

Subject Code : 103 ▾

Subject Code	Exam Date	Q Id	Questions	Answer Key
103	03-12-2020	131	<p>Who among following players has won highest number of titles at one particular Grand Slam singles event?</p> <p>(A) Rafael Nadal</p> <p>(B) Pete Sampras</p> <p>(C) Roger Federer</p> <p>(D) Novak Djokovic</p>	(A)
103	03-12-2020	132	<p>Which of the following Indian actor was conferred with UNDP's SDG Special Humanitarian Action Award?</p> <p>(A) Amitabh Bachchan</p> <p>(B) Deepika Padukone</p> <p>(C) Shah Rukh Khan</p> <p>(D) Sonu Sood</p>	(D)
103	03-12-2020	133	<p>PRAGATI scheme launched by GoI in 2015 is a multi-modal and multi-purpose platform that aims to address the grievances of a common man. Full form of PRAGATI is</p> <p>(A) Pro-Active Governance and Timely Implementation</p> <p>(B) Pro-Active Grievance and Timely Implementation</p> <p>(C) Pro-Active Governance and Timely Action</p> <p>(D) Pro-Active Governance and Truthful Action</p>	(A)
103	03-12-2020	134	<p>Which of the following books is written by Rabindranath Tagore?</p>	(A)

			<p>(A) RaktaKarabi</p> <p>(B) Chidambara</p> <p>(C) Anand Math</p> <p>(D) Durgesh Nandini</p>	
103	03-12-2020	135	<p>The call sign of the aircraft with the President, Vice President or Prime Minister of India on board.</p> <p>(A) Presidential aircraft</p> <p>(B) Air India One</p> <p>(C) Air India</p> <p>(D) Air Force One</p>	(B)
103	03-12-2020	136	<p>Replace the following with a suitable single word.</p> <p>To cause troops, etc. to spread out in readiness for battle</p> <p>(A) Disperse</p> <p>(B) Deploy</p> <p>(C) Collocate</p> <p>(D) Align</p>	(B)
103	03-12-2020	137	<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: A noise started above their heads. P : But people did not take it seriously. Q : That was to show everyone that there was something wrong. R : It was a dangerous thing to do. S : For, within minutes the ship began to sink.</p>	(A)

			<p>S6: Nearly 200 lives were lost on the fateful day.</p> <p>(A) QPRS</p> <p>(B) PQSR</p> <p>(C) PRQS</p> <p>(D) QPSR</p>	
103	03-12-2020	138	<p>Give synonym for the word</p> <p>' industrious'</p> <p>(A) indolent</p> <p>(B) prompt</p> <p>(C) loafing</p> <p>(D) diligent</p>	(D)
103	03-12-2020	139	<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 took the cycle <i><u>which he bought yesterday.</u></i></p> <p>(A) No improvement</p> <p>(B) that he bought yesterday</p> <p>(C) that which he had bought yesterday</p> <p>(D) that he had bought yesterday</p>	(D)
103	03-12-2020	140	<p>Candid is to indirect as honest is to</p> <p>(A) frank</p> <p>(B) wicked</p> <p>(C) untruthful</p>	(C)

			(D) truthful	
103	03-12-2020	141	<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 <u>language</u></p> <p>(A) tongue</p> <p>(B) slang</p> <p>(C) writing</p> <p>(D) words</p>	(D)
103	03-12-2020	142	<p>Read the definition and all four choices carefully, and find the answer that provides the best example of the given definition.</p> <p>Violating an Apartment Lease occurs when a tenant does something prohibited by the legally binding document that he or she has signed with a landlord. Which situation below is the best example of Violating an Apartment Lease?</p> <p>(A) Tom has decided to move to another city, so he calls his landlord to tell him that he is not interested in renewing his lease when it expires next month.</p> <p>(B) Mary recently lost her job and, for the last three months, has neglected to pay her landlord the monthly rent they agreed upon in writing when she moved into her apartment eight months ago.</p> <p>(C) Mark writes a letter to his landlord that lists numerous complaints about the apartment he has agreed to rent for two years.</p> <p>(D) Leslie thinks that her landlord is neglecting the building in which she rents an apartment. She calls her attorney to ask for advice.</p>	(B)
103	03-12-2020	143	Look at this series:	(D)

