p> <p>(C) Permanent Magnet Instruments</p> <p>(D) Hot-wire Instruments</p>	(D)
101	21-01-2021	38	<p>Donor type impurities</p> <p>(A) have five valence electrons</p> <p>(B) create excess free electrons</p> <p>(C) are used to make N-type semi-conductors</p> <p>(D) All of the options</p>	(D)
101	21-01-2021	39	<p>A Microprocessor is ALU</p> <p>(A) and control unit on a single chip</p> <p>(B) and memory on a single chip</p> <p>(C) register unit and I/O device on a single chip</p> <p>(D) register unit and control unit on a single chip</p>	(D)
101	21-01-2021	40	<p>Control Bus is used for transmitting and receiving control signals between</p> <p>(A) Processor and key board</p> <p>(B) Processor and various devices</p> <p>(C) Processor and memory</p> <p>(D) Input Device and Memory</p>	(B)
101	21-01-2021	41	<p>Microprocessor based instruments can be used to</p>	(D)

			<p>measure</p> <p>(A) temperature only</p> <p>(B) pressure only</p> <p>(C) flow only</p> <p>(D) temperature,flow,pressure</p>	
101	21-01-2021	42	<p>For the operation of N-Channel E-MOSFET it is necessary that gate voltage is</p> <p>(A) Highly Negative</p> <p>(B) Highly Positive</p> <p>(C) Low positive</p> <p>(D) Zero</p>	(B)
101	21-01-2021	43	<p>In a DC Motor, the windage loss is proportional to</p> <p>(A) supply voltage</p> <p>(B) square of supply voltage</p> <p>(C) square of flux density</p> <p>(D) square of armature speed</p>	(D)
101	21-01-2021	44	<p>The force experienced by a current carrying conductor lying parallel to the magnetic field is</p> <p>(A) Bil</p> <p>(B) B/il</p> <p>(C) Hil</p> <p>(D) Zero</p>	(D)
101	21-01-2021	45	<p>Form factor is equal to</p> <p>(A) rms value/average value</p> <p>(B) $0.637 \times$ maximum value</p> <p>(C) maximum value/rms value</p>	(A)

			(D) average value/rms value	
101	21-01-2021	46	Retardation test on dc shunt motor is used for finding -----losses (A) copper (B) stray (C) friction (D) iron	(B)
101	21-01-2021	47	A step up transformer increases (A) frequency (B) current (C) power (D) voltage	(D)
101	21-01-2021	48	In a circle diagram of a three phase induction motor, diameter of the circle is determined by (A) rotor current (B) exciting current (C) total stator current (D) rotor current referred to stator	(C)
101	21-01-2021	49	The frequency of voltage generated by an alternator having 4 poles and rotating at 1800 rpm is ----- Hertz (A) 60 (B) 7200 (C) 120 (D) 450	(A)
101	21-01-2021	50	Transmission efficiency increases when (A) voltage and power factor both increases	(A)

			<p>(B) voltage and power factor both decreases</p> <p>(C) voltage increases and power factor decreases</p> <p>(D) voltage decreases and power factor increases</p>	
101	21-01-2021	51	<p>The fact that a conductor carries more current on the surface as compared to core is known as</p> <p>(A) corona</p> <p>(B) skin effect</p> <p>(C) permeability</p> <p>(D) unsymmetrical fault</p>	(B)
101	21-01-2021	52	<p>A load cell is a</p> <p>(A) strain gauge</p> <p>(B) photovoltaic cell</p> <p>(C) thermistor</p> <p>(D) pressure pick up</p>	(A)
101	21-01-2021	53	<p>Which logic gate is similar to the function of two series switches</p> <p>(A) NAND</p> <p>(B) OR</p> <p>(C) AND</p> <p>(D) All of the options</p>	(C)
101	21-01-2021	54	<p>The advantage of transistor over vacuum tube is</p> <p>(A) no heat required</p> <p>(B) small size and light in weight</p> <p>(C) very low power consumption</p> <p>(D) All of the options</p>	(D)
101	21-01-2021	55	<p>A sequence of well defined steps that leads to the</p>	(A)

