

### **RRB 28<sup>th</sup> August Shift 3**

1. The cyclic integral of ( $\delta Q - \delta W$ ) for a process is  
A. Positive                      B. Negative  
C. Zero                          D. Unpredictable

Ans. C.

2. Triple point temperature water is  
A. 273 K                      B. 273.14 K  
C. 273.15 K                  D. 273.16 K

Ans. D.

3. Which of the following law of thermodynamics is responsible for heat transfer  
A. Zeroth law of thermodynamics  
B. First law of thermodynamics  
C. Second law of thermodynamics  
D. Third law of thermodynamics

Ans. C.

4. Which one of the following modes of heat transfer would takes place predominantly from boiler furnace to water wall  
A. Convection  
B. Conduction  
C. Radiation  
D. Conduction and Convection

Ans. C.

5. Compression ratio in case of SI engine is in the range of  
A. 6-10                      B. 10-15  
C. 16-25                      D. 25-40

Ans. A.

6. Mean effective pressure of otto cycle is  
A. Inversely proportional to pressure ratio  
B. Directly proportional to pressure ratio  
C. Does not depend on pressure ratio  
D. Proportional to square root of pressure ratio

Ans. B.

7. The choke is applied when the engine is  
A. Accelerating              B. Hot  
C. Cold                          D. Idling

Ans. C.

8. In which of the following milling operation cutter is rotated in same direction of travel of work piece  
A. Up milling                  B. Down milling  
C. Face milling              D. End milling

Ans. B.

9. Dry and compressed air is used as cutting fluid for machining  
A. Steel                          B. Aluminium  
C. Cast iron                      D. Brass

Ans. C.

10. Spine-holes are machined by  
A. Milling                      B. Boring  
C. Drilling                      D. Broaching

Ans. D.

11. In the forging operation, fullering is done to  
A. Draw out the material  
B. Bend the material  
C. Upset the material  
D. Extrude the material

Ans. A.

12. Which one of the following is not a fusion welding process  
A. Gas welding  
B. Arc welding  
C. Brazing  
D. Resistance welding

Ans. C.

13. The centrifugal casting method is used for casting articles of  
A. Symmetrical shape about vertical axis  
B. Symmetrical shape about vertical axis  
C. Irregular shape  
D. Non-ferrous metal only

Ans. B.

14. The purpose of jigs and fixture is to  
A. Increase interchangeability  
B. facilitate interchangeability  
C. Decrease expenditure on quality control  
D. Decrease Machining accuracy

Ans. A.

15. Directional relays are based on the flow of  
A. Power                      B. Voltage wave  
C. Current                      D. Field

Ans. A.

16. In fuel cell, ..... Energy is converted into electrical energy.  
A. mechanical                  B. heat  
C. sound                          D. chemical

Ans. D.

17. Francis turbine is usually used for  
A. medium heads  
B. lower heads  
C. higher heads  
D. lower, medium and higher heads

Ans. A.

18. The angle between rotating stator flux and rotor poles is called.  
A. torque angle  
B. obtuse angle  
C. synchronizing angle  
D. power factor angle

Ans. A.

19. Which of the following motors is used in tape recorders  
 A. Hysteresis motor  
 B. Reluctance motor  
 C. Capacitor run motor  
 D. Universal motor

Ans. A.

20. Slip ring for induction motors are made up of  
 A. cobalt steel      B. aluminium  
 C. carbon            D. phosphor bronze

Ans. D.

21. A transformer is working at its maximum efficiency. Its iron loss is 1 kW. Its copper loss will be  
 A. 0.2 kW            B. 0.25 kW  
 C. 0.5 kW            D. 1 kW

Ans. D.

22. For arc heating, electrodes are made up of  
 A. Copper            B. Aluminium  
 C. Graphite          D. Tungsten

Ans. C.

23. Sodium lamps are used in  
 A. Reading rooms   B. Street Lights  
 C. Auditoriums      D. Libraries

Ans. D.

24. The fuse wire is made up of  
 A. Nichrome          B. Lead-tin alloy  
 C. Copper            D. Tungsten

Ans. B.