			<p>V, VIII, XI, XIV, __, XX</p> <p>What number should fill the blank?</p> <p>(A) IX</p> <p>(B) XXIII</p> <p>(C) XV</p> <p>(D) XVII</p>	
103	03-12-2020	144	<p>8 persons E, F, G, H, I, J, K and L are seated around a square table - two on each side. There are 3 ladies who are not seated next to each other. J is between L and F. G is between I and F. H, a lady member is second to the left of J. F, a male member is seated opposite to E, a lady member. There is a lady member between F and I. What is true about J and K ?</p> <p>(A) J is male, K is female</p> <p>(B) Both are male</p> <p>(C) J is female, K is male</p> <p>(D) Both are female</p>	(B)
103	03-12-2020	145	<p>If M x N means M is the daughter of N; M + N means M is the father of N; M % N means M is the mother of N and M - N means M is the brother of N then P % Q + R - T x K indicates which relation of P to K?</p> <p>(A) Daughter-in-law</p> <p>(B) Mother-in-law</p> <p>(C) Sister-in-law</p> <p>(D) Aunt</p>	(B)
103	03-12-2020	146	<p>A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is B's share?</p> <p>(A) Rs. 500</p>	(C)

			(B) Rs. 1500 (C) Rs. 2000 (D) Rs. 2500	
103	03-12-2020	147	Ayesha's father was 38 years of age when she was born while her mother was 36 years old when her brother four years younger to her was born. What is the difference between the ages of her parents? (A) 6 years (B) 4 years (C) 2 years (D) 8 years	(A)
103	03-12-2020	148	A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is (A) 250 (B) 276 (C) 280 (D) 285	(D)
103	03-12-2020	149	The price of 2 sarees and 4 shirts is Rs. 1600. With the same money one can buy 1 saree and 6 shirts. If one wants to buy 12 shirts, how much shall he have to pay ? (A) Rs. 4800 (B) Rs. 2400 (C) Rs. 1200 (D) Rs. 2800	(B)
103	03-12-2020	150	A rectangular park 60 m long and 40 m wide has two concrete crossroads running in the middle of	(C)

			<p>the park and rest of the park has been used as a lawn. If the area of the lawn is 2109 sq. m, then what is the width of the road?</p> <p>(A) 2.91 m</p> <p>(B) 5.82 m</p> <p>(C) 3 m</p> <p>(D) 6 m</p>	
103	03-12-2020	151	<p>Two resistors are said to be connected in series when</p> <p>(A) both carry the same value of current</p> <p>(B) total current equals the sum of branch currents</p> <p>(C) sum of IR drops equals battery emf</p> <p>(D) they provide only one path for the current flow</p>	(D)
103	03-12-2020	152	<p>What is the fundamental concept of the GMDSS?</p> <p>(A) It is intended to automate and improve emergency communication in the marine industry</p> <p>(B) It is intended to automate and improve existing digital selective calling procedure and techniques</p> <p>(C) It is intended to provide vessels with a compulsory collision avoidance system when they are operating in water that are also occupied by non-compulsory vessels</p> <p>(D) It is intended to provide more effective but lower cost commercial communications</p>	(A)
103	03-12-2020	153	<p>An autotransformer consists of 200-turn winding connected to 200V a.c supply mains. For getting 24V output, the winding should be tapped at turn numbers.</p> <p>(A) 24</p>	(A)

			(B) 12 (C) 100 (D) 72	
103	03-12-2020	154	Doping materials are called impurities because they (A) decrease the number of charge carriers (B) change the chemical properties of semiconductors (C) make semiconductors less than 100 percent pure (D) alter the crystal structure of the pure semiconductors	(D)
103	03-12-2020	155	The capacitance of a varactor diode can be changed by (A) increasing its doping level (B) changing its forward bias (C) changing the barrier potential (D) changing the reverse voltage	(C)
103	03-12-2020	156	A coil has an inductance of 1 H if current changing at the rate of 2A/s induces (A) one volt in it (B) two volts in another coil (C) two volts in it (D) half a volt in it	(C)
103	03-12-2020	157	Differential transformer transducer is used for the measurement of (A) displacement	(A)

			(B) liquid level (C) temperature (D) speech and music	
103	03-12-2020	158	Constructionally, a solar cell consists of a (A) semiconductor bonded to a metal (B) piece of silicon (C) P-N junction (D) photoemissive material	(C)
103	03-12-2020	159	An SCS has (A) four layers and three terminals (B) three layers and four terminals (C) two anodes and two gates (D) one anode, one cathode and two gates	(D)
103	03-12-2020	160	To obtain very high input and output impedance in a feedback amplifier, the topology must be (A) voltage-series (B) current-series (C) voltage-shunt (D) current-shunt	(C)
103	03-12-2020	161	A non-triggered oscilloscope is one which (A) has no sweep generator (B) cannot produce a stable stationary screen display (C) has a continuously running time-base generator (D) can display a portion of the input signal	(C)

