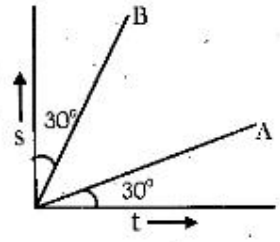
NTSE 2015-16
SAT (SET – A)
HINTS & SOLUTION

1. The displacement (s) and time (t) graphs for two moving objects A and B are straight lines inclined at 30° with the time axis and 30° with the displacement axis respectively. Then what would be their velocity ratio (v_A / v_B)?



A. 1/3 B. 1/2
C. 1/4 D. 2

Answer: A

$$\frac{V_A}{V_B} = \frac{\tan 30°}{\tan 60°} = \frac{1}{3}$$

2. A stone fell from the top of a tower to the ground in 8 seconds. How much time did it take to cover the first quarter of the distance starting from the top?

A. 4 seconds
B. 5 seconds
C. 6 seconds
D. 8 seconds

Answer: A

$$h = \frac{1}{2} \times g \times 8^2$$

$$\frac{h}{4} = \frac{1}{2} \times h \times t^2$$

$$4 = \left(\frac{8}{t}\right)^2 \Rightarrow t^2 = 16 \Rightarrow t = 4s$$

3. **A particle moves in a straight line with a retardation proportional to its displacement. Its loss in kinetic energy for any displacement 'x' would be proportional to:**

A. x B. x^2

C. x^3 D. x^4

Answer: B

$a \propto s \Rightarrow a = ks$

$W = \Delta k \Rightarrow Fs = \Delta k$

$\Delta k = mas = mks^2$

$\Delta k \propto s^2$

4. **If the kinetic energy of a body increases by 300%, by what percent shall the linear momentum of the body increase?**

A. 200%

B. 100%

C. 150%

D. 300%

Answer: B

K ì 4K (K.E. increases by 300%)

$P = \sqrt{2mK}$

$P = \sqrt{2m(4K)} = 2\sqrt{2mK} = 2P$

P ì 2P

y **Momentum increases by 100%.**

5. **When a stone is freely dropped into a well of depth 45m; the sound of its splash is heard after 3.125 second. Then what is the value of the speed of sound in air?($g=10m/s^2$)**

A. 360 m/s

B. 330 m/s

C. 340 m/s

D. 332 m/s

Answer: A

Time taken by stone to hit water

$45 = \frac{1}{2} \times 10 \times t^2 \Rightarrow t = 3s$

Time taken by sound to reach surface = 3.125 – 3 = 0.125s

$45 = v(\text{sound}) \times t$

$\Rightarrow v(\text{sound}) = \frac{45}{0.125} = 360 \frac{m}{s}$

6. The refractive index of diamond with respect to glass is 1.6 and absolute refractive index of glass is 1.5. Then the absolute refractive index of diamond will be;

A. 2.5
B. 2.4
C. 3
D. 3.5

Answer: B

$$g^{\mu d} = \frac{\mu_d}{\mu_g} \Rightarrow 1.6 = \frac{\mu_d}{1.5} \Rightarrow \mu_d = 2.4$$

7. An object is placed at a distance x_1 from the focus on the principal axis of a concave mirror. The image is formed at a distance x_2 from the focus. Then the focal length of the mirror is;

A. $\frac{x_1}{x_2}$ B. $x_1 x_2$

C. $\frac{x_2}{x_1}$ D. $\sqrt{x_1 x_2}$

Answer: D

$$x_1 x_2 = f^2 \Rightarrow f = \sqrt{x_1 x_2}$$

8. Two thin lenses of focal lengths f_1 and f_2 are placed in contact with each other such that the combination behaves as a glass slab. Then how are f_1 and f_2 related to each other?

A. $f_1 = 1/f_2$
B. $f_2 = -f_1$
C. $f_1 = f_2$
D. $f_1 = \sqrt{f_2}$

Answer: B

$$P_{net} = 0$$

$$\frac{1}{f_1} + \frac{1}{f_2} = 0 \Rightarrow \frac{1}{f_1} = -\frac{1}{f_2} \Rightarrow f_1 = -f_2$$

9. An ice-cube of density 900 kg/m³ is floating in water of density 1000 kg/m³. The percentage of volume of ice cube outside the water is;

A. 20%

B. 35%

C. 10%

D. 25%

Answer: C

$$F_B = mg$$

$$\Rightarrow S_{water} \times V_{sub} \times g = \rho_{ice} \times V_{total} \times g$$

$$\Rightarrow 1000 \times V_{sub} = 900 \times V_{total}$$

$$\Rightarrow \frac{V_{sub}}{V_{total}} = \frac{9}{10}$$

$$\therefore \frac{V_{outside}}{V_{total}} = \frac{1}{10}$$

10. A conducting wire of certain length has its resistance R_1. When it is stretched to have its diameter reduced to half its original value, what would be its new resistance R_2 in comparison to R_1?

