Date: 05/11/2017

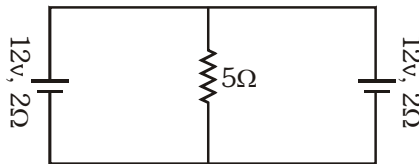**Max. Marks: 100**   **SOLUTIONS**   **Time allowed: 90 mins**

1. An object of mass one kilogram is lifted vertically of height one meter then the amount of work done will be

(A) 9.8 J   (B) 1 J   (C) 9.8 erg   (D) both 'A' and 'C'

Ans. (A)

Sol. Work done = mgh = $1 \times 9.8 \times 1$

W.d. = 9.8 J

2. A circuit as shown in figure the value of current in 5Ω resistance will be

(A) 2A   (B) Zero   (C) $\dfrac{12}{7}$ A   (D) 1A
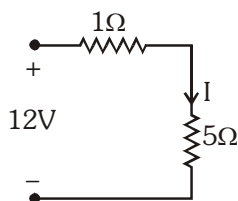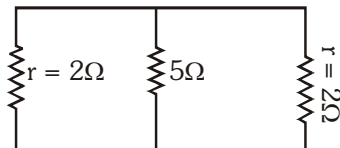
Ans. (A)

Sol. $\dfrac{1}{r_{eq}} = \dfrac{1}{2} + \dfrac{1}{2}$

$\dfrac{1}{r_{eq}} = \dfrac{2}{2}$
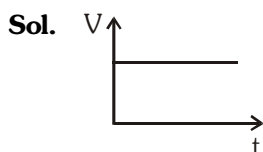
$\boxed{r_{eq} = 1\Omega}$

$\boxed{R_T = 6\Omega}$

$\boxed{I = \dfrac{12}{6} = 2A}$

3. The velocity time graph of the particle in motion is parallel to time axis shows

(A) Uniform motion of particle   (B) Particle is in rest

(C) Non uniform motion of particle   (D) Accelerated motion of particle

Ans. (A)

Sol.

As velocity is constant so body is in uniform motion.

4. An articifical satellite is moving in a circular orbit around the earth with a speed equal to the escape velocity, from the earth of radius R then what is the height of the satellite above the surface of the earth.

(A) $\dfrac{R}{2}$ 　　　　　　(B) R 　　　　　　(C) 3R 　　　　　　(D) None of thses

Ans. (B)

Sol. $V_e = \sqrt{2R_e g}$ 　　　　.....(1)

$V_O = \sqrt{\dfrac{GMe}{(R_e + h)}}$ 　　　　$GMe = gR_e^2$

$V_O = \sqrt{\dfrac{gRe^2}{(R_e + h)}}$ 　　　　.....(2)

Equation (1) divided by (2)

$\dfrac{V_e}{V_O} = \sqrt{\dfrac{2(R_e + h)}{R_e}}$ 　　　　$V_O = \dfrac{V_e}{2}$

$\dfrac{2V_e}{V_e} = \sqrt{\dfrac{2(R_e + h)}{R_e}}$ 　　　　$2 = \sqrt{\dfrac{2(R_e + h)}{R_e}}$

$4 = \dfrac{2(R_e + h)}{R_e}$ 　　　　$2Re = Re + h$

$h = R_e = R$ 　　　　R_e = Radius of Earth

5. An investigator team transmit an ultrasound signal to the sea bed. The signal is received back in 12 second. If the speed of sound in water is 1000 m/s then the depth of sea is

(A) 5 km 　　　　(B) 6 km 　　　　(C) 600 m 　　　　(D) 4000 m

Ans. (B)

Sol. $2d = V \times t$

$d = \dfrac{V \times t}{2} = \dfrac{1000 \times 12}{2}$

$d = 6000$ m

$d = 6$ km

6. The unit of resistivity is

(A) Ohm 　　　　(B) Ohm / meter 　　　　(C) Ohm ×meter 　　　　(D) None of these

Ans. (C)

Sol. The unit of resistivity is Ω m.

7. The focal length of concave lens is 25 cm. Then its power will be

(A) 4D   (B) −4   (C) −4D   (D) All of these

Ans. (C)

Sol. f = −25 cm

$$P = \frac{100}{f(cm)} = \frac{100}{-25}$$

P = −4D

8. To remove short sightedness in eye which lens is used?

(A) Cylindrical lens   (B) Bifocal lens   (C) Convex lens   (D) Concave lens

Ans. (D)

Sol. A short sighted eye or myopic eye can be corrected by using concave lens.

9. At what temperature the density of water is maximum

(A) Below 4° C   (B) Above 4℃   (C) 0℃   (D) 4℃

Ans. (D)

Sol. From 0℃ to 4℃ → density of water increases

From 4℃ to more → density of water decreases

So at 4℃ density of water is maximum.

