

Subject Code : 105 ▼

Subject Code	Exam Date	Q Id	Questions	Answer Key
105	30-03-2021	281	<p>Who among following was declared by the UN as “the most famous teenager in the world” in its ‘Decade in Review’ report in Dec 2019?</p> <p>(A) Malala Yousafzai (B) Jhumpa Lahiri (C) P V Sindhu (D) Dipa Karmakar</p>	(A)
105	30-03-2021	282	<p>Which airport has recently bagged the Airports Council International World’s ‘Voice of the Customer’ award?</p> <p>(A) Indira Gandhi International Airport, Delhi. (B) Kempegowda International Airport, Bengaluru. (C) Netaji Subhash Chandra Bose International Airport, Kolkata. (D) Chhatrapati Shivaji International Airport, Mumbai.</p>	(B)
105	30-03-2021	283	<p>Which state has recently won National Award for Best Electoral Practices 2020?</p> <p>(A) Meghalaya (B) Madhya Pradesh (C) Uttar Pradesh (D) Gujarat</p>	(A)
105	30-03-2021	284	<p>Who among the following constructed Kochi-Mangaluru Natural Gas Pipeline which was inaugurated by PM Modi?</p> <p>(A) Oil and Natural Gas Corporation (B) GAIL India Ltd</p>	(B)

			<p>(C) Bharat Heavy Electricals Limited</p> <p>(D) Petronet LNG</p>	
105	30-03-2021	285	<p>In Jan 2021, Union Cabinet approved the MoU with which country to send Indian Specified Skilled Workforce to work in 14 professional sectors of that country?</p> <p>(A) Japan</p> <p>(B) Malaysia</p> <p>(C) Singapore</p> <p>(D) South Korea</p>	(A)
105	30-03-2021	286	<p>Replace the underlined part with an appropriate meaning.</p> <p>He sold his house <u>for a song</u>.</p> <p>(A) very cheaply</p> <p>(B) at a discount</p> <p>(C) at a premium</p> <p>(D) at a reasonable price</p>	(A)
105	30-03-2021	287	<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: She said on the phone that she would report for duty next day.</p> <p>P : We waited for few days then we decided to go to her place.</p> <p>Q : But she did not.</p> <p>R : We found it locked.</p> <p>S : Even after that we waited for her quite a few days.</p> <p>S6: Eventually we reported to the police.</p> <p>(A) QPRS</p> <p>(B) PQSR</p>	(A)

			(C) PRQS (D) QPSR	
105	30-03-2021	288	Give antonym for the word 'ZENITH' (A) acme (B) nadir (C) climax (D) pinnacle	(B)
105	30-03-2021	289	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. The record for the biggest tiger hunt has not been <u>met</u> since 1911 when Lord Hardinge, then Viceroy of India, shot a tiger that measured 11 feet and 6 inches. (A) No improvement (B) improved (C) broken (D) better	(C)
105	30-03-2021	290	Fill up with most appropriate option: It took the child a long time to recover _____ the shock. (A) over (B) under (C) from (D) about	(C)
105	30-03-2021	291	In the following question, a word is followed by four	(D)

			<p>choices. Choose the word which is the most essential part of the given word.</p> <p>Writing</p> <p>(A) Author</p> <p>(B) Novel</p> <p>(C) Skills</p> <p>(D) Pen</p>	
105	30-03-2021	292	<p>Choose the word which is least like the others in a group?</p> <p>(A) Mason</p> <p>(B) Engineer</p> <p>(C) Blacksmith</p> <p>(D) Mechanic</p>	(D)
105	30-03-2021	293	<p>Look at this series:</p> <p>12, 38, 116, 350, 1052, ?</p> <p>What number should be the last?</p> <p>(A) 2200</p> <p>(B) 3158</p> <p>(C) 1800</p> <p>(D) 2800</p>	(B)
105	30-03-2021	294	<p>A, B,C ,D ,E, F, G, & H are eight friends. They are sitting on the circumference of a circular ground. Some of them are facing the center & some are facing outside. The person facing the center, who is second to the left of B is A & is third to the left of H. H, F, G & E are not facing the center. D is at the left of H & second to the right of C. G is not the neighbour of B & F. E is second to the left of G, who is second to the left of F. Who is fourth to the left of D?</p> <p>(A) B</p> <p>(B) C</p>	(A)