A. $R_2=16\ R_1$

B. $R_2=8\ R_1$

C. $R_2=4\ R_1$

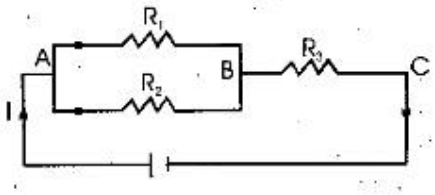
D. $R_2=2\ R_1$

Answer: A

$$R_1 = \frac{\rho\ell}{\left(\frac{\pi d^2}{4}\right)} = \frac{4\rho\ell}{\pi d^2} \Rightarrow \frac{\pi d^2}{4} \times \ell = \ell' \times \frac{\pi\left(\frac{d}{2}\right)^2}{4} \Rightarrow \ell' = 4\ell$$

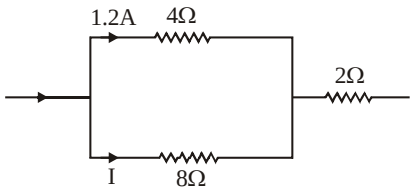
$$R_2 = \frac{\rho(4\ell)}{\frac{\pi\left(\frac{d}{2}\right)^2}{4}} = \frac{64\rho\ell}{\pi d^2} = 16R_1$$

11. Three resistances $R_1 = 4\Omega$, $R_2 = 8\Omega$ and $R_3 = 2\Omega$ are connected in a circuit carrying a total current I, as shown in the figure. If the current through the resistance $R_1 = 4\Omega$ is 1.2A, then the potential difference across the resistance R_3 is;



A. 3.6 V
B. 4.8 V
C. 8.4 V
D. 3.15 V

Answer: A



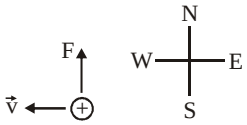
$1.2 \times 4 = I \times 8 \Rightarrow I = 0.6A$

$V(\text{across } 2\Omega) = (1.2 + 0.6) \times 2 = 3.6V$

12. An α-particle projected towards west is deflected towards north by a magnetic field. Then the direction of the magnetic field is towards

A. South
B. East
C. Downward
D. Upward

Answer: D

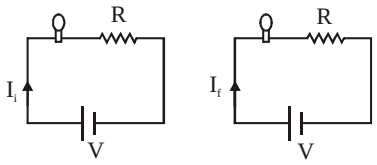


$\vec{F} = a(\vec{v} \times \vec{B}) \Rightarrow \vec{B}$ is upwards.

13. **A standard 100W electric bulb in series with a heater is connected across the mains. If the 100W bulb is now replaced by a 200W bulb; the power output of the heater;**

A. will be halved
B. will increase 4 times
C. will increase 2 times
D. will remain same.

Answer: B



For 100 W bulb let its resistance is R_0.
Then for 200 W bulb resistance will be $R_0/2$.
For same voltage rating:

$$P_i = I_i^2 R = \left(\frac{V}{R + R_0}\right)^2 R = \frac{V^2 R}{(R + R_0)^2}$$

$$P_f = I_f^2 R = \left(\frac{V}{R + \frac{R_0}{2}}\right)^2 R = \frac{4V^2 R}{(2R + R_0)^2}$$

$\therefore$ None of the options are correct
But if R is small as compared to R_0 then $2R + R_0 \approx R_0$
$R + R_0 \approx R_0$
So, $P_f = 4p_i$

14. **Which of the following is the correct order of reactivity of metals?**

A. $Cu > Au > Zn > Na > H$
B. $Au > Na > H > Zn > Cu$
C. $Na > Zn > H > Cu > Au$
D. $H > Au > Cu > Zn > Na$

Answer: C

15. **The element with highest electron affinity is :**

A. Fluorine
B. Chlorine
C. Bromine
D. Iodine

Answer: B

16. **Which of the following molecules is non-polar?**

A. H_2O

B. HF

C. NH_3

D. CCl_4

Answer: D

17. **What is the amount of water produced by the complete combustion of 16 gm of methane?**