10. Three resistance each of 5Ω are joined according to fig the resultant resistance between P and Q will be
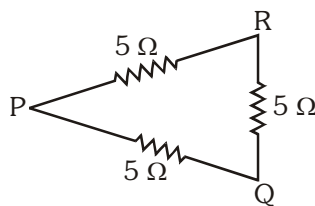
(A) $\frac{10}{3}\,\Omega$ (B) $\frac{3}{10}\,\Omega$ (C) 15 Ω   (D) None of these

Ans. (A)

Sol.
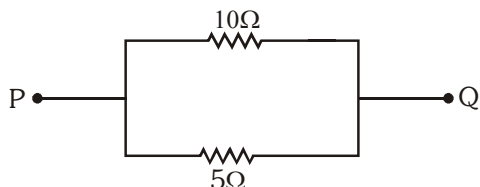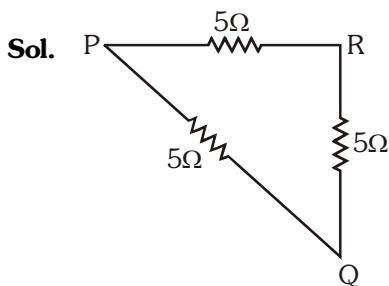
$$\Rightarrow \frac{1}{R_{eq}} = \frac{1}{10} + \frac{1}{5} \qquad \frac{1}{R_{eq}} = \frac{1+2}{10}$$

$$R_{eq} = \frac{10}{3}\,\Omega$$

11. Fleming left hand rule is used to find

(A) Direction of magnetic field due to current carrying conductor

(B) Direction of induced current

(C) Direction of force on a current carrying conductor in a magnetic field

(D) None of these

Ans. (C)

Sol. Fleming's left hand rule is used to find the direction of force on a current carrying conductor placed in a magnetic field.

12. The speed of sound wave is maximum in

(A) Vaccum   (B) Air   (C) Water   (D) Steel

Ans. (D)

Sol. Speed of sound is maximum in solid then liquid and least in gases.

13. An electric generator converts

(A) Electric energy in to mechanical energy   (B) Mechanical energy into thermal energy

(C) Mechanical energy into electric energy   (D) Electric energy into chemical energy

Ans. (C)

Sol. An electric generator is a device used to convert mechanical energy into electrical energy.

14. The physical state of water at 298 K temprature is :

(A) Gaseous   (B) Solid   (C) Liquid   (D) Plasma

Ans. (C)

Sol. Liquid, at room temperature, water is in liquid state 298 K – 273 = 25°C

15. The number of atoms in 46 g of sodium will be :

(A) 3.022×10^{23} (B) 6.022×10^{23} (C) 9.044×10^{23} (D) 12.044×10^{23}

Ans. (D)

Sol. No. of atoms in 23 g Na = NA

then No. of atoms in 46 g of Na = $2 \times NA = 2 \times 6.022 \times 10^{23} = 12.044 \times 10^{23}$

16. The atomic number of an element X is 19. The number of electrons in its ion X^+ will be :

(A) 18   (B) 19   (C) 20   (D) 21

Ans. (A)

Sol. X^+ cation has +1 charge that's why, number of electrons is less than original atom. If X = 19, then X^+ will contain 18 electrons.

17. Two solutions A and B have pH Value 2 and 5 respectively their nature will be :

(A) A and B both acidic   (B) A alkaline, B acidic   (C) B alkaline, A acidic   (D) A and B both alkaline
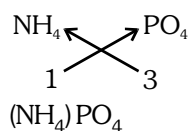
Ans. (A)

Sol. Both the solutions have pH less than 7, so both solutions are acidic in nature.

18. Valency of Phosphate radical in $(NH_4)_3 PO_4$ is :

(A) Four   (B) Two   (C) One   (D) Three

Ans. (D)

Sol. Three

NH_4 PO_4

   1   3

$(NH_4) PO_4$

19. The element A, B, C and D have atomic numbers 4,12,17 and 19 respectivyely. Which pair of elements belong to the same period?

(A) B and C   (B) A and B   (C) A and D   (D) C and D

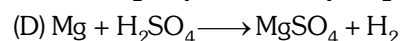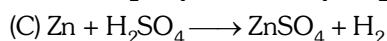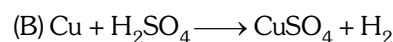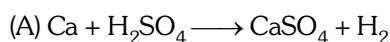**Ans. (A)**

Sol. A = 2, 2 $\Rightarrow$ 2nd period

B = 2, 8, 2 $\Rightarrow$ 3rd period

C = 2, 8, 7 $\Rightarrow$ 3rd period

D = 2, 8, 8, 1 $\Rightarrow$ 4th period
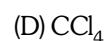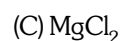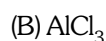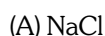
Thus B and C belong to same period.