25. There are ..... Number of modulation techniques.  
 A. 1                    B. 2  
 C. 3                    D. 4

Ans. C.

26. In frequency modulation  
 A. amplitude of carrier wave remains the same  
 B. frequency of carrier wave remains constant  
 C. both frequency and amplitude of carrier waves vary  
 D. signal gets distorted.

Ans. A.

27. In mercury arc rectifier, mercury is used as  
 A. cathode  
 B. conducting medium  
 C. ionizing medium  
 D. electron accelerator

Ans. A.

28. For single phase rotary converters, when the power factor is unity, the ac to dc current ratio will be

- A. 1.0                    B. 0.707  
 C. 1.4                    D. 0.5

Ans. C.

29. When a material becomes a superconductor, its resistivity becomes  
 A. very small  
 B. zero  
 C. about 10% of normal value  
 D. about 20% of normal value

Ans. B.

30. The inputs of logic gate are 0. The output is 1. The gate is  
 A. NAND or XOR    B. OR or XOR  
 C. AND or XOR      D. NOR or Ex-NOR

Ans. D.

31. Octal number 12 is equal to decimal number  
 A. 9                    B. 10  
 C. 11                    D. 12

Ans. B.

32. The output of a NOR gate is HIGH if .....  
 A. all inputs are high  
 B. any input is high  
 C. any input is low  
 D. all inputs are low

Ans. D.

33. A circuit that uses an amplifier with passive filter elements is called a (n)  
 A. relaxation oscillator  
 B. signal generator  
 C. active filter  
 D. differential amplifier

Ans. C.

34. Ionization within a P-N junction causes a layer on each side of the barrier called the  
 A. junction            B. depletion region  
 C. barrier voltage    D. forward voltage

Ans. B.

35. Cup-and-cone type fracture occurs in the case of  
 A. Cast iron  
 B. Round specimen of ductile metals  
 C. Tough steel  
 D. Soft brass

Ans. B.

36. Liquid limit of a soil indicates its  
 A. Compressibility  
 B. Permeability  
 C. Optimum moisture  
 D. Shear strength

Ans. A.

37. Deep beams are designed for  
 A. Shear force only  
 B. Bending moment only  
 C. Both shear force and bending moment  
 D. Bearing

Ans. B.

38. Which one of the following stresses is independent of yield stress as a permissible stress for steel member?  
 A. Axial tensile stress  
 B. Maximum shear stress  
 C. Bearing stress  
 D. Stress in slab base

Ans. D.

39. The capillary depression in mercury is on account of  
 A. Adhesion being larger than the viscosity  
 B. Surface tension being larger than the viscosity  
 C. Cohesion being greater than the adhesion  
 D. Vapour pressure being small

Ans. C.

40. Ranging is the process of  
 A. Fixing ranging rods on the extremities of the area  
 B. Aligning the chain in a straight line between two extremities  
 C. Taking offsets from a chain line  
 D. Chaining over a range of mountains

Ans. B.

41. Economic saving of time results by crashing  
 A. Cheapest critical activity  
 B. Cheapest non critical activity  
 C. Costliest critical activity  
 D. Costliest non critical activity

Ans. A.

42. Which one of the following does not react with concrete?  
 A. Sewage water B. Sulphuric acid  
 C. Vegetable oil D. Alcohol

Ans. D

43. The porosity of a soil sample having its void ratio equal to unity would be  
 A. 33.34% B. 50.0%  
 C. 66.66% D. 75.0%

Ans. B.

44. What is the angle between two plane mirror of an optical square?  
 A. 30 B. 60  
 C. 45 D. 90

Ans. C.

45. Theodolite is an instrument used of  
 A. Tightening the capstan-headed nuts of level tube  
 B. Measurement of horizontal angles only  
 C. Measurement of vertical angles only  
 D. Measurement of both horizontal and vertical angles

Ans. D.

46. An aeroplane works on  
 A. Archimedes principle  
 B. Pascal's law  
 C. Bernoulli's principle  
 D. Stoke's law

Ans. C.

47. In 3 phase power measurement by two wattmeter method, the reading of one wattmeter is zero. The power factor of load is  
 A. 1 B. 0.5  
 C. 0 D. 0.8

Ans. B.