A. 16 gm

B. 18 gm

C. 32 gm

D. 36 gm

Answer: D

$$\underset{16}{CH_4} + 2O_2 \longrightarrow CO_2 + \underset{36gm}{2H_2O}$$

18. **Which of the following atom or ion will have the smallest size?**

A. Mg

B. Mg^{2+}

C. Al^{3+}

D. Al

Answer: C

19. **Which of the following is an ore of copper?**

A. Malachite

B. Bauxite

C. Siderite

D. Calamine

Answer: A

20. In the equation

$CaCO_3 + 2HCl \rightarrow CaCl_2 + H_2O + CO_2$

the volume of CO_2 gas formed when 2.5gm $CaCO_3$ are completely dissolved in excess of hydrochloric acid at O°c and 1 atom pressure is:

A. 0.28 L
B. 0.56 L
C. 1.12 L
D. 5.6 L

Answer: B

$$\underset{100g}{CaCO_3} + 2HCl \longrightarrow CaCl_2 + H_2O + \underset{22.4L}{CO_2}$$
$$\underset{2.5g}{} \qquad\qquad\qquad\qquad\qquad\qquad\qquad \underset{?}{}$$

$$\frac{22.5 \times 22.4}{100} = 0.56L$$

21. The solution of a colourless salt in water has PH value of ≈ 9. The salt would be :

A. NaCl
B. $NaNO_3$
C. CH_3COONa
D. CH_3COONH_4

Answer: C

22. Uranium (A=238, Z=92) emits an α-particle. The product has mass number and atomic number respectively as:

A. 238 and 96
B. 238 and 90
C. 236 and 92
D. 234 and 90

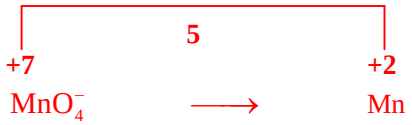
Answer: D

$$U_{92}^{238} + He_2^4 \longrightarrow U_{90}^{234}$$

23. **Find the number of coulombs required for conversion of one mole of MnO_4^- to one mole of Mn^{2+}.**

A. 96,500
B. 3×96,500
C. 5×96;500
D. 7×96,500

Answer: C



5F = 5 × 96500 coloumbs.

24. **The correct order of acid strength is:**

A. $HCOOH > C_6H_5COOH > CH_3COOH$
B. $C_6HCOOH > HCOOH > CH_3COOH$
C. $CH_3COOH > HCOOH > C_6H_5COOH$
D. $C_6H_5COOH > CH_3COOH > HCOOH$

Answer: A

25. **Reaction of water with aluminium carbide gives a colourless gas. The gas is :**

A. Methane
B. Acetylene
C. Ethane
D. Propane

Answer: A

26. **Which of the following is a natural polymer?**

A. Cellulose
B. Teflon
C. Nylon
D. Terylene

Answer: A

27. **Which one of the following converts atmospheric nitrogen to ammonia?**

A. Ammonifying bacteria
B. Anabaena
C. Rhizobium
D. Nitrifying bacteria

Answer : D

28. **Presence of which two of the following compounds causes algal bloom.**

A. Carbonate + Nitrate
B. Sulphate + Phosphate
C. Phosphate + Nitrate
D. Sulphate + Nitrate

Answer : C

29. **Taking the factor of the disease into consideration, choose the incorrect matching pair .**

A. Malaria and Filaria
B. Dengue and Influenza
C. Typhoid and Tuberculosis
D. Influenza and AIDS

Answer : D

30. **Which one of the following disease is water borne?**

A. Hepatitis B
B. Hepatitis C
C. Hepatitis D
D. Hepatitis E

Answer : D

31. **Which pair of the following organells have their own ribosome?**

A. Mitochondria and Golgi bodies
B. Mitochondria and Chloroplast
C. Chloroplast and Endoplasmic reticulum
D. Endoplasmic reticulum and Golgi bodies

Answer : B

32. **In human body which one of the following shows the correct path-way of a blood drop during circulation?**

