

DELHI METRO RAIL CORPORATION LTD.

(Metro Bhawan, Fire Brigade Lane, Barakhamba Road, Delhi-110001)

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Test Center Name:	ION Digital Zone IDZ Duhei
Test Date:	18/04/2018
Test Time:	9:00 AM - 10:30 AM
Subject:	Maintainer Electronic Mechanic RNE11

Section :	Domain	
Ans	register can work with either serial or parallel inputs/outputs and shift the data either right or left, it is called a: 1. Serial / Parallel Out Register	Question ID : 569090915 Chosen Option : 3
•	 2. Bidirectional Register 3. Universal Register 4. Serial / Parallel In Register 	
Q.2 T	he anode in a Leclanche cell is a 1. Cathode rod 2. Silver rod 3. Carbon tube	Question ID : 569090846 Chosen Option :
Q.3 Int	4. Zinc container the diagram given below, what is the type of trigger pulse needed to operate the flip flop? Out Out Out Out Out Out Out Ou	Question ID : 569090913 Chosen Option : 1
,	 Negative edge trigger Positive edge trigger Negative level trigger Positive level trigger 	
Q.4 W	Thich one of the following is NOT a component of an MCB?	Question ID : 569090886
7	 X 1. Bimetallic strip ✓ 2. Discharge capacitor X 3. On/Off lever X 4. Trip coil 	Chosen Option : 1
Ans	ow many windings does the stator of a single phase induction motor have? 1. 4 2. 2 3. 3 4. 5	Question ID : 569090902 Chosen Option : 1

Q.7 Ans	An important specification of a laser diode is its 1. Voltage 2. Current 3. Frequency 4. Resistance Most of the contactors have a diode built inside the case. What is the function of this diode? 1. For the safety of the user 2. For protecting the circuit against spikes 3. For providing a DC voltage to the contactor	Question ID : 569090883 Chosen Option : 1 Question ID : 569090885 Chosen Option :
0.8	4. For clipping the extra voltage However to see a CCD base?	
Q.8 Ans	How many layers does an SCR have? X 1. 6 ✓ 2. 4 X 3. 2 X 4. 3	Question ID : 569090878 Chosen Option : 2
Q.9	In which region is the transistor operating if the Emitter Base junction is forward biased and the Collector Base junction is reverse biased?	Question ID : 569090867
Ans	X 1. Saturation	Chosen Option : 4
	× 2. Balanced	
	X 3. Cutoff	
	✓ 4. Active	
Q.10 Ans	What is the purpose of a diode connected between the gate and cathode of an SCR? 1. To protect the gate against high frequencies. 2. To allow the gate to operate for negative voltages. 3. For commutation.	Question ID : 569090881 Chosen Option :
	To protect the junction against reverse gate voltage.	
Q.11 Ans	How many parasitic elements does a Yagi antenna have? X 1. 6 X 2. 4 X 3. 8 V 4. 2	Question ID : 569090895 Chosen Option :
Q.12 Ans	A 2 $\rm V$ lead acid cell has an internal resistance of 1 ohm. What will be the value of current flowing through a 100 ohm resistor connected to this cell? 1. 19.8 mA 2. 20.01 mA	Question ID : 569090847 Chosen Option : 1
	X 3. 1.98 mA X 4. 2.01 mA	
Q.13	The minimum acceptable input value for Logic 1 in TTL logic is	Question ID : 569090907
Ans	X 1. 5.0 V	Chosen Option : 1

	✓ 2. 2.0 V	
	× 3. 2.6 V	
	× 4. 3.5 V	
Q.14	Identify the number of radians in a complete cycle.	Question ID : 569090843
Ans	×1. π	Chosen Option : 2
	√ 2. 2 π	
	\times 3. $\frac{\pi}{2}$	
	14	
	χ 4. $\frac{3\pi}{2}$	
0.15	A transformer is connected to 250 Volts in the primary and the secondary voltage is 500 Volts. If the number of turns in	
Ans	the primary is 1000, what is the number of turns in the secondary? 1. 250	Question ID : 569090853
	× 2. 500	Chosen Option : 4
	× 3. 1000	
	√ 4. 2000	
0 16	Identify the term used to indicate the potential difference between two terminals.	
Ans	1. MMF	Question ID: 569090842 Chosen Option: 2
	✓ 2. EMF	Chosen Option 2
	X 3. VA	
	X 4. ETF	
Q.17	What does an inductive proximity sensor use to switch the output state?	
Ans	★ 1. Change in capacitance	Question ID: 569090899 Chosen Option:
	★ 2. Change in incoming voltage	
	X 3. Change in incoming light	
	✓ 4. Change in oscillation frequency	
	* Change in oscination requency	
Q.18	What is the maximum modulating frequency transmitted in FM?	Question ID : 569090896
Ans	✓ 1. 15 kHz	Chosen Option :
	× 2. 58 kHz	
	X 3. 22 kHz	
	X 4. 108 kHz	
Q.19	How many bits can a single full adder circuit add?	Question ID : 569090909
Ans	X1.2	Chosen Option : 4
	X 2. 4	
	X 3. 5	
	√ 4. 3	
Q.20	What is the synchronous speed of a 4 pole induction motor running on 220 V, 50 Hz supply?	Question ID : 569090903
Ans	X 1. 1000 RPM	Chosen Option :
	× 2. 4800 RPM	
	3. 2000 RPM	
	✓ 4. 1500 RPM	

