RRB 28th August Shift 1

- 1. Which one of following expression is true for Tds equation
 - A. du PdV
 - B. du + PdV
 - C. du VdP
 - D. du + VdP
- Ans. B.
- PMM1 is closely related with 2.
 - A. First law of thermodynamics
 - B. Second law of thermodynamics
 - C. Third law of thermodynamics
 - D. Zeroth law of thermodynamics
- Ans. A.
- 3. Octane number of iso-octane is
 - A. 0 B. 30
 - C. 60 D. 100
- Ans. D.
- 4. Petrol is used in which cycle
 - A. Otto cycle
 - B. Diesel cycle
 - C. Rankine cycle
 - D. Carnot cycle
- Ans. A.
- Isolated system indicates 5.
 - Mass of substance Α. cross the boundary
 - B. Energy of substance cross the boundary
 - C. Both mass and energy of substance cross the boundary
 - D. Both mass and energy of substance does not cross the boundary
- Ans. D.
- Heat transfer by molecular collision in 6. A. Conduction B. Convection
 - C. Radiation D. Scattering
- Ans. B.
- 7. Which one of the following have a highest thermal conductivity
 - A. Boiling water B. Steam
 - C. Solid ice D. Rain water
- Ans. C.
- Oxy-acetylene welding is categorised in 8.
 - A. Arc welding
 - B. Gas welding
 - C. Chemical welding D. Resistance welding
- Ans. B.
- 9. Acetylene gas is stored in cylinders in A. Solid form
 - B. Gaseous form
 - C. Liquid form
 - D. Mixture of solid and liquid form
- Ans. C.
- 10. The temperature at which the new grains are formed in the metal is called
 - A. Lower critical temperature
 - B. Upper critical temperature
 - C. Eutectic temperature
 - D. Recrystallisation temperature
- Ans. D.

- 11. The process of improving the cutting action of the grinding wheel is called A. Truing B. Dressing
 - C. Facing D. Clearing
- Ans. B.
- 12. The angle on which the strength of the tool depends is
 - A. Rake angle B. Cutting angle
 - C. Clearance angleD. Lip angle
- Ans. A.
- 13. Feed rate in milling operation is expressed as
 - A. mm/tooth
 - B. mm/rev of milling cutter
 - C. meters/min
 - D. mm
- Ans. A.
- 14. The casting defects which is not caused by the high pouring temperature of melts is
 - A. Cuts
 - B. Metals penetration
 - C. Fusion
 - D. Rat tails
- Ans. B.
- 15. Which of the following is not a part of Squirrel cage 3- phase induction motor A. Roto B. Stator
 - C. Carbon Brushes D. Shaft
- Ans. C.
- 16. Number of poles of a 3-phase induction motor when speed of motor is 600 rpm and supple frequency is 50 Hz.
 - A. 10 B. 5 D. 8
 - C. 20
- Ans. A.
- 17. Air preheater is a part of
 - A. Thermal power plant
 - B. Wind power plane
 - C. Nuclear power plant
 - D. Hydel power plant
- Ans. A.
- 18. Steel pipes are manufactured by
 - A. Argon arc welding
 - B. Thermit welding
 - C. Resistance welding
 - D. Arc welding
- Ans. C.
- 19. Hopkinson's test of DC machines is conducted at
 - A. No load B. Full load
 - C. Part load D. Fluctuating load
- Ans. B.

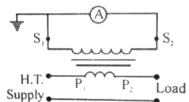
- 20. Heat generated across a resistance is
 - A. directly proportional to current flowing through it
 - B. inversely proportional to the value of resistance
 - C. directly proportional to the square of current flowing through it
 - D. directly proportional to square of resistance

Ans. C

- 21. Which of the following is not a type of Transformation on the basis of cooling system
 - A. Naturally cooled
 - B. Water cooled
 - C. Forced air cooled
 - D. Ammonia cooled

Ans. D.

22. The following is a circuit representation of



- A. Auto transformer
- B. Current transformer
- C. Distribution transformer
- D. Potential transformer
- Ans. B.
- 23. Capacitor start capacitor run motor is basically is
 - A. DC shunt motor
 - B. Single Phase motor
 - C. Two Phase motor
 - D. Three Phase motor
- Ans. B
- 24. A fuse works on the effect of current. A. magnetic B. static electricity
 - D. chemical C. heating

Ans. C.