A. Pulmonary vein → Inferior venacava → Aorta → Heart
B. Aorta → Inferior venacava → Pulmonary artery → Heart
C. Lung → Pulmonary artery → Heart → Superior venacava
D. Pulmonary vein → Lung → Heart → Inferior venacava

Answer : B

33. **Which of the following is associated with Corpus luteum ?**

A. Testis
B. Ovary
C. Pancreas
D. Duodenum

Answer : B

34. **In which one of the following is the sexual dimorphism seen?**

A. Nematohelminthes
B. Annelida.
C. Platyhelminthes
D. Mollusca

Answer : A

35. **Which one of the following contributes to the formation of placenta.**

A. uterus and ovary
B. ovary and embryo
C. uterus and fallopian tube
D. embryo and uterus.

Answer : D

36. **Which one of the following helps in the formation of Plasma membrane?**

A. Mitochondria
B. Endoplasmic reticulum
C. lysosome
D. Ribosome

Answer : B

37. **Read the following statements and choose the correct answer.**

I. Two polar nuclei are fused to form secondary nucleus.
II. Male gamete and secondary nucleus form endosperm nucleus.

A. Both I and II are correct.
B. Both I and II are wrong.
C. I is correct and II is wrong.
D. I is wrong and II is correct.

Answer : A

38. Which one of the following statement is true for photosynthesis?

A. ATP is consumed in light reaction

B. NADP is reduced in dark reaction.

C. CO_2 is required in the light reaction.

D. O_2 is produced in the ligt reaction.

Answer : D

39. Name the substance that helps in blood clotting.

A. Thrombin

B. Heparin

C. Hirudin

D. Sodium oxalate.

Answer : A

40. Name the hormone that runs our biological clock.

A. Oxytocin

B. Thyroxin

C. Melatonin

D. Prolactin

Answer : C

41. For what value of k the equations $x^2 + kx + 64 = 0$ and $x^2 - 8x + k = 0$ will have real roots?

A. 8

B. 16

C. 32

D. 64

Answer : B

To have real roots $D \geq 0$ ($b^2 - 4a \geq 0$)

$x^2 + kx + 64 = 0$

$k^2 - 4(64) \geq 0$

$(k - 16)(k + 16) \geq 0$

$k \in (-\infty, -16] \cup [16, \infty)$ …….. (1)

$x^2 - 8x + k = 0$

$10 \geq k$ …….. (2)

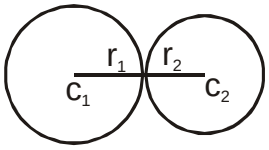
From (1) & (2) $k = 16$

42. **Two circles touch each other externally. The sum of their areas is 130π sq. cm. and the distance between their centres is 14 cm. Find the radii of the circles.**

A. 14 cm, 8 cm
B. 12 cm, 2 cm
C. 11 cm, 3 cm
D. 10 cm, 4 cm

Answer : C

Given



$\pi r_1^2 + \pi r_2^2 = 130\pi$

$r_1^2 + r_2^2 = 130$ ..... (1)

$c_1c_2 = r_1 + r_2 = 14$ ..... (2)

Solving (1) & (2)

$r_1 = 11$ $r_2 = 3$

43. **If $\frac{\cos^2\theta - 3\cos\theta + 2}{\sin^2\theta} = 1$ and $0^0 < \theta < 90^0$, write the value of θ.**

A. 30^0
B. 60^0
C. 75^0
D. 88^0

Answer : B

$\frac{\cos^2\theta - 3\cos\theta + 2}{\sin^2\theta} = 1$

$\cos^2\theta - 3\cos\theta + 2 = \sin^2\theta$

$2\cos^2\theta - 3\cos\theta + 1 = 0$

$\cos\theta = 1, \cos\theta = 1/2$

$\theta = 90° \; \theta = \frac{\pi}{3}$

$\therefore \; 0 < \theta < \frac{\pi}{2}$

44. **What is the mean of 1st ten prime numbers?**

A. 12.3

B. 12.7

C. 12.9

D. None of these

Answer : C

$$\frac{2+3+5+7+9+11+13+17+19+23+29}{10}=\frac{129}{10}=12.9$$

45. **Two triangles ABC and DEF are similar. If area $(\Delta ABC)=243cm^2$, area $(\Delta DEF)=108cm^2$ and $BC=6cm$, find EF:**