48. In a CRO which of the following is not a part of electron gun  
 A. cathode B. grid  
 C. accelerating anode D. X-Y plates

Ans. D.

49. In a strain measuring device using a strain gauge, the output quantity is  
 A. voltage  
 B. resistance  
 C. impedance  
 D. current

Ans. A.

50. Potentiometer method of dc voltage measurement is more accurate than direct measurement using a voltmeter because  
 A. it loads the circuit to maximum extent  
 B. it loads the circuit moderately  
 C. it does not load the circuit at all  
 D. it uses centre zero galvanometer instead of Voltmeters.

Ans. C.

51. **Assertion (A):** A hot wire ammeter has a cramped scale.  
**Reason (R):** The heat is proportional to square of current.  
 A. Both A and R are true and R is correct explanation of A  
 B. Both A and R are true but R is not correct explanation of A  
 C. A is true R is false  
 D. A is false R is true

Ans. A

52. The standard one colour unit is equivalent to  
 A. 1 mg/I cobalt chloride  
 B. 1 mg/1 platinum cobalt  
 C. 1 mg/I platinum chloride  
 D. 1 mg/I cobalt sulphate

Ans. B.

53. The fluoride concentration less than prescribed permissible limit may cause  
 A. dental cavities  
 B. spotting in teeth  
 C. discoloration of teeth  
 D. fluorosis

Ans. A.

54. The ultrafine particle present in surface water are removed through  
 A. coagulation and flocculation  
 B. filtration  
 C. sedimentation  
 D. reverse osmosis

Ans. B.

55. The pollutant lead present in the atmosphere may cause  
 A. respiratory disease  
 B. asthmatic disease  
 C. cardiovascular disease  
 D. pulmonary edema

Ans. C.

56. A continuous exposure of intense noise for longer duration may cause irreversible damage to the nerves and the inner ear resulting loss of sensitivity at higher frequencies which is called  
 A. acoustic trauma  
 B. annoyance  
 C. temporary threshold shift  
 D. permanent threshold shift

Ans. D.

57. The presence of CO<sub>2</sub> may reduce the pH of rain water up to  
 A. 5.6  
 B. 4.0  
 C. 6.5  
 D. 6.0

Ans. A.

58. Plotter is a (an) \_\_\_\_\_  
 A. Input device  
 B. Output device  
 C. Storage device  
 D. Both input and output device

Ans. B.

59. DVD stands for \_\_\_\_\_  
 A. Digital Video Disk  
 B. Digital Variable Disk  
 C. Digital Versatile Disk  
 D. Digital Versatile Data

Ans. C.

60. Which of the following can be treated as both input as well as output device?

A. Mouse                      B. Printer  
 C. Memory                    D. Plotter

Ans. C.

61. UTF-32 is a (an) \_\_\_\_\_  
 A. 16-bit-fixed-width encoding  
 B. 16-bit-variable-width encoding  
 C. 32-bit-variable-width encoding  
 D. 32-bit-fixed-width encoding

Ans. D.

62. The octal representation of (A0E)<sub>16</sub> is \_\_\_\_\_

A. (5016)<sub>8</sub>                    B. (5061)<sub>8</sub>  
 C. (1650)<sub>8</sub>                    D. (5610)<sub>8</sub>

Ans. A.

63. Considering X and Y as binary variable, the Boolean expression X(X + Y') is equivalent to

A. X                              B. 1  
 C. 0                              D. Y

Ans. A.

64. The 2's complement of the binary number (00001111)<sub>2</sub> is  
 A. (00001111)<sub>2</sub>    B. (11110000)<sub>2</sub>  
 C. (10101010)<sub>2</sub>    D. (11110001)<sub>2</sub>

Ans. D.

65. Which of the following categories of viruses normally infect executable code, such as .com and .exe files?

A. File infection viruses  
 B. Boot sector viruses  
 C. Master boot record viruses  
 D. Macro viruses

Ans. A.

66. In class 'C' IP addresses, number of network ID bits used to identify the class is \_\_\_\_\_

A. 0                              B. 1  
 C. 2                              D. 3

Ans. D.