- 25. In a mercury arc rectifier positive ions are attracted towards.
 - A. mercury pool B. shell bottom
 - C. cathode D. anode

Ans. C.

- 26. Boolean algebra obeys
 - A. commutative law only
 - B. distributive law only
 - C. associative law only
 - associative, D distributive and commutative law



- 27. The hexadecimal number 64 AC is equivalent to decimal number
 - A. 25727 B. 25722 C. 25772 D. 25277

Ans. C.

- 28. When transistors are used in digital circuits they usually operate in the
 - A. active region
 - B. break down region
 - C. saturated region
 - D. saturation and cut off region
- Ans. D.
- 29. Most of the electrons in the base of an NPN transistor flow
 - A. out of the base lead
 - B. into the collector
 - C. into the base
 - D. into the base supply
- Ans. B.
- 30. RF amplification is used to amplify the waves
 - A. before detection
 - B. after detection
 - C. after modulation
 - D. after AF amplification
- Ans. A.
- 31. A Karnaugh map with 4 variables has
 - A. 2 cells B. 4 cells
 - C. 8 cells D. 16 cells
- Ans. D.
- 32. A transistor has a current gain of 0.99 in the CB mode. Its current gain in the CC mode is
 - A. 100 B. 99 C. 0.99
 - D. 1.01
- Ans. A.
- 33. The number of doped regions in P-N diode is
 - A. 1 B. 2
 - C. 3 D. 4
- Ans. B.
- 34. The types of carriers in a semiconductor are
 - A. 1
 - B. 2
 - C. 3

D. may be 1 or 2 depending on material Ans. B.

- 35. In the case of pure bending, the beam will bend into an arc of a
 - A. Circle B. Parabola C. Ellipse D. Hyperbola

- 36. Consistency as applied to cohesive soils is an indicator of its
 - A. Density B. Moisture content
 - C. Shear strength D. Porosity
- Ans. C.
- 37. Which one of the following is not a compression member?
 - A. Strut B. Tie
 - C. Rafter D. Boom
- Ans. B.
- 38. Milk mixes with water due to
 - A. Very good cohesion
 - B. Very good adhesion
 - C. Very good surface tension
 - D. Very good vapour pressure
- Ans. B.
- The probability distribution taken to represent the completion time in PERT analysis is
 - A. Gamma distribution
 - B. Normal distribution
 - C. Beta distribution
 - D. Log normal distribution
- Ans. C.
- 40. The strength of timber is maximum when load applied is
 - A. Parallel to grain
 - B. Perpendicular to grain
 - C. Inclined at 45° to grain
 - D. Inclined at 60° to grain
- Ans. A.
- 41. An ideal fluid
 - A. obey's Newton's law of viscosity
 - B. is both incompressible and non-viscous
 - C. is non viscous
 - D. Frictionless and compressible
- Ans. B.
- 42. The two point problem and three point problem are methods of
 - A. Resection
 - B. Orientation
 - C. Traversing
 - D. Resection and orientation
- Ans. D.
- Subtense bar is an instrument used for A. Levelling
 - B. Measurement of horizontal distances in plane areas
 - C. Measurement of horizontal distances in undulated areas
 - D. Measurement of angles

Ans. C.

- 44. A soil having particles of nearly the same size is known as
- A. Well graded B. Uniformly graded C. Poorly graded D. Gap graded Ans. B. 45. Addition of pozzolana to ordinary portland cement increase A. Bleeding B. Shrinkage C. Permeability D. Heat of hydration Ans. B. 46. Critical path A. is always longest B. is always shortest C. May be longest D. May be shortest Ans. A. 47. The scale of a rectifier instrument is A. linear B. non-linear C. either linear or non linear D. neither linear or non linear Ans. A. 48. For measuring current high at frequency we should use A. moving iron instrument B. electrostatic instrument C. thermocouple instrument D. PMMC instruments Ans. C. 49. The resistance in the circuit of the dynamometer moving coil of a wattmeter should be A. almost zero B. low C. hiah D. very low Ans. C. 50. A dynamometer wattmeter can be used for A. both D.C. and A.C if scales are calibrated B. D.C. only C. A.C. only D. both AC and DC without any calibration of scale Ans. A. 51. In a low power factor wattmeter the compensating coil is connected A. in series with current coil B. in parallel with current coil C. in series with pressure coil D. in parallel with pressure coil Ans. C. 52. The average water consumption for government office range from A. 45–90 litres per capita per day
 - B. 30–60 litres per capita per day
 - C. 75–100 litres per capita per day
 - D. 25–50 litres per capita per day
- Ans. A.

