

Date: 08/11/2015

## SOLUTIONS

**Max. Marks: 100**

**Time allowed: 90 mins**

1. Which the smallest number that devises 1512 is the complete the cube?

- (1) 5                                      (2) 6                                      (3) 7                                      (4) 9

**Ans. (3)**

**Sol.** Prime factorization of 1512 is

2	1512
2	756
2	378
3	189
3	63
3	21
7	7
	1

To make 1512 a perfect cube it should be divided by 7.

2. Which number is the inverse of the opposite of  $-\frac{5}{8}$  ?

- (1)  $\frac{5}{8}$                                       (2)  $1\frac{3}{5}$                                       (3)  $2\frac{2}{5}$                                       (4)  $-\frac{8}{5}$

**Ans. (2)**

**Sol.** Opposite of  $-\frac{5}{8}$  is  $\frac{5}{8}$ , and inverse of  $\frac{5}{8}$  is  $\frac{8}{5}$  which can also be written as  $1\frac{3}{5}$ .

3. What is the value of  $(a^{10})^3 \div (a^6)^5$  ?

- (1) a                                      (2)  $a^2$                                       (3) 1                                      (4)  $\frac{1}{a}$

**Ans. (3)**

**Sol.**  $\frac{(a^{10})^3}{(a^6)^5} = \frac{a^{30}}{a^{30}} = a^{30-30} = a^0 = 1$

4. If  $x = \sqrt[4]{16} + \sqrt[4]{625}$ , then what is x = ?

- (1) 7                                      (2) 29                                      (3) 12                                      (4) 5

**Ans. (1)**

**Sol.**  $x = \sqrt[4]{16} + \sqrt[4]{625}$   
 $x = \sqrt[4]{2^4} + \sqrt[4]{5^4}$   
 $x = 2 + 5$   
 $x = 7$

5. What is the coefficient of  $(x + y)^4$  in the expansion of  $x^2y^2$  ?

- (1) 3                                      (2) 4                                      (3) 5                                      (4) 6

**Ans. (4)**

**Sol.** Expansion of  $(x + y)^4$  is

$$(x + y)^4 = x^4 + 4x^3y + 6x^2y^2 + 4xy^3 + y^4$$

Hence co-efficient of  $x^2y^2$  is 6.

**6.** The proportion of the angles of quadrilateral is 2: 5: 7: 4. What type of quadrilateral is that?

- (1) Parallelogram                      (2) Cyclic Quadrilaterals      (3) Rhombus                      (4) Trapezium

**Ans. (2)**

**Sol.** Let the angles of the quadrilateral ABCD be  $2x$ ,  $5x$ ,  $7x$  and  $4x$  respectively.

We know that sum of all the angles of a quadrilateral be 360

$$\angle A + \angle B + \angle C + \angle D = 360$$

$$\therefore 2x + 5x + 7x + 4x = 360$$

$$18x = 360$$

$$\Rightarrow x = 20$$

$$\therefore \text{angles are } \angle A = 40, \angle B = 100, \angle C = 140, \angle D = 80$$

Now, since  $\angle A + \angle C = 180, \angle B + \angle D = 180$

i.e sum of opposite angles of a quadrilateral is 180, hence it is a cyclic quadrilateral

**7.** What is the formula for finding the area of an open cylinder with base?

- (1)  $2\pi rh$                       (2)  $\pi r^2 h$                       (3)  $\pi r(24 + r)$                       (4)  $2\pi r(4 + r)$

**Ans. (No option matching)**

**Sol.** Misprint in the options. Answer should be  $\pi(2h + r)$ , but it is written  $\pi(24 + r)$  in option C

**8.** The diameter of roller is 1 meter and length is 2.8 meter. If it rolls 100 rounds in the same direction, how many square meter does it press?

- (1) 440 sq meter                      (2) 220 sq meter                      (3) 880 sq meter                      (4) 4400 sq meter

**Ans. (3)**

$$r = 0.5 \text{ m}$$

$$h = 2.8 \text{ m}$$

**Sol.** C.S.A =  $2\pi rh = 2 \times \frac{22}{7} \times \frac{1}{2} \times \frac{28}{10} = 8.8 \text{ m}^2$

In 100 rounds, it will press  $8.8 \times 100 = 880$  square meter.

**9.** If Universal set  $U = \{3, 4, 5, 6, 7\}$ ,  $A = \{5, 7, 8\}$  and  $B = \{4, 5, 8\}$  then what is  $A' \cap B'$  ?