20. Which one of the following reaction is not possible?

(A) $Ca + H_2SO_4 \longrightarrow CaSO_4 + H_2$ (B) $Cu + H_2SO_4 \longrightarrow CuSO_4 + H_2$

(C) $Zn + H_2SO_4 \longrightarrow ZnSO_4 + H_2$ (D) $Mg + H_2SO_4 \longrightarrow MgSO_4 + H_2$

Ans. (B)

Sol. Copper is less reactive than hydrogen, so it cannot displace hydrogen from acid.

21. Which one of the following is a covalent compound?

(A) NaCl   (B) $AlCl_3$ (C) $MgCl_2$ (D) CCl_4

Ans. (D)

Sol. As both carbon and chlorine are non-metals, they form covalent compounds.

22. A hydrocarbon having one double bond has 100 carbon atoms in its molecule. The number of hydrogen atoms in its molecule will be :
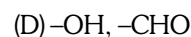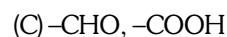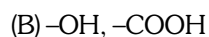
(A) 196   (B) 198   (C) 200   (D) 202

Ans. (C)

Sol. As given compound is alkene (C_nH_{2n}). C = 100 then H = $2 \times 100 = 200$ atoms.

23. The functional group present in ethanol and methanoic acid is :

(A) –COOH, –OH   (B) –OH, –COOH   (C) –CHO, –COOH   (D) –OH, –CHO

Ans. (B)

Sol. Ethanol possess alcoholic group (–OH) and methanoic acid possess carboxylic group (–COOH).

24. Main objective of smelting of ore is :

(A) To oxidise ore   (B) To reduce ore

(C) To remove volatile impurities   (D) Alloy formation

Ans. (B)

Sol. Smelting is used for reduction of ore by carbon.

25. Plaster of paris hardens by :

(A) Losing $CaCl_2$ (B) Absorbing CO_2 (C) Absorbing water   (D) Releasing water

Ans. (C)

Sol. $CaSO_4 \cdot \dfrac{1}{2} H_2O + \dfrac{3}{2} H_2O \xrightarrow{\text{373 K}} CaSO_4 \cdot 2H_2O$.
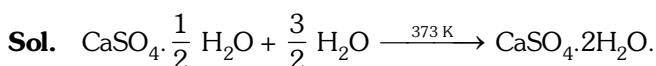
26. Basic radical is :

(A) Positively charged ion   (B) Negatively charged ion

(C) Neutral atom   (D) None of the above

Ans. (A)

Sol. Basic radical is positively charged ion.

27. Which of the following group is a group of connective tissue -

(A) Bones and Blood

(B) Muscles of hand and heart

(C) Brain and Spinal cord

(D) Both (A) and (B)

Ans. (A)

Sol. Bones are skeletal connective tissue and blood is fluid connective tissue.

28. The nutritive element found in large amount in soyabean and pulses is

(A) Fat   (B) Carbohydrate   (C) Mineral   (D) Protein

Ans. (D)

Sol. Protein is the nutritive element found in large amount in soyabean and pulses.

29. In our body which organ is responsible for conversion of ammonia into urea

(A) Kidney   (B) Lungs   (C) Liver   (D) Heart

Ans. (C)

Sol. In our body liver is the organ which is responsible for conversion of ammonia into urea (ornithine cycle)

30. In a food chain usually find the following at the first trophic level

(A) Producers   (B) Primary consumer   (C) Decomposer   (D) Secondary consumer

Ans. (A)

Sol. In a food chain producers are find at the first trophic level because they produce food for organisms on higher trophic level by photosynthesis.

31. If in stomach hydrochloric acid is not produced which enzyme will not function

(A) Ptylin   (B) Trypsin   (C) Pepsin   (D) Chymotrypsin

Ans. (C)

Sol. If HCl is not produced in stomach then pepsinogen will not convert into pepsin.

32. If a heterozygous tall plant is crossed with homozygous dwarf plant the ratio of dwarf plant in progeny will be

(A) 100%   (B) 75%   (C) 25%   (D) 50%

Ans. (D)

Sol. It is a test cross so the ratio will be 1 : 1 and 50% dwarf plant will be seen in progeny.

33. When we sleep at night and are bite by a mosquito we often try to kill the mosquito. This action is controlled by:

(A) Pituitary gland

(B) Spinal Cord and brain

(C) Brain

(D) Pineal gland

Ans. (B)

Sol. It's an example of reflex action which is being controlled by Brain and spinal cord.