53. In water treatment, the manual screens are kept inclined at an angle of A. 30 – 50° with the horizontal B. 45 - 60° with the horizontal C. 50 - 70° with the horizontal D. 45 - 80° with the horizontal Ans. B. 54. The water distribution networks are normally designed for a period of A. 40 years B. 30 years C. 25 years D. 50 years Ans. B 55. Which of the following is used for the removal of particulates as well as gaseous pollutants A. catalytic converters B. wet scrubbers C. electrostatic precipitators D. fluidized bed absorbers Ans. B. 56. The summation of 50 dBA noise level with another 50 dBA noise level is equation to A. 100 dBA B. 50 dBA C. 53 dBA D. 56 dBA Ans. C. 57. Which of the following is correct in respect of ozone layer: A. ozone layer is being highest at equator and lowest at poles B. ozone layer is being highest at poles and lowest at equator ozone layer is being uniform C. thickness throughout the layer D. ozone layer is being uniform at equator but non uniform at poles Ans. A. 58. Monitor (VDU) is a (an) ____ A. Output device B. input device C. Storage device D. Both input and output device Ans. A. 59. Which of the following memories is directly accessible by the CUP? A. RAM B. Hard Disk C. Magnetic Type D. DVD Ans. A. 60. Static RAM (SRAM) is faster than Dynamic RAM (DRAM) because A. SRAM uses capacitors B. SRAM is costlier C. SRAM does not require refreshing D. SRAM is cheaper Ans. C.

61. UTF-8 is a (an) ____ A. 8-bitfixed-width encoding B. 8-bit variable-width encoding C. 16-bit variable-width encoding D. 16-bit fixed-width encoding Ans. B. 62. The hexadecimal representation of 225.5 is B. (E1.80)₁₆ A. (E1.08)₁₆ C. (1E.80)₁₆ D. (1E.08)₁₆ Ans. B. 63. Considering X and Y as binary variables, the Boolean expression X + XY' is equivalent to A. X B. 1 C. 0 D.Y Ans. A. 64. The 2's compliment of the binary number (01010101)₂ is A. $(1000000)_2$ B. (11111111)₂ C. (01010110)₂ D. (10101011)₂ Ans. D. 65. Compiler is used to convert A. High-level language programs into machine codes B. Low-lever language programs into machine codes C. Assembly language programs into machine codes D. High-level language programs into assembly codes Ans. A. 66. In class 'A' IP addresses, number of network ID bits used to identify the class is ___ A. 0 B. 1 C. 2 D. 3 Ans. B. 67. Which of the following categories of networks has smallest geographic area? A. MAN B. PAN C. LAN D. WAN Ans. B. 68. The distance between two stations is 20 kilometers. If the R.F. of the scale is 1/400000. Then the distance between the two stations on the map will be A. 50 cm B. 5 cm C. 5 mm D. 1 cm Ans. B. 69. If a line is perpendicular to V.P. and parallel to H.P., its front view will be A. a point B. a line of smaller dimension C. a line of larger dimension D. a line of same dimension Ans. A.

- 70. A circular plane with a 60 mm diameter is resting on a point of its circumference on the V.P.. The surface of the plane is inclined at 45° to the V.P. and perpendicular to H.P.. Its front view will be
 - A. a straight line B. an ellipse C. a circle D. a rectangle
- Ans. C.
- 71. The angle that isometric lines make with each other is

A. 90°	B. 60°
C. 120°	D. 45°
_	

- Ans. C.
- 72. The eccentricity of a parabola is

Ans. A.

- 73. A force of 20 N accelerates a body from rest to a velocity of 3 m/s in 10 s. The magnitude of change in momentum of the body is one second is
 - A. 2 kg m/s B. 20 kg m/s C. 60 kg m/s D. 6 kg m/s
- Ans. B.
- 74. The mass of an object is 24 kg on the surface of Earth. It's mass on the surface of Moon will be

А. 24 КД	в. 4 кд
C. 2.4 kg	D. 0.24 kg

Ans. A.

75. A 5 kg box is raised through a height. Its potential energy increases by 49 J. The height is $(g = 9.8 \text{ m/s}^2)$

A. 9.8 m	B. 5.0 m
C. 1.0 m	D. 0.5 m

Ans. C.

