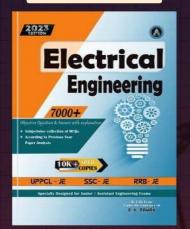


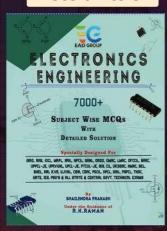
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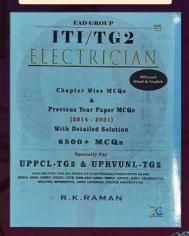
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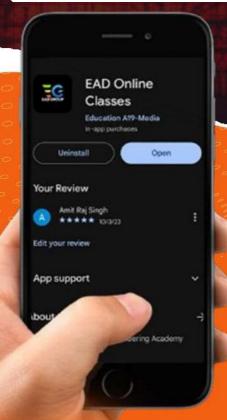


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Test Center Name	iON Digital Zone iDZ 2 Industrial Area Panki	
Test Date	08/09/2021	
Test Time	2:30 PM - 5:30 PM	
Subject	Junior Engineer (Trainee) Electrical	

Section: Domain Knowledge

Q.1 What is the aim of all energy conservation techniques? Ans X A. To experiment with new energy sources

B. To reduce energy losses

X C. To promote non-renewable energy sources

X D. To replace old equipment with new ones

Question ID: 9277593712 Status: Answered

Chosen Option : B

Q.2 Which of the following is the correct sequence of steps in a coal handling system? Ans A. Preparation, Inplant handling, Furnace firing, Coal delivery

B. Coal delivery, Preparation, Inplant handling, Furnace firing

X C. Coal delivery, Preparation, Furnace firing, Inplant handling

X D. Inplant handling, Furnace firing, Coal delivery, Preparation

Question ID: 9277593693

Status : Answered

Chosen Option: B

Q.3 The average current rating of a semiconductor diode will be maximum for:Ans

A. half-wave rectified ac

X B. full-wave rectified ac

C. pure dc

🗙 D. pure ac

Question ID: 9277593680

Status : Answered

Chosen Option: C

Q.4 For transformers above 1000 KVA rating, inspection of Buchholz relay is carried out: Ans X A. every year X B. every 4 years C. every 2 years X D. every 3 years Question ID: 9277593746 Status: Answered Chosen Option: A Q.5 Intermediate switch is also called the _____. Ans X A. one-way switch B. four-way switch X C. two-way centre-off switch X D. two-way switch Question ID: 9277593686 Status: Answered Chosen Option: D Q.6 Which of the following is NOT an example of inert gas welding?Ans A. Thermit welding X B. TIG welding X C. MIG welding X D. MAG welding Question ID: 9277593756 Status: Answered Chosen Option: A Q.7 Which of the following is NOT a valid advantage of underground system of electrical distribution as compared to overhead system? Ans X A. Decent appearance X B. Long life X C. Less maintenance D. Low cost Question ID: 9277593688 Status: Answered Chosen Option: D Q.8 In common collector configuration of transistor, the voltage gain is always:Ans A. less than unity X B. infinity X C. greater than unity X D. zero Question ID: 9277593673 Status: Answered Chosen Option: B

Q.9 The wave used to minimise heat dissipation in the switching transistor of an SMPS is a:Ans X A. triangular wave X B. sine wave X C. saw-tooth wave D. square wave Question ID: 9277593676 Status: Answered Chosen Option : A Q.10 Which of the following faults is least likely to occur in power systems?Ans X A. L-L ✓ B. L-L-L X C. L-L-G X D. L-G Question ID: 9277593726 Status: Answered Chosen Option: C Q.11 Which of the following heating elements is suitable for the highest temperature? Ans X A. Nichrome X B. Plastic C. Tungsten X D. Silicon carbide Question ID: 9277593754 Status: Answered Chosen Option: C Q.12 A 2000/200 V transformer absorbs 400 Watts. Find the iron loss current.Ans X A. 5.0 A **✗** B. 2.0 A X C. 0.5 A ✓ D. 0.2 A Question ID: 9277593660 Status: Answered Chosen Option: B Q.13 For the same power output, which power plant of the following has minimum operatingcharges? A. Hydel plant Ans X B. Nuclear plant X C. Thermal plant X D. Gas turbine plant Question ID: 9277593697 Status: Answered Chosen Option: A

	Which of the following is a conventional source of				
energ	y?Ans X A. Wind				
X B. Biomass					
	C. Fossil fuels				
	D. Solar energy				
		Question ID: 9277593690			
		Status : Answered			
		Chosen Option : C			
Q.15 \	Which of the following statements is INCORRECT for HVDC				
	mission?Ans X A. Corona losses are less as compared t	0			
a.c. tr	ansmission.				
	X B. Charging current is absent.				
	C. It operates at unity power factor.				
	✓ D. It suffers from skin effect.				
		Question ID: 9277593706			
		Status : Answered			
		Chosen Option : D			
	X B. JFET X C. NPN transistor X D. UJT To increase the voltage range of an analogue voltmeter an additedded inseries with the meter resistance. This additional resistance				
Ans	✓ A. multiplier	IKUUP			
Alla	X B. divider				
	X C. shunt				
	X D. short				
	D. SHOIT				
		Question ID: 9277593624			
		Status : Answered			
		Chosen Option : A			
Q.18	The energy conservation building code is applicable to				
Ans	X A. open lands and farms only				
	X B. old buildings only				
	✓ C. new buildings only				
	X D. old as well as new buildings				
		0 15 . 0077750074			
		Question ID: 9277593714 Status: Answered			
		Chosen Option : C			

Q.19 Which of the following methods of welding does NOT require electrode? Ans X A. Plasma arc welding ✓ B. Laser beam welding X C. TIG welding X D. Resistance welding Question ID: 9277593760 Status: Answered Chosen Option : B Q.20 Because of corona, in case of AC transmission, __harmonics are always present. Ans 🕜 A. 3rd **X** B. 7th X C. 11th X D. 5th Question ID: 9277593729 Status: Answered Chosen Option: C Q.21 What is the minimum requirement of connected load in a new building for the energy conservation building code to be applicable? ✓ A. 100 kW Ans X B. 10 MW X C. 1000 kW X D. 500 kW Question ID: 9277593718 Status: Answered Chosen Option: A Q.22 If the shunt admittance of a transmission line is ignored, the torque angle at whichmaximum power will occur is Ans \checkmark A. $\pi/2$ B. $-\pi/2$ c. $\pi/4$ × D. π Question ID: 9277593709 Status: Answered Chosen Option: C

Q.23 The base of octal number system is _. Ans X A. 10 X B. 16 **✓** C. 8 X D. 2 Question ID: 9277593639 Status: Answered Chosen Option: C Q.24 Which of the following frequency meters works on the heterodyne principle? Ans X A. Wien bridge frequency meter B. Zero beat frequency meter X C. Oscilloscope X D. Digital frequency counter Question ID: 9277593627 Status: Answered Chosen Option: B Q.25 In case of ETAP software, the full form of ETAP is: Ans X A. Estimation of Transient Analysis of Power X B. Electrical Testing and Analysis Program ✓ C. Electrical Transient Analyzer Program X D. Electrical Transformer Analysis Program Question ID: 9277593762 Status: Answered Chosen Option: C Q.26 As per classical organisation theory, a supervisor CANNOT directly supervise the work ofmore than subordinates. Ans X A. 8 to 10 X B. 1 to 2 ✓ C. 5 to 6 X D. 12 to 15 Question ID: 9277593722 Status: Answered Chosen Option : B Q.27 Which of the following is an application of induction heating?Ans X A. Room heater X B. Wood gluing C. Brazing X D. Immersion water heater Question ID: 9277593753 Status: Answered Chosen Option: D