Q.21 Ans	When used in multivibrator circuits, the transistors operate as	Question ID : 569090873
7410	1. non-linear amplifiers	Chosen Option : 2
	2. switches	
	X 3. linear amplifiers	
	X 4. error amplifiers	
`	Which one of the materials given below is NOT a preferred material for construction of LEDs?	Ouestion ID : 569090882
Ans	★ 1. Gallium phosphide	Chosen Option : 4
	× 2. Gallium arsenide	
	X ₃ Gallium arsenide phosphide	
	4. Silicon phosphide	
Q.23	In fiber optic communications involving large distances and high speed transmission, which one of the following diodes is best suited as a source of light?	Question ID : 569090900
Ans	✓¹. Laser diode	Chosen Option : 2
	× 2. Photo diode	
	X 3. PIN diode	
	X 4. LED	•
Q.24	The number of flip flops needed to construct a decade counter is	Question ID : 569090912
Ans	1. 2	Chosen Option : 2
	√ 2. 4	
	X 3. 5	
	X 4. 3	
Q.25	Heat sink is used to	Question ID : 569090868
Ans	X 1. decrease distortion	Chosen Option : 4
	× 2. prevent PCB damage	
	X ₃ decrease noise	
	✓ 4. prevent thermal runaway	
Q.26	The expansion of the term HDMI is .	Outsties ID F5000005
Ans	X 1. High Definition Media Interactor	Question ID : 569090905 Chosen Option : 2
	✓ 2. High Definition Multimedia Interface	
	X 3. High Definition Media Interchange	
	× 4. High Distortion Media Indicator	
	And the state of t	
	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor.	Question ID : 569090849
Q.27 Ans	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor. 1. Brown, Black, Orange	Question ID : 569090849 Chosen Option : 1
	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor.	Question ID : 569090849
	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor. 1. Brown, Black, Orange	Question ID : 569090849
	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor. 1. Brown, Black, Orange 2. Black, Brown, Orange	Question ID : 569090849
Ans	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor. 1. Brown, Black, Orange 2. Black, Brown, Orange 3. Brown, Black, Red	Question ID: 569090849 Chosen Option: 1
Ans	A current of 1 mA is passing through a carbon film resistor when connected to a 10 V supply. Identify the colour code of the resistor. 1. Brown, Black, Orange 2. Black, Brown, Orange 3. Brown, Black, Red 4. Black, Brown, Red	Question ID : 569090849 Chosen Option : 1

	× 2. Analysing	
	X ₃ Filtering	
	✓ 4. Sampling	
Q.29	For an SCR, commutation is the term used to describe	Ouestion ID : 569090879
Ans	★ 1. Controlling angle	Chosen Option : 1
	× 2. Latching state	
	→ 3. Switching on	
	✓ 4. Switching off	
Q.30	Identify the feature of an autotransformer from the given options	Question ID : 569090854
Ans	★ 1. Automatic tap changing in secondary	Chosen Option : 2
	✓ 2. Has a single winding	
	★ 3. Has very few turns in the secondary	
	× 4. Used for isolation	
Q.31	Identify the function of a multiplier in a voltmeter.	Question ID : 569090859
Ans	★ 1 To increase its bandwidth	Chosen Option :
	★ 2. To increase its response time	
	X ₃ To increase its accuracy	•
	✓ 4. To extend its range	
Q.32	The wavelength of the IR signal used in TV remote controls is	Question ID : 569090906
Ans	X 1. 1020 nm	Chosen Option :
	X 2. 460 nm	
	3. 980 nm	
_	X 4. 100 nm	
Q.33 Ans	Which of the following does NOT have four electrons in its outermost orbit	Question ID : 569090864
Allo	1. Antimony	Chosen Option : 2
	X 2. Carbon X 3. Silicon	
	× 4. Germanium	
0.34	The binary equivalent of the hexadecimal number FF is	
Ans	1. 11111111	Question ID : 569090908 Chosen Option : 1
	X 2. 10001000	
	× 3. 10000000	
	× 4. 10101010	
	The LCR bridge employs for measurements in the low to medium frequency range	Question ID : 569090860
Ans	√ 1. Wheatstone bridge	Chosen Option :
	× 2. Differential measurement	
	X 3. Series resistances	
	X 4. Power measurement	