67. Which of the following is a general-purpose network?

A. Storage Area Network (SAN)  
 B. Local Area Network (LAN)  
 C. Enterprise Private Network (EPN)  
 D. Virtual Private Network (VPN)

Ans. B.

68. The term "plan" in orthographic projection refers to:

A. top view                    B. front view  
 C. side view                   D. sectioned view

Ans. A.

69. The thread profile having included  $55^\circ$  angle is:  
 A. V thread  
 B. Acme thread  
 C. Square thread  
 D. Whitworth thread

Ans. D.

70. The common map of "rod network" is drawn to scale with RF:  
 A. Less than one  
 B. Greater than one  
 C. Equal to one  
 D. RF is not relevant for such maps

Ans. A.

71. The eccentricity of a hyperbola is equal to  
 A. Less than one  
 B. Greater than one  
 C. One  
 D. There is not term as eccentricity for a parabola

Ans. B.

72. The angle between the vertical iso-axis and rest of the two iso-axis are:  
 A.  $15^\circ$  each      B.  $90^\circ$  each  
 C.  $30^\circ$  each      D.  $60^\circ$  each

Ans. C.

73. An object of mass  $m$  at rest is acted upon by a force. When the velocity-time graph of the object is plotted (with velocity on y-axis and time on x-axis), we get a straight line passing through origin and inclined to x-axis. If the force (on y-axis) versus time (on x-axis) graph is plotted, the graph is a straight line  
 A. passing through origin and inclined to x-axis  
 B. passing through origin and coinciding with x-axis  
 C. parallel to x-axis  
 D. parallel to y-axis

Ans. C.

74. The acceleration due to gravity,  $g$ , is  
 A. independent of the mass of the earth  
 B. inversely proportional to the radius of the earth  
 C. proportional to the mass of the earth and inversely proportional to the square of the radius of the earth  
 D. same at the poles and the equator

Ans. C.

75. Rohan (mass 40 kg) and Sohan (mass 60 kg) climb the stairs of their school building to reach the first floor in 40 s and 60 s, respectively. Let  $P_1$  and  $P_2$  be the power delivered in this task by Rohan and Sohan, respectively. Which one of the following is correct?  
 A.  $P_1 = P_2$       B.  $P_1 > P_2$   
 C.  $P_1 < P_2$       D.  $P_1 = 2 P_2$

Ans. A.

76. The loudness or softness of a sound is determined basically by its

- A. amplitude  
 B. frequency  
 C. speed  
 D. speed and frequency both

Ans. A.

77. A ray of light travelling in air is incident on a glass slab. Part of it is reflected and part is refracted. Let  $i$ ,  $r$  and  $s$  be the angle of incidence, angle of reflection and angle of refraction. Which one of the following is correct?

- A.  $i = r = s$   
 B.  $i \neq r \neq s$   
 C.  $i = r$  and  $s < i$   
 D.  $i = r$  and  $s > i$

Ans. C.

78. A conducting wire has length  $\ell$  and area of cross-section  $A$ . The resistivity of its material is  $\rho$  and its resistance is  $R$ . It is connected in series with another wire of the same dimensions but of a resistivity  $2\rho$ . The net resistance of the combination is

- A.  $R$       B.  $2R$   
 C.  $3R$       D.  $2R/3$

Ans. C.

79. Which one of the following changes will decrease the vapour pressure of water contained in a sealed tube?  
 A. Increasing the quantity of water  
 B. decreasing the quantity of water  
 C. Decreasing the temperature of water  
 D. Decreasing the volume of the vessel

Ans. C.

80. Which of the following reaction represents the process of calcination?  
 A.  $\text{Cu}_2\text{S} + \text{O}_2 \rightarrow \text{Cu}_2\text{O} + \text{SO}_2$   
 B.  $\text{ZnCO}_3(\text{s}) \rightarrow \text{ZnO}(\text{s}) + \text{CO}_2$   
 C.  $\text{ZnO}(\text{s}) + \text{C}(\text{s}) \rightarrow \text{Zn}(\text{s}) + \text{CO}(\text{g})$   
 D.  $2\text{ZnS} + 3\text{O}_2 \rightarrow 2\text{ZnO} + 2\text{SO}_2(\text{g})$

Ans. B.