76. Smita uses a tuning fork of frequency 512 Hz to produce sound in the science laboratory of her school. The velocity of sound in the laboratory is 344 m/s. The distance between two consecutive crests of the sound waves produced is
A. 1.34 m B. 0.67 m
C. 6.7 m D. 1.49 m

Ans. B.

77. A concave lens forms an image of a real object. This image is necessarily

A. enlarged, erect and real

- B. enlarged, erect and virtual
- C. diminished, inverted and virtual
- D. diminished, erect and virtual

Ans. D.

78. A wire has a radius of 0.50 mm and carries a current of 0.5 A. The resistivity of the material of wire is 1.1×10^{-6} ohm-m. The potential difference per

A. 0.70 V/m B. 1.4 V/m D. 0.90 V/m C. 2.2 V/m Ans. A. 79. A substance "A" reacts with another substance "B" to yield a substance "C" and a gas "D". The gas "D" which when passed through lime water turns it milky. The substances "A" and "B" are A. A) = HCl and B) = Na_2CO_3 B. A) = NaHCO₃ and B) = H_2O C. A) = Na_2CO_3 and B) = H_2O D. A) = CH₃COOH and B) = NaOH Ans. A. 80. Which of the following represents a double displacement reaction? A. Zn + 2HCl \rightarrow ZnCl₂ + H₂ B. Cu + AgNO₃ \rightarrow Cu(NO₃)₂ + 2Ag C. $K_2SO_4 + BaCl_2 \rightarrow BaSO_4 + 2KCl$ D. $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$ Ans. C. 81. Which of the following set of conditions are the most favourable for corrosion of metals? (i) Dry air (ii) Humid air (iii) Presence of acidic gases A. (ii) only B. (iii) only C. (i) and (iii) D. (ii) and (iii) Ans. D. 82. A trivalent metal "M" was made to react with oxygen to yield 0.25 mole of metal oxide. Which of the following is a correct statement about the product of this reaction? The reaction product contains A. 1.506 \times 10²³ molecules of oxide of formula M₂O₃. B. 1.506 \times 10²³ molecules of oxide of formula M₃O₂. C. 1.506 × 105.75 molecules of oxide of formula M₃O₂. D. 1.506×105.75 molecules of oxide of formula M₂O₃. Ans. A. 83. In Modern Periodic Table, there are A. 18 Groups and 09 periods B. 18 Groups and 07 periods C. 07 Groups and 18 periods D. 08 Groups and 06 periods Ans. B. 84. Which of the following would immediately decolorize bromine dissolved in Carbon disulphide? A. Ethane B. Pentane

unit length along the wire is

C. Benzene D. Propene

Ans. D.

85. Ans.	change in the stru A. Recombination C. Variation	
86.	Nitrous Oxide diss	Sulphur-dioxide and olve in water present ey form acids which
	B. Acid rain C. Air pollution	
Ans.	D. Climate change	
-		use when we cut and
	A. Incisors and Mc B. Molars and Prer	
	C. Premolars and	
Ans.	D. Incisors and Ca	nines
88.		nd Fertilization, which or pistil becomes the
	A. Entire carpel	-
Ans.	C. Style	D. Ovary
	To which kingdom belong?	of life do all bacteria
	A. Monera C. Plantae	B. Fungi D. Animalia
Ans.		D. Animalia
90.	Which one of the carry oxygenated	e following does not blood?
		B. Pulmonary Artery
Ans.	B. The HCF and LCM	of 0 and 17 are
91.	A. 0, 153	B. 1, 153
	C. 1, 9	D. 1,17
Ans.		which when divided
92.	by 15 and 20 lea each case is	aving remainder 9 in
	A. 60 C. 69	B. 65
Ans.		D. 309
	If $a : b = 4 : 5$ and is equal to	d a + b = 63, then a
	A. 28 C. 46	B. 35 D. 54
Ans.		U, JT
94.	is equal to	in proportion then x
	A. 5 C. 5√3	B. 75 D. 10√3

