

Subject Code : 109 ▼

Subject Code	Exam Date	Q Id	Questions	Answer Key
109	03-12-2020	591	<p>THE WORLD BENEATH HIS FEET is a Biography of</p> <p>(A) Pullela Gopichand</p> <p>(B) Nawab Pataudi</p> <p>(C) Ajit Wadekar</p> <p>(D) Sachin Tendulkar</p>	(A)
109	03-12-2020	592	<p>Which state has passed ordinance to ban unlawful religious conversions for marriage?</p> <p>(A) Uttar Pradesh</p> <p>(B) Madhya Pradesh</p> <p>(C) Assam</p> <p>(D) Gujarat</p>	(A)
109	03-12-2020	593	<p>Which Indian advocate was appointed as Queen's Counsel (QC) for the courts of England and Wales?</p> <p>(A) Raahul Trivedi</p> <p>(B) Mukul Rohtagi</p> <p>(C) Soli Sorabjee</p> <p>(D) Harish Salve</p>	(D)
109	03-12-2020	594	<p>The Ministry of Agriculture and Farmers Welfare recently launched the Sahakar Pragya Programme</p> <p>(A) to train the primary cooperative societies in the country</p> <p>(B) to accelerate development of Covid-19 vaccine in the country</p> <p>(C) to address the grievances of a common man</p>	(A)

			(D) for the beekeepers and honey collectors	
109	03-12-2020	595	<p>Which country has recently appointed John Kerry for full-time climate leader?</p> <p>(A) New Zealand</p> <p>(B) China</p> <p>(C) France</p> <p>(D) USA</p>	(D)
109	03-12-2020	596	<p>In question below, the passage consists of six sentences. The first and sixth sentences are given in the beginning. The middle sentences in each have been removed and jumbled up. These are labelled as P, Q, R and S. Find out the proper order for the four sentences.</p> <p>S1: An elderly lady suddenly became blind.</p> <p>P : The doctor called daily and every time he took away some of her furniture he liked.</p> <p>Q : At last she was cured and the doctor demanded his fee.</p> <p>R : She agreed to pay a large fee to the doctor who would cure her.</p> <p>S : On being refused, the doctor wanted to know the reason.</p> <p>S6: The lady said that she had not been properly cured because she could not see all her furniture.</p> <p>(A) PQRS</p> <p>(B) RSPQ</p> <p>(C) RPQS</p> <p>(D) RQPS</p>	(C)
109	03-12-2020	597	<p>In question given below, a part of the sentence is italicised and underlined. Below are given alternatives to the underlined part which may improve the sentence. Choose the correct alternative. In case no improvement is needed, option ' No improvement ' may be chosen as the answer.</p> <p><i>If the room had been brighter,</i> I would have been able to read for a while before bed time.</p>	(C)

			<p>(A) No improvement</p> <p>(B) If the room was brighter</p> <p>(C) Had the room been brighter</p> <p>(D) If the room are brighter</p>	
109	03-12-2020	598	<p>Replace the sentence by a suitable single word.</p> <p>A person who tries to deceive people by claiming to be able to do wonderful things</p> <p>(A) Trickster</p> <p>(B) Imposter</p> <p>(C) Magician</p> <p>(D) Mountebank</p>	(A)
109	03-12-2020	599	<p>Give synonym for the word ‘ spontaneous’</p> <p>(A) well-timed</p> <p>(B) willing</p> <p>(C) instinctive</p> <p>(D) instantaneous</p>	(C)
109	03-12-2020	600	<p>Guide is to direct as reduce is to</p> <p>(A) decrease</p> <p>(B) maintain</p> <p>(C) increase</p> <p>(D) preserve</p>	(A)
109	03-12-2020	601	<p>Look at this series:</p> <p>70, 71, 76, __, 81, 86, 70, 91</p> <p>What number should fill the blank?</p> <p>(A) 70</p> <p>(B) 71</p>	(A)

			(C) 80 (D) 90	
109	03-12-2020	602	<p>Given sentence has an underlined word followed by four choices. Choose the word that is a necessary part of the underlined word.</p> <p>The necessary part of a <u>book</u></p> <p>(A) fiction (B) pages (C) pictures (D) learning</p>	(B)
109	03-12-2020	603	<p>A is the son of C; C and Q are sisters; Z is the mother of Q and P is the son of Z. Which of the following statement is true?</p> <p>(A) C and P are sisters (B) P and A are cousins (C) Q is the maternal grandfather of A (D) P is the maternal uncle of A</p>	(D)
109	03-12-2020	604	<p>Read the definition and all four choices carefully, and find the answer that provides the best example of the given definition.</p> <p>An Informal Gathering occurs when a group of people get together in a casual, relaxed manner. Which situation is the best example of an Informal Gathering?</p> <p>(A) The book club meets on the first Thursday evening of every month. (B) After finding out about his promotion, Jeremy and a few coworkers decide to go out for a quick drink after work. (C) Mary sends out 25 invitations for the reception she is giving for her sister.</p>	(B)