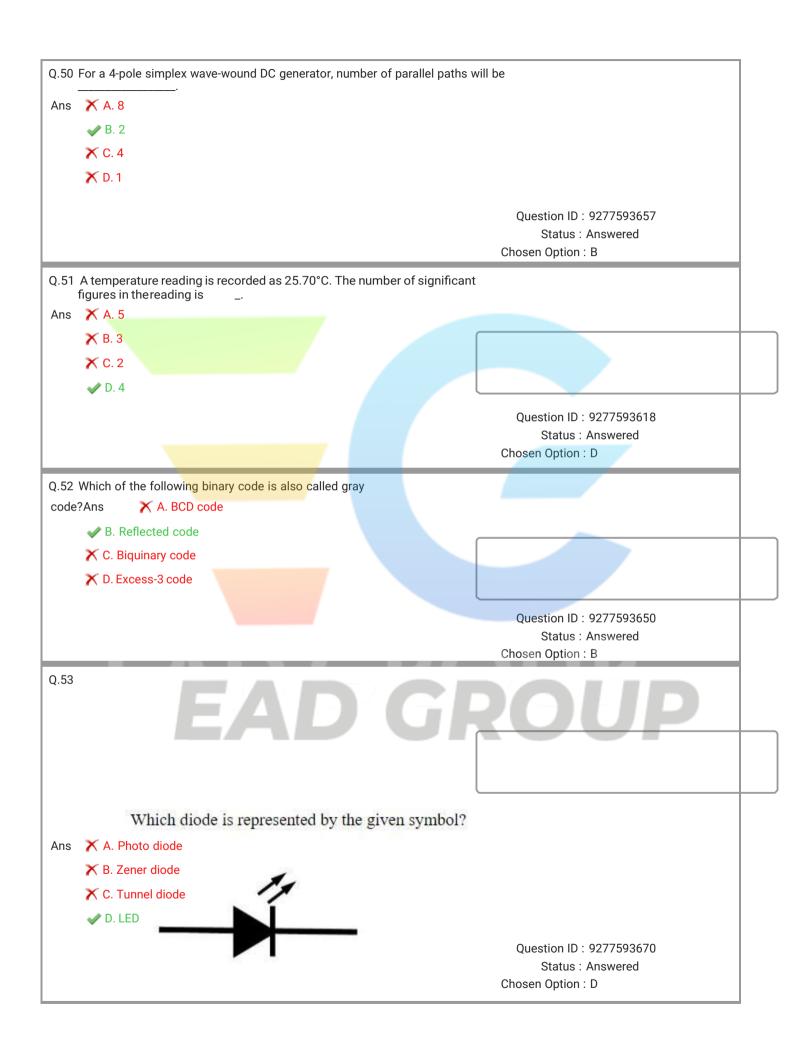
Q.28 For a single-phase 250/3000 volts, 50 Hz transformer, the EMF per turn is 8 volts. Find thenumber of secondary turns. ✓ A. 375 Ans X B. 32 X C. 325 X D. 48 Question ID: 9277593658 Status: Answered Chosen Option : A Q.29 With reference to the AC and DC transmission, state whether the following statements aretrue/false. 1. In AC transmission, power is proportional to the product of the line end voltages. 2.In DC transmission, power is proportional to the difference of the line end voltages.Ans ✓ A. 1- True, 2 - True X B. 1 - False, 2 - True X C. 1 - True, 2 - False X D. 1 - False, 2 - False Question ID: 9277593705 Status: Not Answered Chosen Option: --Q.30 Which of the following materials can serve the purpose of acceptor impurity for obtaining p-type semiconductor? A. Gallium Ans X B. Arsenic X C. Phosphorus X D. Antimony Question ID: 9277593633 Status: Answered Chosen Option : A Q.31 The set of horizontal and vertical lines permanently marked on the CRT screen is called:Ans X A. aquadag X B. control grid X C. focusing anode D. graticule Question ID: 9277593621 Status: Answered Chosen Option : D

Q.32 Which of the following softwares is used for programming of embedded devices?Ans X A. PSCAD X B. ETAP X C. Multisim D. Keil uVision Question ID: 9277593764 Status: Answered Chosen Option: A Q.33 Operation of stepping motors at high speeds is called _ Ans X A. inching X B. fast forward C. slewing X D. jogging Question ID: 9277593669 Status: Answered Chosen Option : A Q.34 Which part of the steam power plant converts mechanical energy into electrical energy?Ans A. Generator X B. Boiler X C. Furnace X D. Turbine Question ID: 9277593691 Status: Answered Chosen Option: A Q.35 In Nominal-T configuration of medium transmission line, the shunt capacitance is assumedto be: Ans X A. concentrated at the receiving end of the line X B. concentrated at the sending end of the line C. concentrated at the middle of the line X D. distributed equally throughout the length Question ID: 9277593701 Status: Answered Chosen Option: C Q.36 Which element of the flowchart is used to begin and end the programs? Ans X A. Rectangle box X B. Diamond C. Bubble X D. Arrow Question ID: 9277593740 Status: Answered Chosen Option : B

Q.37 What is the unit of measurement for slew rate of an op-amp?Ans X A. Ampere X B. dB X C. nA ✓ D. V/µs Question ID: 9277593677 Status: Answered Chosen Option : D Q.38 In case of IDMT over current relay, IDMT means: Ans X A. Inverse Differential Minimum Time X B. Inverse Definite Maximum Time X C. Inverse Differential Maximum Time D. Inverse Definite Minimum Time Question ID: 9277593728 Status: Answered Chosen Option: D Q.39 Which of the following methods of cleaning is NOT suitable for electrical equipment? Ans X A. Non-conductive sandblasting B. Shot blasting X C. Brushing X D. Vacuum cleaning Question ID: 9277593747 Status: Answered Chosen Option: C Q.40 While using analogue meters, which error may result if the line of sight is NOT exactlyperpendicular to the measuring scale? A. Parallax error X B. Friction error X C. Scale error X D. Loading error Question ID: 9277593626 Status: Answered Chosen Option : A Q.41 Normally, overhauling is performed at an interval of _. Ans X A. 1 week X B. 5 years X C. 1 month D. 6 months Question ID: 9277593745 Status: Answered Chosen Option: D

Q.42 Which of the following IC logic families has minimum value of fan-out?Ans X A. ECL X B. CMOS X C. Low power Schottky TTL D. Standard TTL Question ID: 9277593645 Status: Answered Chosen Option: A Q.43 In which of the following methods of welding is a transducer used to convert high frequencyelectric power into vibratory energy? A. Ultrasonic welding X B. DC arc welding X C. MIG welding X D. Resistance welding Question ID: 9277593759 Status: Answered Chosen Option: A Q.44 A relay with 5A rating is having the relay setting of 125 percent. Find the operating current of the relay. Ans X A. 3.75A **X** B. 10A ✓ C. 6.25A X D. 5A Question ID: 9277593731 Status: Answered Chosen Option: C Q.45 Which of the following is a semiconductor material?Ans X A. Bakelite X B. Brass X C. Asbestos D. Germanium Question ID: 9277593630 Status: Answered Chosen Option : D

Q.46 In production planning and control system,____means estimation of type, quantity and quality of future work. A. forecasting Ans X B. data processing X C. scheduling X D. dispatching Question ID: 9277593724 Status: Answered Chosen Option: A Q.47 Which of the following is INCORRECT for an ideal transformer?Ans A. Zero permeability X B. Zero winding resistance X C. Zero leakage flux X D. No losses Question ID: 9277593654 Status: Answered Chosen Option: A Q.48 Ladder diagram is associated with_ Ans ✓ A. PLC X B. SCADA X C. microprocessor X D. microcontroller Question ID: 9277593735 Status: Answered Chosen Option: A Q.49 A stepper motor has a step angle of 3°. Determine the number of steps required for the shaft to make 25 revolutions. Ans X A. 300 X B. 600 ✓ C. 3000 X D. 6000 Question ID: 9277593667 Status: Answered Chosen Option: C