A. $8cm$

B. $9cm$

C. $12cm$

D. None of these

Answer : D

$\Delta ABC \sim \Delta DEF$

$$\therefore \frac{[ABC]}{DEF}=\frac{BC^2}{EF^2}$$

$$\frac{243}{108}=\frac{6^2}{EF^2}=\frac{9}{6}=\frac{6}{EF}$$

$$EF=\frac{36}{9}$$

$EF = 4$

46. **In a right angled triangle, if the square of the hypotenuse is twice the product of other two sides, then one of the angles of the triangle is:**

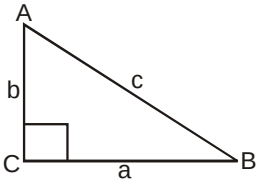
A. 15^0

B. 30^0

C. 45^0

D. 60^0

Answer : C



$\angle C = 90$

Given $AB = AC \times BC$

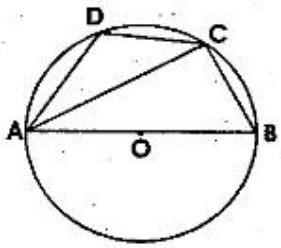
$C^2 = 2ab$

$$\cos C = \frac{a^2 + b^2 - c^2}{2ab}$$

$0 = a^2 + b^2 - 2ab$

$A - b = 0 \quad \Rightarrow a = b$

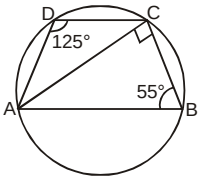
47. **In the given figure, AOB is a diameter of the circle with centre at 'O' and $\angle ADC = 125^0$, then $\angle BAC$ is:**



A. 35^0 B. 45^0

C. 55^0 D. 65^0

Answer : A



AB is diameter

$\therefore \angle ACB = 90°$

$\therefore$ □ABCD is cyclic

$\angle D + \angle B = 180°$

$\angle B = 55°$

In ΔABC $\angle B = 55°$, $\angle C = 90°$

$\therefore \angle A = 35°$

48. **In a school the ratio of boys and girls in Class VIII, Class IX and Class X are respectively 3:1, 5:3 and 7:5. If the number of students in each class is same, then find the ratio of boys and girls in the school.**

A. 15:9

B. 5:3

C. 27:20

D. 47:25

Answer : D

Class VIII → Boys : girls = 3 : 1

Class IX → Boys : Girls = 5 : 3

Class X → Boys : Girls = 7 : 5

Given numbers of students in each class equal

Let number of students in each class = 100

$\therefore$ Number of Boys in Class VIII = $\frac{3}{4}\times 100 = 75$

$\therefore$ Number of Girls = 25

In Class IX Number of Boys = $\frac{5}{8}(100) = \frac{125}{2}$

Number of Girls = $\frac{75}{2}$

In Class X Number of Boys $\frac{7}{12}(100) = \frac{75}{3}$

Number of Girls = $\frac{125}{3}$

$$\frac{\text{Number of boys}}{\text{Number of girls}} = \frac{75+\frac{125}{2}+\frac{175}{3}}{25+\frac{75}{2}+\frac{125}{3}} = \frac{47}{25}$$

49. If $\sin\theta + \cos ec\theta = 2$, then the value of $\sin^{13}\theta + \cos ec^{13}\theta$ is:

A. 2^{10}

B. 2^{11}

C. 2^{13}

D. None of these

Answer : D

$\sin\theta + \text{cosec}\,\theta = 2$

$\sin\theta + \frac{1}{\sin\theta} = 2$

$\sin^2\theta + 1 = 2\sin\theta$

$\sin^2\theta - 2\sin\theta + 1 = 0$

$\sin\theta = 1 \qquad \therefore \text{cosec}\,\theta = 1$

$\therefore \sin^{13}\theta + \text{cosec}^{13}\theta = 2$

50. The product of the length of three sides of a triangle is $196cm^3$ and the radius of its circum circle is 2.5 cm. The area of the triangle is:

A. $39.2\,cm^2$

B. $19.6\,cm^2$

C. $32\sqrt{3}cm^2$

D. $16.25\,cm^2$

Answer : B

Given abc = 196

R = 2.5

$\therefore\ R = \frac{abc}{4\Delta}$

Where Δ = Area of triangle

$\Delta = \frac{abc}{4R} = \frac{196}{4\times 2.5} = 19.6$

51. The sum of length, breadth and depth of a cuboid is 19 cm and its diagonal is $5\sqrt{5}\ cm$. Its surface area is

A. $125\ cm^2$

B. $236\ cm^2$

C. $326\ cm^2$

D. $362\ cm^2$

Answer : B

l + b + h = 19

d = diagonal = $\sqrt{l^2+b^2+h^2} = 5\sqrt{5}$

$\therefore\ l^2 + b^2 + h^2 = 125$

Surface Area = 2(lb + lh + bh)