34. In plants ovary develops into

(A) Seed   (B) Fruit   (C) Flower   (D) Bud

Ans. (B)

Sol. After fertilization ovary develops into fruit in Angiosperm.

35. A patient is generally advised to consume more meat, lentils, milk and eggs in diet when he suffers from:

(A) Scurvy   (B) Anaemia   (C) Rickets   (D) Kwashiorkor

Ans. (D)

Sol. A patient is advised to consume protein rich diet in Kwashiorkor which is a form of malnutrition caused by lack of protein in diet.

36. Cellulosic cell wall is not present in one of the following :

(A) Bacteria   (B) Hydrilla   (C) Cactus   (D) Mango

Ans. (A)

Sol. Bacteria cell wall is composed of peptidoglycan.

37. The thick stem of trees respire through:

(A) Trachea   (B) Stomata   (C) Lenticel   (D) Gills

Ans. (C)

Sol. Lenticel functions as a pore, providing a pathway for the direct exchange of gases between the internal tissues and atmosphere through the bark, which is otherwise impermeable to gases.

38. Which of the following is unmatched:

	Kingdom	**Example**
(A)	Protista	Amoeba
(B)	Fungi	Yeast
(C)	Plantae	Cuscuta
(D)	Monera	Euglena

Ans. (D)

Sol. Euglena belongs to the kingdom Protista.

39. The function of white blood cells of blood is:

(A) Oxygen transportation   (B) Carbon dioxide transportation

(C) Transportation of nutrients   (D) Protection from germs

Ans. (D)

Sol. White blood cells (WBCs), also called leukocytes or leucocytes, are the cells of the immune system that are involved in protecting the body against both infectious disease and foreign invaders.

40. Reticulate venation is not found in leaves of:

(A) Onion   (B) Rose   (C) Radish   (D) Tulsi

Ans. (A)

Sol. Reticulate venation is not found in leaves of onion because it is a monocot plant with parallel venation.

41. The curved surface area of a cylinder is 264 m^2 and its volume is 924 m^3. The ratio of its diameter to its height will be :

(A) 3 : 7   (B) 7 : 3   (C) 6 : 7   (D) 7 : 6

Ans. (B)

Sol. C.S.A. of cylinder = 264

$2\pi rh = 264$ ..... (1)

Volume = 924

$\pi r^2 h = 924$ ..... (2)

Dividing (2) by (1)

$$\frac{\pi r^2 h}{2\pi rh} = \frac{924}{264}$$

$$\frac{r}{2} = \frac{462}{132}$$

$r = 7$

From (1)

$$2 \times \frac{22}{7} \times 7 \times h = 264$$

$h = 6$

$$\frac{\text{Diameter}}{\text{Height}} = \frac{2 \times 7}{6} = \frac{7}{3} = 7 : 3$$

42. Sum of odd numbers between 100 and 200 is :

(A) 7500   (B) 751   (C) 2500   (D) 50

Ans. (A)

Sol. Odd numbers between 100 and 200 = 50

$a = 101, d = 2$

$$\text{sum} = \frac{50}{2}\ [2 \times 101 + 49 \times 2]$$

$$= 7500$$

43. If the sum of squares of zeros of the quadratic polynomial $f(x) = x^2 - 8x + k$ is 40. Then the value of K will be.

(A) 6   (B) 24   (C) 12   (D) 10

Ans. (C)

Sol. Let α and β be the roots of quadratic polynomial $f(x) = x^2 - 8x + k$

$\alpha^2 + \beta^2 = 40$

$\alpha + \beta = 8$

$(\alpha + \beta)^2 = \alpha^2 + \beta^2 + 2\alpha\beta$

$64 = 40 + 2\alpha\beta$

$$\frac{24}{2} = \alpha\beta$$

$\alpha\beta = 12$

$k = 12$

44. Sides of two similar triangles are in a ratio 4 : 9. Areas of these triangles will be in the ratio of :

(A) 2 : 3   (B) 4 : 9   (C) 81 : 16   (D) 16 : 81

Ans. (D)

Sol. $\dfrac{\text{Side of } 1^{st}\ \Delta}{\text{Side of } 2^{nd}\ \Delta} = \dfrac{4}{9}$

We know that if two Δs are similar $\dfrac{\text{Area of } 1^{st}\ \Delta}{\text{Area of } 2^{nd}\ \Delta} = \dfrac{(\text{Side of } 1^{st}\ \Delta)^2}{(\text{Side of } 2^{nd}\ \Delta)^2} = \left(\dfrac{4}{9}\right)^2 = \dfrac{16}{81}$

45. If the mean of 6, 7, x, 8, y, 14 is 9 then :

(A) x + y = 21   (B) x − y = 19   (C) x + y = 19   (D) x − y = 21

Ans. (C)

