

Subject Code : 103 ▼

Subject Code	Exam Date	Q Id	Questions	Answer Key
103	12-02-2021	321	<p>Government of India has decided to celebrate the birthday of Netaji Subhas Chandra Bose on every year as “ PARAKRAM DIWAS” to inspire people of the country, especially the youth, to act with fortitude in the face of adversity as Netaji did, and to infuse in them a spirit of patriotic fervour.</p> <p>(A) 23rd January</p> <p>(B) 3rd January</p> <p>(C) 23rd December</p> <p>(D) 3rd December</p>	(A)
103	12-02-2021	322	<p>Fouaad Mirza, who was recently seen in news, is a famous sportsperson of which event, qualified to represent India in the Tokyo Olympics?</p> <p>(A) Javelin Throw</p> <p>(B) Equestrian sports</p> <p>(C) Shot put</p> <p>(D) Boxing</p>	(B)
103	12-02-2021	323	<p>How is the Railway Protection Force (RPF) recently renamed by the Ministry of Railways?</p> <p>(A) Railway Protection Service</p> <p>(B) Indian Railway Force Service</p> <p>(C) Indian Railway Service</p> <p>(D) Indian Railway Protection Force Service</p>	(D)
103	12-02-2021	324	<p>Which Indian body recently warned against recording its sessions using mobile phones?</p> <p>(A) Supreme Court</p> <p>(B) Rajya Sabha</p>	(B)

			<p>(C) RBI</p> <p>(D) Ministry of Defence</p>	
103	12-02-2021	325	<p>Chauri Chaura is a town located in which Indian state/ UT?</p> <p>(A) Uttar Pradesh</p> <p>(B) Punjab</p> <p>(C) Bihar</p> <p>(D) West Bengal</p>	(A)
103	12-02-2021	326	<p>Look carefully for the pattern, and then choose which pair of numbers comes next.</p> <p>42 40 38 35 33 31 28</p> <p>(A) 27 30</p> <p>(B) 26 24</p> <p>(C) 26 23</p> <p>(D) 34 30</p>	(B)
103	12-02-2021	327	<p>A,B,C,D,E,F and G are travelling in three buses X,Y,Z with at least two of them in any of these buses. Each of them likes a different sweet viz. Petha, Rasmalai, Rasagolla, Kheer, Sandesh, Chamcham and Jalebi, but not necessarily in the same order.</p> <p>B is travelling in bus Y with E. E's favourite sweet is Jalebi. Those who travel in Bus X do not like Petha and Kheer. The one who likes Rasmalai travels only with G in Bus Z. The one whose favourite sweet is Sandesh does not travel in the same bus with either E or G. A does not travel in Bus Y. A likes Chamcham. D and F are travelling in the same bus. F does not like Rasagolla. The one whose favourite sweet is Kheer does not travel in bus Y.</p> <p>In which bus three of them are travelling?</p>	(B)

			<p>(A) Either X or Y</p> <p>(B) Only X</p> <p>(C) Only Z</p> <p>(D) Only Y</p>	
103	12-02-2021	328	<p>'Reading' is related to 'knowledge' in the same way as 'Work' is related to:</p> <p>(A) Money</p> <p>(B) Employment</p> <p>(C) Experience</p> <p>(D) Engagement</p>	(C)
103	12-02-2021	329	<p>Find the day of the week on 27th Dec 1985.</p> <p>(A) Sunday</p> <p>(B) Monday</p> <p>(C) Friday</p> <p>(D) Thursday</p>	(C)
103	12-02-2021	330	<p>In a row of 20 persons, the position of Riya from the left side of the row is 6th. Find the no. of persons after Riya in the row?</p> <p>(A) 14</p> <p>(B) 15</p> <p>(C) 16</p> <p>(D) 17</p>	(A)
103	12-02-2021	331	<p>Rearrange the jumbled letters to make meaningful words and then select the one which is different.</p> <p>(A) OMESU</p> <p>(B) ROTINOM</p> <p>(C) RETNIRP</p>	(D)

			(D) RETIAW	
103	12-02-2021	332	<p>Choose the synonym of the word "AUGUST"</p> <p>(A) Common</p> <p>(B) Dignified</p> <p>(C) Ridiculous</p> <p>(D) Petty</p>	(B)
103	12-02-2021	333	<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>Because of the Internet, working at jobs at home <u>have become</u> much more common.</p> <p>(A) has become</p> <p>(B) had become</p> <p>(C) may become</p> <p>(D) No correction</p>	(A)
103	12-02-2021	334	<p>Fill up with the correct preposition:</p> <p>I will have finished this project Friday.</p> <p>(A) by</p> <p>(B) from</p> <p>(C) since</p> <p>(D) on</p>	(A)
103	12-02-2021	335	<p>Complete the following sentence meaningfully with options given:</p> <p>There is a general _____ in the State that our ethics are declining and that our moral standards are _____.</p> <p>(A) optimism, improving</p>	(D)