$= (l + b + h)^2 - (l^2 + b^2 + h^2) = 361 - 125 = 236$

52. If $pqr = 1$, then the value of $\left(\frac{1}{1+p+q^{-1}}+\frac{1}{1+q+r^{-1}}+\frac{1}{1+r+p^{-1}}\right)$ is

A. 0

B. pq

C. 1

D. $\frac{1}{pq}$

Answer : C

pqr = 1

$$\frac{1}{1+p+\frac{1}{q}}+\frac{1}{1+q+pq}+\frac{1}{1+\frac{1}{pq}+\frac{1}{p}}$$

$$= \frac{q}{pq+q+1}+\frac{1}{pq+q+1}+\frac{pq}{pq+q+1}$$

$$= \frac{pq+q+1}{pq+q+1} = 1$$

53. The lines $2x-3y+5=0$ and $3x+2y+5=0$ are

A. parallel

B. perpendicular

C. identical

D. none of these

Answer : B

Two lines are perpendicular if product of slopes is –ve

i.e. $a_1a_2 + b_1b_2 = 0$

54. **Which of the following is not an empty set?**

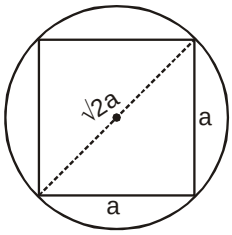
A. $\{x \mid x+3=x, x \in R\}$

B. $\{x \mid x \neq x\}$

C. $\{x \mid x+3=3, x \in R\}$

D. $\{x \mid 2x-3=0, x \in N\}$

Answer : C



Diagonal of square = Diameter of circle

$\sqrt{2}a = 2r$

$\therefore a = \sqrt{2}r$

$\therefore$ required ratio $\frac{\pi r^2}{2r^2} = \frac{\pi}{2}$

55. **A square is inscribed in a circle. The ratio of the areas of the circle to that of the square is:**

A. $2:\pi$ B. $2\pi:1$

C. $\pi:3$ D. $\pi:2$

Answer : D

56. **Three dice are thrown once. Write the probability that all the dice show different faces.**

A. $\frac{5}{18}$ B. $\frac{2}{9}$

C. $\frac{8}{15}$ D. $\frac{5}{9}$

Answer : D

Given E = all dice show difference faces

$P(E) = 1 \times \frac{5}{6} \times \frac{4}{6} = \frac{5}{9}$

57. In an A.P $t_4 = 11$ and $t_{10} = 16$, then the sum of the first 40 terms is

A. 550
B. 660
C. 880
D. 990

Answer : D

$T_4 = 11, t_{10} = 16$

$a + 3d = 11$

$a + 9d = 16 = 6d = 5 \Rightarrow d = 5/6$

$$a = 11 - 3d = 11 - 3\left(\frac{5}{6}\right) = 11 - \frac{5}{2} = \frac{17}{2}$$

$$S_{40} = \frac{40}{2}\left[2\left(\frac{17}{2}\right) + (39)\left(\frac{5}{6}\right)\right] = 20\left(17 + \frac{13\times 5}{2}\right) = 10(34 + 65) = 99\times 10 = 990$$

58. If the points (2,1), (x, y) and (7,5) are collinear, then the relation between x and y is

A. $4x - 5y + 3 = 0$
B. $5x - 4y + 3 = 0$
C. $3x + 4y + 5 = 0$
D. None of these

Answer : D

A(2, 1), B(x, y)and C(7, 5) are collinear slope of AB = slope BC

$$\Rightarrow \frac{y-1}{x-2} = \frac{5-y}{7-x} \Rightarrow 7y - xy - 7 + x = 5x - xy - 10 + 2y$$

$\Rightarrow 4x - 5y - 3 = 0$

59. The difference between compound interest and simple interest on a certain sum of money in 2 years at 4% per annum is Rs.50.00. Find the principal amount.