			(C) F (D) A	
105	30-03-2021	295	E is the sister of B. A is the father of C. B is the son of C. So how is A related to E? (A) Grandfather (B) Brother (C) Father (D) Grandson	(A)
105	30-03-2021	296	Two girls move in opposite directions, one from A to B and other from B to A. The girl from A reaches the destination in 16 hrs and girl from B reaches her destination in 25 hrs, after having met. If former's speed is 25 km/hr, what will be the speed of latter? (A) 10 km/hr (B) 20 km/hr (C) 12 km/hr (D) 16 km/hr	(B)
105	30-03-2021	297	The ratio of Rohan's age 4 years ago and Rahul's age after 4 years is 1 : 1. If at present, the ratio of their ages is 5 : 3, then find the ratio between Rohan's age 4 years hence and Rahul's age 4 years ago. (A) 1 : 3 (B) 3 : 1 (C) 4 : 3 (D) 3 : 4	(B)
105	30-03-2021	298	Gopal and Ravi contracted a work for Rs 480. If Gopal can do that work in 15 days and Ravi can complete that same work in 10 days. He completed this work with Mahesh in 5 days, then how much money Mahesh got. (A) Rs.80	(A)

			<p>(B) Rs.120</p> <p>(C) Rs.160</p> <p>(D) Rs. 40</p>	
105	30-03-2021	299	<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> <p>(A) Rs. 3800</p> <p>(B) Rs. 3400</p> <p>(C) Rs. 3900</p> <p>(D) Rs. 3500</p>	(C)
105	30-03-2021	300	<p>The length of a rectangle is twice its breadth. If its length is decreased by 5 cm and the breadth is increased by 5 cm, the area of the rectangle is increased by 75 cm^2. Therefore , the length of the rectangle in cm is ?</p> <p>(A) 20</p> <p>(B) 30</p> <p>(C) 40</p> <p>(D) 50</p>	(C)
105	30-03-2021	301	<p>The algebraic sum of voltages around any closed path in a network is equal to _____</p> <p>(A) Infinity</p> <p>(B) 1</p> <p>(C) 0</p> <p>(D) Negative polarity</p>	(C)
105	30-03-2021	302	<p>In a AC circuit ,the current is expressed as $I=200 \sin 100\pi t$. In this circuit , the current rises from zero to peak value in time</p> <p>(A) 1/200 sec</p>	(A)

			<p>(B) 1/100 sec</p> <p>(C) 1/300 sec</p> <p>(D) 1/400 sec</p>	
105	30-03-2021	303	<p>The application of Thevenin's theorem in a circuit results in</p> <p>(A) an ideal voltage source</p> <p>(B) an ideal current source</p> <p>(C) a current source and an impedance in parallel</p> <p>(D) a voltage source and an impedance in series</p>	(D)
105	30-03-2021	304	<p>A sine wave has a frequency of 50 Hz. Its angular frequency is _____radian/ second.</p> <p>(A) 100π</p> <p>(B) 50π</p> <p>(C) 25π</p> <p>(D) 5π</p>	(A)
105	30-03-2021	305	<p>A current of 4 Amp through a coil of 1000 turns produces a magnetic flux of 400 lines. The self-inductance of the coil is</p> <p>(A) 0.1 mH</p> <p>(B) 100 mH</p> <p>(C) 1 mH</p> <p>(D) 0.001 mH</p>	(C)
105	30-03-2021	306	<p>Potential transformers are used to measure _____</p> <p>(A) high voltages</p> <p>(B) low voltages</p> <p>(C) high currents</p> <p>(D) low currents</p>	(A)