			(D) Whenever she eats at the Mexican restaurant, Clara seems to run into Peter.	
109	03-12-2020	605	<p>In a class there are seven students (including boys and girls) A, B, C, D, E, F and G. They sit on three benches I, II and III. Such that at least two students on each bench and at least one girl on each bench. C who is a girl student, does not sit with A, E and D. F the boy student sits with only B. A sits on the bench I with his best friends. G sits on the bench III. E is the brother of C. Which of the following is the group of girls ?</p> <p>(A) BAC</p> <p>(B) BFC</p> <p>(C) CDF</p> <p>(D) BCD</p>	(D)
109	03-12-2020	606	<p>Two numbers are in the ratio 3 : 5. If 9 is subtracted from each, the new numbers are in the ratio 12 : 23. The smaller number is</p> <p>(A) 27</p> <p>(B) 33</p> <p>(C) 49</p> <p>(D) 55</p>	(B)
109	03-12-2020	607	<p>The average weight of 8 persons increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?</p> <p>(A) 85 kg</p> <p>(B) 76 kg</p> <p>(C) 76.5 kg</p> <p>(D) None of the options</p>	(A)
109	03-12-2020	608	<p>The price of 10 chairs is equal to that of 4 tables. The price of 15 chairs and 2 tables together is Rs. 4000. The total price of 12 chairs and 3 tables is</p>	(C)

			<p>(A) Rs. 3500</p> <p>(B) Rs. 3750</p> <p>(C) Rs. 3900</p> <p>(D) Rs. 3840</p>	
109	03-12-2020	609	<p>The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, son's age will be</p> <p>(A) 12 years</p> <p>(B) 18 years</p> <p>(C) 14 years</p> <p>(D) 20 years</p>	(D)
109	03-12-2020	610	<p>A and B take part in 100 m race. A runs at 5 kmph. A gives B a start of 8 m and still beats him by 8 seconds. The speed of B is</p> <p>(A) 5.15 kmph</p> <p>(B) 4.14 kmph</p> <p>(C) 4.25 kmph</p> <p>(D) 4.4 kmph</p>	(B)
109	03-12-2020	611	<p>The superposition theorem is essentially based on the concept of</p> <p>(A) duality</p> <p>(B) linearity</p> <p>(C) reciprocity</p> <p>(D) non-linearity</p>	(B)
109	03-12-2020	612	<p>In Fleming's left-hand rule , thumb always represents</p> <p>(A) current</p> <p>(B) voltage</p> <p>(C) magnetic field</p>	(D)

			(D) direction of force on conductor	
109	03-12-2020	613	<p>Peak factor =</p> <p>(A) rms value/peak value</p> <p>(B) average value/rms value</p> <p>(C) peak value/rms value</p> <p>(D) peak value/average value</p>	(C)
109	03-12-2020	614	<p>Power factor is</p> <p>(A) watts/volt ampere</p> <p>(B) Tan of the angle of lead or lag</p> <p>(C) reactance/impedance</p> <p>(D) kW/KVAR</p>	(A)
109	03-12-2020	615	<p>The form factor of a dc supply voltage is always</p> <p>(A) zero</p> <p>(B) 0.5</p> <p>(C) unity</p> <p>(D) infinite</p>	(C)
109	03-12-2020	616	<p>The reactance offered by a capacitor to alternating current of frequency 50 Hz is 10 Ohm. If frequency is increased to 100 Hz, reactance becomes ---- ohm</p> <p>(A) 20</p> <p>(B) 5</p> <p>(C) 2.5</p> <p>(D) 40</p>	(B)
109	03-12-2020	617	<p>Commercial efficiency of a DC generator is</p> <p>(A) total watts generated in armature/mechanical power supplied</p>	(C)