A. Rs.30000
B. Rs.31250
C. Rs.32000
D. Rs.32500

Answer : B

$$P\left[\left(1 + \frac{r}{100}\right)^n - 1\right] - \frac{PTR}{100} = 50$$

$$P\left[\left(\left(1 + \frac{4}{100}\right)^2 - 1\right) - \frac{4}{100}\right] = 50$$

$$P\left[\left(\frac{26}{25}\times\frac{26}{25} - 1\right) - \frac{2}{25}\right] = 50$$

$$P\left[\left(\frac{676-625}{625}\right)-\frac{2}{25}\right]=50$$

$$P\left(\frac{51-50}{625}\right)=50$$

$P = 50 \times 625$

$P = 31250$

60. **A boat, whose speed is 15 km/hr in still water, takes 4 hours 30 minutes to go 30 km in downstream and to return upstream to the same spot. Find the speed of the stream per hour.**

A. 3 km/hr
B. 5 km/hr
C. 7 km/hr
D. 2 km/hr

Answer : B

Let speed of boat = x km/hr

Speed of stream = y km/hr

Speed still water = x + y km/hr

Speed of upstream = (x – y) km/hr

Given $t=\frac{d}{x+y}+\frac{d}{x-y}$

$$4\frac{1}{2}=\frac{30}{x+y}+\frac{30}{x-y}\Rightarrow 4\frac{1}{2}=\frac{30}{15+y}+\frac{30}{15-y}$$

$\therefore$ y = 5 km/hr

61. **Who amongst the following early nationalists was a vehement critic of the British Economic exploitation of India?**

A. Dadabhai Naoroji
B. Surendranath Bannerjee
C. Pherozeshah Mehta
D. Anand Charlu

Answer : A

62. Choose from amongst the answer options given below the one against which the given events are chronologically arranged.

A. Swadeshi Movement, Non-Cooperation Movement, Salt Satyagraha, Quit India Movement.

B. Quit India Movement, Swadeshi Movement, Non-Cooperation Movement, Salt Satyagraha.

C. Salt Satyagraha, Swadeshi Movement, Quit India Movement, Non-Cooperation Movement.

D. Non-Cooperation Movement, Swadeshi Movement, Quit India Movement, Salt Satyagraha.

Answer : A

63. Which one was the first movement organized by Gandhiji in India?

A. Kheda Movement

B. Champaran Movement

C. Non-Cooperation Movement

D. Quit India Movement

Answer : B

64. Why did Gandhiji support the Khilafat Movement?

A. He was a supporter of Turkey

B. He was against the Allied powers

C. He was a supporter of the Khalifa

D. He considered it an opportunity to strengthen Hindu – Muslim unity in India

Answer : D

65. What led to suspension of the Non – Cooperation Movement?

A. Death of Bal Gangadhar Tilak

B. Arrest of Gandhiji

C. Violent incident at Chauri Chaura

D. Coming of the Khilafat Movement to an end

Answer : C

66. **How many Indian members were there in the Simon Commission?**

A. One
B. Two
C. Three
D. No one

Answer : D

67. **In which session of the Indian National Congress the Purna Swaraj resolution was passed?**

A. Poona
B. Lahore
C. Delhi
D. Karachi

Answer : B

68. **Where did the Salt Satyagraha begin?**

A. Dandi
B. Sabarmati Ashram
C. Lucknow
D. Astaranga

Answer : B

69. **Which Round Table Conference was attended by Gandhiji?**

A. First
B. Second
C. Third
D. None of these

Answer : B

70. **Under whose leadership 'Khudai Khidmatgars' was formed?**

A. Mahatma Gandhi
B. Bal Gangadhar Tilak
C. Khan Abdul Ghaffar Khan
D. Abul Kalam Azad

Answer : C

71. **When did the Russian Revolution break out?**

A. 1905
B. 1914
C. 1917
D. 1919

Answer : C

72. **When did Nazism develop in Germany?**

A. Before the First World War
B. During the First World War
C. After the First World War
D. After the Second World War

Answer : C

73. **Who has written the book, 'Mein Kamf'?**

A. Adolf Hitler
B. Benito Mussolini
C. Karl Marx
D. Lenin

Answer : A

74. **Which of the following makes India a Secular State?**

A. There is no National religion
B. State pays equal respects to all religions
C. Citizens of India enjoy freedom of religion
D. All the above reasons

