## RRB 28 ${ }^{\text {th }}$ August Shift 1

1. Which one of following expression is true for Tds equation
A. du - PdV
B. $d u+P d V$
C. $d u-V d P$
D. $d u+V d P$

Ans. B.
2. PMM1 is closely related with
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.
5. Isolated system indicates
A. Mass of substance 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.
6. Heat transfer by molecular collision in
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.
8. Oxy-acetylene welding is categorised in
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. $\mathrm{mm} / \mathrm{rev}$ 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
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
C. 20
D. 8

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 $\qquad$ effect of current.
A. magnetic
B. static electricity
C. heating
D. chemical

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
D. associative, distributive and commutative law
Ans. D.
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

Ans. B.
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.
39. 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 $45^{\circ}$ to grain
D. Inclined at $60^{\circ}$ to grain

Ans. A.
41. An ideal fluid
A. obey's Newton's law of viscosity
B. is both incompressible and nonviscous
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.
43. 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 at high 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 moving coil of a dynamometer wattmeter should be
A. almost zero
B. Iow
C. high
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. $30-50^{\circ}$ with the horizontal
B. $45-60^{\circ}$ with the horizontal
C. $50-70^{\circ}$ with the horizontal
D. $45-80^{\circ}$ 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
C. ozone layer is being uniform 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) $\qquad$
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) $\qquad$
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 $\qquad$
A. $(\mathrm{E} 1.08)_{16}$
B. $(\mathrm{E} 1.80)_{16}$
C. $(1 \mathrm{E} .80)_{16}$
D. $(1 \mathrm{E} .08)_{16}$

Ans. B.
63. Considering $X$ and $Y$ as binary variables, the Boolean expression $X+X Y^{\prime}$ 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. $(10000000)_{2}$
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 $\qquad$
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 $45^{\circ}$ 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. $90^{\circ}$
B. $60^{\circ}$
C. $120^{\circ}$
D. $45^{\circ}$

Ans. C.
72. The eccentricity of a parabola is
A. $=1$
B. $<1$
C. $>1$
D. $=0$

Ans. A.
73. A force of 20 N accelerates a body from rest to a velocity of $3 \mathrm{~m} / \mathrm{s}$ in 10 s . The magnitude of change in momentum of the body is one second is
A. $2 \mathrm{~kg} \mathrm{~m} / \mathrm{s}$
B. $20 \mathrm{~kg} \mathrm{~m} / \mathrm{s}$
C. $60 \mathrm{~kg} \mathrm{~m} / \mathrm{s}$
D. $6 \mathrm{~kg} \mathrm{~m} / \mathrm{s}$

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
A. 24 kg
B. 4 kg
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 $\left(\mathrm{g}=9.8 \mathrm{~m} / \mathrm{s}^{2}\right)$
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 $344 \mathrm{~m} / \mathrm{s}$. 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 $1.1 \times 10^{-6}$ ohm-m. The potential difference per
unit length along the wire is
A. $0.70 \mathrm{~V} / \mathrm{m}$
B. $1.4 \mathrm{~V} / \mathrm{m}$
C. $2.2 \mathrm{~V} / \mathrm{m}$
D. $0.90 \mathrm{~V} / \mathrm{m}$

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) $=\mathrm{HCl}$ and $B)=\mathrm{Na}_{2} \mathrm{CO}_{3}$
B. $A)=\mathrm{NaHCO}_{3}$ and $\left.B\right)=\mathrm{H}_{2} \mathrm{O}$
C. $A)=\mathrm{Na}_{2} \mathrm{CO}_{3}$ and $\left.B\right)=\mathrm{H}_{2} \mathrm{O}$
D. $A$ ) $=\mathrm{CH}_{3} \mathrm{COOH}$ and $\left.B\right)=\mathrm{NaOH}$

Ans. A.
80. Which of the following represents a double displacement reaction?
A. $\mathrm{Zn}+2 \mathrm{HCl} \rightarrow \mathrm{ZnCl}_{2}+\mathrm{H}_{2}$
B. $\mathrm{Cu}+\mathrm{AgNO}_{3} \rightarrow \mathrm{Cu}\left(\mathrm{NO}_{3}\right)_{2}+2 \mathrm{Ag}$
C. $\mathrm{K}_{2} \mathrm{SO}_{4}+\mathrm{BaCl}_{2} \rightarrow \mathrm{BaSO}_{4}+2 \mathrm{KCl}$
D. $\mathrm{CH}_{4}+2 \mathrm{O}_{2} \rightarrow \mathrm{CO}_{2}+2 \mathrm{H}_{2} \mathrm{O}$

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. $1.506 \times 10^{23}$ molecules of oxide of formula $\mathrm{M}_{2} \mathrm{O}_{3}$.
B. $1.506 \times 10^{23}$ molecules of oxide of formula $\mathrm{M}_{3} \mathrm{O}_{2}$.
C. $1.506 \times 105.75$ molecules of oxide of formula $\mathrm{M}_{3} \mathrm{O}_{2}$.
D. $1.506 \times 105.75$ molecules of oxide of formula $\mathrm{M}_{2} \mathrm{O}_{3}$.
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
C. Benzene
D. Propene

Ans. D.
85. What is the term given to a sudden change in the structure of a gene?
A. Recombination
B. Mutation
C. Variation
D. Evolution

Ans. $B$.
86. When fumes of Sulphur-dioxide and Nitrous Oxide dissolve in water present in the clouds, they form acids which cause
A. Eutrophication
B. Acid rain
C. Air pollution
D. Climate change