81. Which of the following has only covalent bonds between the atoms?  
 A.  $\text{KCl}$       B.  $\text{HCHO}$   
 C.  $\text{Na}_2\text{O}$       D.  $\text{MgO}$

Ans. B.

82. An acid reacts with a base to form salt and water. What type of reaction is this?  
 A. Combination  
 B. Decomposition  
 C. Displacement  
 D. Double displacement

Ans. D.

83. An acid produces a gas 'X' on reaction with metal carbonates and hydrogen carbonates separately. What is 'X' in these reactions?

- A. Carbon dioxide B. Carbon monoxide  
C. Sulphur dioxide D. Hydrogen

Ans. A.

84. Which one of the following statements is correct about Mendeleev's periodic table of elements?

- A. It has 18 groups  
B. It had some gaps for the new elements to be discovered later  
C. It has the elements arranged in order of their increasing atomic numbers.  
D. The table initially contained 112 elements.

Ans. B.

85. Which of the following functions is not performed by the kidneys?

- A. Removal of Urea from the body  
B. Regulating the water content of the body  
C. Reabsorbing useful substances from the filtrate back into blood  
D. Excreting excess hormones present in the blood

Ans. D.

86. Which is the correct evolutionary sequence of vertebrates?

- A. Fish, Amphibians, Birds, Reptiles, Mammals  
B. Amphibians, Fish, Reptiles, Birds, Mammals  
C. Fish, Amphibians, Reptiles, Birds, Mammals  
D. Mammals, Birds, Reptile, Fish, Amphibians

Ans. C.

87. The organs of plants that carry out Photosynthesis are

- A. all kinds of leaves  
B. green leaves only  
C. green leaves in any plant and stem in cacti  
D. roots and branches

Ans. C.

88. What sperm is to egg

- A. stamen is to carpel  
B. stigma is to ovary  
C. pollen is to style  
D. pollen grain is to ovule

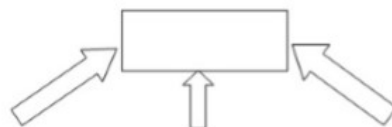
Ans. D.

89. The disease Thalassemia wherein a person is unable to make Hemoglobin is a

- A. Life style disease  
B. infectious disease  
C. Genetic disorder  
D. Metabolic disorder

Ans. C.

90.



In the above diagram name of which gas would you write in the box.

- A. Oxygen B. Carbon-di-oxide  
C. Nitrogen D. Ammonia

Ans. B.

91. The HCF and LCM of first two prime numbers is

- A. 1, 2 B. 1, 3  
C. 2, 3 D. 1, 6

Ans. D.

92. The least number which when divided by 10 and 16 leaving remainder 6 in each case is

- A. 36 B. 86  
C. 156 D. 164

Ans. B.

93. If  $a : b = 3 : 7$  and  $a + b = 80$ , then a is equal to

- A. 24 B. 56  
C. 30 D. 60

Ans. A.

94. If 8, 3x, 6, 27 are in proportion, then x is equal to

- A. 6 B. 9  
C. 12 D. 15

Ans. C.

95. If 8% of a number is 24, then number is

- A. 200 B. 300  
C. 350 D. 400

Ans. B.

96. The simple interest on Rs. 720 for 5 years, at 6% per annum is

- A. Rs. 216 B. Rs. 232  
C. Rs. 250 D. Rs. 300

Ans. A.

97. The compound interest on Rs. 8000 for  $3\frac{1}{2}$  years at 20% per annum compounded half yearly is

- A. Rs. 10648 B. Rs. 3648  
C. Rs. 2648 D. Rs. 2400

Ans. C.

98. The cost price of an article is Rs 550. If it is sold at profit of 10%, then selling price of article is

- A. Rs. 495                      B. Rs. 610  
C. Rs. 625                      D. Rs. 605

Ans. D.

99. The selling price of an article is Rs. 608. If it was sold at a loss of 5%, the cost price of the article was

- A. Rs. 620                      B. Rs. 640  
C. Rs. 650                      D. Rs. 680

Ans. B.