Sol. $\dfrac{6 + 7 + x + 8 + y + 14}{6} = 9$

$21 + x + y + 14 = 54$

$35 + x + y = 54$

$x + y = 19$

46. If the equation of a straight line is $y = -x + 5$ then its slope and interception on y axis will be :

(A) 5, −1   (B) −1, 5   (C) −1, −5   (D) 1, 5

Ans. (B)

Sol. Given line

$y = -x + 5$

slope = −1

Intercept = 5

47. Two dices are thrown together. The probability of getting the same number on both dices will be :

(A) $\dfrac{1}{2}$ (B) $\dfrac{1}{3}$ (C) $\dfrac{1}{6}$ (D) $\dfrac{1}{12}$

Ans. (C)

Sol. Favourable event = {(1, 1), (2, 2), (3, 3), (4, 4), (5, 5), (6, 6)}

Number of favourable events = 6

Total number of events = 36

Probability of getting same number on both dice = $\dfrac{6}{36} = \dfrac{1}{6}$

48. A fraction becomes $\dfrac{4}{5}$ if 1 is added to both numerator and denominator, but if 5 is subtracted from both numerator and denominator the fraction becomes $\dfrac{1}{2}$. The fraction will be :

(A) $\dfrac{7}{9}$ (B) $\dfrac{9}{7}$ (C) $\dfrac{8}{7}$ (D) $\dfrac{7}{8}$

Ans. (A)

Sol. Let the fraction is $\dfrac{x}{y}$.

$\dfrac{x+1}{y+1} = \dfrac{4}{5}$

$\Rightarrow 5x + 5 = 4y + 4$

$\Rightarrow 5x - 4y = -1$ .... (1)

$\dfrac{x-5}{y-5} = \dfrac{1}{2}$

$\Rightarrow 2x - 10 = y - 5$

$\Rightarrow 2x - y = 5$ .... (2)

eq. (1) – 4 × eq. (2)

$\Rightarrow x = 7$

put in equation (2) y = 9

So, the fraction is $\dfrac{7}{9}$

49. If a + b = 12 and ab = 11, then the value of $a^2 - b^2$ will be :

(A) 100 (B) 144 (C) 120 (D) 121

Ans. (C)

Sol. $a - b = \sqrt{(a+b)^2 - 4ab}$

$= \sqrt{144 - 44} = 10$

So, $a^2 - b^2 = (a + b)(a - b)$

$= 12 \times 10 = 120$

50. If
```
    1  P  Q
 +  R  R  P
 ─────────
    7  8  6
```

then value of Q will be :

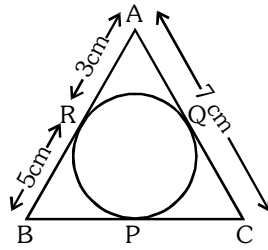(A) 4　　　　　　　(B) 6　　　　　　　(C) 2　　　　　　　(D) 5

Ans. (A)

Sol. Value of R = 6 or 5

If R = 6, then P = 2, so Q = 4

If R = 5, then P = 12, which is not possible

　　So, Q = 4

51. If in the following figure circle PQR is incircle of the triangle ABC. The length of BC will be :

(A) 7 cm　　　　　(B) 8 cm　　　　　(C) 9 cm　　　　　(D) 10 cm

Ans. (C)

Sol. BR = BP = 5 cm

AR = AQ = 3 cm

QC = PC = 4 cm

So, BC = BP + PC = 5 + 4 = 9 cm

52. If x is a positive real number then the value of $\left(\dfrac{x^a}{x^b}\right)^{a+b} \times \left(\dfrac{x^b}{x^c}\right)^{b+c} \times \left(\dfrac{x^c}{x^a}\right)^{c+a}$ will be :

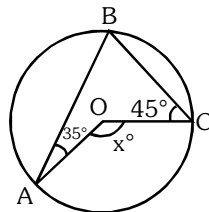(A) 0　　　　　　　(B) 1　　　　　　　(C) $(x)^1$　　　　　(D) $(x)^{a+b+c}$

Ans. (B)

Sol. $(x^{a-b})^{a+b} \times (x^{b-c})^{b+c} \times (x^{c-a})^{c+a}$

$\Rightarrow x^{a^2-b^2} \times x^{b^2-c^2} \times x^{c^2-a^2}$

$\Rightarrow x^{a^2-b^2+b^2-c^2+c^2-a^2}$

$\Rightarrow x^0 = 1$

53. In the given figure O is the centre of circle. If $\angle BAO = 35°$ and $\angle BCO = 45°$ then the value of x will be :