- (1)  $\{4, 6\}$                       (2)  $\{3, 6\}$                       (3)  $\{3, 7\}$                       (4)  $\{3, 4\}$

**Ans. (2)**

**Sol.**  $U = \{3, 4, 5, 6, 7\}, A = \{5, 7, 8\}, B = \{4, 5, 8\}$

$$A' = U - A = \{3, 4, 6\}$$

$$B' = U - B = \{3, 6, 7\}$$

$$\therefore A' \cap B' = \{3, 6\}$$

**10.** The printed price of a sari is Rs 2000. If after discount of 10% the profit is 20%. Then what is the net price of the sari?

- (1) Rs. 1600                      (2) Rs. 1200                      (3) Rs. 1500                      (4) Rs. 1800

**Ans. (3)**

**Sol.** Listing Price = 2000, Discount = 10%, Profit = 20 %

$$\text{Discount on List price} = \frac{2000 \times 10}{100} = \text{Rs. } 200$$

$$S.P = L.P - \text{Discount} = 2000 - 200 = \text{Rs. } 1800$$

$$\text{Profit} = \frac{SP - CP}{CP} \times 100$$

$$\therefore 20 = \frac{1800 - CP}{CP} \times 100$$

$$\therefore \frac{CP}{5} = 1800 - CP$$

$$\therefore CP = 9000 - 5 \times CP$$

$$\therefore 6 \times CP = 9000$$

$$\therefore CP = 1500$$

So the net Price of the Sari is Rs.1500

**11.** The median of 7, 5, 8, x, 12, 17 is 10. Then what is the value of X.

(1) 10

(2) 11

(3) 12

(4) 9

**Ans. (3)**

**Sol.** The Median of 7, 5, 8, x, 12, 17 is 10

Now arrange them in Ascending Order

$$\therefore 5, 7, 8, x, 12, 17$$

Now the number of Observations,  $n = 6$ . So

$$\text{Median} = \frac{\left(\frac{n}{2}\right)^{\text{th}} + \left(\frac{n}{2} + 1\right)^{\text{th}}}{2} = 10$$

$$\therefore \frac{(3)^{\text{rd}} + (4)^{\text{th}}}{2} = 10$$

$$\therefore \frac{8 + x}{2} = 10$$

$$\therefore 8 + x = 20$$

$$\therefore x = 12$$

**12.** 0 of which quadratic polynomial are 4 and 3.

(1)  $x^2 + 7x + 12$

(2)  $x^2 - 7x + 12$

(3)  $x^2 + 7x - 12$

(4)  $x^2 - 7x - 12$

**Ans. (2)**

**Sol.** Zeros are 4 and 3, so factors are  $(x - 4)$  and  $(x - 3)$

$$\therefore \text{Required Quadratic Equation is } (x - 4)(x - 3) = x^2 - 7x + 12.$$

**13.** If  $\frac{x}{3} + 7 = 15 - \frac{x}{5}$  then find the solution?

(1)  $x = 20$

(2)  $x = 15$

(3)  $x = 21$

(4)  $x = 18$

**Ans. (2)**

$$\text{Sol. } \frac{x}{3} + 7 = 15 - \frac{x}{5}$$

$$\Rightarrow \frac{x}{3} + \frac{x}{5} = 8$$

$$\Rightarrow \frac{8x}{15} = 8$$

$$\Rightarrow x = 15$$

**14.** There are 5 red, 2 yellow and 7 white roses in a flower vase. If a rose is selected randomly, the probability of the selection of white rose ?

(1)  $\frac{5}{14}$

(2)  $\frac{1}{7}$

(3)  $\frac{1}{2}$

(4) 1

**Ans. (3)**

**Sol.** There are 5 Red, 2 Yellow, 7 white Roses in a flower vase.

$$\text{Probability of Selecting White Roses, } P(W) = \frac{7}{14} = \frac{1}{2}$$

**15.** If one factor of  $27x^3 + 64y^3$  is  $(3x+4y)$  what is the second factor?

- (1)  $(3x - 4y)$                       (2)  $(3x^2 + 12xy + 4y^2)$       (3)  $(9x^2 + 12xy - 16y^2)$       (4)  $(9x^2 - 12xy + 16y^2)$

**Ans. (4)**

**Sol.**  $27x^3 + 64y^3$

$$(3x)^3 + (4y)^3 = (3x + 4y)(9x^2 - 12xy + 16y^2)$$

**16.** The HCF is  $6x^2y^2$  and LCM  $36x^3y^3$  of two terms. If one term is  $12x^3y^2$  what is the second term?

- (1)  $18x^2y^2$                       (2)  $18x^3y^2$                       (3)  $36x^2y^3$                       (4)  $36x^3y^2$