Q.36	In case of overloading, IC voltage regulators reduce both the output current and voltage for protection of the IC. What is this feature called?	Question ID : 569090889
Ans	★ 1. Crowbar protection	Chosen Option :
	✓ 2. Fold back current limiting	
	✗ 3. Feedback current limiting	
	★ 4. Reverse switching	
Q.37	In an RC phase shift oscillator, the total phase shift provided by the RC networks is	0 11 15 52000070
Ans	✓ 1. 180 degrees	Question ID : 569090872 Chosen Option : 1
	X 2. 120 degrees	
	→ 3. 90 degrees	
	X 4. 60 degrees	
Q.38	The number of triggering modes for a Triac is .	0. 11. 10. 10. 10.
Ans	✓ 1. 4	Question ID : 569090880 Chosen Option : 2
	X 2. 1	
	X 3. 2	
	× 4. 3	
Q.39	A photo sensor switch contains which of the following components?	Question ID : 569090884
Ans	★ 1. LED and Switch	Chosen Option : 2
	× 2. LED and LDR	
	X 3. Photodiode and Switch	
	✓ 4. LED and Photodiode	
Q.40	An LVDT is a transducer used to measure .	Question ID : 569090897
Ans	X 1. Angular Velocity ↑	Chosen Option : 2
	✓ 2. Linear Displacement	
	X 3. Linear Velocity	
	X 4. Angular Displacement	
Q.41	How many select lines are needed to realise an 8:1 multiplexer?	Ouestion ID : 569090910
Ans	X1.1	Chosen Option : 3
	X 2. 2	
	√ 3. 3	
	X 4.4	
Q.42	Which of the following is NOT a characteristic of an ideal OP Amp?	Question ID : 569090874
Ans	★ 1. Infinite open loop gain	Chosen Option : 4
	× 2. Infinite bandwidth	
	★ 3. Infinite input impedance	
	✓ 4. Infinite offset voltage	
Q.43	The internal resistance of a voltmeter is .	Question ID : 569090858
Ans	X 1. zero	Chosen Option :
	· · · · · · · · · · · · · · · · · · ·	

	✓ 2. very high	
	X 3. low	
	× 4. infinity	
Q.44	If the value of β is 99, the value of α will be	Question ID : 569090866
Ans	√ 1. 0.99	Chosen Option : 1
	× 2. 9.99	
	X 3. 99,9	
	× 4. 0.09	
Q.45	Identify the correct statement for a 3 phase Star connection.	Question ID : 569090845
Ans	↑ Line Voltage < Phase Voltage	Chosen Option : 4
	X 2. Line Current < Phase Current	
	✓ 3. Line Current = Phase Current	
	★ 4. Line Voltage = Phase Voltage	
0.46	AND THE PROOF THE SAME THE SAM	
Q.46	What will be the output of the given circuit?	Question ID : 569090861 Chosen Option : 2
	· · · · · · · · · · · · · · · · · · ·	
	V _{IN} $\stackrel{\downarrow}{\nabla}$ V _{OUT}	
	<u></u>	
Ans	X 1. Positive half cycles only	
	2.	
	Partially clipped positive half cycle and full negative cycle	
	★ 3. Negative half cycles only	
	X 4.	
	Partially clipped negative half cycle and full positive cycle	
Q.47	A power amplifier gives an output power of 1 W for an input of	Question ID : 569090870
Ama	100 mW. Its power gain expressed in dB is:	Chosen Option : 3
Ans	X 1. 50 X 2. 100	
	3. 10	
	X 4. 1	
	Frequency selective amplifiers employ for coupling.	Question ID : 569090871
Ans	X 1. Inductors	Chosen Option :
	✓ 2 Tuned Circuits	
	× 3. Transformers	
	X 4. Capacitors	
Q.49	What is the term that measures the ability of a receiver to receive even the weakest signals?	Question ID : 569090892
Ans	✓ 1. Sensitivity	Chosen Option : 1
	× 2. Rejection	
	X ₃ Selectivity	
	overseen per autoporter * • * ov	