100. A shopkeeper mixes 20 kg of wheat which cost him Rs. 16/kg with 10 kg of wheat which cost him Rs. 12/kg. He sells the mixture at Rs. 17/kg. His gain is

- A. Rs. 50                      B. Rs. 60  
C. Rs. 70                      D. Rs. 80

Ans. C.

101. In two vessels A and B, the milk and water are in the ratio 5 : 4 and 3 : 5 respectively. The ratio in which these are mixed to obtain new mixture which contains half milk and half water is

- A. 9 : 4                      B. 4 : 9  
C. 4 : 3                      D. 3 : 4

Ans. A.

102. The speed of a car is 54 km/h. The time taken by it in second, to cover a distance of 240 m is

- A. 12                      B. 15  
C. 16                      D. 18

Ans. C.

103. A train is moving at a speed of 72 km/h. In 40 seconds it will cover a distance of

- A. 900 m                      B. 800 m  
C. 600 m                      D. 550 m

Ans. B.

104. B can do a piece of work in 30 days. If A and B together can do same work in 12 days, then, the number of days required for A alone to do the same work is

- A. 20                      B. 25  
C. 30                      D. 32

Ans. A.

105. P and Q can do a piece work in 20 days, Q and R in 15 days and R and P in 12 days. The number of days required for P to do same work is

- A. 20                      B. 30  
C. 40                      D. 60

Ans. B.

106. The average of first seven whole numbers is

- A. 8                      B. 7  
C. 6                      D. 5

Ans. A.

107. The average of 16 observations is 25 and average of 24 observations is 30. The average of all 40 observations is

- A. 26                      B. 27  
C. 27.5                      D. 28

Ans. D.

108. The sum of first 21 terms of the AP -20, -18, -16, ....., is

- A. 0                      B. -4  
C. -8                      D. 4

Ans. A.

109. The sum of infinite GP is 6. If common ratio is  $\frac{1}{3}$ , the first term is

- A. 6                      B. 4  
C. 3                      D. 2

Ans. B.

110. From the top of a tower, the angle of depression of a car on the ground is  $60^\circ$ . If height of the tower is 40 m, the distance of the car from the base of tower is

- A.  $20\sqrt{3}$  m                      B.  $30\sqrt{3}$  m  
C.  $40\sqrt{3}$  m                      D.  $\frac{40\sqrt{3}}{3}$  m

Ans. D.

111. The angles of elevation of top of a tower, 30 m high, from two points on same side of the tower are respectively  $30^\circ$  and  $45^\circ$ . If the point and tower are in same line, the distance between two points is

- A.  $15(3 + \sqrt{3})$  m                      B.  $15(3 - \sqrt{3})$  m  
C.  $40(\sqrt{3} + 1)$  m                      D.  $30(\sqrt{3} - 1)$  m

Ans. D.

112. If  $(x + 2)$  is a factor of  $5x^3 - 3x^2 + ax + 2$ , then a is equal to

- A. -25                      B. -20  
C. 15                      D. 27

Ans. A.

113. One of the factors of  $(5x - 7y)^3 - (3x - 4y)^3$  is

- A.  $(2x - 3y)$                       B.  $(2x - 11y)$   
C.  $(8x - 3y)$                       D.  $(2x + 3y)$

Ans. A.

114. The value of k for which  $kx^2 + 5x + 1 = 0$ , has equal roots is

- A.  $\frac{5}{4}$                       B.  $-\frac{5}{4}$   
C.  $\frac{25}{4}$                       D.  $-\frac{25}{4}$

Ans. C.

115. The sum of squares of the roots of the equations  $x^2 - 7x + 6 = 0$  is

- A. 37                      B. 35  
C. 29                      D. 27

Ans. A.



116. Consider the following statements and select the difference between Chaitya and Vihara

- A. Chaitya is a place of worship whereas Vihara is a living place for Buddhist saints
- B. Vihara is a place of worship whereas Chaitya is a living place for Buddhist saints
- C. Chaitya and Vihara both can be used as a living place
- D. There is not much difference between the two

Ans. A.