**Ans. (No option matching)**

**Sol.** Option is Missing.  $\text{LCM} \times \text{HCF} = a \times b$ , where a is first term and b is second term.

$$\text{LCM} = 36x^3y^3, \text{HCF} = 6x^2y^2, a = 12x^3y^2$$

$$\text{LCM} \times \text{HCF} = a \times b$$

$$(36x^3y^3) \times (6x^2y^2) = (12x^3y^2) \times b$$

$$\Rightarrow b = 18x^2y^3$$

**17.** If  $p(x) = 2x^3 - 3x^2 + 5x - 4$  is divided by  $(x - 2)$ , what is remainder?

- (1) 12                      (2) 8                      (3) 10                      (4) -10

**Ans. (3)**

**Sol.**  $p(x) = 2x^3 - 3x^2 + 5x - 4$  is divisible by  $(x - 2)$

$$\therefore \text{By Remainder Theorem, remainder is } p(2) = 2(2)^3 - 3(2)^2 + 5(2) - 4 = 16 - 12 + 10 - 4 = 10$$

**18.** Two concentric circles are  $\odot(P, 5)$  and  $\odot(P, 13)$ . The tangents of the small circle is the chord of the big circle. What is the length of it?

- (1) 12                      (2) 15                      (3) 20                      (4) 24

**Ans. (4)**

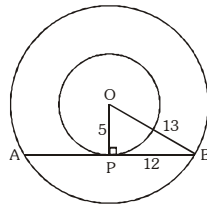
**Sol.** OP is the radius of smaller circle and OB is the radius of bigger circle and AB is the tangent to the smaller circle passing through point P.

$$OP^2 + PB^2 = OB^2$$

$$\therefore PB^2 = 13^2 - 5^2$$

$$\therefore PB = 12$$

$$\therefore AB = 24$$



**19.** Mother was at age of 30 when the son was born. Now the sum of the age mother and son is 40 years. So after 10 years what is the age of the son?

- (1) 5 years                      (2) 10 years                      (3) 15 years                      (4) 20 years

**Ans. (3)**

**Sol.** Let present age of mother is 30 years.

After x years, the sum of mother and son's age will be 40 years.

i.e mother's age =  $(30 + x)$  years and Son's age = x years

$$\therefore 30 + x + x = 40$$

$$\therefore 30 + 2x = 40$$

$$\therefore 2x = 10$$

$$\therefore x = 5$$

$\therefore$  After 10 years, Son's age will be,  $(10+5) = 15$  years.

20. Which is not the identity true for trigonometric ratios?

- (1)  $\sin^2 \theta + \cos^2 \theta = 1$       (2)  $\tan \theta = \cot(90 - \theta)$       (3)  $\sec^2 \theta + \tan^2 \theta = 1$       (4)  $\operatorname{cosec}^2 \theta - \cot^2 \theta = 1$

Ans. (3)

Sol. By going through options incorrect identity is option C and correct identity is  $\sec^2 \theta - \tan^2 \theta = 1$ .

21. How many meters is equal to 1 nanometer?

- (1)  $10^{-9}$  meter      (2)  $10^{-10}$  meter      (3)  $10^9$  meter      (4)  $10^{10}$  meter

Ans. (1)

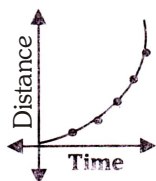
Sol. Prefix 'nano' stands for  $10^{-9}$ . Therefore, 1 nanometer =  $10^{-9}$  meter

22. A light ray enters from denser medium to rarer medium. What is the angle of incidence called that has  $90^\circ$  angle of refraction?

- (1) angle of refraction      (2) critical angle      (3) angle of deviation      (4) angle of reflection

Ans. (2)

Sol. When angle of incidence equals critical angle, then angle of refraction is  $90^\circ$ .



23.

Which motion does the graph of distance and time shows for accelerated motion?

- (1) Non-uniformly accelerated      (2) Constant accelerated  
(3) Uniformly accelerated      (4) Uniformly retarded motion

Ans. (3)

Sol. Distance-time equation for a uniformly accelerated motion is given by

$$s = ut + \frac{1}{2} at^2$$

Nature of distance-time graph for the above equation is parabolic.

Since the graph shown in figure is a parabola, the motion represented by it is a uniformly accelerated motion.