			<p>solution of a problem is called</p> <p>(A) algorithm</p> <p>(B) accumulator</p> <p>(C) alphanumeric</p> <p>(D) cobol</p>	
101	21-01-2021	56	<p>Which oscillator is used for the best frequency stability?</p> <p>(A) wein bridge oscillator</p> <p>(B) crystal controlled oscillator</p> <p>(C) hartley oscillator</p> <p>(D) tickler oscillator</p>	(B)
101	21-01-2021	57	<p>Time between separation of circuit breaker contacts and final current zero is called</p> <p>(A) dead time</p> <p>(B) relay time</p> <p>(C) arcing time</p> <p>(D) opening time</p>	(C)
101	21-01-2021	58	<p>Current carrying capacity of a cable depends on</p> <p>(A) area of conductor</p> <p>(B) area of insulation</p> <p>(C) thickness of insulation</p> <p>(D) All of the options</p>	(A)
101	21-01-2021	59	<p>Earth resistance value preferred for a substation is</p> <p>(A) greater than 500 ohm</p> <p>(B) greater than 100 ohm</p> <p>(C) greater than 200 ohm</p>	(D)

			(D) less than 1 ohm	
101	21-01-2021	60	<p>-----is one which has terminal voltage which is completely independent of current through it</p> <p>(A) Ideal current source</p> <p>(B) resistance</p> <p>(C) Ideal voltage source</p> <p>(D) inductance</p>	(C)
101	21-01-2021	61	<p>Motor used in toys</p> <p>(A) Capacitor start and run motor</p> <p>(B) Capacitor start motor</p> <p>(C) reluctance motor</p> <p>(D) shaded pole motor</p>	(D)
101	21-01-2021	62	<p>Tolerance of Gold band in resistance is</p> <p>(A) 10%</p> <p>(B) 5%</p> <p>(C) 1%</p> <p>(D) 20%</p>	(B)
101	21-01-2021	63	<p>If the field of a synchronous motor is under excited, the power factor will be</p> <p>(A) leading</p> <p>(B) lagging</p> <p>(C) unity</p> <p>(D) more than unity</p>	(B)
101	21-01-2021	64	<p>Out of the following which one is not an unconventional source of energy</p>	(C)

			<p>(A) tidal power</p> <p>(B) geothermal energy</p> <p>(C) nuclear energy</p> <p>(D) wind power</p>	
101	21-01-2021	65	<p>In a _____ circuit, the total resistance is smaller than the smallest resistance in the circuit.</p> <p>(A) Series</p> <p>(B) Parallel</p> <p>(C) Either series or parallel</p> <p>(D) Neither series nor parallel</p>	(B)
101	21-01-2021	66	<p>In a series RLC circuit, the phase difference between the voltage across the inductor and the current in the circuit is?</p> <p>(A) 0</p> <p>(B) 90</p> <p>(C) 180</p> <p>(D) 45</p>	(B)
101	21-01-2021	67	<p>Thevenin equivalent circuit consist of</p> <p>(A) Current source and series impedance</p> <p>(B) voltage source and series impedance</p> <p>(C) voltage source and shunt impedance</p> <p>(D) Current source and shunt impedance</p>	(B)
101	21-01-2021	68	<p>When the voltage sources are replaced with short circuits and current sources are replaced with open circuits, leaving dependant sources in the circuit, the theorem applied is</p> <p>(A) Superposition</p> <p>(B) Thevenin</p>	(A)