117. The world famous Takht-i-Taus (the Peacock Throne) was kept in which of the following Mughal buildings?

- A. The Diwan-i-Khas at Fatehpur Sikri
- B. Agar Fort
- C. The Rang Mahal at the Red Fort at Delhi
- D. The Diwan-i-Aam at the Red Fort at Delhi

Ans. D.

118. With reference to the colonial rule in India, consider the following events

1. Morely-Minto Reforms Act
2. Transfer to capital from Calcutta to Delhi
3. First World War
4. Lucknow Pact

The correct chronological order of these events is

- A. 2, 1, 3, 4
- B. 1, 2, 3, 4
- C. 2, 1, 4, 3
- D. 1, 2, 4, 3

Ans. B.

119. The latitudes that pass through Sikkim also pass through

- A. Rajasthan
- B. Jammu and Kashmir
- C. Himachal Pradesh
- D. Punjab

Ans. A.

120. River Indus originates from

- A. Hindukush Range
- B. Himalayan Range
- C. Karakoram Range
- D. Kailash Range

Ans. D.

121. Currently half of the world's population lives in just six countries. Identify them from the following.

- A. India, China, Bangladesh, Pakistan, Brazil, Indonesia
- B. India, China, United States, Indonesia, Brazil, Pakistan
- C. China, India, United States, Indonesia, Brazil, Pakistan
- D. China, India, Bangladesh, United States, Pakistan, Indonesia

Ans. C.

122. If a ship moves from fresh water to sea water, it will

- A. sink completely
- B. sink a little bit
- C. rise a little higher
- D. remain unaffected

Ans. C.

123. The focal length of a convex lens is

- A. same for all the colours
- B. shorter for blue light than for red
- C. shorter for red light than for blue
- D. maximum for yellow light

Ans. B.

124. Which of the following is not correctly matched

- A. Decibel-unit of sound
- B. Horse power-Unit of power
- C. Nautical mile-unit of distance
- D. Celsius-unit of heat

Ans. D.

125. For distribution of powers between the union and the states, the constitution of India introduced three lists. Which two of the following Articles govern the distribution of power:

- A. Articles 3 and 4
- B. Articles 56 and 57
- C. Articles 141 and 142
- D. Articles 245 and 246

Ans. D.

126. Which of the following can a court issue for enforcement of Fundamental Rights?

- A. A decree
- B. An ordinance
- C. A writ
- D. A notification

Ans. C.

127. Twenty point Programme' (Bees-kutri Karyakrama) was first launched in the Year

- A. 1969
- B. 1975
- C. 1977
- D. 1982

Ans. B.

128. Among other things, which one of the following was the purpose for which the Deepak Parekh Committee was constituted

- A. To study the current socio-economic conditions of certain minority communities
- B. To suggest measures for financing the development of infrastructure
- C. To frame a policy on the production of genetically modified organisms
- D. To suggest measures to reduce the fiscal deficit in the Union Budget.

Ans. B.



129. Who among the following developed the concept of Human Development Index.  
 A. Amartya Sen  
 B. A.S. Kadir  
 C. Alva Myrdal  
 D. Mehboob-ul-Haq

Ans. D.

130. Ryder cup is related with which sport  
 A. Football                      B. Golf  
 C. Badminton                  D. Cricket

Ans. B.

131. The Badminton player who won the Malaysian open on April 5, is  
 A. Chen Long                  B. Lin Dan  
 C. Carolina Marin              D. Li-xuerui

Ans. A.

132. Dog bites can cause rabies. Which among the following other animals can also cause rabies  
 A. Donkey                      B. Bat  
 C. Horse                        D. Crocodile

Ans. B.

133. A 'flower bud' which is used as a spice is obtained from  
 A. Cinnamon                  B. Cardamom  
 C. Clove                        D. Coriander

Ans. C.

134. The gas used for artificial ripening of fruits is  
 A. Ether                        B. Ammonia  
 C. Acetylene                  D. Ethylene

Ans. D.

135.  $\text{H}_2\text{O}$  is liquid  $\text{H}_2\text{S}$  is a gas because  
 A. Oxygen forms stronger hydrogen bond than sulphur  
 B. Oxygen is less electronegative than that of sulphur  
 C. Atomic radius of oxygen is less than that of sulphur  
 D. Atomic radius of oxygen is greater than that of sulphur

Ans. A.