24. Which law of Newton gives the value of force?

- (1) First law      (2) Second law      (3) Third law      (4) All

Ans. (2)

Sol. According to Newton's second law of motion,

$$\text{Force} = \frac{\text{Change in momentum}}{\text{Time}}$$

or, Force = Mass  $\times$  Acceleration

Therefore, Newton's Second law of motion gives the value of force.

25. Due to which motion of light does the Tyndall effect occur?

- (1) Incidence      (2) Refraction      (3) Scattering      (4) Distersion

Ans. (3)

Sol. Tyndall effect occurs due to scattering of light in many directions by colloidal particles.

26. The absolute refractive index of any medium is

- (1) 1      (2)  $> 1$       (3)  $< 1$       (4) 0

Ans. (2)

Sol. Absolute refractive index of any medium =  $\frac{\text{Speed of light in vacuum}}{\text{Speed of light in medium}}$

Since speed of light in vacuum is always greater than speed of light in any medium, absolute refractive index of the medium is always greater than 1.

**27.** Which fundamental particles did Chadwick invent in 1932?

- (1) Electron                      (2) Proton                      (3) Neutron                      (4) All the three

**Ans. (3)**

**Sol.** Chadwick discovered neutron in 1932 for which he was awarded Nobel Prize in Physics in 1935.

**28.** What is a gaseous fuel used at home called?

- (1) L.P.G                      (2) C.N.G                      (3) P.N.G                      (4) All

**Ans. (1)**

**Sol.** Gaseous fuel used at homes is called L.P.G (Liquefied Petroleum Gas).

**29.** What is the measuring equipment called that measures the electric current passing through conductors?

- (1) Wattmeter                      (2) Ammeter                      (3) Galvanometer                      (4) Voltmeter

**Ans. (2)**

**Sol.** Ammeter is used to measure electric current flowing through a conductor.

**30.** What are the names of the two Moons of the Mars?

- (1) Titan and Sheron                      (2) Titan and Demos                      (3) Phobos and Demos                      (4) Sheron and Phobos

**Ans. (3)**

**Sol.** Two Moons of the Mars are known as Phobos and Demos.

**31.** Earthquake waves are of which type?

- (1) Infrasonic                      (2) Ultrasonic                      (3) Supersonic                      (4) Intrasonic

**Ans. (1)**

**Sol.** Earthquake waves have frequency less than 20 Hz, therefore they are known as infrasonic waves.

**32.** Which branch of science is associated with the use of X-rays and the Gamma rays for the diagnosis and treatment?

- (1) Urology                      (2) Radiology                      (3) Histology                      (4) Pathology

**Ans. (2)**

**Sol.** Radiology is the branch of science that uses X-rays and Gamma rays for diagnose and treatment of diseases.

**33.** The initial velocity of the free falling object is \_\_\_\_\_?

- (1) More                      (2) Less                      (3) Zero                      (4) 9.8 m/s

**Ans. (3)**

**Sol.** The initial velocity of a free falling object is zero as it is released from rest.

**34.** During a chemical reaction between acid and base, Salt and water are formed. What is the process called?

- (1) Neutralization                      (2) Corrosion                      (3) Hydrolysis                      (4) Ionization

**Ans. (1)**

**Sol.** A chemical reaction of an acid and a base is called a neutralization reaction.

**35.** Which of the following is a strong acid?

- (1) Acetic acid                      (2) Citric acid                      (3) Nitric acid                      (4) Oxalic acid

**Ans. (3)**

**Sol.** Only nitric acid (an inorganic acid) completely dissociates in aqueous medium. Rest all are weak acids.

**36.** Which method is used for concentration of those ores obtained in the Sulphide form?

- (1) Magnetic separation                      (2) Centrifugation                      (3) Froth Flotation Method                      (4) Calcination

**Ans. (3)**

**Sol.** For concentration of sulphide ores Froth flotation method (based on wetting properties) is used.

**37.** Which of the following pairs is not suitable for organic functional group of the carbonic compound?

- (1) Carboxylic acid -  $\text{-COOH}$  (2) Ketone -  $\text{>C = O}$   
(3) Aldehyde -  $\text{-CHO}$  (4) Ester -  $\text{-OH}$

**Ans. (4)**

**Sol.**  $\text{>C = O}$  having compounds are known as carbonic compounds. Except (4) option all are having  $\text{>C = O}$  group.