(A) 160　　　　　　(B) 170　　　　　　(C) 80　　　　　　(D) 140

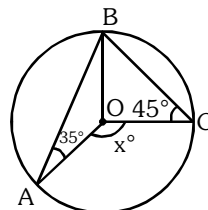**Ans. (A)**

Sol. $\angle OAB = \angle OBA = 35°$

and $\angle OCB = \angle OBC = 45°$

So, $x° = 2 \times 35° + 2 \times 45°$

　　$= 70 + 90°$

　　$= 160°$

54. The diagonal of a square is $8\sqrt{2}$ cm. Then the side of this square will be :

(A) $8\sqrt{3}$ cm   (B) 16 cm   (C) 8 cm   (D) 32 cm

Ans. **(C)**

Sol. Let the side be = a cm

So, $a^2 + a^2 = \left(8\sqrt{2}\right)^2$

$\Rightarrow 2a^2 = 64 \times 2$

$\Rightarrow a^2 = 64$

$\Rightarrow a = 8$ cm

55. The mean proportional is '24' and the third proprotional is 1536. Then the numbers are :

(A) 6 and 98   (B) 6 and 96   (C) 36 and 98   (D) 36 and 96

Ans. **(B)**

Sol. $24 = \sqrt{ab}$

$576 = ab$ $\therefore a = \dfrac{576}{b}$

Also, a : b : : 1536

$\dfrac{a}{b} = \dfrac{b}{1536}$

$\dfrac{576}{b^2} = \dfrac{b}{1536}$

$576 \times 1536 = b^3$

$\therefore 24 \times 4 = b$

$\boxed{96 = b}$ and $\boxed{6 = a}$

56. The product of the roots of equation $3x^2 - 7x - 5 = 0$ will be :

(A) $\dfrac{5}{3}$ (B) $\dfrac{-5}{3}$ (C) $\dfrac{3}{5}$ (D) $\dfrac{-3}{5}$

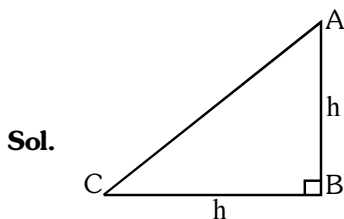**Ans.** **(B)**

Sol. Product of roots = $\dfrac{\text{Const. term}}{\text{Coefficent of } x^2} = \dfrac{-5}{3}$

57. If the shadow of vertical tower is equal to its height at any moment. At that moment the angle of elevation of the sun will be :
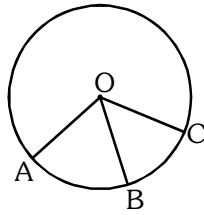
(A) 0°   (B) 30°   (C) 45°   (D) 90°

Ans. **(C)**

Sol.

Given, AB = BC

$\therefore \angle A = \angle C = 45°$

58. In the given figure, what would be ∠COB, if ratio of arc AB and BC is 3 : 2 and ∠AOB = 96° :

(A) 96°   (B) 32°   (C) 64°   (D) 16°

Ans. **(C)**

Sol. ∠AOB = 96°

3θ = 96°

θ = 32°

∴ ∠COB = 2θ

$= 2 \times 32°$

$= 64°$
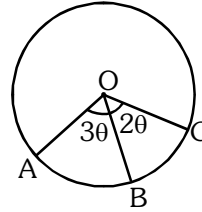
59. If 2A = 3B and 4B = 5C then A : C will be :

(A) 15 : 8   (B) 8 : 15   (C) 2 : 5   (D) 5 : 2

Ans. **(A)**

Sol. 2A = 3B

$\dfrac{A}{3} = \dfrac{B}{2} \Rightarrow \dfrac{A}{15} = \dfrac{B}{10}$ ...... (i)

Also, 4B = 5C

$\dfrac{B}{5} = \dfrac{C}{4} \Rightarrow \dfrac{B}{10} = \dfrac{C}{8}$ ...... (ii)

From (i) and (ii),

$\dfrac{A}{15} = \dfrac{C}{8}$

A : C = 15 : 8

60. The number of axis of symmetry in scalene triangle is :

(A) 3   (B) 2   (C) 1   (D) 0

Ans. **(D)**

Sol. By observation.

61. Treaty of Versailles took place on

(A) 28 June 1919   (B) 28 July 1924   (C) 20 July 1915   (D) 28 July 1919

Ans. **(A)**

Sol. The Treaty of Versailles was held on 28th June 1919.

62. When was the establishment of the league of Nation:

(A) 1915   (B) 1917   (C) 1919   (D) 1920

Ans. **(D)**

Sol. League of Nations was established in 1920.

63. Axis countriesare:

(A) Germany, Italy, Japan   (B) Germany, Russia, France

(C) Japan, Poland, America   (D) Spain, Austria, Italy

Ans. (A)

Sol. Germany, Italy and Japan are known as Axis Powers.