			<p>(B) idea, futile</p> <p>(C) feeling, normalising</p> <p>(D) complaint, deteriorating</p>	
103	12-02-2021	336	<p>What is the correct meaning of the underlined phrase in the following sentence:</p> <p>My friend had the <u>special right or advantage</u> of visiting England as the official guest of the Queen.</p> <p>(A) reputation</p> <p>(B) masterpiece</p> <p>(C) extravagance</p> <p>(D) privilege</p>	(D)
103	12-02-2021	337	<p>Antonym of Admire</p> <p>(A) cheerful</p> <p>(B) detest</p> <p>(C) clumsy</p> <p>(D) dismay</p>	(B)
103	12-02-2021	338	<p>Select the correct sentence.</p> <p>(A) If the cab had started on time, she would have reached office on time.</p> <p>(B) If the cab would have been started on time, she had reached office on time.</p> <p>(C) If the cab would have started on time, she would have reached the office on time.</p> <p>(D) If the cab would have started on time, she had reached office on time.</p>	(A)
103	12-02-2021	339	<p>Choose the correct alternative which can be substituted for the below given sentence:</p> <p>The sales manager tried <u>every trick in the book</u> to sell the flat to my uncle, but they failed.</p>	(C)

			<p>(A) Try to give the least discount</p> <p>(B) Not ready to bargain</p> <p>(C) Try every possible way</p> <p>(D) Stuck in the midway</p>	
103	12-02-2021	340	<p>Choose the correct alternative which can be substituted for the below given clause:</p> <p>'Lasting for a very short time'</p> <p>(A) Gregarious</p> <p>(B) Snob</p> <p>(C) Ephemeral</p> <p>(D) Belligerent</p>	(C)
103	12-02-2021	341	<p>12 men or 15 women can finish a work in 24 days, in how many days can the same work be finished by 8 men and 8 women?</p> <p>(A) 20</p> <p>(B) 15</p> <p>(C) 22</p> <p>(D) 12</p>	(A)
103	12-02-2021	342	<p>A man can cover a certain distance in 42 minutes. He covers two thirds of it at 4 Km/hr and the remaining 5 Km/hr. The total distance is</p> <p>(A) 3 km</p> <p>(B) 9 km</p> <p>(C) 1 km</p> <p>(D) 4.5 km</p>	(A)
103	12-02-2021	343	<p>Within a rectangular garden 10 m wide and 20 m long, we wish to pave a walk around the borders of uniform width so as to leave an area of 96 m² for flowers. How wide should the walk be?</p>	(B)

			<p>(A) 1 m</p> <p>(B) 2 m</p> <p>(C) 3 m</p> <p>(D) 4 m</p>	
103	12-02-2021	344	<p>A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 4 km/hr, find the time taken by the boat to go 68 km downstream.</p> <p>(A) 3 hours</p> <p>(B) 4 hours</p> <p>(C) 5 hours</p> <p>(D) 8 hours</p>	(B)
103	12-02-2021	345	<p>If 120 is 20% of a number, then 120% of that number will be :</p> <p>(A) 560</p> <p>(B) 720</p> <p>(C) 680</p> <p>(D) 480</p>	(B)
103	12-02-2021	346	<p>A, B, C enter into a partnership investing Rs. 35,000 and Rs. 45,000 and Rs. 55,000 respectively. The respectively shares of A, B, C, in an annual profit of Rs. 40,500 are:</p> <p>(A) Rs. 10,500, Rs. 13,500, Rs. 16,500</p> <p>(B) Rs. 11,500, Rs. 13,000, Rs. 16,000</p> <p>(C) Rs. 11,000, Rs. 14,000, Rs. 15,500</p> <p>(D) Rs. 11,500, Rs. 12,500 , Rs. 16,500</p>	(A)
103	12-02-2021	347	<p>Two pipes fill a tank in 10 hours and 12 hours respectively, while a third pipe empties the full tank in 20 hours. If all the three pipes operate simultaneously, in how much time the tank will be filled?</p>	(C)