			<p>(B) watts available in load circuit/total watts generated</p> <p>(C) watts available in load circuit/mechanical power supplied</p> <p>(D) total watts generated in armature/watts available in load circuit</p>	
109	03-12-2020	618	<p>The number of turns on the primary and secondary windings of a single phase transformer are 350 and 35 respectively. If the primary is connected to a 3.3kV, 50Hz supply, determine the secondary voltage on no-load</p> <p>(A) 33kV</p> <p>(B) 330V</p> <p>(C) 3300V</p> <p>(D) 0.33kV</p>	Question Withdrawn
109	03-12-2020	619	<p>Which type of protection is provided on a generator to protect against stator insulation failure?</p> <p>(A) Thermocouple actuated alarm</p> <p>(B) Over current relay</p> <p>(C) Reverse power relay</p> <p>(D) Differential protection</p>	(D)
109	03-12-2020	620	<p>The regulation of a synchronous motor is</p> <p>(A) 0%</p> <p>(B) 1%</p> <p>(C) 50%</p> <p>(D) 100%</p>	(A)
109	03-12-2020	621	<p>"Cogging" in induction motor occurs when</p> <p>(A) number of stator teeth - number of rotor teeth=odd number</p> <p>(B) number of stator teeth - number of rotor</p>	(C)

			<p>teeth=even number</p> <p>(C) number of stator teeth - number of rotor teeth=0</p> <p>(D) number of stator teeth - number of rotor teeth =negative number</p>	
109	03-12-2020	622	<p>At present, most commonly used motor for crane application is</p> <p>(A) squirrel cage induction motor</p> <p>(B) slip ring induction motor</p> <p>(C) synchronous motor</p> <p>(D) dc motor</p>	(A)
109	03-12-2020	623	<p>The internal resistance of an ideal constant voltage source is</p> <p>(A) 1</p> <p>(B) 0</p> <p>(C) high</p> <p>(D) very high</p>	(B)
109	03-12-2020	624	<p>The motor used in the portable tools is</p> <p>(A) shaded pole motor</p> <p>(B) universal motor</p> <p>(C) hysteresis motor</p> <p>(D) reluctance motor</p>	(B)
109	03-12-2020	625	<p>Reaction turbines are used for</p> <p>(A) low head</p> <p>(B) medium head</p> <p>(C) low and medium head</p> <p>(D) high head</p>	(C)
109	03-12-	626	In a circuit breaker time between energising of shunt	(C)

	2020		<p>trip release and opening of circuit breaker contacts is called</p> <p>(A) dead time</p> <p>(B) relay time</p> <p>(C) opening time</p> <p>(D) fault clearing time</p>	
109	03-12-2020	627	<p>In a 415V system, voltage grade of cable generally used is</p> <p>(A) 415V</p> <p>(B) 440V</p> <p>(C) 1100V</p> <p>(D) 11000V</p>	(C)
109	03-12-2020	628	<p>Which type of wattmeter cannot be used for both AC and DC?</p> <p>(A) Dynamometer type</p> <p>(B) Electrostatic type</p> <p>(C) Induction type</p> <p>(D) None of the options</p>	(C)
109	03-12-2020	629	<p>Moving coil instrument make use of</p> <p>(A) electromagnetic effect</p> <p>(B) electrostatic effect</p> <p>(C) electro thermal effect</p> <p>(D) photovoltaic effect</p>	(A)
109	03-12-2020	630	<p>A 100/5A CT is used for measurement of 100A current. The current at output terminal of CT is</p> <p>(A) 100A</p> <p>(B) 5A</p>	(B)

			(C) 50A (D) 1A	
109	03-12-2020	631	The damping force may be provided by (A) air friction (B) eddy current (C) fluid friction (D) All of the options	(D)
109	03-12-2020	632	Meter used to measure energy (A) ammeter (B) voltmeter (C) multifunction meter (D) power factor meter	(C)
109	03-12-2020	633	Power transistors are invariably provided with (A) soldered connections (B) heat sink (C) metallic casing (D) heater	(B)
109	03-12-2020	634	A zenor diode (A) has a high forward voltage rating (B) has a sharp break down at low reverse voltage (C) can be used as an amplifier (D) None of the options	(B)
109	03-12-2020	635	Permeability in a magnetic circuit corresponds to ----- --in an electric circuit (A) conductivity (B) resistivity	(A)

			(C) conductance (D) resistance	
109	03-12-2020	636	Which of the following frequencies has the longest period? (A) 1 Hz (B) 10 Hz (C) 1 kHz (D) 10 kHz	(A)
109	03-12-2020	637	When an unusually wide and very sensitive speed control is required for DC shunt motor in electric excavators, elevators and main drive of steel mills, the method of speed control used is (A) Ward-Leonard system (B) flux control method (C) armature control method (D) multiple voltage control	(A)
109	03-12-2020	638	Retardation test of DC machines is also called (A) brake test (B) field test (C) running down test (D) back to back test	(C)
109	03-12-2020	639	The efficiency and power factor of a squirrel cage induction motor increase in proportion to its (A) speed (B) mechanical load (C) voltage (D) rotor torque	(B)