**38.** What is the chemical name of the quick lime?

- (1) Calcium Oxide (2) Calcium Carbonate (3) Calcium Hydroxide (4) Carbon Dioxide

**Ans. (1)**

**Sol.** Calcium oxide is also known as quick lime.

**39.** Which of the following is a compound?

- (1) Iron (2) Air (3) Washing Soda (4) Mercury

**Ans. (3)**

**Sol.** Compound is a substance which is made up of two or more elements in fixed proportion by mass. Here only washing soda is fulfilling the condition.

**40.** While preparing  $\text{CO}_2$  in laboratory, on which of the following substances hydrochloride acid is poured?

- (1) Pieces of Zinc (2) Pieces of marble  
(3) The particles of Copper Sulphate (4) Ammonium Chloride

**Ans. (2)**

**Sol.** When acid reacts with metal carbonates or metal hydrogen carbonates it forms metal salt, Water and  $\text{CO}_2$ .

**41.** Which of the following gases is used to show the clouds or artificial smoke in film or drama?

- (1) Carbon Dioxide (2) Oxygen (3) Nitrogen (4) Hydrogen

**Ans. (1)**

**Sol.** Carbon Dioxide gas is used for artificial smoke or clouds in film or drama.  $\text{CO}_2$  stored in compressed cylinders is used in conjunction with theatrical fog machines to produce low lying fog effects.

**42.** Which of the following relations between mole and mass correct?

- (1)  $\text{Mass} = \text{Weight}/\text{Mass}$  (2)  $\text{Weight} = \text{Mass}/\text{Mole}$   
(3)  $\text{Mole} = \text{Weight}/\text{Atomic weight}$  (4) All of them

**Ans. (3)**

**Sol.** For calculating mole weight is divided by atomic weight or molecular weight.

**43.** From which compound are the tablets made that are used for conservation of grain?

- (1) Aluminum Phosphide (2) Zinc Phosphide  
(3) Manganese Dioxide (4) Potassium Permanganate

**Ans. (1)**

**Sol.** Aluminium phosphide is a major constituent of the tablets which are made for conservation of grains.

**44.** Which are the components of stainless steel?

- (1) Copper, Zinc, Nickle (2) Iron, Chromium, Nickle  
(3) Iron, Carbon, Tin (4) Copper, Chromium, Tin

**Ans. (2)**

**Sol.** Stainless steel (an alloy) is made up of Iron, Carbon, Chromium and Nickle.

**45.** What is the electronic configuration of Sulphur?

- (1) 2, 6, 8 (2) 2, 4, 8 (3) 2, 8, 6 (4) 2, 6, 4

**Ans. (3)**

**Sol.** Sulphur =  ${}_{16}\text{S}^{32}$ ; Atomic number is 16 so configuration will be 2, 8, 6.

46. How many atoms are there in a compound of a mole?  
(1)  $60.22 \times 10^{-23}$       (2)  $602.2 \times 10^{-23}$       (3)  $6.022 \times 10^{23}$       (4)  $6022 \times 10^{23}$

**Ans. (3)**

**Sol.** Question is wrong. As a compound is made up of minimum two different type of atoms so here correct question will be how many molecules are there in a compound of a mole? In that condition correct answer will (3).

47. Which of the following factors does a plant use for process of photosynthesis?  
(1) Sunlight      (2) Chlorophyll      (3)  $\text{CO}_2$  and  $\text{H}_2\text{O}$       (4) All of them

**Ans. (4)**

**Sol.** A plant use all factors i.e, Sunlight, Chlorophyll,  $\text{CO}_2$  and  $\text{H}_2\text{O}$  for the process of photosynthesis.

48. Which is the longest organ of the digestive system?  
(1) Oesophagus      (2) Stomach      (3) Small Intestine      (4) Large Intestine

**Ans. (3)**

**Sol.** Alimentary canal in human beings is about 9meter long in which small intestine is 6.5 meter long. Hence, Small intestine is the longest organ of Human Digestive system.

49. Which of the following living being has a three chambered heart?  
(1) Frog      (2) The Bat      (3) Human      (4) The mouse

**Ans. (1)**

**Sol.** Frog is an amphibian so, it has a three chambered heart.

50. What is the name of the blood vessels that provide nutrition to the heart wall?  
(1) Pulmonary Arteries      (2) Pulmonary Veins      (3) Coronary arteries      (4) Descending aorta

**Ans. (3)**

**Sol.** Coronary Arteries are the blood vessels that provides nutrition to the heart muscles.

51. Which organelle is considered as a suicide bag?  
(1) Centrosome      (2) Mesosomes      (3) Lysosomes      (4) Chromosome

**Ans. (3)**

**Sol.** Lysosomes contain enzymes which destroy the cell by digesting all cell organelles of the cell.

52. Which one of the following pairs is not correct?  
(1) The pituitary gland - Adrenalin      (2) Ovary - Estrogen  
(3) Pancreas - Insulin      (4) Testis - Testosterone

**Ans. (1)**

**Sol.** Adrenaline hormone secretes from adrenal glands.

53. Which is the common method of artificial reproduction in plants?  
(1) Cutting      (2) Layering      (3) Grafting      (4) All of them

**Ans. (4)**

**Sol.** All the methods i.e, cutting , layering and grafting are the common methods of artificial reproduction in plants.