	X 4. Filtering	
Q.50 Ans	When the operating point of a transistor is at cutoff, what is the conduction angle of the amplifier? 1. 90 degrees	Question ID : 569090869 Chosen Option : 3
	✓ 2. 180 degrees	
	X 3. 0 degrees	
	X 4. 270 degrees	
Q.51	One of the advantages of an FET over BJT is	Question ID : 569090877
Ans	★ 1. Lower operating frequency	Chosen Option :
	★ 2. Lesser supply voltage	
	× 3. More number of terminals	
	✓ 4. Higher switching speeds	
Q.52	To make a 555 IC work as a pulse width modulator, to which pin should the variable voltage be applied?	Question ID: 569090875
Ans	★ 1. Threshold pin	Chosen Option : 1
	× 2. Trigger pin	•
	✓ 3. Control pin	
	★ 4. Discharge pin	
Q.53	What type of regulator is the IC 7812?	Question ID : 569090888
Ans	X 1. −12 volts regulator	Chosen Option : 3
	X 2. Single +8.12 volts regulator	
	✓ 3. +12 volts regulator	
	X 4. Dual 7.81 volts regulator ✓	
Q.54	In which stage of communication is Pre Emphasis performed?	Question ID : 569090893
Ans	X 1. Receiver	Chosen Option : 1
	× 2. Audio Amplifier	
	X 3. Antenna	
	✓ 4. Transmitter	
	Which component is used with a relay to avoid damage due to the collapsing magnetic field?	Question ID : 569090852
Ans	1. Diode	Chosen Option :
	× 2. Fuse × 3. Capacitor	
	× 4. Thermistor	
0.56	No. Commence of the Commence o	
Q.56	What type of insulation is provided for thermocouple cables? 1. Mineral Insulated	Question ID : 569090898 Chosen Option :
_	× 2. Glass Insulation	опост ориот.
	× 3. PVC Cable	
	× 4. Cotton Sleeve	
Q.57	The effective value of a Sine Wave of 100 Vpp is	
		ı İ

Question ID: 569090844 √ 1. 70.71 volts Chosen Option: 3 2. 50.0 volts X 3. 35.35 volts X 4. 63.7 volts $^{Q.58}$ What is the type of display used in LED TV? Question ID: 569090904 Chosen Option: 1 Ans X 1. LED X 2. TFT X 3. Plasma √ 4. LCD Q.59 Identify the value of the current flowing through the given circuit at resonance. Question ID: 569090850 Chosen Option: --X 1. 22.5 A X 2. 12.5 A X 3. 10 A 4. 2.2 A Q.60 Which of the statements holds true for a transformer to have maximum efficiency? Question ID: 569090855 X 1. Copper Losses = 0 Chosen Option : 1 ✓ 2. Copper Losses = Iron Losses X 3. Copper Losses > Iron Losses 4. Copper Losses < Iron Losses</p> Q.61 What will be the value of voltage V in the given circuit if a current of 2 Amps is flowing through the circuit Question ID: 569090848 Chosen Option: 1 1. 120 volts X 2. 20 volts X 3. 60 volts X 4. 40 volts Q.62 Which of the following statements is true for a Common Emitter configuration? Question ID: 569090865 1. It has only Current Gain Chosen Option: 4 × 2. It has only Voltage Gain X 3. It is called Emitter Follower 4. It has both Current and Voltage Gains Q.63 Identify the value of the power factor of a parallel resonant circuit at resonance. Question ID: 569090851 Ans X 1. 0.5 Chosen Option: --**2**. 1 X 3. 0.75 X 4. 0