109	03-12-2020	640	<p>The method used for analysis of long transmission line is</p> <p>(A) End condenser method</p> <p>(B) Rigorous method</p> <p>(C) Nominal T method</p> <p>(D) Nominal pi method</p>	(B)
109	03-12-2020	641	<p>Sub stations do not change the voltage level i.e. incoming and outgoing lines have the same voltage are called</p> <p>(A) transformer substations</p> <p>(B) switching substations</p> <p>(C) converting substations</p> <p>(D) industrial substations</p>	(B)
109	03-12-2020	642	<p>The size of the conductor of power cables depends on</p> <p>(A) type of insulation</p> <p>(B) current</p> <p>(C) voltage</p> <p>(D) power factor</p>	(B)
109	03-12-2020	643	<p>There will be serious errors if power factor of non-sinusoidal waveform is measured by electro-dynamometer 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)
109	03-12-2020	644	<p>Thevenin equivalent circuit consist of</p> <p>(A) Current source and series impedance</p>	(B)

			<p>(B) Voltage source and series impedance</p> <p>(C) Voltage source and shunt impedance</p> <p>(D) Current source and shunt impedance</p>	
109	03-12-2020	645	<p>Calculate the work done in a resistor of $20\ \Omega$ carrying 5A of current in 3 hours.</p> <p>(A) 1.5J</p> <p>(B) 15J</p> <p>(C) 1.5kWh</p> <p>(D) 15kWh</p>	(C)
109	03-12-2020	646	<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)
109	03-12-2020	647	<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)
109	03-12-2020	648	<p>A network delivers maximum power to the load resistance when it is</p> <p>(A) Greater than Norton's equivalent resistance of the network</p> <p>(B) Equal to Thevenin's equivalent resistance of the network</p> <p>(C) Less than source resistance</p>	(B)

			(D) Less than Norton's equivalent resistance of the network	
109	03-12-2020	649	<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)
109	03-12-2020	650	<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)
109	03-12-2020	651	<p>A moving coil ammeter has a fixed shunt of 0.02Ω with a coil resistance of $R = 1000\Omega$ and a potential difference of 500 mV across it, full scale deflection is obtained. The current through the moving coil to give full scale deflection will be</p> <p>(A) 25 A</p> <p>(B) 0.5×10^{-2} A</p> <p>(C) 0.25×10^{-3} A</p> <p>(D) 0.5×10^{-3} A</p>	(D)
109	03-12-2020	652	<p>Convert decimal 41.6875 into equivalent binary</p> <p>(A) 100101.1011</p> <p>(B) 100101.1101</p> <p>(C) 101001.1011</p> <p>(D) 101001.1101</p>	(C)

109	03-12-2020	653	<p>The important fact about the collector current is</p> <p>(A) It is greater than emitter current</p> <p>(B) It equals the base current</p> <p>(C) It is small</p> <p>(D) It approximately equals the emitter current</p>	(D)
109	03-12-2020	654	<p>Which of the following is true</p> <p>(A) Schering bridge is used for the measurement of high voltages</p> <p>(B) Wheatstone bridge is used for the measurement of medium resistances</p> <p>(C) Kelvin bridge is used for the measurement of low resistance</p> <p>(D) All of the options</p>	(D)
109	03-12-2020	655	<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)
109	03-12-2020	656	<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)
109	03-12-2020	657	<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>	(A)

			<p>(A) -1 pu</p> <p>(B) 2 pu</p> <p>(C) 1 pu</p> <p>(D) 3 pu</p>			
109	03-12-2020	658	<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> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <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> </td> <td style="width: 50%; vertical-align: top;"> <p>List-II</p> <p>1. Transformers</p> <p>2. Turbines</p> <p>3. Busbars</p> <p>4. Shunt capacitors</p> <p>5. Alternators</p> <p>6. Transmission lines</p> </td> </tr> </table> <p>(A) P-6,Q-5,R-3,S-1</p> <p>(B) P-4,Q-5,R-3,S-6</p> <p>(C) P-6,Q-3,R-4,S-1</p> <p>(D) P-6,Q-5,R-1,S-3</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> <p>4. Shunt capacitors</p> <p>5. Alternators</p> <p>6. Transmission lines</p>	(A)
<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> <p>4. Shunt capacitors</p> <p>5. Alternators</p> <p>6. Transmission lines</p>					
109	03-12-2020	659	<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</p> <p>(B) leading</p> <p>(C) lagging</p> <p>(D) dependent on machine parameters</p>	(B)		
109	03-12-2020	660	<p>The RMS value of the voltage $u(t) = 3 + 4 \cos(3t)$ is</p> <p>(A) $\sqrt{17}$ V</p> <p>(B) 4.5 V</p> <p>(C) 8 V</p>	(A)		

(D) 7 V