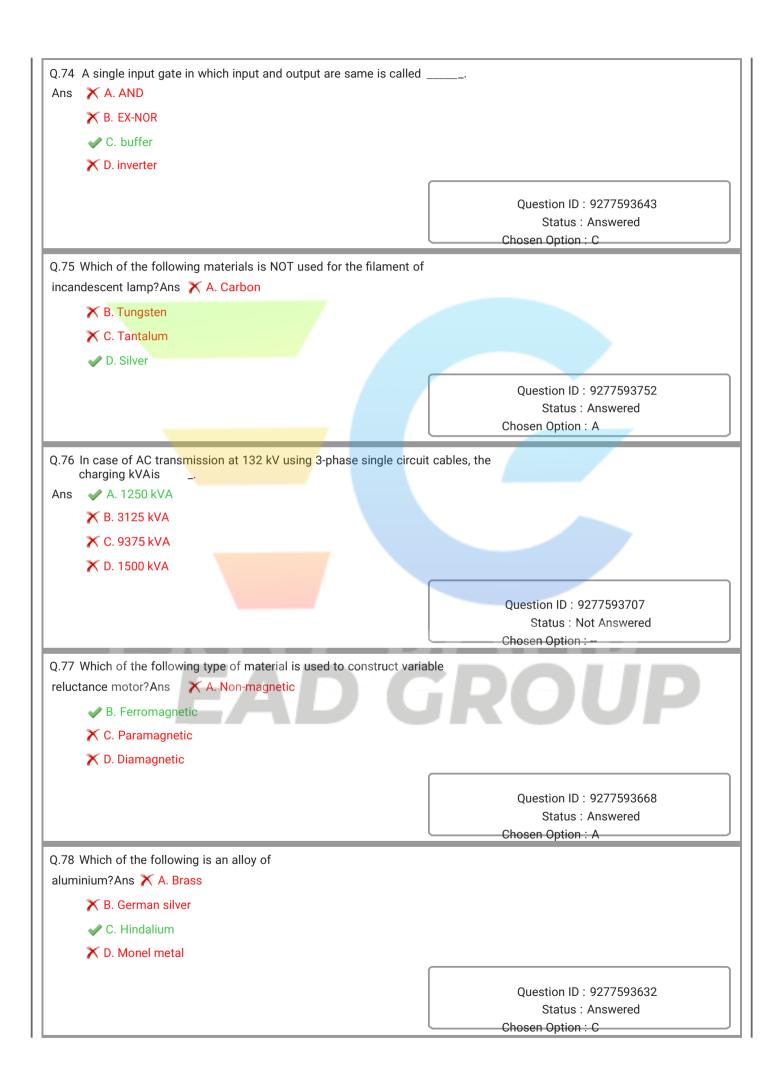


Ans X A. accumulator X B. program counter X C. stack pointer D. PSW Question ID: 9277593741 Status: Answered Chosen Option: A Q.55 Laws of Electrolysis were formulated by _____. Ans X A. Alexander Fleming B. Michael Faraday X C. Lord Kelvin X D. Max Planck Question ID: 9277593758 Status: Answered Chosen Option: B Q.56 Which of the following practices is an example of a medium-term energy conservationscheme? ✓ A. Improvement and low-cost modifications in existing system Ans X B. Repairs of system or leakages X C. Minimisation of excess combustion air in furnace X D. Improved housekeeping Question ID: 9277593713 Status: Answered Chosen Option: C Q.57 Which of the following devices has only two terminals? Ans 🛷 A. DIAC X B. SCR C. UJT X D. TRIAC Question ID: 9277593671 Status: Answered Chosen Option: A Q.58 The real part of the propagation constant of a transmission line is: Ans X A. phase constant B. attenuation constant X C. stability constant X D. reliability factor Question ID: 9277593710 Status: Answered Chosen Option : A

Q.59 An atom of hydrogen has ______in its first orbit. Ans X A. 8 electrons X B. 2 electrons C. 1 electron X D. 4 electrons Question ID: 9277593629 Status: Answered Chosen Option: C Q.60 The ripple factor of a power supply is the ratio of: Ans X A. peak value to DC value X B. RMS value to peak value C. RMS value to DC value X D. peak value to RMS value Question ID: 9277593675 Status: Answered Chosen Option: C Q.61 A 2-input gate gives high output only when both the inputs are low. For all other conditions the output remains low. Identify the gate. Ans X A. NAND X B. EX-OR X C. OR ✓ D. NOR Question ID: 9277593642 Status: Answered Chosen Option: D Q.62 Simulink is the GUI based companion software for Ans 🗳 A. MATLAB X B. LabVIEW X C. MAGNET X D. ETAP Question ID: 9277593765 Status: Answered Chosen Option: A Q.63 Which of the following gates is also called universal gate?Ans ✓ A. NOR **✗** B. NOT X C. EX-OR X D. AND Question ID: 9277593641 Status: Answered Chosen Option : A

Q.64 A pressure gauge is calibrated between 100 bar and 350 bar. The scale span is Ans X A. 450 bar X B. 100 bar X C. 350 bar D. 250 bar Question ID: 9277593617 Status: Answered Chosen Option: D Q.65 Iron-Constantan thermocouple is commercially known as ____ __thermocouple. Ans 🗳 A. J-type X B. E-type X C. K-type X D. T-type Question ID: 9277593628 Status: Not Answered Chosen Option: --Q.66 The ratio of the luminous flux to the power input is called Ans X A. beam factor X B. absorption factor C. lamp efficiency X D. utilisation factor Question ID: 9277593749 Status: Answered Chosen Option: C Q.67 What is the ohms/volt rating of a voltmeter with a 1 mA movement? Ans X A. 10 Ω/V **⊘** B. 1000 Ω/V **X** C. 100 Ω/V X D. 10000 Ω/V Question ID: 9277593625 Status: Answered Chosen Option: B Q.68 Boiler efficiency can be improved by _____ due to economiser. Ans X A. 12 to 15 percent ✓ B. 4 to 10 percent X C. 20 percent X D. 1 to 2 percent Ouestion ID: 9277593695 Status: Answered Chosen Option : B

Q.69 In a three-phase induction motor, the maximum torque is independent of: Ans X A. rotor reactance B. rotor resistance X C. synchronous speed X D. applied voltage Question ID: 9277593662 Status : Answered Chosen Option : B Q.70 In electrodynamometer movement, the deflection of the pointer is: Ans X A. inversely proportional to the current X B. directly proportional to the current X C. inversely proportional to the current squared D. directly proportional to the current squared Question ID: 9277593619 Status: Answered Chosen Option: D Q.71 In an op-amp, the differential mode gain is Ans X A. always zero B. very high X C. always unity X D. very low Question ID: 9277593678 Status: Answered Chosen Option: B Q.72 Which of the following is NOT a valid type of DC motor?Ans X A. Series motor X B. Separately excited motor C. Squirrel cage motor X D. Shunt motor Question ID: 9277593653 Status: Answered Chosen Option: C Q.73 Which of the following is a bidirectional device?Ans X A. GTO X B. SCR C. TRIAC X D. PN diode Question ID: 9277593672 Status: Answered Chosen Option : C



Q.79 In a 6-pole DC machine, 45 mechanical degrees corresponds to _____ electrical degrees. Ans X A. 90 X C. 180 X D. 45 Question ID: 9277593666 Status: Answered Chosen Option: B $^{Q.80}$ The 1's complement of the binary number $(101100)_2$ is: Ans A. $(001100)_2$ B. (010011)₂ c. (101101)₂ D. (110011)₂ Question ID: 9277593644 Status: Answered Chosen Option: B Q.81 Which of the following methods of speed control of induction motor can be only used forwound rotor type induction motor? Ans X A. Stator frequency control X B. Stator voltage and frequency control C. Rotor resistance control X D. Stator voltage control Question ID: 9277593663 Status: Answered Chosen Option : C Q.82 Which part of a motor needs maximum attention for A. Bearing maintenance?Ans X B. Rotor winding X C. Stator winding X D. Frame Question ID: 9277593744 Status: Answered Chosen Option : A

Q.83 Which logic gate is represented by the given symbol? Ans X A. AND ✓ B. NOT X C. OR X D. EX-OR Question ID: 9277593640 Status: Answered Chosen Option : B Q.84 Which of the following shows job titles and their relationships to each other in anorganisation? Ans X A. Organisation rule book X B. Organisation manual X C. Standard practice instructions D. Organisation chart Question ID: 9277593721 Status: Answered Chosen Option: D Q.85 The transmission of instructions from the top executive to the lowest grade executive is called: Ans X A. horizontal communication B. downward communication X C. upward communication X D. unofficial communication Question ID: 9277593720 Status: Answered Chosen Option : B

Q.86 In electrical drawings, the given symbol is used to indicate a ______. Ans X A. loud speaker X B. siren C. bell X D. hooter Ouestion ID: 9277593684 Status: Answered Chosen Option: C Q.87 The board on which the energy meter, cut-out, neutral link are installed is called Ans 🗳 A. service board X B. switch board X C. main switch board X D. distribution board Question ID: 9277593687 Status: Answered Chosen Option: C Q.88 A 4-pole, 3-phase induction motor is supplied through a 50 Hz supply. On full load, its speedis observed to be 1410 RPM. Calculate the full load slip. Ans 🗳 A. 6 percent X B. 4 percent X C. 2 percent X D. 3 percent Question ID: 9277593665 Status: Answered Chosen Option : A Q.89 Which of the following is NOT a desirable characteristic of the conductor used fortransmission and distribution of electrical energy? Ans X A. High tensile strength X B. Low cost X C. Low specific resistance D. High specific gravity Question ID: 9277593689 Status: Answered Chosen Option: D