			<p>(A) 7 hours</p> <p>(B) 8 hours</p> <p>(C) 7 hrs. 30 minutes</p> <p>(D) 8 hrs. 30 minutes</p>	
103	12-02-2021	348	<p>A typist uses a sheet measuring 20 cm by 30 cm lengthwise. If a margin of 2 cm is left on each side and a 3 cm margin on top and bottom, then percent of the pages used for typing</p> <p>(A) 35</p> <p>(B) 55</p> <p>(C) 64</p> <p>(D) 71</p>	(C)
103	12-02-2021	349	<p>In a class with a certain number of students if one new student weighing 50 kg is added, then average weight of class is increased by 1 kg. If one more student weighing 50 kg is added, then the average weight of the class increases by 1.5 kg over the original average. What is the original average weight (in kg) of the class?</p> <p>(A) 46</p> <p>(B) 42</p> <p>(C) 45</p> <p>(D) 47</p>	(D)
103	12-02-2021	350	<p>In 10 years, A will be twice as old as B was 10 years ago. If A is now 9 years older than B, the present age of B is:</p> <p>(A) 19</p> <p>(B) 29</p> <p>(C) 39</p> <p>(D) 10</p>	(C)
103	12-02-2021	351	<p>The brake resistors usually have:</p>	(A)

			<p>(A) high power rating and relatively low ohmic values</p> <p>(B) low power rating and relatively high ohmic values</p> <p>(C) low power rating and low ohmic values</p> <p>(D) None of the options</p>	
103	12-02-2021	352	<p>Resistor type with higher power rating are known as:</p> <p>(A) Metal film resistor</p> <p>(B) Carbon resistor</p> <p>(C) Wire wound resistor</p> <p>(D) Light dependent resistor</p>	(C)
103	12-02-2021	353	<p>As the temperature increases resistance of the semiconductor</p> <p>(A) Increases</p> <p>(B) Decreases</p> <p>(C) Remains same</p> <p>(D) Initially increases and then decreases</p>	(B)
103	12-02-2021	354	<p>Which among the following is an insulator</p> <p>(A) Germanium</p> <p>(B) Silicon</p> <p>(C) Mica</p> <p>(D) Selenium</p>	(C)
103	12-02-2021	355	<p>Copper is widely preferred for making electrical wires, because</p> <p>(A) Copper is a good conductor of electricity</p> <p>(B) Copper is an insulator</p> <p>(C) Copper is a poor conductor of electricity</p>	(A)

			(D) Copper is easily available	
103	12-02-2021	356	<p>Which of the following finds application as Switching device in modern power devices</p> <p>(A) Silicon Controlled Rectifier (SCR)</p> <p>(B) Bipolar Junction Transistor (BJT)</p> <p>(C) Insulated-Gate Bipolar Transistor (IGBT)</p> <p>(D) Metal–Oxide–Semiconductor Field-Effect Transistor (MOSFET)</p>	(C)
103	12-02-2021	357	<p>Among the following, select the basic circuit function/s performed by transistors:-</p> <p>I. Amplification</p> <p>II. Switching</p> <p>(A) I only</p> <p>(B) II only</p> <p>(C) Both I and II</p> <p>(D) None of the functions</p>	(C)
103	12-02-2021	358	<p>If the time period T of a sine wave is 50ms, its frequency is</p> <p>(A) 20Hz</p> <p>(B) 20kHz</p> <p>(C) 50Hz</p> <p>(D) 50kHz</p>	(A)
103	12-02-2021	359	<p>RS232 is a</p> <p>(A) Parallel bus for data communication</p> <p>(B) Serial bus for data communication</p> <p>(C) Binary Code</p> <p>(D) Power diode</p>	(B)

103	12-02-2021	360	The reduced form of $(A+B)(A+C)$ is _____ (A) $AB+BC$ (B) $B+AC$ (C) $(A+B)C$ (D) $A+BC$	(D)
103	12-02-2021	361	No of select lines in a 4 to 1 multiplexer (A) 1 (B) 2 (C) 3 (D) 4	(B)
103	12-02-2021	362	Input/output signals of PLC(Programmable Logic Controller)s falls under range of (A) 0-100mA (B) 0-20mA (C) 4-100mA (D) 4-20mA	(D)
103	12-02-2021	363	Choose the correct option regarding Common Mode in Op-amp: (A) both inputs are grounded (B) both outputs are grounded (C) the output signals are in-phase (D) same signal appears on both inputs	(D)
103	12-02-2021	364	Propagation delay due to flip flops is larger in _____ (A) Synchronous counter (B) Ring counter	(C)