Ans. B.
87. Which teeth do we use when we cut and tear food?
A. Incisors and Molars
B. Molars and Premolars
C. Premolars and Canines
D. Incisors and Canines

Ans. D.
88. After Pollination and Fertilization, which part of the carpel or pistil becomes the fruit?
A. Entire carpel
B. Stigma
C. Style
D. Ovary

Ans. D.
89. To which kingdom of life do all bacteria belong?
A. Monera
B. Fungi
C. Plantae
D. Animalia

Ans. A.
90. Which one of the following does not carry oxygenated blood?
A. Pulmonary Vein B. Pulmonary Artery
C. Aorta
D. Renal Artery

Ans. B.
91. The HCF and LCM of 9 and 17 are
A. 0,153
B. 1,153
C. 1,9
D. 1,17

Ans. B.
92. The least number which when divided by 15 and 20 leaving remainder 9 in each case is
A. 60
B. 65
C. 69
D. 309

Ans. C.
93. If $a: b=4: 5$ and $a+b=63$, then $a$ is equal to
A. 28
B. 35
C. 46
D. 54

Ans. A.
94. If $3, x, 2 x, 50$ are in proportion then $x$ is equal to
A. 5
B. 75
C. $5 \sqrt{ } 3$
D. $10 \sqrt{ } 3$

Ans. C.
95. If $20 \%$ of a number is 30 , then number is
A. 120
B. 130
C. 140
D. 150

## Ans. D.

96. If Rs. 500 amounts to Rs. 700 in 8 years, then rate of simple interest is
A. $5 \%$
B. $6 \%$
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. $16 / \mathrm{kg}$ with 10 kg wheat which cost him Rs. $12 / \mathrm{kg}$. He sells the mixture at Rs. $18 / \mathrm{kg}$. His profit is
A. Rs. 100
B. Rs. 110
C. Rs. 115
D. Rs. 120

## 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 $90 \mathrm{~km} / \mathrm{h}$. 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 $72 \mathrm{~km} / \mathrm{h}$. 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 can do a piece of work in 10 day. A alone can do the same work in 15 days. In how many days $B$ alone can do same work?
A. 30
B. 25
C. 22
D. 20

Ans. A.
105. $P$ and $Q$ can do a piece work in 15 days, $Q$ and $R$ in 12 days and $R$ and $P$ in 20 days. The number of days required for $P$ to do same work is
A. 20
B. 30
C. 50
D. 60

Ans. D.
106. The average of cubes of first five whole numbers is
A. 25
B. 20
C. 16
D. 6

Ans. B.
107. The average of 11 observations is 20 . If average of first 6 observations is 18 and average of last 6 observations is 25 , the sixths observation is
A. 38
B. 45
C. 36
D. 43

Ans. A.
108. The sum of first 16 terms of the AP
$10,7,4,1, \ldots .$. , is
A. -400
B. -300
C. -200
D. -800

Ans. C.
109. The sum of infinite GP $1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots .$. , is
A. 5
B. 4
C. 3
D. 2

Ans. D.
110.A vertical pole is tied with a string of length 20 m on the ground. If string makes an angle of $30^{\circ}$ with the ground, the length of pole is
A. $10 \sqrt{ } 3 \mathrm{~m}$
B. 10 m
C. 15 m
D. $5 \sqrt{ } 3 \mathrm{~m}$

Ans. B.
111. The angles of elevation of top of a tower, 30 m high, from two points on same side of the tower are $30^{\circ}$ and $60^{\circ}$ respectively. If the two point and base of tower are in same line, the distance between two points is
A. $20 \sqrt{3} \mathrm{~m}$
B. $20(\sqrt{3}+1) \mathrm{m}$
C. $40 \sqrt{3} \mathrm{~m}$
D. $40(\sqrt{3}-1) \mathrm{m}$

Ans. A.
112. If $(x+2)$ is a factor of $a x^{2}-5 x+6=$ 0 , then a is equal to
A. 8
B. -8
C. -4
D. 4

Ans. C.
113. One of the factor of $(3 x-4 y)^{3}+(4 x+$ $3 y)^{3}$ is
A. $(y+x)$
B. $(7 x-y)$
C. $(7 y-3 x)$
D. $(x-y)$

Ans. D.
114. The value of $k$ for which $3 x^{2}-5 x+2 k$ $=0$ 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 $x^{2}-5 x+4=0$ 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) <br> List 2(Emblem)

A. Chera

1. Bow
B. Chola
2. Tiger
C. Pandya
3. Fish
A. A-1
B-2 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
A. Africa
B. South America
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. $90^{\text {th }}$
B. $91^{\text {st }}$
C. $92^{\text {nd }}$
D. $93^{\text {rd }}$

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.
A. India
B. South Korea
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
A. potato
B. Sorgum
C. sunflower
D. pea

Ans. D.
134. Which one of the following is a protein fiber
A. Nylon
B. Polyester
C. Silk
D. Cotton

Ans. C.
135. What are the element present in urea
A. C, H, O
B. $\mathrm{C}, \mathrm{N}, \mathrm{O}$
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 $46^{\text {th }}$ 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 $87^{\text {th }}$ 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
3. Income
4. 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
A. 4
B. 240
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 as 'MEDRCOYCA' then 'ADVENTURE' would be coded as:
A. DAVNETURE
B. VDAENTERU
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?
A. 10 km
B. 14 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?

A. 36
B. 40
C. 45
D. 55

Ans. B