Q.90 Common emitter current gain h_{FE} of a BJT is: Ans X A. dependent on collector-emitter voltage X B. always constant C. dependent on collector current X D. dependent on base-emitter voltage Question ID: 9277593679 Status: Not Answered Chosen Option: --Q.91 Which of the following methods of heating is most suitable for drying of X A. Induction heating paints?Ans X B. Electrical resistance heating C. Infrared heating X D. Dielectric heating Question ID: 9277593755 Status: Answered Chosen Option : D Q.92 At the starting of induction motor the rotor frequency is: Ans X A. twice the supply frequency B. same as supply frequency X C. half of the supply frequency X D. zero Question ID: 9277593655 Status: Answered Chosen Option: B Q.93 In a measurement system, which of the following static characteristics is NOT desirable? Ans X A. Accuracy B. Drift X C. Linearity X D. Sensitivity Question ID: 9277593616 Status: Answered Chosen Option: B Q.94 Compounding of steam turbine is done for: Ans X A. increasing the rotor speed X B. balancing the turbine X C. reducing the work done D. reducing the rotor speed Question ID: 9277593696 Status: Answered Chosen Option: A

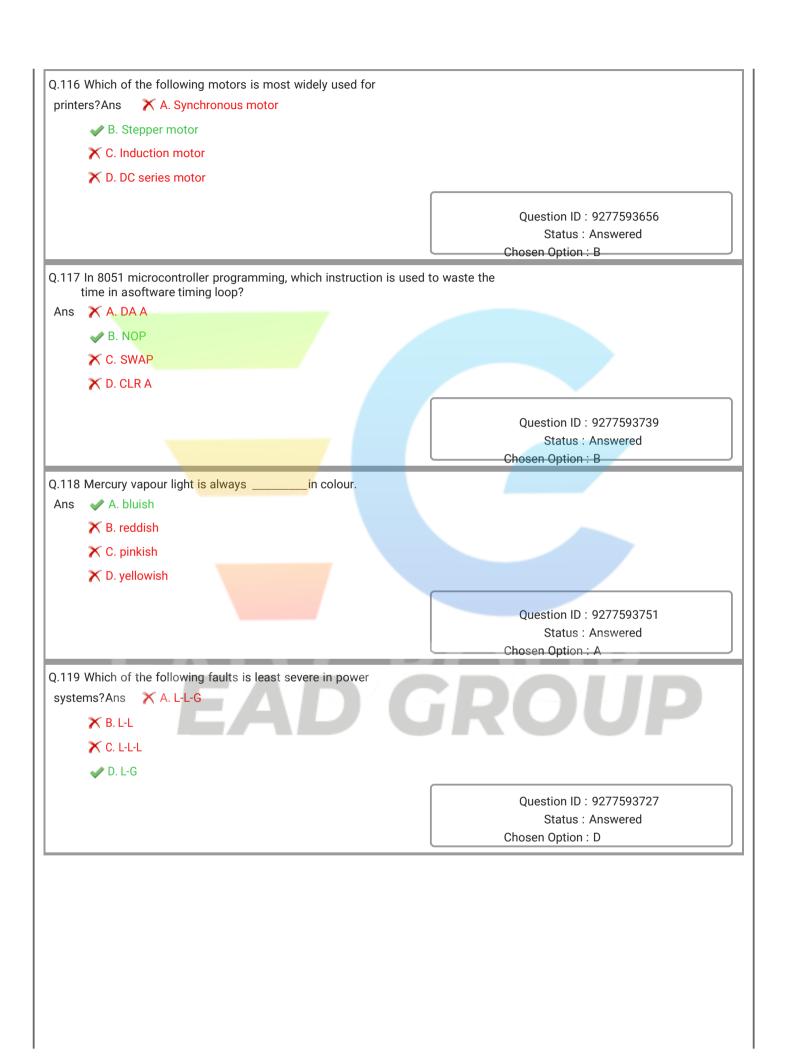
Q.95 Which of the following statements is INCORRECT for squirrel cage rotor of induction motor?Ans X A. It is also called a short-circuited rotor. X B. Slip ring and brush assembly are not required. C. Airgap between stator and rotor is not uniform. X D. External resistance cannot be introduced in rotor circuit. Ouestion ID: 9277593664 Status: Answered Chosen Option : C Q.96 Which of the following is NOT a discharge X A. Mercury iodide lamp lamp?Ans X B. Neon lamp X C. Sodium vapour lamp D. Incandescent lamp Question ID: 9277593750 Status: Answered Chosen Option: D Q.97 In which of the organisational conflicts is open aggression observed? Ans X A. Felt conflict B. Manifest conflict X C. Perceived conflict X D. Latent conflict Question ID: 9277593723 Status: Answered Chosen Option: B Q.98 Which of the following systems is associated with ash handling in thermal power plants? Ans X A. Superheater X B. Condenser X C. Economiser D. Electrostatic precipitator Question ID: 9277593692 Status: Answered Chosen Option: D Q.99 Which of the following statements is true for Ferranti-effect? Ans 🗳 A. Receiving end voltage is greater than sending end voltage X B. Sending end voltage is zero X C. Receiving end voltage is zero X D. Sending end voltage is greater than receiving end voltage Question ID: 9277593704 Status: Answered Chosen Option : A

Q.100 Which of the following functions is NOT under the scope of marketing management?Ans X A. Advertising B. Quality control X C. Sales promotion X D. Packaging Question ID: 9277593725 Status: Answered Chosen Option : B Q.101 The approximate value of surge impedance for overhead lines is: Ans X A. 100 ohms X B. 1000 ohms ✓ C. 400 ohms X D. 1500 ohms Question ID: 9277593703 Status: Answered Chosen Option: C Q.102 Total number of 8-bit ports available in Microcontroller 8051 are_ Ans X A. 8 X B. 6 X C. 2 √ D. 4 Question ID: 9277593736 Status: Answered Chosen Option: B Q.103 Which of the following practices can significantly reduce the need of new investment inenergy generation or supply? Ans X A. Reduced supply of electricity in specific areas X B. Load shedding C. Energy conservation X D. Increase the tariff on energy Question ID: 9277593716 Status: Answered Chosen Option : D

	supply ascompared to linear power supply? X A. Higher efficiency			
	✓ B. Low noise at output			
	C. Light weight			
	X D. Smaller size of transformer			
	.,			
		Question ID: 9277593674		
		Status : Answered		
		Chosen Option : B		
	Natural draught is produced by			
Ans	X A. exhaust fan			
	X B. fan			
	C. chimney			
	🗙 D. steam jet			
		Question ID: 9277593694 Status: Answered		
		Chosen Option : C		
	➤ D. Skin effect	Question ID: 9277593708 Status: Answered Chosen Option: C		
		Chosen option . c		
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जाता है Ans A. अपर X B. सर	रूप (allotropes)			
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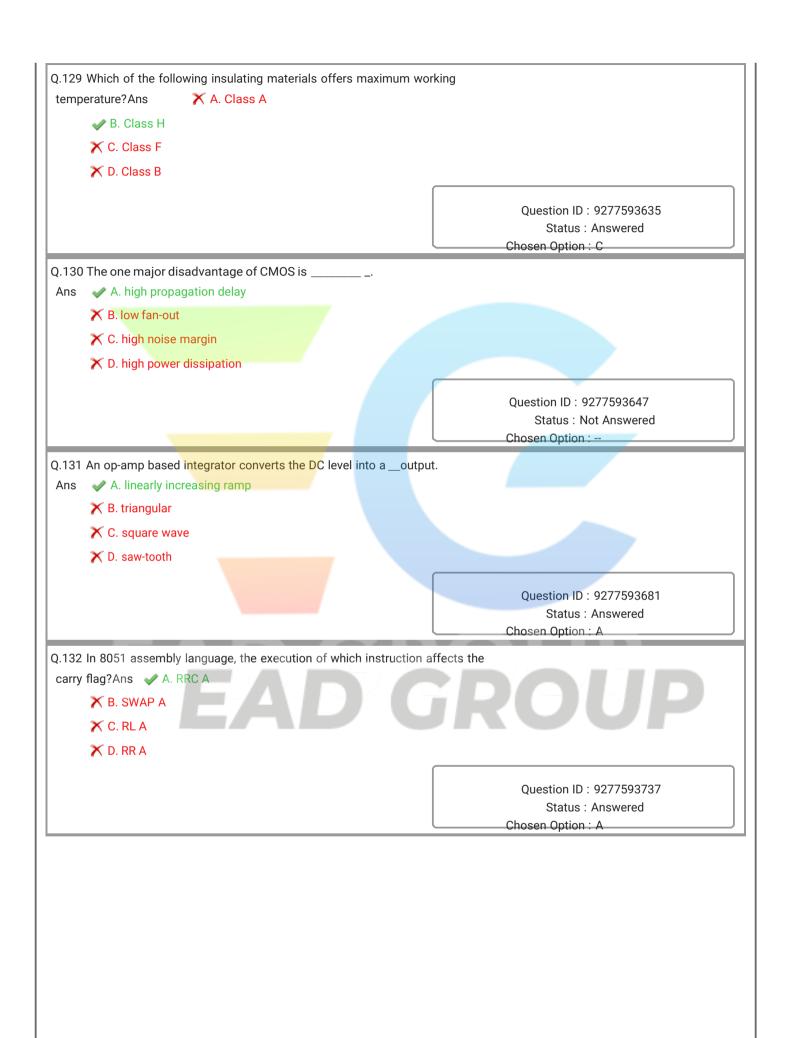
Q.108 According to Boolean algebra, the resultant of the operation (A + AB) will be Ans 💢 A. AB **★** B. B X C. A + B ✓ D. A Question ID: 9277593651 Status: Answered Chosen Option: D Q.109 The basic circuit for the ECL family is the _____ gate. Ans X A. NAND X B. AND X C. XNOR ✓ D. OR/NOR Question ID: 9277593646 Status: Answered Chosen Option: B Q.110 The signal generated by the time-base circuitry of the CRO is basically a: Ans X A. triangular waveform X B. square waveform X C. sinusoidal waveform D. saw-tooth waveform Question ID: 9277593623 Status: Answered Chosen Option: D Q.111 The effective length of a short transmission line is less than _ Ans 🗳 A. 80 km X B. 320 km X C. 160 km X D. 100 km Question ID: 9277593700 Status: Answered Chosen Option: A