Ans. C. 95. If 20% of a number is 30, then number is B. 130 A. 120 C. 140 D. 150 Ans. D. 96. If Rs. 500 amounts to Rs. 700 in 8 years, then rate of simple interest is B. 6% A. 5% C. 8% D. 10% Ans. A. 97. The compound interest of Rs. 10,000 for 1 year at the rate of 8% per annum compounded half yearly is A. Rs. 800 B. Rs. 816 C. Rs. 856 D. Rs. 958 Ans. B. 98. The C.P of an article is Rs. 210. If loss is 10%, then SP of article is A. Rs. 240 B. Rs. 220 C. Rs. 231 D. Rs. 189 Ans. A. 99. The selling price of an article is Rs. 900. If it is sold at a loss of 10%, then cost price is A. Rs. 900 B. Rs. 1000 C. Rs. 810 D. Rs. 910 Ans. B. 100.A shopkeeper mixes 20 kg of wheat which cost him Rs. 16/kg with 10 kg wheat which cost him Rs. 12/kg. He sells the mixture at Rs. 18/kg. His profit is A. Rs. 100 B. Rs. 110 D. Rs. 120 C. Rs. 115 Ans. A. 101. In two vessels A and B, sprit and water are in the ratio 5 : 2 and 3 : 4 respectively. The ratio in which these are mixed which contains spirit and water in the ratio 2 : 1 is A. 5 : 2 B. 2 : 5 C. 5 : 1 D.1:5 Ans. C. 102. The speed of a car is 90 km/h. The time taken by it in seconds to cover a distance of 700 m is A. 20 B. 25 C. 28 D. 35 Ans. C. 103.A train 120 m long is moving with the speed of 72 km/h. The time taken in seconds, to cross a stationary train 100 m long is A. 5 B. 6 C. 11 D. 15 Ans. C.

104.A and B car	n do a piece of work in 10
	e can do the same work in
	how many days B alone can
do same wo	
A. 30	B. 25
C. 22	D. 20
Ans. A.	
	do a piece work in 15 days,
	12 days and R and P in 20
P to do sam	umber of days required for
A. 20	B. 30
A. 20 C. 50	D. 60
Ans. D.	D. 80
	of outpage of first five whole
numbers is	of cubes of first five whole
A. 25	B. 20
A. 25 C. 16	D. 6
	D. 6
Ans. B.	of 11 observations is 20. If
107. The average	of 11 observations is 20. If rst 6 observations is 18 and
	ast 6 observations is 25, the
sixths obser	
A. 38	B. 45
C. 36	D. 43
Ans. A.	
108. The sum of	first 16 terms of the AP
10, 7, 4, 1,	
	,
A400	B300
A400 C200	B300 D800
C. –200	B300 D800
C200 Ans. C.	D800
C200 Ans. C.	D800
C200 Ans. C. 109.The sum of	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is
C200 Ans. C. 109.The sum of A. 5	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4
C200 Ans. C. 109.The sum of i A. 5 C. 3	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is
C200 Ans. C. 109.The sum of A. 5 C. 3 Ans. D.	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2
C200 Ans. C. 109.The sum of i A. 5 C. 3 Ans. D. 110.A vertical p	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of
C200 Ans. C. 109.The sum of 1 A. 5 C. 3 Ans. D. 110.A vertical p length 20 m	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string
C200 Ans. C. 109.The sum of i A. 5 C. 3 Ans. D. 110.A vertical p length 20 m makes an ar	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ingle of 30° with the ground,
C200 Ans. C. 109.The sum of i A. 5 C. 3 Ans. D. 110.A vertical p length 20 n makes an ar the length o	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is
C200 Ans. C. 109.The sum of i A. 5 C. 3 Ans. D. 110.A vertical p length 20 n makes an ar the length o A. $10\sqrt{3}$ m	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is B. 10 m
C200 Ans. C. 109.The sum of i A. 5 C. 3 Ans. D. 110.A vertical p length 20 n makes an ar the length o	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is
C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 m makes an ar the length o A. $10\sqrt{3}$ m C. 15 m Ans. B.	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m
C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 n makes an ar the length 0 A. $10\sqrt{3}$ m C. 15 m Ans. B. 111. The angles	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is B. 10 m
C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 n makes an ar the length 0 A. 10 $\sqrt{3}$ m C. 15 m Ans. B. 111. The angles tower, 30 m same side of	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ingle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m of elevation of top of a n high, from two points on f the tower are 30° and 60°
C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 m makes an ar the length 0 A. 10 $\sqrt{3}$ m C. 15 m Ans. B. 111. The angles tower, 30 m same side of respectively	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ingle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m of elevation of top of a n high, from two points on f the tower are 30° and 60°. If the two point and base
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C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 m makes an ar the length o A. 10 $\sqrt{3}$ m C. 15 m Ans. B. 111. The angles tower, 30 m same side of respectively of tower are between two	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ingle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m of elevation of top of a n high, from two points on f the tower are 30° and 60°. If the two point and base in same line, the distance
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C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 m makes an ar the length o A. 10 $\sqrt{3}$ m C. 15 m Ans. B. 111. The angles tower, 30 m same side of respectively of tower are between two	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m of elevation of top of a n high, from two points on f the tower are 30° and 60°. If the two point and base in same line, the distance o points is
C200 Ans. C. 109. The sum of i A. 5 C. 3 Ans. D. 110. A vertical p length 20 m makes an ar the length 0 A. 10 $\sqrt{3}$ m C. 15 m Ans. B. 111. The angles tower, 30 m same side of respectively of tower are between two A. 20 $\sqrt{3}$ m	D800 Infinite GP 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$,, is B. 4 D. 2 ole is tied with a string of n on the ground. If string ngle of 30° with the ground, f pole is B. 10 m D. 5 $\sqrt{3}$ m of elevation of top of a n high, from two points on f the tower are 30° and 60°. If the two point and base in same line, the distance o points is