105	30-03-2021	307	<p>A double squirrel-cage induction motor has</p> <p>(A) Two series winding in stator</p> <p>(B) Two parallel windings in stator</p> <p>(C) Two parallel winding in Rotor</p> <p>(D) Two rotors moving in opposite direction</p>	(C)
105	30-03-2021	308	<p>Breather is provided in a transformer to</p> <p>(A) Absorb moisture of air during breathing</p> <p>(B) Provide cold air in the transformer</p> <p>(C) The filter of transformer oil</p> <p>(D) None of the options</p>	(A)
105	30-03-2021	309	<p>If input frequency is 50Hz for a full wave rectifier, the ripple frequency of it would be _____</p> <p>(A) 100Hz</p> <p>(B) 50Hz</p> <p>(C) 25Hz</p> <p>(D) 500Hz</p>	(A)
105	30-03-2021	310	<p>Generator internal fault protection is usually based on the principle of</p> <p>(A) Differential protection</p> <p>(B) Cross-differential protection</p> <p>(C) Negative sequence protection</p> <p>(D) All of the options</p>	(A)
105	30-03-2021	311	<p>The essential condition for parallel operation of two D.C. generators is that they have</p> <p>(A) Same kW rating</p> <p>(B) The same operation r.p.m.</p>	(C)

			<p>(C) The same drooping voltage characteristics</p> <p>(D) Same percentage regulation</p>	
105	30-03-2021	312	<p>The rotor slots are usually given slight skew in the squirrel case induction motor</p> <p>(A) To increase the tensile strength of the rotor bars and hence strength</p> <p>(B) To reduce the magnetic hum and locking tendency of the rotor</p> <p>(C) To see the copper used</p> <p>(D) Because of easiness in fabrication</p>	(B)
105	30-03-2021	313	<p>The scale of moving iron instrument is</p> <p>(A) Uniform</p> <p>(B) Cramped</p> <p>(C) Linear</p> <p>(D) All of the options</p>	(B)
105	30-03-2021	314	<p>In eddy-current damping systems of measuring instruments, the disc is usually made of</p> <p>(A) Non-conducting and Non-magnetic material</p> <p>(B) Non-conducting and magnetic material</p> <p>(C) Conducting and magnetic material</p> <p>(D) Conducting and Non-magnetic material</p>	(D)
105	30-03-2021	315	<p>An ammeter is convertible to a voltmeter by</p> <p>(A) Changing the scale</p> <p>(B) Putting a large resistance in parallel with the actual measuring part of the instrument</p> <p>(C) Putting a large resistance in series with the actual measuring part of the instrument</p> <p>(D) Simply installing the instrument in parallel with the circuit</p>	(C)

105	30-03-2021	316	<p>STATEMENT I - An ideal op-amp should have infinite bandwidth.</p> <p>STATEMENT II - An ideal op-amp should have infinite input resistance and zero output resistance.</p> <p>(A) Both Statement (I) and Statement (II) are individually true and Statement (II) is the correct explanation of Statement (I)</p> <p>(B) Both Statement (I) and Statement (II) are individually true and Statement (II) is not the correct explanation of Statement (I)</p> <p>(C) Statement (I) is true and Statement (II) if false.</p> <p>(D) Statement (I) and Statement (II) are false.</p>	(B)
105	30-03-2021	317	<p>The current drawn by a 220 V DC motor having armature resistance of 0.5 Ohm and back EMF of 200 V is----- . Assume separately excited DC machine.</p> <p>(A) 40 A</p> <p>(B) 44 A</p> <p>(C) 400 A</p> <p>(D) 440 A</p>	(A)
105	30-03-2021	318	<p>DC machines employ wave winding when there is a requirement for -</p> <p>(A) high current and low voltage rating</p> <p>(B) low current and high voltage rating</p> <p>(C) high current and high voltage rating</p> <p>(D) low current and low voltage rating</p>	(B)
105	30-03-2021	319	<p>The direction of rotation of a 3 phase induction motor can be reversed by-</p> <p>(A) using a star delta starter</p> <p>(B) DOL starter</p> <p>(C) Auto Transformer</p>	(D)