Q.112 In ladder logic, the given symbol is used to indicate _____. Ans X A. fuse B. heating element X C. relay coil X D. flow switch Question ID: 9277593742 Status: Not Answered Chosen Option: --Q.113 In 8051 microcontroller, which of the following instructions is an example of unconditionaljump? Ans X A. CJNE X C. JZ X D. JNZ Question ID: 9277593738 Status: Not Answered Chosen Option: Q.114 As compared to an incandescent lamp, CFL offers approximately savings in electricity costs. Ans X A. 40 to 50 percent X C. 5 to 10 percent X D. 20 to 30 percent Question ID: 9277593717 Status: Answered Chosen Option: B Q.115 Which of the following bridges is used for most accurate inductance measurement of inductors having high value of Q-factor? A. Hay bridge Ans X B. Schering bridge X C. Kelvin bridge X D. Maxwell bridge Question ID: 9277593622 Status: Answered Chosen Option: A



Q.120 Surge impedance (Z_c) of the long transmission line is given by: Ans \checkmark A. $\sqrt{L/C}$ B. $\sqrt{1/LC}$ c. \sqrt{LC} D. $\sqrt{C/L}$ Question ID: 9277593702 Status: Answered Chosen Option: D Q.121 Using Boolean algebra, if the following Boolean expression is minimised, then the result willbe: AB + ABC + AB (D+E)Ans AB X B. ABCD X C. A X D. ABC Question ID: 9277593652 Status: Answered Chosen Option: A Q.122 The T flip-flop is a single-input version of the flip-flop. Ans X A. clocked RS X B. RS **X** C. D ✓ D. JK Question ID: 9277593648 Status : Answered Chosen Option: A Q.123 A transformer having 1000 primary turns is connected to a 250 V AC supply. For a secondary voltage of 300 V, the number of secondary turns should be: Ans X A. 600 **✓** B. 1200 X C. 800 X D. 1600 Question ID: 9277593661 Status : Answered Chosen Option: B

Q.124 LabVIEW is the abbreviated form of ____ Ans A. Laboratory Virtual Instruments Engineering Workbench X B. Laboratory Visual Instrumentation for Engineering Work X C. Laboratory Visual Instrument for Electronic Workbench X D. Laboratory Visual Instrument for Electrical Wiring Question ID: 9277593763 Status: Answered Chosen Option: A Q.125 Constant product characteristics of a directional relay is in the form of ____. Ans X A. straight line with positive slope X B. straight line with negative slope X C. square wave D. rectangular hyperbola Question ID: 9277593732 Status: Answered Chosen Option: B Q.126 A power plant has load factor = 0.75 and capacity factor = 0.60. If the maximum demand is 80 MW, then find the plant capacity. Ans X A. 90 MW X B. 135 MW ✓ C. 100 MW X D. 60 MW Question ID: 9277593698 Status: Answered Chosen Option: C Q.127 Which of the following parts absorbs secondary electrons in CRT?Ans X A. Control grid B. Aquadag coating X C. Cathode X D. Accelerating anode Question ID: 9277593620 Status : Answered Chosen Option: B Q.128 Process Field-Bus (PROFI-BUS) is a/an: Ans X A. American standard X B. African standard C. German standard X D. Asian standard Question ID: 9277593761 Status : Answered Chosen Option: C



Q.133 Which type of switch is indicated by the given symbol? Ans X A. Single-pole switch B. Two-pole switch X C. Three-pole switch X D. Multi-position switch Question ID: 9277593683 Status: Answered Chosen Option: B Q.134 The loss in draught in a chimney is_____ of the total draught produced by it. Ans 🗳 A. 20 percent X B. 40 percent X C. 5 percent X D. 10 percent Question ID: 9277593699 Status: Answered Chosen Option : A Q.135 Donor type impurities have_ _valence electrons. Ans X A. 3 **X** B. 2 **✓** C. 5 X D. 4 Question ID: 9277593634 Status : Answered Chosen Option: C Q.136 In an organisation, which of the following positions is on the top?Ans A. Managing Director X B. Sales Manager X C. Production Manager X D. Marketing Manager Question ID: 9277593719 Status: Answered Chosen Option : A

Q.137 Which of the following wiring systems is most economical for house wiring? Ans X A. Concealed conduit wiring B. Cleat wiring X C. Metal sheathed wiring X D. PVC casing and capping wiring Question ID: 9277593685 Status: Answered Chosen Option : B Q.138 Which of the following is NOT a type of distance X A. Mho relay relay?Ans X B. Reactance relay C. Buchholz relay X D. Impedance relay Question ID: 9277593733 Status: Answered Chosen Option : C Q.139 Forbidden energy gap is largest in _ Ans A. insulator X B. semiconductor X C. conductor X D. superconductor Question ID: 9277593631 Status: Answered Chosen Option: A Q.140 In which of the following relays is the generation of gas used as a means of fault detection? Ans X A. Mho relay X B. Induction cup relay C. Buchholz relay X D. Reactance relay Question ID: 9277593734 Status: Answered Chosen Option: C Q.141 Which of the following is NOT a correct way of energy conservation?Ans X A. Effective periodic maintenance X B. Improving power factor X C. Replace electrical circuit with solid state circuit D. Increase reactive loads Question ID: 9277593711 Status: Answered Chosen Option: D

_	ne part ofmaintenance.				
X B. predictive					
🗙 C. breakdow	★ C. breakdown				
D. preventive	9				
		Question ID: 9277593743			
		Status : Answered			
		Chosen Option : D			
Q.143 How many squa	res will be there in a three variable				
Karnaugh map?Ans	★ A. 16				
✓ B. 8					
X C. 4					
X D. 2					
		Question ID: 9277593649			
_		Status : Answered			
		Chosen Option : B			
	ith magnetic leakage is equivalent to an ideal				
transformer with:Ans	X A. high primary resistance				
X B. inductive	coil in primary circuit				
C. inductive	coils in primary and secondary circuits				
X D. inductive	coil in secondary circuit				
		Outstire ID - 0077500750			
		Question ID: 9277593659 Status: Answered			
		Chosen Option : C			
Q.145 Which of the foll	owing is the ore of				
aluminium?Ans 🥓 A.	Cryolite	POLID			
🔀 B. Chalcopyr	ite	:P()(IP			
🗙 C. Graphite					
X D. Hematite					
		Question ID: 9277593636			
		Status : Answered			
		Chosen Option : B			
	ollowing cases is frequent starting and stopping	ng of electric			
motors needed?Ans	X A. Grinding mills				
🔀 B. Paper mill	S				
✓ C. Lifts and	hoists				
🔀 D. Air conditi	oners				
		Question ID : 9277593757			
		Status : Answered			