Q.64	Ground wave propagation is suitable for which of the following frequencies?	Question ID : 569090894
Ans	X 1. <50 MHz	Chosen Option :
	× 2. <5 GHz	
	√ 3. <5 MHz	
	X 4. <500 kHz	
Q.65	Which mode is used to measure the phase difference between two signals in an oscilloscope?	Question ID : 569090856
Ans	X 1. X mode	Chosen Option : 4
	∠ 2. Chop mode	
	X 3. Alt mode	
	✓ 4. X - Y mode	
Q.66	A current of $1.6\mathrm{A}$ is flowing through a wire of unit cross sectional area. How many electrons are moving through this wire per second?	Question ID : 569090841
Ans	\times 1. 1.6 \times 10 ¹⁰	Chosen Option :
	\times 2. 1.6 × 10 ¹⁹	
	√ 3. 10 ¹⁹	
	× 4. 10 ¹⁰	
Q.67	The function of a Clamper circuit is to .	Question ID : 569090862
Ans	➤ 1. limit the negative peak	Chosen Option : 2
	× 2 remove the DC value	
	X 3. limit the positive peak	
	✓ 4. insert a DC value	
	" llisert a DC value	
Q.68	In an AM signal, the number of sidebands is	Question ID : 569090891
Ans	√ 1. 2	Chosen Option : 1
	X 2. 6	
	X 3. 4	
	X 4. 8	
Q.69	The refractive index of an optical fiber varies when the distance from the core is varied. Identify the type of optical fiber from the options given.	Question ID : 569090901
Ans	✓ 1. Graded index fiber	Chosen Option :
	× 2. Linear index fiber	
	× 3. Non-linear index fiber	
	4. Step index fiber	
Q.70	A NOR gate SR flip flop has both inputs at logic 0. The output of this flip flop	Outstier ID (F60000011
Ans	X1. toggles	Question ID : 569090911 Chosen Option : 4
	× 2. is LOW	
	√ 3. does not change	
	X 4. is HIGH	
Q.71	What is the term that indicates the current which a fuse can carry without interrupting the circuit in which it is connected?	Question ID : 569090887
Ans	✓ 1. Current carrying capacity	Chosen Option : 1
	× 2. Peak current	
	- I the thirth	

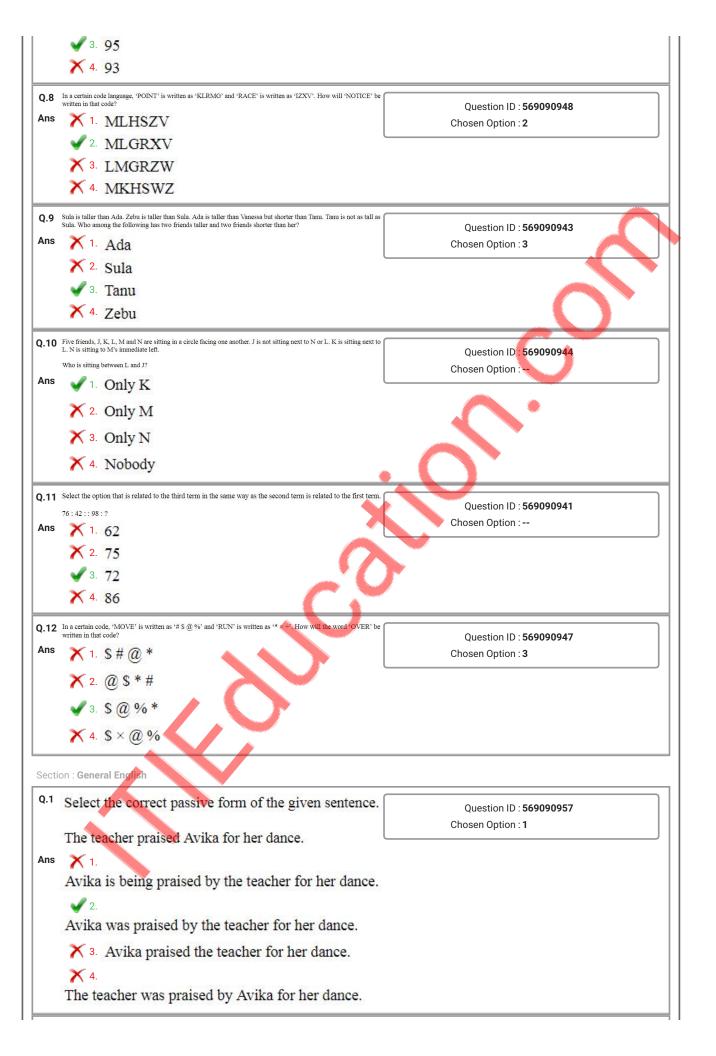
X 3. Breaking current X 4. Latching current Q.72 Identify the name of the OP Amp circuit in the diagram given below. Ouestion ID: 569090876 Chosen Option: 3 X 1. Integrator X 2. Non Inverting Amplifier √ 3. Differentiator X 4. Inverting Amplifier Q.73 The number of output states in a Schmitt trigger circuit is Question ID: 569090863 Ans **1.** 2 Chosen Option: 1 X 2. 8 X 3. 10 Q.74 In a seven segment display, the LED segments light up when the corresponding pins are connected to ground. This type of display is ______. Question ID: 569090914 Ans Common cathode display Chosen Option: 1 2. Common anode display X 3. Common logic display X 4. Common grid display Q.75 In electronics communications, the undesirable interference is referred to as Question ID: 569090890 √ 1. Noise Chosen Option: 1 X 2. Spike X 3. Distortion X 4. Glitch Section: General Awareness Q.1 Which of these cities is not included in the centrally sponsored Smart Cities Mission? Question ID: 569090926 X 1. Kalyan-Dombivali Chosen Option: 4 X 2. Solapur X 3. Pune 4. Latur 0.2 Name the position that Muhammad Ali Jinnah held as the head of Pakistan from its formation till his death. Question ID: 569090918 1. Governor General of Pakistan Chosen Option: 4 × 2. Sultan of Pakistan X 3. President of Pakistan A. Prime Minister of Pakistan The number of ministers, including the Chief Minister in a state, cannot be less than: Q.3 Ouestion ID: 569090921 X 1. 38 Chosen Option: 2