			(C) Asynchronous (Ripple) counter (D) Johnson counter	
103	12-02-2021	365	Working principle of Optical fibers is (A) Refraction (B) Total Internal Reflection (C) Scattering (D) Dispersion	(B)
103	12-02-2021	366	Which of the following is known as heat radiation? (A) Infrared radiation (B) Gamma rays (C) Microwave (D) Radio waves	(A)
103	12-02-2021	367	What is the approximate frequency limit of the optical fiber? (A) 20 GHz (B) 1 MHz (C) 100 MHz (D) 40 MHz	(A)
103	12-02-2021	368	For a super heterodyne receiver with an IF of 455 kHz, calculate image frequency at 1400kHz. (A) 2100 kHz (B) 2310 kHz (C) 1650 kHz (D) 910 kHz	(B)
103	12-02-2021	369	Content of the program counter is _____ (A) The address of the instruction to be executed	(A)

			<p>next</p> <p>(B) The address of the instruction being executed</p> <p>(C) Value after arithmetic operations</p> <p>(D) Counts the number of instructions that have been executed</p>	
103	12-02-2021	370	<p>The voltage gain of an amplifier is expressed</p> <p>(A) as Volts</p> <p>(B) in db</p> <p>(C) as a Number</p> <p>(D) unitless</p>	(B)
103	12-02-2021	371	<p>The rating of a resistor is measured in</p> <p>(A) ohms</p> <p>(B) watts</p> <p>(C) amperes</p> <p>(D) both ohms and watts</p>	(D)
103	12-02-2021	372	<p>Semiconductor has a</p> <p>(A) Negative Temperature coefficient of resistance</p> <p>(B) Positive Temperature coefficient of resistance</p> <p>(C) Constant Temperature coefficient of resistance</p> <p>(D) Zero Temperature coefficient of resistance</p>	(A)
103	12-02-2021	373	<p>For Germanium PN Junction the maximum value of barrier potential is</p> <p>(A) 0.1 V</p> <p>(B) 1.3 V</p> <p>(C) 0.3 V</p> <p>(D) 1.7 V</p>	(C)

103	12-02-2021	374	<p>In a photoconductive diode</p> <p>(A) As light increases, resistance increases</p> <p>(B) As light increases, resistance decreases</p> <p>(C) Resistance remains constant even when light varies</p> <p>(D) Resistance is null when light increases</p>	(B)
103	12-02-2021	375	<p>The output impedance of an ideal op-amp is</p> <p>(A) Zero</p> <p>(B) 50 ohm</p> <p>(C) 100 ohm</p> <p>(D) Infinite</p>	(D)
103	12-02-2021	376	<p>The NOR gate output will be high if the two inputs are</p> <p>(A) 00</p> <p>(B) 01</p> <p>(C) 10</p> <p>(D) 11</p>	(A)
103	12-02-2021	377	<p>The boolean expression for a 3-input AND gate is</p> <p>(A) $X=AB$</p> <p>(B) $X=ABC$</p> <p>(C) $X=AB+C$</p> <p>(D) $X=A+B+C$</p>	(B)
103	12-02-2021	378	<p>The sweep generator of a CRO is used to produce</p> <p>(A) Sinusoidal voltage for the horizontal deflection of electron beam</p> <p>(B) Saw tooth voltage for the vertical deflection of electron beam</p>	(D)

			<p>(C) Sinusoidal voltage for the vertical deflection of electron beam</p> <p>(D) Saw tooth voltage for the horizontal deflection of electron beam</p>	
103	12-02-2021	379	<p>LVDT is a/an _____ transducer</p> <p>(A) Magneto-strict ion</p> <p>(B) Inductive</p> <p>(C) Resistive</p> <p>(D) Eddy Current</p>	(C)
103	12-02-2021	380	<p>How is a J-K flip flop made to toggle?</p> <p>(A) J=0, K=0</p> <p>(B) J=1, K=0</p> <p>(C) J=0, K=1</p> <p>(D) J=1, K=1</p>	(D)
103	12-02-2021	381	<p>Following is a 16 bit register for 8085 microprocessor</p> <p>(A) Stack pointer</p> <p>(B) Accumulator</p> <p>(C) Register B</p> <p>(D) Register C</p>	(A)
103	12-02-2021	382	<p>Which of the following is not a possible cause for optical fiber loss?</p> <p>(A) Impurities</p> <p>(B) Attenuation in glass</p> <p>(C) Stepped index operation</p> <p>(D) Micro-bending</p>	(C)
103	12-02-2021	383	<p>The secondary winding of which of the following transformer is always kept closed</p>	(A)