Q.147 Which of the following does NOT help in achieving inherent reliability in protective relay?Ans X A. Good workmanship X B. Dust free enclosures C. Low contact pressure X D. Robust construction Question ID: 9277593730 Status: Answered Chosen Option : A Q.148 Which of the following is NOT a valid method of cooling of transformer?Ans X A. Oil Natural Water Forced X B. Oil Natural Air Forced X C. Oil Forced Water Forced D. Water Natural Oil Forced Question ID: 9277593748 Status: Answered Chosen Option: D Q. 149 निम्न में से किसने EC अधिनियम के समर्थन में विभिन्न प्रोत्साहन प्रावधान श्रू किए हैं? Ans XA नामित उपभोक्ता X B. ECBD C. BEE XD. BIS Question ID: 9277593715 Status: Answered Chosen Option : B Q.150 Permeability can be considered as the: X B. ability to resist the change in magnetisation X C. ability to oppose the electric current through it X D. ability of the material to allow the magnetic lines to pass through it Question ID: 9277593637 Status: Answered Chosen Option: D

Section: General Knowledge or Awareness

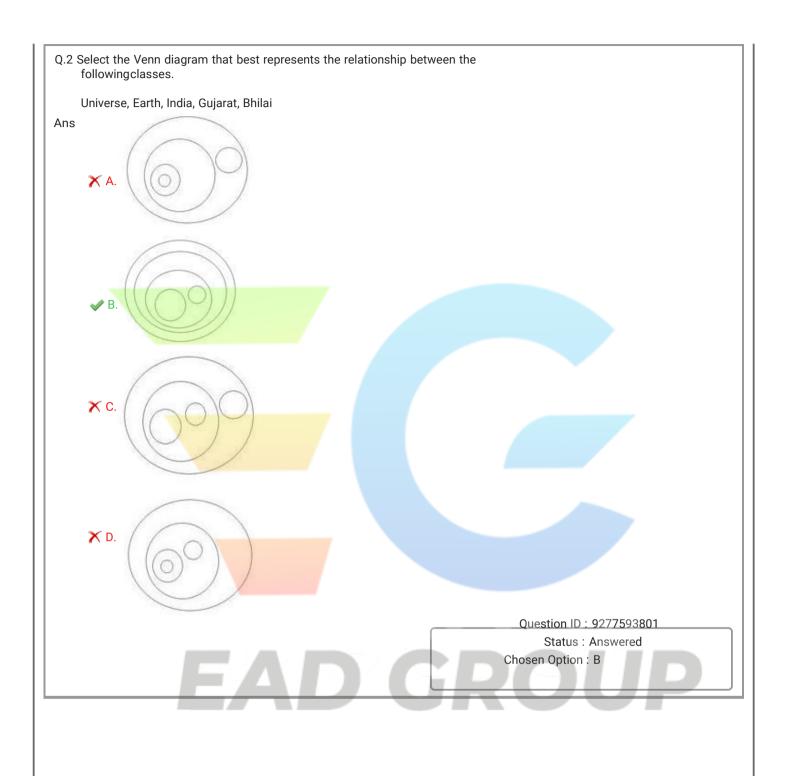
Q.1 The ___ dance is performed only by women at weddings and festivals in Haryana. Ans X A. Dhamal B. Khoria X C. Jhumar X D. Phag Question ID: 9277593768 Status: Answered Chosen Option: C Q.2 Sharath Kamal is a professional _player from India. Ans X A. lawn tennis X B. badminton C. table tennis X D. squash Question ID: 9277593785 Status: Answered Chosen Option : D Q.3 As per Article 22(2) of the Constitution of India, a person CANNOT be detained in custodybeyond a period of without the authority of a magistrate. ✓ A. 24 hours Ans X B. 48 hours X C. 12 hours X D. 36 hours Question ID: 9277593781 Status: Answered Chosen Option: A Q.4 Which of the following statements is INCORRECT? Ans X A. The height of the tide is higher when the sun, the moon and the earth are in a straightline. ✓ B. Normally, there is a 15-day interval between spring tides and neap tides. X C. Spring tides occur twice a month, one during the full moon period and another duringthe new moon period. X D. The time between high tide and low tide, when the water level is falling, is called 'theebb'. Question ID: 9277593774 Status: Answered Chosen Option: C

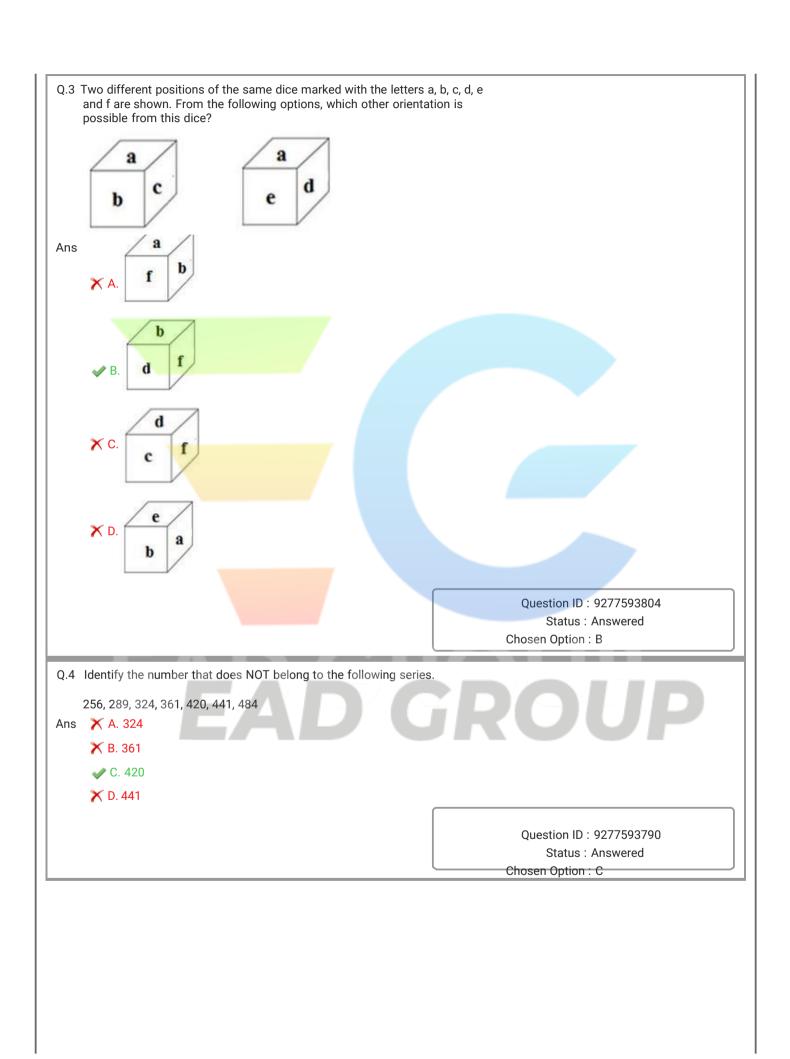
	n December 2020, the All India Football Federation formally candidature tohost the AFC Asian Cup			
Ans	★ A. 2023★ B. 2025			
				X C. 2029
	✓ D. 2027			
			Question ID: 9277593784	
		Status : Answered		
		Chosen Option : B		
Q.6	Which of the following statements is INCORRECT?			
Ans	A. Air pollution causes diseases such as hepatitis, chol	era and typhoid.		
	X B. An increase in the content of harmful substances in a	air is called air pollution.		
	X C. The combustion of fossil fuels increases the amount	of suspended particles in air.		
	X D. Smog is a visible indication of air pollution.			
		Question ID: 9277593772 Status: Answered		
		Chosen Option : A		
	C. Coins are issued by the Government of India.D. Balance in savings accounts is called 'demand depos	its'.		
		Question ID: 9277593770		
		Status : Answered		
		Chosen Option : D		
Q.8	भारतीय रिज़र्व बैंक द्वारा 2016 में महात्मा गांधी (नई) श	भ्रंखला के भाग के रूप में जारी किए गए ₹. मूल्यवर्ग में व		
	इन किए गए बैंक नोटों का आधार रंग (base colour) मैजे			
۱ns				
XA.	100			
K B.	500			
C. 20				
D. 2	000			
		Question ID: 9277593769		
		Status : Answered		
		Chosen Option : C		