136. In reaction between  $\text{HCl}$  and  $\text{O}_2$  is given by  
 $4\text{HCl} + \text{O}_2 \rightarrow 2\text{H}_2\text{O} + 2\text{Cl}_2$   
 The equivalent weight of  $\text{HCl}$  equal to  
 A. Its molecular weight  
 B. Half of its molecular weight  
 C. Twice of its molecular weight  
 D. Four times of its molecular weight

Ans. A.

137. Which has the highest electron affinity  
 A. F                              B. Cl  
 C. Br                            D. I

Ans. B.

138. The country, which has decided to lift ban on rice import from India in May 2015, is  
 A. USA                          B. China  
 C. Brazil                        D. Iran

Ans. D.

139. LOK SABHA on MAY 7 cleared a bill to lower the age of juveniles from 18 years to  
 A. 16 years                      B. 15 years  
 C. 14 years                      D. 17 years

Ans. A.

140. Who has been nominated by India to be the first president of \$100 billion BRICS bank being set up by the five big emerging economies in May 2015  
 A. M.V. Tankale                B. K.V. Kamath  
 C. O.P. Batt                    D. Shikha Sharma

Ans. B.

141. Pointing to a lady, Sunil said, "She is the wife of my father's wife's brother." How is the lady related to Sunil?  
 A. Aunt                        B. Grandmother  
 C. Niece                       D. Cousin

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.  
 $8 : 65 :: 11 : ?$   
 A. 91                            B. 107  
 C. 122                         D. 145

Ans. C.

143. 'Dice' is related to 'Cube' in the same way as 'Ball' is related to:  
 A. Circle                        B. Sphere  
 C. Shape                        D. Roundness

Ans. B.

144. Eight friends A, B, C, D, E, F, G and H are sitting in a circle facing the centre. C is sitting between H and F. A is not sitting opposite H. E is third to the left of C. B is sitting next to F and opposite D.  
 Which of the following statement is not correct?  
 A. G is between A and B  
 B. H is third to the left of B  
 C. C is sitting opposite A  
 D. G is sitting second to the left of D

Ans. D.

145. Arrange the following words in a meaningful logical sequence and choose the appropriate number sequence from the alternatives.

- |                     |                     |
|---------------------|---------------------|
| 1. Core             | 2. Thousand         |
| 3. Million          | 4. Trillion         |
| 5. Hundred          | 6. Billion          |
| A. 4, 6, 3, 1, 2, 5 | B. 5, 2, 3, 1, 4, 6 |
| C. 5, 2, 3, 1, 6, 4 | D. 5, 2, 1, 3, 6, 4 |

Ans. C.

146. One term in the following number series is wrong. Find out the wrong term.

130, 60, 32, 18, 10, 6

- |       |       |
|-------|-------|
| A. 32 | B. 66 |
| C. 10 | D. 18 |

Ans. A.

147. If DEAF = 7349 and KITE = 5283, then DIET would be coded as:

- |         |         |
|---------|---------|
| A. 7283 | B. 7238 |
| C. 3728 | D. 7823 |

Ans. B.

148. If 'THRIVE' is coded as 'DUHQGS', then 'STRONG' would be coded as:

- |           |           |
|-----------|-----------|
| A. FMNSQP | B. RSQNMF |
|-----------|-----------|

C. HOPSUT

D. FMNQSR

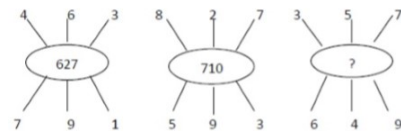
Ans. D.

149. One evening before sunset, Rohan and Rahul were talking to each other face to face. If Rahul's shadow was exactly to his left, which direction was Rohan facing?

- |          |          |
|----------|----------|
| A. South | B. North |
| C. East  | D. West  |

Ans. B.

150. The numbers in the following figures, follow a pattern. Which number would replace the question mark?



- |        |        |
|--------|--------|
| A. 296 | B. 215 |
| C. 503 | D. 527 |

Ans. C.