			waveform	
103	03-12-2020	162	<p>The current- delivering capacity of a cell depends on</p> <p>(A) condition of electrolyte</p> <p>(B) quality of electrolyte</p> <p>(C) physical size of electrode</p> <p>(D) All of the options</p>	(D)
103	03-12-2020	163	<p>The rms value of a sinusoidal ac current is equals to its value at an angle ofdegrees.</p> <p>(A) 60</p> <p>(B) 45</p> <p>(C) 30</p> <p>(D) 90</p>	(B)
103	03-12-2020	164	<p>The main reason why electrons can tunnel through a P-N junction is that</p> <p>(A) they have high energy</p> <p>(B) barrier potential is very low</p> <p>(C) depletion layer is extremely thin</p> <p>(D) impurity level is low</p>	(C)
103	03-12-2020	165	<p>Cosmic noise is caused by</p> <p>(A) lightning discharges</p> <p>(B) solar eruptions</p> <p>(C) distant stars</p> <p>(D) industrial electrical discharges</p>	(C)
103	03-12-2020	166	<p>Precision measurement of resistances is generally carried out by</p>	(D)

			(A) potentiometer method (B) CRO method (C) voltmeter -ammeter method (D) bridge method	
103	03-12-2020	167	The decimal equivalent of the hexadecimal number E5 is (A) 279 (B) 229 (C) 427 (D) 300	(B)
103	03-12-2020	168	The primary function of a clamper circuit is to (A) suppress variations in signal voltage (B) raise positive half-cycle of the signal (C) lower negative half- cycle of the signal (D) introduce a dc level into an ac signal	(D)
103	03-12-2020	169	A thermistor (A) is made of a semiconductor like silicon (B) has positive temperature coefficient (C) cannot be used for measuring temperatures below 0 degree C (D) has negative temperature coefficient	(D)
103	03-12-2020	170	A square voltage wave is applied to a RC circuit having a short time constant. The waveshape of the charging current (A) resembles the waveshape of the applied voltage	(C)

			<p>(B) has rounded corners</p> <p>(C) has sharp peaks coinciding with leading edge of the applied voltage pulse</p> <p>(D) is triangular</p>	
103	03-12-2020	171	<p>The collector characteristics of a CE - connected transistor may be used to find its</p> <p>(A) input resistance</p> <p>(B) base current</p> <p>(C) output resistance</p> <p>(D) voltage gain</p>	(C)
103	03-12-2020	172	<p>The main idea behind the use of a coupling circuit is to</p> <p>(A) connect two independent circuits</p> <p>(B) transfer energy from one circuit to another</p> <p>(C) reject unwanted frequencies</p> <p>(D) utilize mutual inductance</p>	(B)
103	03-12-2020	173	<p>The major cause of creeping in an energy meter is</p> <p>(A) over-compensation for friction</p> <p>(B) mechanical vibrations</p> <p>(C) excessive voltage across the potential coil</p> <p>(D) stray magnetic fields</p>	(C)
103	03-12-2020	174	<p>The bandwidth of an amplifier may be increased by</p> <p>(A) decreasing the capacitance of its bypass capacitors</p> <p>(B) minimizing its stray capacitances</p> <p>(C) increasing input signal frequency</p>	(B)

			(D) cascading it	
103	03-12-2020	175	<p>When in a negative scaler, both R1 and Rf are reduced to zero, the circuit functions as</p> <p>(A) integrator</p> <p>(B) subtractor</p> <p>(C) comparator</p> <p>(D) unity follower</p>	(D)
103	03-12-2020	176	<p>An ideal power supply is characterised by</p> <p>(A) Very large output resistance</p> <p>(B) Very small output resistance</p> <p>(C) Zero internal resistance</p> <p>(D) Infinite internal resistance</p>	(C)
103	03-12-2020	177	<p>For a full-wave rectifier sine wave, form factor is</p> <p>(A) 1.55</p> <p>(B) 1.44</p> <p>(C) 1.22</p> <p>(D) 1.11</p>	(D)
103	03-12-2020	178	<p>In general, LEDs operate at voltage levels from _____ V to _____ V.</p> <p>(A) 1.0, 3.0</p> <p>(B) 1.7, 3.3</p> <p>(C) 0.5, 4.0</p> <p>(D) None of the options</p>	(B)
103	03-12-2020	179	<p>At series or parallel resonance, the circuit power factor is</p>	(C)