	▼ 2. 12	
	X 3. 26	
	★ 4. 18	
0.4	Kanyakumari, the southernmost tip of peninsular India, is nearest to which of these lines?	
Ans	1. Greenwich Meridian	Question ID : 569090920
	Control of the Contro	Chosen Option : 3
	× 2. Tropic of Cancer	
	✓ 3. Equator	
	★ 4. Tropic of Capricorn	
Q.5	The Gangaur festival, glorifying the celestial couple of Shiva and Gauri, is primarily celebrated in which Indian state?	
Ans	X 1. Punjab	Question ID : 569090924
	× 2. Maharashtra	Chosen Option :
	- 1000 100 100 100 100 100 100 100 100 1	
	✓ 3. Rajasthan	
	× 4. Orissa	
Q.6	The then capital city of Indus Valley Civilization Harappa is located in the province of Pakistan.	Question ID : 569090916
Ans	✓ 1. Punjab	Chosen Option : 4
	× 2. Baluchistan	
	X 3. Khyber Pakhtunkhwa	
	X 4. Sind	
	A Sind	
Q.7	Name the smallest state of India by population.	Question ID : 569090919
Ans	X 1. Goa	Chosen Option : 4
	X 2. Tripura	
	X 3. Mizoram	
	✓ 4. Sikkim	
	· Sikkiii	
Q.8	What is the IBC Amendment Bill related to?	Question ID : 569090922
Ans	★ 1. Corruption in government	Chosen Option : 4
	× 2. Information and broadcasting rights	
	X 3. Intellectual Property Rights (IPR)	
	✓ 4. Insolvency and bankruptcy	
Q.9	In which year did Burma (now Myanmar) become an independent republic nation?	Question ID : 569090917
Ans	X 1. 1944	Chosen Option :
	× 2 1958	
	√ 3. 1948	
	× 4. 1950	
0.10	Total FDI inflow in India has gone up by in the last three years.	
Ans	1. 38%	Question ID : 569090923
	× 2. 22%	Chosen Option :
	× 3. 45%	
	★ 4. 12%	

Q.11 Who is the first Indian to win a gold medal in an international fencing event? Question ID: 569090925 Ans Chosen Option: --√ ¹. Bhavani Devi X 2. Neha Karmakar X 3. Ruchi Trikha X 4. P.V. Sindhu Q.12 Which city of the following has hosted the FIFA U-17 world cup matches? Ouestion ID: 569090927 X 1. Mumbai Chosen Option: --X 2. Nagpur X 3. Pune 4. Navi Mumbai Section: Quantitative Aptitude Q.1 One of the factors of the expression x(3x + 2)(x - 2)(3x - 4) - 21 is: Question ID: 569090938 \times 1. $3x^2 - 4x + 7$ Chosen Option :- $\sqrt{2.3x^2-4x+3}$ \times 3. $3x^2 + 4x - 7$ \times 4. $3x^2 + 4x - 3$ Surbhi sets out to walk from place A towards place B. At the same time, Abhi starts to walk from B to A. After meeting each other, Surbhi and Abhi take 3 hour 20 minutes and 4 hour 48 minutes respectively to reach their destinations. If Surbhi walks at 9 km/h, then the speed of Abhi (in km/h) is: Question ID: 569090932 Chosen Option: --Ans \times 2. $6\frac{1}{2}$ X 3. 6 X 4. 8 Q.3 Two pillars A and B of heights h₁ and h₂ respectively stand on either side of a road that is 50 m wide. At a point on the road between A and B, 10 m away from A, the angles of elevation of the tops of A and B are 60° and 30°, respectively. What is h₁: h₂? Question ID: 569090936 Chosen Option: 2 Ans $\times 1. \sqrt{3}:2$ 2. 3:4 X 3. 4:3 \times 4. 2: $\sqrt{3}$ **Q.4** The average score in mathematics of students in a class is x and the ratio of the number of boys to that of girls is 4:3. If the average score of girls is x+6, then the average score of boys is: Question ID: 569090934 Ans \times 1. x - 8Chosen Option: 4 **Q.5** In an arithmetic series of 24 terms, if the sum of a_i , i = 1, 5, 10, 15, 20, 24 is 225, where a_i denotes i^{th} term, then the Question ID: 569090935 Ans X 1. 850 Chosen Option: --X 2. 450 3. 900 X 4. 750 Q.6 Three men and 4 women earn ₹ 36,400 in 7 days, whereas 16 men and 13 women earn ₹ 1,75,200 in 8 days. In how many days 4 men and 5 women will earn ₹ 40,200?