			(D) Interchanging any two of the supply lines	
105	30-03-2021	320	<p>The no load operating power factor of a transformer is approximately</p> <p>(A) 1</p> <p>(B) 0</p> <p>(C) 0.2</p> <p>(D) 0.8</p>	(C)
105	30-03-2021	321	<p>Which among the following is used for safety and protection of electrical equipment & operating personnel?</p> <p>(A) RCCB</p> <p>(B) MCB</p> <p>(C) MCCB</p> <p>(D) All of the options</p>	(D)
105	30-03-2021	322	<p>Stepper motors find wide applications because of</p> <p>(A) wide speed range</p> <p>(B) large power output</p> <p>(C) no requirement for field control</p> <p>(D) compatibility with digital systems</p>	(D)
105	30-03-2021	323	<p>Which among the following is reason behind creeping in an induction type energy meter?</p> <p>(A) Imperfect lag compensation</p> <p>(B) Imperfect Overload compensation</p> <p>(C) Misalignment of Brake Magnets</p> <p>(D) Over friction compensation</p>	(D)
105	30-03-2021	324	<p>Which among the following need NOT be ensured during paralleling of two three-phase alternators?</p>	(D)

			<p>(A) the voltage of the incoming alternator shall be equal to the already live alternator</p> <p>(B) the frequency of the incoming alternator shall be equal to the live alternator</p> <p>(C) the phase sequence of the incoming alternator shall be same as that of the live alternator</p> <p>(D) the incoming alternator rotor speed shall be same as that of the live alternator</p>	
105	30-03-2021	325	<p>Single Phase Induction motors use capacitors mainly for</p> <p>(A) improving power factor</p> <p>(B) improving starting torque</p> <p>(C) starting the motor</p> <p>(D) reducing the harmonics</p>	(C)
105	30-03-2021	326	<p>A three phase induction motor is operated at No load. After achieving the rated speed one of the phase gets cut off due to blown off fuse. Which among the following is likely to occur?</p> <p>(A) The motor would continue to run in the same direction</p> <p>(B) The motor would stop first and then run in reverse direction</p> <p>(C) The motor stops immediately</p> <p>(D) The motor continues to run in the same direction but with increased speed</p>	(A)
105	30-03-2021	327	<p>100 Ahr ideal battery when operated with a constant load current lasted for 8 hrs. The current drawn from the battery is</p> <p>(A) 0.08 A</p> <p>(B) 8.00 A</p> <p>(C) 12.5 A</p> <p>(D) 10.0 A</p>	(C)

105	30-03-2021	328	<p>An energy meter having a meter constant of 1200 rev/kWh is found to make 5 revolutions in 75 sec. The load power is</p> <p>(A) 500W</p> <p>(B) 100W</p> <p>(C) 200W</p> <p>(D) 1000W</p>	(C)
105	30-03-2021	329	<p>Distribution transformers are usually Delta Star type because of the following reason</p> <p>(A) To ensure availability of Single phase supply for distribution</p> <p>(B) Delta Star type transformers are more efficient</p> <p>(C) Delta Star transformers are easier to maintain</p> <p>(D) Due to small size and weight of Delta Star Transformers</p>	(A)
105	30-03-2021	330	<p>A Series R L C circuit having R as 10 Ohm, L as 0.5 mH and C as 20 microF is at resonance. The total reactance across the circuit is</p> <p>(A) 20 kilo Ohm</p> <p>(B) 10 Ohm</p> <p>(C) 0.5 Ohm</p> <p>(D) 30.5 Ohm</p>	(B)
105	30-03-2021	331	<p>Based on the standard resistance colour code - What is the value of resistance of a resistor having the colours in the following order? ORANGE ORANGE BROWN</p> <p>(A) $330 \pm 5\%$ Ohm</p> <p>(B) $3.3 \pm 20\%$ kilo Ohm</p> <p>(C) $330 \pm 20\%$ Ohm</p> <p>(D) $3.3 \pm 5\%$ kilo Ohm</p>	(C)

105	30-03-2021	332	<p>Which among the following is a best application of DC Series Motor?</p> <p>(A) Lathe</p> <p>(B) Hoists & Lifts</p> <p>(C) Centrifugal Pumps</p> <p>(D) Fans</p>	(B)
105	30-03-2021	333	<p>In a Δ connected source feeding a Y-connected load,</p> <p>(A) each phase voltage equals the difference of the corresponding load voltages</p> <p>(B) each phase voltage equals the corresponding load voltage</p> <p>(C) each phase voltage is one-third the corresponding load voltage</p> <p>(D) each phase voltage is 60° out of phase with the corresponding load voltage</p>	(A)
105	30-03-2021	334	<p>A phasor represents</p> <p>(A) the magnitude and a quantity direction</p> <p>(B) the width of a quantity</p> <p>(C) the phase angle</p> <p>(D) the magnitude of a quantity</p>	(A)
105	30-03-2021	335	<p>Which of the following protects a cable against mechanical injury?</p> <p>(A) Bedding</p> <p>(B) Sheath</p> <p>(C) Armouring</p> <p>(D) None of the options</p>	(C)
105	30-03-2021	336	<p>A synchronous motor can be used as a synchronous capacitor when it is</p> <p>(A) Under-loaded</p>	(D)