54. With what are the disease like Swine Flu, Dengue and Chikungunya Fever spread?  
(1) Bacteria      (2) Virus      (3) Parasites      (4) Fungi

**Ans. (2)**

**Sol.** Swine Flu, Dengue and Chikungunya are the diseases spread from virus.

55. Living mechanical tissue is :  
(1) Parenchyma      (2) Collenchyma      (3) Sclerenchyma      (4) Chlorenchyma

**Ans. (2)**

**Sol.** Collenchyma contains nucleus and it provides strength to the plants hence a living mechanical tissue .



56. Which plant leaves have a parallel venation?  
(1) Peepal leaves (2) Hibiscus leaves (3) Banana leaves (4) Banyan tree

**Ans. (3)**

**Sol.** Banana is a monocot plant hence have a parallel venation.

57. For which of the following diseases vaccine has not been invented yet?  
(1) Jaundice (2) Cholera (3) Typhoid (4) Chikungunya

**Ans. (4)**

**Sol.** Chikungunya vaccine has not been invented yet.

58. The inner layer of the pharynx of a frog is made of \_\_\_\_\_ Epithelium.  
(1) Squamous (2) Cuboidal (3) Ciliated (4) Columnar

**Ans. (3)**

**Sol.** Inner layer of pharynx of frog is made up of ciliated epithelium cells.

59. Which of the following gases mainly increases global warming?  
(1) Carbon monoxide (2) Nitrous oxide (3) Carbon dioxide (4) Sulphur Dioxide

**Ans. (2)**

**Sol.** Nitrous oxide gas is mainly increases global warming because it is 300 times more powerful than other gases causing global warming.

60. Which of the following is the example of the waste bio-decomposition of living beings?  
(1) Vegetable (2) Glass (3) Plastic (4) Metal

**Ans. (1)**

**Sol.** Vegetable is a Bio degradable component.

61. Which method is used to know the time line of the archaeological remains?  
(1) Dropping method (2) Carbon dating method (3) Metric dating method (4) All of them

**Ans. (2)**

**Sol.** Carbon dating method is used to know the time line of the archeological remains.

62. With which Governor General's efforts did the teaching of English language begin in India?  
(1) Lord Cornwallis (2) Lord Ripon (3) Lord Macaulay (4) Lord Hastings

**Ans. (3)**

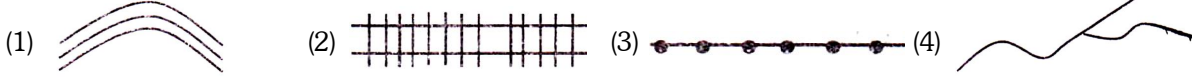
**Sol.** Lord Macaulay

63. Who started the 'DakChouki, Tapal method which means 'GhodesvarSathetapalihalkaro'?  
(1) GyasuddinTugluk (2) AllauddinKhilji (3) Razia Sultana (4) Mohd.Tuglak

**Ans. (2)**

**Sol.** Mohd.Tughlak

64. Which of the following symbols in map indicates Railway?



**Ans. (2)**

**Sol.** Symbol of railway

65. Where is the headquarters of the United Nation (UN)?  
(1) Rome (2) Paris (3) Washington (4) New York

**Ans. (4)**

**Sol.** New York - Head quarter of UNO.

**66.** By which pass of the Himalayas can we easily travel for the pilgrimage of the KM Mansarovar?  
(1) The Shipkila Ghat (2) The Jelapala Ghat (3) The Nathula Ghat (4) The Karakoram Ghat

**Ans. (1)**

**Sol.** ShipkilaGhat

**67.** Which institution has been formed by Justice MahadevGovindRanade for social reform.

- (1) The Brhmosamaj (2) The PrarthnaSamaj (3) The AryaSamaj (4) The Satyashodhaksamaj