Ans	✓ 1. 6 × 2. 9	Question ID : 569090933 Chosen Option :
	X 3. 10	
	× 4. 8	
Q.7	Gaurav bought 864 articles and sold 800 of them for the price he paid for all 864 articles. He sold the remaining articles at the same price per article as the first 800. The percentage gain is:	Question ID : 569090930
Ans	√ 1. 8	Chosen Option :
	\times 2. $8\frac{1}{2}$	
	X 3. 9	
	\times 4. $7\frac{1}{2}$	
Q.8	What is the value of $2(\sin^6\theta + \cos^6\theta) - 3(\sin^4\theta + \cos^4\theta) + 4$?	Question ID : 569090937
Ans	X 1. 1	Chosen Option :
	✓ 2. 3 × 3. 5	
	★ 4. 0	
Q.9	If the equations $3x^2 + 4kx + 2 = 0$ and $2x^2 + 3x - 2 = 0$ have a common root, then the sum of possible values of k	
Ans	is: 3	Question ID : 569090939 Chosen Option :
	√ 1. 3/8	
	\times 2. $\frac{9}{4}$	
	\times 3. $\frac{13}{8}$	
	X 4. 2	
	Let x be the least number which, on being divided by 5, 6, 8, 9 and 12, leaves in each case a remainder of 1. This number x is exactly divisible by 13. What is the sum of the digits of x ?	Question ID : 569090928
Ans	X 1. 11 X 2. 13	Chosen Option :
	X 3. 9	
	√ 4. 10	
Q.11	Two identical jars are full of solutions of alcohol and water. One jar contains 60% alcohol whereas the other contains $33\frac{2}{3}\%$ water. If the contents of these jars are emptied into a third jar and mixed, the percentage of alcohol in resulting	Question ID : 569090931
Ans	solution will be:	Chosen Option : 1
	✓ 1. 63 ¹ / ₃	
	\times 2. $60\frac{1}{3}$	
	\times 3. $62\frac{2}{3}$	
	\times 3. $62\frac{2}{3}$ \times 4. $60\frac{2}{3}$	
Q.12	Let N be the greatest natural number that will divide 13511, 13903 and 14589, leaving the same remainder in each case. The difference between N and the remainder is:	Question ID : 569090929
Ans	√ 1. 13	Chosen Option :
	× 2. 17	
	★ 3. 14 ★ 4. 18	
	10	