			<p>(B) Over-loaded</p> <p>(C) Under-excited</p> <p>(D) Over-excited</p>	
105	30-03-2021	337	<p>Transformers are rated in KVA instead of KW because.....</p> <p>(A) Load power factor is often not known</p> <p>(B) KVA is fixed whereas KW depends on load power factor</p> <p>(C) Total transformer loss depends on volt-ampere</p> <p>(D) It has become customary</p>	(C)
105	30-03-2021	338	<p>Directional over current relays have two exciting coils connected across</p> <p>(A) CT secondaries of two different phases</p> <p>(B) VT secondaries of two different phases</p> <p>(C) CT and VT secondaries of same phases</p> <p>(D) CT and VT secondaries of two different phases</p>	(C)
105	30-03-2021	339	<p>In network theory, The terminals across the source are..... if a current source is to be neglected</p> <p>(A) Open-circuited</p> <p>(B) Short-circuited</p> <p>(C) Replaced by a capacitor</p> <p>(D) Replaced by a source resistance</p>	(A)
105	30-03-2021	340	<p>If a battery is to be charged at a much higher rate as compared to normal charging rate, the charging should be restricted to</p> <p>(A) 95% of the capacity of battery</p> <p>(B) 80% of the capacity of battery</p> <p>(C) 55% of the capacity of battery</p>	(B)

			(D) 35% of the capacity of battery	
105	30-03-2021	341	<p>Torque weight ratio will be least in Instruments</p> <p>(A) Dynamometer</p> <p>(B) Moving iron</p> <p>(C) Moving coil</p> <p>(D) All of the options</p>	(A)
105	30-03-2021	342	<p>In a capacitor start single-phase motor, when capacitor is replaced by a resistance</p> <p>(A) Torque will increase</p> <p>(B) The motor will consume less power</p> <p>(C) Motor will run in reverse direction</p> <p>(D) Motor will continue to run in same direction</p>	(D)
105	30-03-2021	343	<p>While representing in the drawing, Switches and relays should be shown in ----- position with no operating force or applied energy</p> <p>(A) Normal</p> <p>(B) Closed</p> <p>(C) Offset</p> <p>(D) Application</p>	(A)
105	30-03-2021	344	<p>The principle views associated with orthographic projection are</p> <p>(A) Front View</p> <p>(B) Right side view</p> <p>(C) Top view</p> <p>(D) All of the options</p>	(D)
105	30-03-2021	345	<p>Hatching lines are drawn at ___ degree to reference line</p>	(B)

			(A) 30 (B) 45 (C) 60 (D) 90	
105	30-03-2021	346	The isometric projection of a sphere is a (A) Circle (B) Ellipse (C) Hyperbola (D) Parabola	(A)
105	30-03-2021	347	There are two main types of projection in drawings (A) Parallel and Orthographic (B) Station-point and Perspective (C) Parallel and Convergent (D) Perspective and Parallel	(D)
105	30-03-2021	348	A three-phase generator is connected to three 90Ω load resistors. Each coil generates 120 V ac. A common neutral line exists. How much current flows through the common neutral line? (A) 0 Amps (B) 1.33 Amps (C) 3.99 Amps (D) 2.66 Amps	(A)
105	30-03-2021	349	Static capacitors are rated in terms of (A) kW (B) kWh (C) kVAR (D) None of the options	(C)

105	30-03-2021	350	<p>A waveform has a baseline of 3 V, a duty cycle of 20%, and an amplitude of 8 V. The average voltage value is</p> <p>(A) 4 V</p> <p>(B) 4.6 V</p> <p>(C) 1.6 V</p> <p>(D) 11 V</p>	(A)
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