			<p>(C) Norton</p> <p>(D) Millman</p>	
101	21-01-2021	69	<p>A filter that allows high and low frequencies to pass but attenuates any signal with a frequency between two corner frequencies is a</p> <p>(A) Notch filter</p> <p>(B) Band pass filter</p> <p>(C) Band stop filter</p> <p>(D) Multiband filter</p>	(C)
101	21-01-2021	70	<p>When a number of two-port networks are cascaded then</p> <p>(A) z-parameters are added up</p> <p>(B) y-parameters are added up</p> <p>(C) h-parameters are multiplied</p> <p>(D) ABCD-parameters are multiplied</p>	(D)
101	21-01-2021	71	<p>There will be serious errors if power factor of non-sinusoidal waveform is measured by electrodynamicometer power factor meter. This is true for</p> <p>(A) Single-phase meters alone</p> <p>(B) 3-phase meters only</p> <p>(C) Both Single-phase meters and 3-phase</p> <p>(D) 3-phase meters with balanced loads</p>	(C)
101	21-01-2021	72	<p>For an op-amp having a slew rate of $2 \text{ V}/\mu\text{s}$, if the input signal varies by 0.5 V in 10 ms, the maximum closed-loop voltage gain will be</p> <p>(A) 50</p> <p>(B) 40</p> <p>(C) 22</p>	(B)

			(D) 20	
101	21-01-2021	73	<p>The maximum power is delivered from a source to a load when the source resistance is</p> <p>(A) Greater than the load resistance</p> <p>(B) Equal to zero</p> <p>(C) Less than the load resistance</p> <p>(D) Equal to the load resistance</p>	(B)
101	21-01-2021	74	<p>The skin effect in a transmission line is affected by</p> <p>(A) The resistivity of the transmission line</p> <p>(B) The current magnitude of the transmission line</p> <p>(C) The cross sectional area of the transmission line</p> <p>(D) The voltage drop across transmission line</p>	(C)
101	21-01-2021	75	<p>Consider a step voltage of magnitude 1 pu travelling along a lossless transmission line that terminates in a reactor. The voltage magnitude across the reactor at the instant travelling wave reaches the reactor is</p> <p>(A) -1 pu</p> <p>(B) 2 pu</p> <p>(C) 1 pu</p> <p>(D) 3 pu</p>	(A)
101	21-01-2021	76	<p>A list of relays and the power system components protected by the relays are given in List-I and List-II respectively. Choose the correct match from the four choices given below:</p> <p>List-I</p> <p>P. Distance relay</p> <p>Q. Under frequency relay</p> <p>R. Differential relay</p> <p>S. Buchholz relay</p> <p>List-II</p> <p>1. Transformers</p> <p>2. Turbines</p> <p>3. Busbars</p>	(A)

			<p>4. Shunt capacitors 5. Alternators 6. Transmission lines</p> <p>(A) P-6,Q-5,R-3,S-1 (B) P-4,Q-5,R-3,S-6 (C) P-6,Q-3,R-4,S-1 (D) P-5,Q-4,R-3,S-1</p>	
101	21-01-2021	77	<p>A three-phase synchronous motor connected to ac mains is running at full load and unity power factor. If its shaft load is reduced by half, with field current held constant, its new power factor will be</p> <p>(A) unity (B) leading (C) lagging (D) dependent on machine parameters</p>	(B)
101	21-01-2021	78	<p>A 3 V DC supply with an internal resistance of 2 W supplies a passive non-linear resistance characterized by the relation $V_{NL} = I_{NL}^2$. The power dissipated in the non linear resistance is</p> <p>(A) 1 W (B) 2 W (C) 3 W (D) 0 W</p>	(A)
101	21-01-2021	79	<p>The RMS value of the voltage $u(t) = 3 + 4 \cos(3t)$ is</p> <p>(A) $\sqrt{17}$ V (B) 4.5 V (C) 8 V (D) 7 V</p>	(A)
101	21-01-2021	80	<p>The slip of an induction motor normally does not depend on</p>	(D)

- (A) rotor speed
- (B) synchronous speed
- (C) shaft torque
- (D) core-loss component