64. Which Journal was started by Lokmanya Tilak in 1881 in Marathi?

(A) Miraat   (B) Hindu '   (C) Times of India ,   (D) Kesari

Ans. (D)

Sol. The Marathi Journal 'Kesari' was started by Lokmanya Tilak in 1881.

65. In 1919 Indian Act was based :

(A) On Simon Commission report   (B) On Nehru report

(C) On Montague Chlems ford   (D) On Minto Marley ammendment

Ans. (C)

Sol. Government of India act 1919 was based on Montague Chelmsford Refoms .

66. ln the year 1962 the war that took place between which of the following two countries :

(A) India and Bangaladesh   (B) India and China

(C) India and Shrilanka   (D) India and Pakistan

Ans. (B)

Sol. The war between India and China took place in 1962

67. Who was the first lady President of the lndian National Congress ?

(A) Dr. Annie Bisant   (B) Sarojani Naidu

(C) Aruna Asaf Ali   (D) Dr. Vijaylaxmi Pandit

Ans. (A)

Sol. Dr. Annie Besant was the first lady President of the Indian National Congress.

68. Satkarni was first rular of which dynasty:

(A) Chola   (B) Gupt   (C) Kushan   (D) Satvahni

Ans. (D)

Sol. Satkarni was the first ruler of Satvahni dynasty.

69. During 7th century B.C. the form of Buddhism was famous as

(A) Mahayan   (B) Heenyan   (C) Vajrayan   (D) Sahajyan

Ans. (C)

Sol. During the seventh century BC the new form of Buddhism was famous as Vajrayan.

70. Important Principle of fascism was:

(A) Terror rule in the state

(B) To control the production and exchange system of the state

(C) 16 equip the state for war

(D) Extension of the state through supremacy and victory

Ans. (D)

Sol. Extension of the state through supremacy and victory was the most important principle of Fascism.

71. The industrial revolution of Germany was based on which Industries:

(A) Cotton cloth

(B) Mineral

(C) Computer

(D) Chemical and electricity

Ans. (B)

Sol. The Industrial Revolution of Germany was mainly based on mineral based industries.

72. When was Russia separted from first world war

(A) In 1914   (B) In 1917   (C) In 1918   (D) In 1919

Ans. (B)

Sol. Russia got separated from the first world war in 1917.

73. Largest and oldest industry of country is :

(A) Cement industry   (B) Paper Industry   (C) Jute Industry   (D) Cotton Industry

Ans. (D)

Sol. Cotton industry is the oldest and the largest industry of India.

74. The trees with conical shaped leaves founded in which type of forest:

(A) Tropical Evergreen forest

(B) Decidous Forest

(C) Coniferous Forest

(D) Tidal Forest

Ans. (C)

Sol. Trees with Conical shaped leaves are found in Coniferous Forests.

75. From which continent do the tropic of cancer, tropic of capricorn and equator pass?

(A) Australia   (B) Asia   (C) Africa   (D) Europe

Ans. (C)

Sol. All the three important latitudes, The Equator, The Tropic of Capricorn and the Tropic of Cancer pass through Africa.

76. The sex ratio in India was 940 in 2011. This means that :

(A) The sex ratio is low

(B) The sex ratio is high

(C) The sex ratio is balanced

(D) Nothing can be said

Ans. (A)

Sol. The is Sex-ratio data of Census 2011(940) proves that there is low sex ratio in India.

77. The line joining places of equal atmosphare pressure is termed

(A) Contour   (B) Isolyet   (C) Isotherm   (D) Isobar

Ans. (D)

Sol. The line joining places of equal atmospheric pressure is termed as Isobar.

78. Which of the following pairs of Indian rivers and cities is not correctly matched:

(A) Ganga   -   Varanasi

(B) Yamuna - Delhi

(C) Codavari - Patna

(D) Narmada - Jabalpur

Ans. (C)

Sol. Only Option C matches correctly

79. For the Production the wheat there should be:

(A) A cool & wet climate during its growing period but not climate during the ripening period

(B) Sufficient heat but very little rainful

(C) Sufficient heat but heavy rainful

(D) Hot climate during the growing period but cool climate during the ripening period

Ans. (A)

Sol. The wheat requires cool and wet climate during its growing period and hot climate during the ripening.

80. Which the following Ocean connected by Panama canal:

(A) Pecific and Atlantic

(B) Atlantic and Indian Ocean

(C) Indian Ocean and Pecific

(D) Pecific and North Ocean

Ans. (A)

Sol. Pacific and Atlantic oceans are connected by Panama Canal.