**Ans. (2)**

**Sol.** The PrarthnaSamaj - formed by Justice MahadevGovindRanade

**68.** Which of the following rivers does not meet the Ganga?

- (1) The koshi (2) The Chambal (3) The shon (4) The Gandak

**Ans. (2)**

**Sol.** The Chambal river does not meet the ganga

**69.** Whose statue is there in front of the VidhanSabha of Gujarat in sitting posture?

- (1) Vitthalbhai Patel (2) Vallabhbbhai Patel (3) Mahatma Gandhi (4) Dr. Jivraj Mehta

**Ans. (1)**

**Sol.** Vitthalbhai Patel statue in front of thevidhansabha of Gujarat in sitting posture

**70.** Which of the following rivers meets the river Krishna?

- (1) The Tungbhadra (2) The Koyna (3) The GhatPrahbha (4) All of them

**Ans. (4)**

**Sol.** The Tundbhadra, The Koyna, The GhatPradbha All of them meet the river krishna

**71.** In which states there is "Amravrishti" at the end of the summer and just before the setting of the monsoon?

- (1) Tamilnadu and Telangana (2) Andrapradesh and Tamilnadu  
(3) Kerala and Kamataka (4) Andrapradesh and Telangana

**Ans. (3)**

**Sol.** Kerala and Karnataka, there is Amravrishti at the end of the summer before the monsoon.

**72.** By which name is the Bhagirathi Ganga known as after it originates from the Gar goal?

- (1) Padma (2) Jamuna (3) Meghna (4) All

**Ans. (1)**

**Sol.** Padma by this name Bhagirathi ganga known as after it originate from the gangotri.

**73.** Which country has the largest written contitution?

- (1) Britain (2) France (3) India (4) America

**Ans. (3)**

**Sol.** India has the largest written constitution.

**74.** What was the name of the inspiring guru of Harihar and Bukkaray that had setup the Hindu Maharajya- Vijayanagar on the shore of Tungbhadra?

- (1) AcharyaShilbhadra (2) Vidyaranya Swami (3) Swami Ramtirtha (4) GuruVirjanada Swami

**Ans. (2)**

**Sol.** Vidyaranya Swami was the name of inspiring guru of Harihar and Bukkaray

**75.** What is the position of India in the world with reference to area ?

- (1) 6<sup>th</sup> (2) 7<sup>th</sup> (3) 8<sup>th</sup> (4) 9<sup>th</sup>

**Ans. (2)**

**Sol.** India ranks 7<sup>th</sup> in the area, in the world

**76.** Which country is called the land of "Midnight Summer"?

- (1) Sweden (2) Norway (3) Spain (4) Portugal

**Ans. (2)**

**Sol.** Norway is called the land of midnight sun.

**77.** Where did Vastupal and Tejpal, the ministers of the RanaVirDhaval of Dhoika, ouit the Jain temples?

- (1) Delwara (Abu) (2) Palitana (3) Gimar (4) All

**Ans. (1)**

**Sol.** Delwara (Abu) this jain temple was built by Vastupal and Tejpal the minister of RanaVirDhaval.

**78.** Which Veda of the Aryas is called the 'Gangotrf of music'?

- (1) The Rigveda (2) The Yajurveda (3) The Samveda (4) The Atharveda

**Ans. (3)**

**Sol.** The Samved the gangotri of music

**79.** In which state of India was the Panchayati Raj was established first?

- (1) Gujarat (2) Rajasthan (3) Maharastra (4) Madhya Pradesh

**Ans. (2)**

**Sol.** Rajasthan where the first panchayati raj established

**80.** Of which Indian classical dance is the plaited green coloured petticoat', kumin, 'silk blouse' and 'belt around the waist' the characteristics?

- (1) Manipuri (2) Kathak (3) Bharatnatyam (4) Kathakali

**Ans. (1)**

**Sol.** Manipuri Indian classical dance is the plaited green colourpaticot, kumin, silk blouse and belt around the waist the characteristic.