Ans. A.

112. If (x + 2) is a factor of $ax^2 - 5x + 6 =$ 0, then a is equal to A. 8 B. -8 D. 4 C. -4 Ans. C. 113.0ne of the factor of $(3x - 4y)^3 + (4x +$ 3y)3 is A. (y + x)B. (7x - y) C. (7y - 3x) D. (x - y) Ans. D. 114. The value of k for which $3x^2 - 5x + 2k$ = 0 has equal roots is A. 25/24 B. 25/6 C. 25/12 D. 25/19 Ans. A. 115. The sum of squares of the roots of the equations $x^2 - 5x + 4 = 0$ is A. 15 B. 17 C. 20 D. 25 Ans. B. 116.Match List 1 with List 2 and select the correct answer from the codes given below in the list List 1 (State) List 2(Emblem) A. Chera 1. Bow B. Chola 2. Tiger C. Pandya 3. Fish B-2 A. A-1 C-3 B. A-3 B-2 C-1 C. A-3 B-1 C-2 D. A-2 B-1 C-3 Ans. A. 117. The medieval ruler who was the first to establish a ministry of agriculture (Diwan-i-Kohi) was A. Alauddin Khilji B. Mohammad Bin Tughlaq C. Sher Shah D. Akbar Ans. B. 118. When did Queen Victoria declared the taking over the Indian Administration under British crown A. 1 November, 1858 B. 31 December, 1857 C. 6 January, 1958 D. 47 November, 1859 Ans. A. 119. Through which one of the following continent, do the equator, the tropic of cancer and the tropic of capricorn pass through B. South America A. Africa C. North America D. Australia Ans. A.

120. Shivasundaram falls are located in the course of the river. A. Krishan B. Godavari C. Kaveri D. Mahanadi Ans. C. 121. Which one state of India is surrounded by Bangladesh from three sides A. Mizoram B. Meghalaya C. Tripura D. West Bengal Ans. C. 122. The torque on a rectangular coil placed in uniform magnetic field is large when the A. number of turns is large B. number of turns is less C. plane of the coil is perpendicular to the magnetic field D. area of the coil is small Ans. A. 123. Which of the following is the best conductor of heat A. mercury B. water C. leather D. benzene Ans. A. 124. Due to contraction of eyeball, a long sighted eye can see only A. farther objects which is corrected using convex lens B. father objects which is corrected using concave lens C. nearer objects which is corrected using convex lens D. nearer objects which is corrected using concave lens Ans. C. 125. Who among the following was the chairman of the union constitution committee of the constituent assembly. A. B.R. Ambedkar B. J.B. Kripalani C. Jawaharlal Nehru D. Alladi Krishnaswamy lyer Ans. C. 126.Which one of the following Constitutional Amendments state that the total number of ministers, including the prime minister in the council of ministers shall not exceed 15% of the total number of members of the house of the people. A. 90th B. 91st C. 92nd D. 93rd Ans. B. 127. Depreciation is equal to A. Gross National Product - Net National Product