			<p>(A) Current Transformer</p> <p>(B) Voltage Transformer</p> <p>(C) Power Transformer</p> <p>(D) Step Down transformer</p>	
103	12-02-2021	384	<p>Parity Bits are used</p> <p>(A) For Encryption of Data</p> <p>(B) To Transmit faster</p> <p>(C) To detect errors</p> <p>(D) To identify the user</p>	(C)
103	12-02-2021	385	<p>Which of the following operating systems does not support more than one program at a time?</p> <p>(A) Linux</p> <p>(B) DOS</p> <p>(C) MAC</p> <p>(D) Windows</p>	(B)
103	12-02-2021	386	<p>The input to a comparator is sine wave,the output is</p> <p>(A) ramp voltage</p> <p>(B) sine wave</p> <p>(C) rectangular wave</p> <p>(D) saw tooth wave</p>	(C)
103	12-02-2021	387	<p>For JFET,when VDS is increased beyond the pinch off voltage,the drain current</p> <p>(A) increases</p> <p>(B) decreases</p> <p>(C) remains constant</p> <p>(D) first decreases then increases</p>	(C)

103	12-02-2021	388	<p>Which of the following diode is most suitable for detection of microwave signal?</p> <p>(A) P-I-N DIODE</p> <p>(B) SCHOTTKY BARRIER DIODE</p> <p>(C) VARACTOR DIODE</p> <p>(D) P-N JUNCTION DIODE</p>	(B)
103	12-02-2021	389	<p>Form factor of sine wave is</p> <p>(A) 1</p> <p>(B) 1.11</p> <p>(C) 1.44</p> <p>(D) 1.57</p>	(B)
103	12-02-2021	390	<p>How many select lines are required for a 1 to 8 demultiplexer?</p> <p>(A) 2</p> <p>(B) 3</p> <p>(C) 4</p> <p>(D) 5</p>	(B)
103	12-02-2021	391	<p>The purpose of a “shield” wire on an instrument signal cable is to</p> <p>(A) Hold a steadier setpoint value</p> <p>(B) Minimize the possibility of sparking</p> <p>(C) Minimize electrical noise</p> <p>(D) Ensure technician safety</p>	(C)
103	12-02-2021	392	<p>The breakdown mechanism in a lightly doped p-n junction under reverse biased condition is called?</p> <p>(A) Avalanche Breakdown</p> <p>(B) Zener Breakdown</p>	(A)

			<p>(C) Breakdown By Tunnelling</p> <p>(D) High Voltage Tunneling</p>	
103	12-02-2021	393	<p>The gain of the amplifierwhen negative feedback is added</p> <p>(A) increases</p> <p>(B) remains unchanged</p> <p>(C) reduces</p> <p>(D) becomes infinite</p>	(C)
103	12-02-2021	394	<p>N-type silicon is obtained by</p> <p>(A) Doping with Tetravalent Element</p> <p>(B) Doping with Pentavalent Element</p> <p>(C) Doping with Trivalent Element</p> <p>(D) Doping with a Mixture of Trivalent & Tetravalent Element</p>	(B)
103	12-02-2021	395	<p>A pattern displayed by oscilloscope which has a steady characteristic is called</p> <p>(A) lissajous</p> <p>(B) Nyquist pattern</p> <p>(C) Barkhausens criteria</p> <p>(D) Fermats pattern</p>	(A)
103	12-02-2021	396	<p>X Band Radar Frequency</p> <p>(A) 8GHz-12GHz</p> <p>(B) 4GHz-8GHz</p> <p>(C) 2GHz-4GHz</p> <p>(D) 1GHz-2GHz</p>	(A)
103	12-02-2021	397	<p>Moving coil instrument make use of</p>	(A)

			<p>(A) electromagnetic effect</p> <p>(B) electrostatic effect</p> <p>(C) electro thermal effect</p> <p>(D) photovoltaic effect</p>	
103	12-02-2021	398	<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)
103	12-02-2021	399	<p>Parity bits are used for the purpose of _____ in digital systems</p> <p>(A) Power monitoring</p> <p>(B) Error detection</p> <p>(C) Symmetry Generation</p> <p>(D) Time Stamping data</p>	(B)
103	12-02-2021	400	<p>Strain gauge, LVDT and thermocouple are examples of</p> <p>(A) Active transducers</p> <p>(B) Passive transducers</p> <p>(C) Analog transducers</p> <p>(D) Primary transducers</p>	(C)