**81.** Which of the followings is not written by MahakaviKalidas in Sanskrit?

- (1) AbhigyanShakuntalam (2) Rutusamhar (3) Kadambari (4) Kumarsambhava

**Ans. (3)**

**Sol.** Kadambari was not written by kalidas in sanskrit

**82.** In which cave is the great piece of the Indina sculpture Kailash temple situated?

- (1) Ajanta (2) Ellora (3) Elephanta (4) Bagh

**Ans. (2)**

**Sol.** Ellora - Kailsah temple is situated here.

**83.** Which of the following is not our neighbor country?

- (1) Nepal (2) Bhutan (3) Iran (4) Srilanka

**Ans. (3)**

**Sol.** Iran is not our neighboring country.

**84.** Which is the highest postion in the Indian Army?

- (1) Field Marshall (2) Admiral (3) Air chief Marshal (4) Lt. General

**Ans. (1)**

**Sol.** Field Marshal the highest position in the Indian army after President.

**85.** Which is the state of India that has the largest area?

- (1) Uttar Pradesh (2) Maharastra (3) Rajasthan (4) Madhya Pradesh

**Ans. (3)**

**Sol.** Rajasthan is the largest stateof India, according to area.

**86.** What amount of the nation income of India is obtained from agriculture?  
(1) 65% (2) 26% (3) 62% (4) 22%

**Ans. (2)**

**Sol.** 26% of National Income comes from agriculture.

**87.** Who was the first speaker of the loksabha in India?  
(1) NeelamSanjeev Reddy (2) Ganesh VasudevMavlankar  
(3) Mirakumari (4) SumitraMahajan

**Ans. (2)**

**Sol.** Ganesh VasudevMavlankar was the first speaker of loksabha in India.

**88.** Of which religion is the Tripitika the holy book belong?  
(1) Jain (2) Hindu (3) Buddha (4) Islam

**Ans. (3)**

**Sol.** Tripitaka is the holy book of Buddha

**89.** What is 'Mahabhinishkramana'?  
(1) The renunciation of Mahavir (2) The renunciation of Buddha  
(3) The Sankaracharya became sanyasi (4) The renunciation of Guru Nanak

**Ans. (2)**

**Sol.** The renunciation of Buddha is the mahabhinishkramana

**90.** Which Indian state has been given special right in our constitution?  
(1) Kerala (2) Assam (3) Nagaland (4) Jammu Kashmir

**Ans. (4)**

**Sol.** Jammu and Kashmir has been given special right in our constitution

**91.** Which right is not enlisted in the list of fundamental rights?  
(1) Right to Protection against exploitation (2) Right to liberty  
(3) Right to property (4) Right to education and culture

**Ans. (3)**

**Sol.** Right to property is not listed in the fundamental rights.

**92.** What is the duration (Time limit) for the member of the Rajyasabha?  
(1) 4 yrs (2) 5 yrs (3) 6 yrs (4) 10 yrs

**Ans. (3)**

**Sol.** Rajyasabha membership is for 6 years

**93.** Who was the first chairman of the Indian constitution assembly?  
(1) Jawaharlal Nehru (2) Dr. B.R. Ambedkar  
(3) Dr. Rajendra Prasad (4) Dr. SarvapalliRadha Krishnan

**Ans. (3)**

**Sol.** Dr. Rajendra Prasad was the first chairman of the Constitution Assembly

**94.** The river Tsangpo flows through Tibet, in which state does it enter after taking 'U' turn from 'NamchaBarva'?  
(1) Assam (2) Arunachal Pradesh (3) Meghalaya (4) Nagaland

**Ans. (2)**

**Sol.** Arunachal Pradesh - The Tsangpo river taking u turn and enter in India from NamchaBarva in this state

**95.** The 16<sup>th</sup> October is observed as 'Mourning day' which occurrence is the reason of it?

- (1) The Jaliyawala Bag Massacre (2) Bang Bhang  
(3) The dandikuch (4) All of them

**Ans. (2)**

**Sol.** Bang Bhang after this 16th October is observed as the mourning day.

**96.** How many are the factors of production?

- (1) 3 (2) 4 (3) 2 (4) 5

**Ans. (2)**

**Sol.** There are 4 factors of the production.

**97.** The concept of human development number was accepted by \_\_\_\_\_.

- (1) WHO (2) UNO (3) UNDP (4) UNICEF

**Ans. (3)**

**Sol.** UNDP accepted the concept of human development.

**98.** Which year was declared as 'The international Women's year' by the UNO?

- (1) 1975 (2) 2002 (3) 1990 (4) 2001

**Ans. (2)**

**Sol.** 2002 was declared as International women's year by the UNO

**99.** The Indian standard time line passes from the city, which is that?

- (1) Aurangabad (2) Lucknow (3) Allahabad (4) Hyderabad

**Ans. (3)**

**Sol.** Allahabad is the city from where IST line pass

**100.** In which state is the KanchanJanghapark situated?

- (1) Manipur (2) Sikkim (3) Nagaland (4) Arunachal Pradesh

**Ans. (2)**

**Sol.** Sikkim is the state where Kanchanjangha park is situated.