B. Net National Product – Gross National Product C. Gross National Product - Personal Income D. Personal Income – Personal Taxes Ans. A. 128. The slogan 'Garibi Unmulan' (Poverty eradication) was given in which Five year plane A. Second plane B. Fourth plane C. Fifth plane D. Sixth plane Ans. C. 129. The first Census in India during the British period was held during the tenure of A. Lord Dufferin B. Lord Lytton C. Lord Maya D. Lord Ripon Ans. C. 130.In Baseball, how many players are there in each side. A. 5 B. 7 C. 9 D. 11 Ans. C. 131. Which nation won the Azlan shah cup Hockey in April 2015. B. South Korea A. India C. Australia D. New Zealand Ans. D. 132. Viruses are made up of A. Protein and Lipids B. Nucleic acid and protein C. Lipids and Carbohydrate D. Carbohydrate and Nucleic acid Ans. B. 133. Which of the following crop enrich the soil with nitrogen B. Sorgum A. potato C. sunflower D. pea Ans. D. 134. Which one of the following is a protein fiber B. Polyester A. Nvlon C. Silk D. Cotton Ans. C. 135. What are the element present in urea A. C, H, O B. C, N, O C. C, N, H D. C, O, N, H Ans. D. 136. A radioactive substance has a half life of four months. Three-fourth of the substance would decay in A. 3 months B. 4 months C. 8 months D. 12 months Ans. C.

137. In an atom the order of filling up of the orbitals is governed by A. Aufbau principle B. Heisenberg's uncertainty principle C. Hund's rule D. Pauli's exclusion principle Ans. A. 138. Scientists of which country have invented a new supper powerful electron microscope-super STEM 3 that can examine objects a million times smaller than a human hair? A. Australia B. France C. Britain D. USA Ans. C. 139. Who has been bestowed with the 46th Dada Saheb Phalke Award for 2014? A. Rishi Kapoor B. Shashi Kapoor C. Pran D. Gulzar Ans. B. 140.Which film was adjusted as the Best Motion pictures at the 87th Academy awards (Oscars) on February 22, 2015? A. The theory of everything B. The Grand-Budapest Hotel C. Birdman D. Still Alice Ans. C. 141.A + B means A is the father of B. A \times B means A is the son of B, A – B means A is the wife of B. If $Z \times T - S + U$, then how is Z related to U? A. Brother B. Cousin C. Sister D. Uncle Ans. A. 142. The first two numbers on the left of the sign `::' are related in a certain way. The same relationship holds for the second pair of numbers on the right side of the sign `::' of which one is missing. Find the missing one from the alternatives. 81:8:49:? A. 5 B. 6 C. 7 D. 9 Ans. B. 143. 'Nurse' is related to 'Hospital' in the same way as 'Farmer' is related to: A. Village B. Grains C. Cultivation D. Field Ans. D. 144. A team of five is to be selected from four boys A, B, C and D, and four girls E, F, G and H.

(i) B and F cannot be put together.

(ii) C and H must go together. (iii) G and A cannot be put together. (iv) D and C cannot go together. If 3 boys and 2 girls are to be selected, the team would consist of: A. CBAHD B. GCAHD C. CEBAH D. GDBEA Ans. C. 145.Arrange the following words in a meaningful logical sequence and choose the appropriate number sequence from the alternatives. 1. Placement 2. Application 2. Income Education 5. Salary 6. Interview A. 3, 4, 2, 6, 1, 5 B. 4, 2, 6, 1, 5, 3 C. 3, 5, 1, 2, 4, 6 D. 4, 2, 5, 6, 1, 3 Ans. B. 146.One term I the following number series is wrong. Find out the wrong term. 1440, 240, 50, 12, 4, 2 B. 240 A. 4 C. 12 D. 50 Ans. D. 147. If BAD = 14 and FIG = 44, then HIS will be equal to: A. 72 B. 68 C. 66 D. 58 Ans. A. 148.If 'DEMOCRACY' is coded ลร 'MEDRCOYCA' then 'ADVENTURE' would be coded as: **B. VDAENTERU** A. DAVNETURE C. VDATNEERU D. VDATNERUE Ans. C. 149.A boy walked 2 k towards West and turned left and walked 3 km. Then he took a right turn and walked 4 km. Finally he took a left turn and walked 5 km. How far is he from the starting point? B. 14 km A. 10 km C. 12 km D. 9 km Ans. A. 150. The numbers in the following figure, follow a pattern. Which number would replace the question mark? 10 11 5 7 6 40 27 8 4 5 2 A. 36 B. 40 C. 45 D. 55 Ans. B