81. Which country is Europ is famous from dairy Industry

(A) Denmark   (B) Norway   (C) Sweden   (D) Switzerland

Ans. (D)

Sol. Switzerland is famous for its dairy industry.

82. Sierra Nevada is the name of

(A) An animal of America ,

(B) A desert found in America

(C) A fruit found in America

(D) A mountain found in Amarica

Ans. (D)

Sol. Sierra Nevada is a mountain found in America.

83. What is Gulf Stream?

(A) Fishing Center   (B) Large Canal   (C) Warm Ocean Current   (D) Air Current

Ans. (C)

Sol. Gulf stream is an example of warm ocean current.

84. If Aravalli ranges were from East to West :

(A) There would be no difference at all

(B) Bangal would have been the dry area

(C) The western Rajasthan would never have been a desert

(D) Uttar Pradesh would have been a desert

Ans. (C)

Sol. If Aravalli range were from east of west, the western Rajasthan would not have been a desert.

85. Who was the first home minister of Independent of India:

(A) Lai Bahadur Shastri

(B) Sardar Swarn Singh

(C) Sardar Vallabh Bhai Patel

(D) Dr. S. Radhakrishnan

Ans. (C)

Sol. Sardar Vallabh Bhai Patel was the first Home Minister of independent India.

86. How much time was spent in constitution building ?

(A) 3 years 11 months 18 days

(B) 2 years 11 months 18 day

(C) 4 years 11 months 18 days

(D) 1 year 11 months 18 days

Ans. (B)

Sol. The making of Indian Constitution took 2 years 11 months and 18 days to complete.

87. What is the population percentage of sechduled caste according to 2001 cencus ?

(A) 13.2%   (B) 21.2%   (C) 15.2%   (D) 16.2%

Ans. (D)

Sol. As per Census 2001, the population percentage of schedule caste was 16.2 %.

88. Women have been given 33% to 50% reservation in which political organization

(A) Local body   (B) Language dispute   (C) Parliament   (D) Gram Panchayat

Ans. (D)

Sol. Women have been given 33% to 50% reservation in Gram Panchayat.

89. Was not the founder country of non alignment movement

(A) Indonesia   (B) Egypt   (C) Yugoslavia   (D) China

Ans. (D)

Sol. China was not the founder country of NAM.

90. Management made by planning commission in India

(A) Social Economy   (B) Mixed Economy   (C) Capitalism Economy   (D) Marxism Economy

Ans. (B)

Sol. Mixed Economy management was established by Planning commission of India.

91. Federal legislation is consituted by

(A) President   (B) Loksabah and Rajyasabha

(C) (A) and (B)   (D) None of the above

Ans. (C)

Sol. Federal Legislation in India consist of Lok Sabha , Rajya Sabha and the President.

92. Right to information was started for

(A) Demand for minimum wage   (B) Awarness about corruption

(C) Information about muster role   (D) All of above

Ans. (B)

Sol. The Right to Information act was started for creating awareness regarding corruption in India.

93. The actual meaning of development comes from

(A) Income   (B) literacy rate   (C) Life average age   (D) above all

Ans. (D)

Sol. The development includes all the given three factors in the options.

94. F.C.I. purchases the grains from farmers on :

(A) Local rate   (B) Wholesale price

(C) Internation rate   (D) Minimum Support Price

Ans. (D)

Sol. FCI in India purchases grains from farmers on minimum support price.

95. What is India's rank according to 2016 Human development Index:

(A) 129   (B) 136   (C) 131   (D) 130

Ans. (C)

Sol. India ranked 131st as per 2016 Human Development Index.

96. NREGA 2005 Guarantees work for how many day's (In Chhattisgarh in present):

(A) 100 days   (B) 150 days   (C) 120 days   (D) 90 days

Ans. (A)

Sol. NREGA 2005 guarantees 100 days employment in rural areas.

97. Full form of G.S.T. is :

(A) Goods & Service Tax   (B) Global Service Tax

(C) Global Stenderd Time   (D) Global System Technologies

Ans. (A)

Sol. The full form of GST is Goods and Service Tax

98. According to the cencus 2011,total Population in Chhattisgarh is.

(A) 2,55,45,198   (B)2,45,12,110   (C) 1,27,12,330   (D) 1,96,07,961

Ans. (A)

Sol. As per Census 2011, the total population of Chhattisgarh is 25545198.

99. Important role played in globalization:

(A) International Company   (B) Multinational Company

(C) National Company   (D) Government Bank of India

Ans. (B)

Sol. MNCs play the most important role in globalization.

100. Which of the following is central banking institution in India?

(A) State Bank of India   (B) Central Bank of India

(C) State Co-operative Bank   (D) Reserve Bank of India

Ans. (D)

Sol. The Central Banking institution in India is called Reserve Bank of India.