Answer : D

75. **Who presides over the Joint Sitting of the Parliament?**

A. Prime Minister
B. Vice President
C. Speaker of Lok Sabha
D. Leader of Opposition

Answer : C

76. Against which of the following institutions NITI Aayog has been created?

A. National Judicial Appointment Commission
B. Planning Commission
C. Finance Commission
D. Union Public Service Commission

Answer : B

77. Which of the following has been accorded the states of Opposition Party in the present lok Sabha?

A. Congress
B. Communist Party of India
C. Samajwadi Party
D. None of the above

Answer : D

78. Which of the following is not a permanent member of the Security Council of the UNO?

A. United States of America
B. Brazil
C. France
D. China

Answer : B

79. Which of the Articles enshrines India's commitment to International Peace and Security?

A. Article 14
B. Article 21
C. Article 32
D. Article 51

Answer : D

80. Which of the following is not a hindrance to National Integration?

A. Communalism
B. Castrism
C. Feminism
D. Regionalism

Answer : C

81. Which of the following statements is true about Parliamentary Democracy?

i. Executive is a part of the Legislature

ii. Executive is controlled by the Legislature

A. i is true, ii is false

B. i is false, ii is true

C. Both i and ii are true

D. Both i and ii are false

Answer : C

82. In which of the State Governor's Rule can be imposed?

A. Jammu and Kashmir

B. Odisha

C. Manipur

D. Goa

Answer : A

83. Sustainable development is concerned with:

A. Future generation

B. Preservation of natural resources

C. Both A and B

D. None of the above

Answer : C

84. Which of the following is not an element of Public Distribution System in India?

A. Fare price shop

B. Rationing

C. Subsidy

D. Support price

Answer : D

85. Which Five Year Plan is operating in India now?

A. 11th Five Year Plan

B. 12th Five Year Plan

C. 13th Five Year Plan

D. 14th Five Year Plan

Answer : B

86. **Which of the following is an unfavourable impact of globalization on the Indian economy?**

A. Strengthening of consumers' sovereignty
B. Cultural erosion
C. More market competition
D. Increased foreign capital inflow

Answer : B

87. **Who of the following said that people's well being would increase when their capabilities and opportunities to work improved?**

A. Kuznet
B. Leibenstein
C. Amartya Sen
D. Arvind Panagariya

Answer : C

88. **Which type of forest 'Solas' is?**

A. Tropical Dry Deciduous forest
B. Mangrove forest
C. Sub tropical Montane forest
D. Temperate Montane forest

Answer : C

89. **What type of forest is found in the areas of India having an average annual rainfall between 100 cm to 200 cm?**

A. Evergreen forest
B. Monsoon forest
C. Tidal forest
D. Montane forest

Answer : B

90. **In which of the following states of India the Vedanthangal Bird Sanctuary is located?**

A. Assam
B. Rajasthan
C. Tamil Nadu
D. Kerala

Answer : C

91. **What is the position of India in the world in cotton production?**

A. First
B. Second
C. Third
D. Fourth

Answer : B

92. **What is the percentage of petroleum production at Bombay High to the total production of petroleum in India?**

A. 23%
B. 43%
C. 63%
D. 83%

Answer : C

93. **At which place of India an aluminium industry is located?**

A. Jamshedpur
B. Bumpur
C. Korba
D. Chittaranjan Nagar

Answer : C

94. **What is the percentage of carbon in Bituminous coal?**

A. 90 to 95
B. 60 to 80
C. 50 to 55
D. 30 to 40

Answer : B

95. **For what type of resources the Puga of Ladakh is famous?**

A. Iron ore
B. Petroleum
C. Hydroelectricity
D. Geo-thermal energy

Answer : D

96. **Which one of the following crops is plantation crop?**

A. Rice
B. Wheat
C. Rubber
D. Maze

Answer : C

97. **In which of the following place 'Khadin is found?**
A. Bhopal
B. Raipur
C. Jaisalmar
D. Gaya

Answer : C

98. **In which of the year India became a member of the World Trade Organization?**
A. 1995
B. 1997
C. 1999
D. 2001

Answer : A

99. **Which of the following Union Territories of India has the highest population density?**
A. Poduchery
B. Chandigarh
C. Andaman and Nicobar Iceland
D. Lakshadweep

Answer : B

100. **What type of map the Atlas is?**
A. Large scale map
B. Medium scale map
C. Small scale map
D. Cadastral map

Answer : C