Section : General Intelligence and Reasoning	
Q.1 What will come in place of the blank in the series	Question ID : 569090950 Chosen Option :
6, 8, 12, 18, 26, 36,	
Ans X 1. 52	
√ 2. 48	
X 3. 54	
★ 4. 45	
Q.2 Which word CANNOT be formed using letters of the given word only as many times as each letter appears in the w	ord?
ADVERTISE	Question ID : 569090945
Ans X 1. SATIRE	Chosen Option : 3
× 2. DERIVATE	
✓ 3. STEROID	
X 4. SEDATIVE	
Q.3 Introducing a man, Garima said, "He is my mother's only son's only sister's son." How is the man related to Gari	
Ans X 1. Brother-in-law	Question ID : 569090940 Chosen Option : 3
× 2. Brother	Silotti Silott
✓ 3. Son	
X 4. Cousin	
0.4 What will be the value of the expression given below if the sign 'x' is interchanged with '+' and the number '	
interchanged with '5'?	Question ID : 569090946
(21+5)×4=? Ans 1. 41	Chosen Option : 2
× 2. 30	
X 3. 109	
✓ 4. 89	
4. 69	
Q.5 Manoj walks from his home to the cowshed on his farm. He starts by facing West. After walking for 5 km, he turn his left and walks for a distance of 3 km. Then, he turns left and walks for another 1 km to reach the cowshed.	Question ID : 569090949
To which direction is Manoj's cowshed located with respect to his home?	Chosen Option :
Ans 1. South-West	
× 2. South-East	
× 3. North-West	
✓ 4. North-East	
Q.6 Select the option that is related to the third term in the same way as the second term is related to the first to	erm.
Carpenter: Wood: Cobbler:?	Question ID : 569090942 Chosen Option : 3
Ans X 1. Silk	
X2 Cloth	
✓ 3. Leather	
X 4. Iron	
Q.7 What will come in place of the blank in the series	2
what will come in place of the blank in the series	Question ID : 569090951 Chosen Option : 3
50, 55, 61, 68, 76, 85,	5555.7 59.1011.10
Ans X 1. 94	
× 2. 96	



Q.2	Select the antonym of the given word.	Question ID : 569090958 Chosen Option : 1
	ARRIVE	
Ans	✓ 1. Depart	
	× 2. Come	
	X ₃. Appear	
	X 4. Enter	
Q.3	Select the most appropriate option to fill in the blank.	Question ID : 569090954 Chosen Option : 1
	Dalhousie is than Chamba.	
Ans	COOLE	
	× 2. more cool	
	X 3. cool	
	X 4. coolest	
Q.4	Select the most appropriate option to fill in the blanks.	Question ID : 569090955
	Alice opened the doorledinto a narrow passage.	Chosen Option : 3
Ans	✓ 1. It, her	
	× 2. He, her	
	X 3. She, it	
	× 4. This, she	
	, Illio, sire	
Q.5	Select the adverb in the given sentence.	Question ID : 569090952 Chosen Option : 2
Q.5	He always tries to do his best.	·
Q.5		·
	He always tries to do his best.	·
	He always tries to do his best.	·
	He always tries to do his best. X 1. best ✓ 2. always	
Ans	He always tries to do his best. X 1. best ✓ 2. always X 3. tries X 4. his	Chosen Option : 2
	He always tries to do his best. X 1. best ✓ 2. always X 3. tries	Chosen Option : 2 Question ID : 569090953
Ans	He always tries to do his best. X 1. best ✓ 2. always X 3. tries X 4. his	Chosen Option : 2
Ans	He always tries to do his best. ✓ 1. best ✓ 2. always X 3. tries X 4. his Select the most appropriate option to fill in the blank.	Chosen Option : 2 Question ID : 569090953
Ans	He always tries to do his best. 1. best 2. always 3. tries 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell.	Chosen Option : 2 Question ID : 569090953
Ans	He always tries to do his best. *\times 1. best *\times 2. always *\times 3. tries *\times 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. *\times 1. by 1. by	Chosen Option : 2 Question ID : 569090953
Ans	He always tries to do his best. *\times 1. best 2. always *\times 3. tries *\times 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. *\times 1. by *\times 2. at	Chosen Option : 2 Question ID : 569090953
Q.6	He always tries to do his best. 1. best 2. always 3. tries 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. 1. by 2. at 3. with	Chosen Option : 2 Question ID : 569090953
Q.6	He always tries to do his best. X 1. best 2. always X 3. tries X 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. X 1. by X 2. at X 3. with X 4. from	Question ID : 569090953 Chosen Option : 1
Q.6	He always tries to do his best. 1. best 2. always 3. tries 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. 1. by 2. at 3. with 4. from Select the option that gives the correct indirect form of the given sentence. Mother asked me, "Are you coming home with me?" 1.	Question ID : 569090953 Chosen Option : 1
Q.6 Ans	He always tries to do his best. X 1. best 2. always X 3. tries X 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. I by X 2. at X 3. with X 4. from Select the option that gives the correct indirect form of the given sentence. Mother asked me, "Are you coming home with me?" X 1. Mother asked me if she was coming home with her.	Question ID : 569090953 Chosen Option : 1
Q.6 Ans	He always tries to do his best. 1. best 2. always 3. tries 4. his Select the most appropriate option to fill in the blank. The telephone was invented Graham Bell. 1. by 2. at 3. with 4. from Select the option that gives the correct indirect form of the given sentence. Mother asked me, "Are you coming home with me?" 1.	Question ID : 569090953 Chosen Option : 1