9 निम्न में से कौन-सा त्योहार हिंदू श्रावण (श्रवण) महीने के पांचवें दिन मनाया जाता है, जिसमें धार्मिक-क्रिया/ पूजा-पाठ के दौरान दूध चढ़ाया जाता है?		Question ID: 9277593766 Status: Answered
ıs	🗙 A. गंगा दशहरा	Chosen Option : D
	🗙 B. जीवती पूजा	
	🗙 C. वसंत (बसंत) पंचमी	
	✔ D. नाग पंचमी	
).10 N	played an important role in the making of the Lucknow Pact and reorganised fuslim League after 1934.	the
าร	🗙 A. Maulana Abul Kalam Azad	
	X B. Dr. Zakir Husain	
	➤ C. Khan Abdul Ghaffar Khan	
	✓ D. Mohammad Ali Jinnah	
		Question ID: 9277593777
		Status : Answered
	Cho	osen Option : A
		d sodium
solut	The salt commonly used in food can be formed by a combination of hydroxide ion. Ans A.	
solut	hydroxide ion. Ans A. ochloric X B. sulphuric	
solut	hydroxide ion. Ans A. ochloric	
solut	hydroxide ion. Ans A. ochloric X B. sulphuric	
solut	hydroxide ion. Ans A. ochloric X B. sulphuric X C. nitric D. chloric	d sodium Question ID: 9277593771
solut	hydroxide ion. Ans A. ochloric X B. sulphuric X C. nitric X D. chloric	d sodium Question ID: 9277593771 Status: Answered
solut	hydroxide ion. Ans A. ochloric X B. sulphuric X C. nitric X D. chloric	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. ochloric B. sulphuric C. nitric D. chloric Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019.	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. A. A. Chochloric B. sulphuric C. nitric D. chloric Choc Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. A. Bhutan	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. ochloric X B. sulphuric X C. nitric X D. chloric Cho Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. X A. Bhutan X B. Nepal	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. A. A. Chochloric B. sulphuric C. nitric D. chloric Choc Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. A. Bhutan	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. ochloric X B. sulphuric X C. nitric X D. chloric Cho Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. X A. Bhutan X B. Nepal	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. A. A. A. Chloric X B. sulphuric X C. nitric X D. chloric Cho Cho Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. X A. Bhutan X B. Nepal X C. Myanmar D. Afghanistan	Question ID: 9277593771 Status: Answered osen Option: A
solut hydro	hydroxide ion. Ans A. A. A. A. Chloric X B. sulphuric X C. nitric X D. chloric Cho Cho Refugees of certain communities from Bangladesh, Pakistan and Indian citizenship under the Citizenship (Amendment) Bill, 2019. X A. Bhutan X B. Nepal X C. Myanmar D. Afghanistan	Question ID : 9277593771 Status : Answered psen Option : A

Q.13 The Border-Gavaskar Trophy is a Test cricket series played between India and Ans X A. England B. Australia X C. New Zealand X D. West Indies Question ID: 9277593783 Status: Answered Chosen Option : B Q.14 The 'Great Conjunction' of December 2020 was a celestial event involving the planets Ans 🗳 A. Jupiter and Saturn X B. Mars and Jupiter X C. Venus and Mars X D. Saturn and Mercury Question ID: 9277593780 Status: Not Answered Chosen Option: --Q.15 In November 2020, Joe Biden was elected as the President of the US. Ans X A. 47th ✓ B. 46th X C. 44th X D. 43rd Question ID: 9277593779 Status: Answered Chosen Option: B Q.16 The Muslim League announced as 'Direct Action Day'. Ans X A. 17 September 1944 X B. 15 December 1946 ✓ C. 16 August 1946 X D. 18 November 1944 Question ID: 9277593776 Status: Answered Chosen Option: B Q.17 India ranks_ in the Human Development Index released by the United Nations in December 2020. Ans X A. 137th X B. 138th ✓ C. 131st X D. 130th Question ID: 9277593778 Status: Answered Chosen Option: B

festival at Madurai Meenakshi Amman temple celebrates the celestial marriage of the Goddess Meenakshi to the God Sundareswarar. Ans X A. Purattasi Sani B. Chithirai X C. Vaikasi Visakam X D. Masi Question ID: 9277593767 Status: Not Answered Chosen Option: --Q.19 The ___ is the western-most of the Himalayan rivers in India. Ans X A. Sutlej B. Indus X C. Brahmaputra X D. Ganga Question ID: 9277593775 Status: Answered Chosen Option: C _belong to the p<mark>hylum 'Coelenterata' ('C</mark>nidaria<mark>').</mark> Ans X A. Locusts X B. Mosquitoes X C. Tapeworms D. Corals Question ID: 9277593773 Status: Answered Chosen Option: C Section: Reasoning Q.1 Read the given statements and conclusions carefully. Assuming that the information givenin the statements is true, decide which of the conclusions logically follow(s) from the statements. Statements: $\lambda \leq \Omega$, $\lambda > \pounds$, $\pi \geq \varphi$, £ > πConclusions: Ω > Φ **II.** λ ≤ π X B. Both conclusions I and II follow. X C. Either conclusion I or II follows. X D. Only conclusion II follows. Question ID: 9277593797 Status: Answered Chosen Option: A





Q.5 The present age of Tanya is double that of the age of Mohit. Five years ago, the age of Mohit was one-third that of the age of Tanya. What is the present age of Mohit?

Ans 🕜 A. 10 years

X B. 20 years

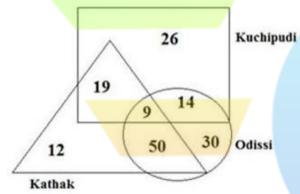
X C. 15 years

X D. 25 years

Question ID: 9277593799 Status: Answered

Chosen Option : A

Q.6 Study the diagram carefully and answer the question that follows. The given diagram shows the number of students in a school who are practicing different dance forms.



What is the number of students who practice both Odissi and Kuchipudi, but NOT Kathak?

Ans X A. 30

X B. 9

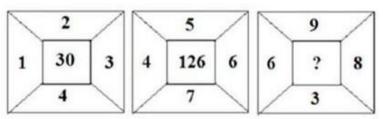
X C. 50

✓ D. 14

Question ID: 9277593802 Status: Answered

Chosen Option : D

Q.7 Study the given pattern carefully and select the number that can replace the question mark(?) in it.



Ans X A. 175

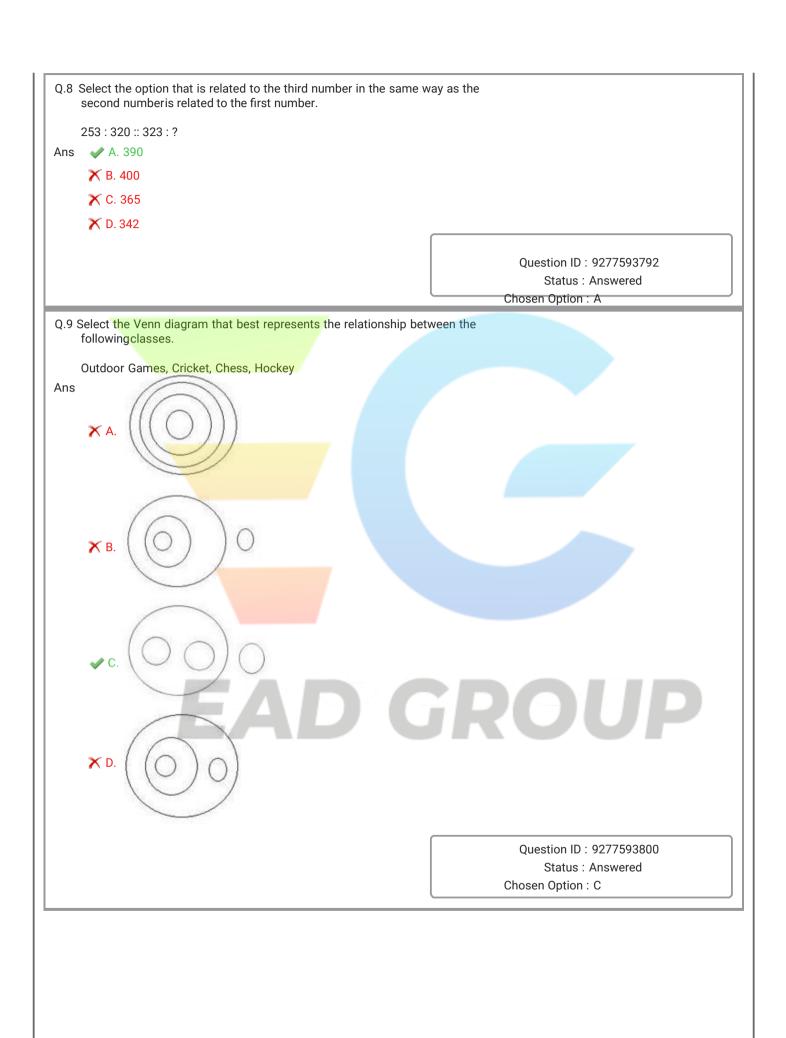
X B. 160

X C. 205

✓ D. 190

Question ID: 9277593795 Status: Answered

Chosen Option : D



Q.10 The present ages of three friends Riya, Pankaj and Gaurav are in the ratio of 3: 4:5, respectively. Five years ago the sum of their ages was 69 years. Find the present age of Pankaj.