			(A) 0 (B) 0.8 leading (C) 1 (D) 0.8 lagging	
103	03-12-2020	180	Which of the following is decimal equivalent of the binary 1111111 ? (A) 67 (B) 87 (C) 127 (D) 167	(C)
103	03-12-2020	181	The maximum peaks of an electromagnetic wave are separated by a distance of 8 inch. What is the frequency? (A) 256.4Khz (B) 1477.5Khz (C) 1477.8Mhz (D) 256.7Mhz	(C)
103	03-12-2020	182	Usually double tuned amplifier circuit is employed in (A) Audio stage of radio receiver (B) Mixing stage of radio receiver (C) Output stage of radio receiver (D) IF stage of radio receiver	(D)
103	03-12-2020	183	Emitter follower is used for (A) Current gain (B) Impedance matching	(B)

			(C) Voltage gain (D) None of the options	
103	03-12-2020	184	The main difference between a register and a counter is (A) A register has no specific sequence of states (B) A counter has no specific sequence of states (C) A register has capability to store one bit of information but counter has n-bit (D) A register counts data	(A)
103	03-12-2020	185	Boolean algebra is essential based on (A) Numbers (B) Truth (C) Logic (D) Symbols	(C)
103	03-12-2020	186	Which microprocessor has multiplexed data and address lines? (A) 8086 (B) 80286 (C) 80386 (D) Pentium	(A)

103	03-12-2020	187	<p>Which of the following amplifier is designed to operate in digital pulses?</p> <p>(A) Class D</p> <p>(B) Class C</p> <p>(C) Class AB</p> <p>(D) Class B</p>	(A)
103	03-12-2020	188	<p>A basic multiplexer principle can be demonstrated through the use of a</p> <p>(A) Single-pole relay</p> <p>(B) DPDT switch</p> <p>(C) Rotary switch</p> <p>(D) Linear stepper</p>	(C)
103	03-12-2020	189	<p>A TDMA system uses 25 MHz for the forward link, which is broken into radio channels of 200 kHz. If 8 speech channels are supported on a single radio channel, how many simultaneous users can be accommodated?</p> <p>(A) 25</p> <p>(B) 200</p> <p>(C) 1600</p> <p>(D) 1000</p>	(D)
103	03-12-2020	190	<p>Cathode ray oscilloscope uses</p> <p>(A) Wide band amplifier</p> <p>(B) Narrow band amplifier</p> <p>(C) Zero band amplifier</p> <p>(D) None of the options</p>	(A)

103	03-12-2020	191	<p>What is IC 723?</p> <p>(A) A voltage regulator</p> <p>(B) A full-wave rectifier</p> <p>(C) A half-wave rectifier</p> <p>(D) A clipper</p>	(A)
103	03-12-2020	192	<p>One advantage TTL has over CMOS is that TTL is</p> <p>(A) less expensive</p> <p>(B) not sensitive to electrostatic discharge</p> <p>(C) faster</p> <p>(D) more widely available</p>	(B)
103	03-12-2020	193	<p>The process of releasing electrons from a metal surface by supplying heat energy to it is called emission</p> <p>(A) photoelectric</p> <p>(B) thermionic</p> <p>(C) secondary</p> <p>(D) cold</p>	(B)
103	03-12-2020	194	<p>The structure of the IGBT is a</p> <p>(A) P-N-P structure connected by a MOS gate</p> <p>(B) N-N-P-P structure connected by a MOS gate</p> <p>(C) P-N-P-N structure connected by a MOS gate</p> <p>(D) N-P-N-P structure connected by a MOS gate</p>	(C)
103	03-12-2020	195	<p>Electronic soft starters are used for motors to:</p> <p>(A) achieve variable speed</p>	(B)

			(B) provide smooth start and stop (C) improve the loading (D) None of the options	
103	03-12-2020	196	Which of these best describes a PTZ CCTV camera (A) A fixed camera with a wide angle lens (B) A camera with night vision capability (C) A mobile camera which is positioned in high crime areas (D) A camera with remote directional and zoom control	(D)
103	03-12-2020	197	Which one of the following is not a reason for not using X-rays in communication? (A) Highly attenuated (B) High power is required (C) Stopped by ionizing effects (D) Ionizing radiation	(C)
103	03-12-2020	198	A decade counter needs (A) 10 flip-flops (B) 4 flip-flops (C) 5 flip-flops (D) 2 flip-flops	(B)
103	03-12-2020	199	Piezoelectric transducer is used for measuring (A) non-electrical quantities (B) electrical quantities (C) chemical quantities	(A)

			(D) any quantity	
103	03-12-2020	200	<p>Which protocol assigns IP address to the client connected in the internet?</p> <p>(A) DHCP</p> <p>(B) IP</p> <p>(C) RPC</p> <p>(D) RSVP</p>	(A)