Ans X A. 32 years

B. 28 years

X C. 35 years

X D. 21 years

Question ID : 9277593798 Status : Answered

Chosen Option : B

Q.11 Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R). Assertion (A): Wearing masks helps in controlling the spread of COVID-19 virus. Reason (R): Masks repel coronavirus.

Ans X A. A' is false but 'R' is true.

X B. Both 'A' and 'R' are true but 'R' is not the correct explanation of 'A'.

C. A' is true but 'R' is false.

X D. Both 'A' and 'R' are true and 'R' is the correct explanation of 'A'.

Question ID : 9277593786 Status : Answered

Chosen Option: C

Q.12 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, decide which of the conclusions logically follows from the statements.

Statements: P ≥ R, R > T, T

≤ AConclusions:

I. P > A II. T < P

Ans X A. Either conclusion I or II follows.

X B. Only conclusion I follows.

C. Only conclusion II follows.

X D. Neither conclusion I nor II follows.

GROUP

Question ID: 9277593796 Status: Answered

Chosen Option : A

Q.13 Which two numbers should be interchanged in the given equation so that the equation becomes correct?

 $96 \div 8 + 7 - 2 \times 3 = 23$

X B. 7 and 2

X C. 2 and 3

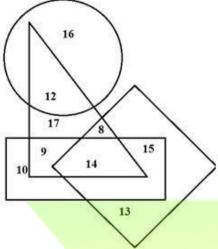
X D. 3 and 7

Question ID: 9277593794 Status: Answered

Chosen Option : A

Q.14 Identify the number that does NOT belong to the following series. 7, 21, 63, 199, 567, 1701 Ans X A. 567 X B. 21 **✓** C. 199 X D. 63 Question ID: 9277593791 Status : Answered Chosen Option: C Q.15 Select the option that can replace the question mark (?) in the following number series. 53, 90, 127, 164, ? Ans 🗳 A. 201 X B. 221 X C. 260 X D. 182 Question ID: 9277593789 Status: Answered Chosen Option : A Q.16 If '-' means 'x', 'x' means '+', '+' means '÷', and '÷' means '-', then find the value of the following expression. 335 + 67 - 8 ÷ 21 × 9 Ans X A. 52 X B. 231 **✓** C. 28 X D. 169 Question ID: 9277593793 Status: Answered Chosen Option: C

Q.17 In the following diagram, the triangle represents men, the circle represents unemployed, therectangle represents rural, and the square represents dancers.



How many men are NEITHER unemployed NOR dancers?

Ans X A. 17

✓ B. 26

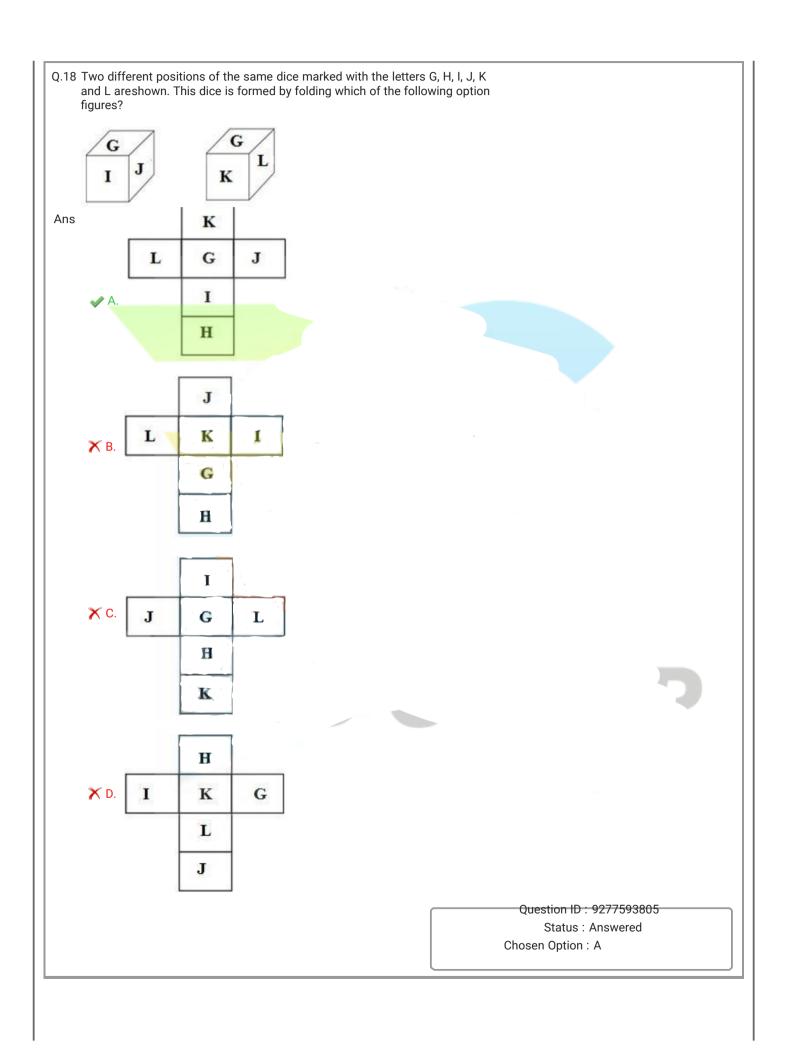
X C. 9

X D. 12

Question ID: 9277593803 Status: Answered

Chosen Option: B

EAD GROUP



Q.19 Select the option that can replace the question mark (?) in the following number series. 19, 28, ?, 52, 67 Ans 🕜 A. 39 X B. 36 X C. 34 X D. 43 Question ID: 9277593787 Status: Answered Chosen Option: A Q.20 Select the option that can replace the question mark (?) in the following number series. 16, 48, 24, 72, 36, ? Ans X A. 92 X B. 120 **✓** C. 108 X D. 88 Question ID: 9277593788 Status: Answered Chosen Option: C Section: General Hindi Q.1 मानव पढ़ रहा है।' वा य का काल है -Ans 🗙 A. पूण' वत'मान 🗶 C. सामा य वत'मान 🟋 D. सं द ध वत'मान Question ID: 9277593812 Status: Answered Chosen Option: B Q.2 पपीहा,_____ करता है। रिक्त स्थान के लिए उपयुक्त शब्द कौन सा है Ans A. पीउ पीउ X B. पिया पिया X C. काँव-काँव X D. क् - क् .? Question ID: 9277593811 Status: Answered Chosen Option : A

ns 🧳 A. अवधि	
★ B. काल	
X C. क्षण	
X D. युग	
	Question ID: 9277593810
	Status : Answered
	Chosen Option : A
Q.4 कौन' सर्वनाम का परिमाणवाचक विशेषण	
होगा-	
Ans	
A. कितना	
X B. किसका	
X С. किस	
X D. कैसा	
x D. कसा	Ougation ID : 0277F02000
	Question ID: 9277593809 Status: Answered
	Chosen Option : A
(B. तत्सम ट. देशज (D. तद्भव Q.6 चिड़िया' किस प्रकार का शब्द है?	Question ID : 9277593806 Status : Answered Chosen Option : D
Ans	
A. देशज	
X B. तद्भव	
. C. तत्सम	
X D. विदेशी	
	Question ID: 9277593807
	Status : Answered
	Chosen Option : B

Q.7 सदा प्रसन्न रहो।' वाक्य में क्रिया की वृत्ति है-	
Ans 🗙 A. आज्ञापूरक	
🗙 C. संकेतसूचक	
🗙 D. संदेहसूचक	
	Question ID: 9277593814
	Status : Answered
	Chosen Option : B
Q.8 सीता जा रही थी।' वा य का काल है	
-Ans 🧳 A. अपूण' भूत	
🗙 в. पूण' भूत	
🗙 c. सामा य भूत	
🗙 D. सं ध ध भूत	
N D. (144 - g)	
	Question ID: 9277593813
	Status : Answered Chosen Option : D
	Chosen option . B
लोकोक्ति कौन सी है? Ans	
X A फिसल पड़े तो हर गंगा	
X B. प्यासा कुएँ के पास जाता है	
C. बहरा सो गहरा	
(D. भूख लगे तो घर की सूझी	
	Question ID: 9277593815
	Status : Answered
	Chosen Option : A
Q.10 हिन्दी में कुल कितने सर्वनाम	
ह [†] ?	
And V A Q	
Ans X A.9	
X B. 13	
/C. 11 X D. 15	
	Question ID: 9277593808
	Status : Answered Chosen Option : C
	onosen option. o