

# Competishun

52/6, Opposite Metro Mas Hospital, Shipra Path, Mansarovar

**Date:** 13/01/2025

**Time:** 3 hours

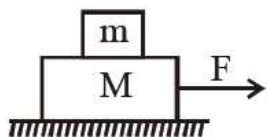
**Max. Marks:** 300

## Numerical type PCM Test (24-25)

### Physics

#### Numerical

- Q1** A projectile fired at  $30^\circ$  to the ground is observed to be at same height at time 3s and 5s after projection, during its flight. The speed of projection of the projectile is \_\_\_\_\_  $\text{ms}^{-1}$  (Given  $g = 10 \text{ m s}^{-2}$ )
- Q2** A force on an object of mass 100g is  $(10\hat{i} + 5\hat{j}) \text{ N}$ . The position of that object at  $t = 2\text{s}$  is  $(a\hat{i} + b\hat{j}) \text{ m}$  after starting from rest. The value of  $\frac{a}{b}$  will be \_\_\_\_\_
- Q3** Two blocks ( $m = 0.5 \text{ kg}$  and  $M = 4.5 \text{ kg}$ ) are arranged on a horizontal frictionless table as shown in figure. The coefficient of static friction between the two blocks is  $\frac{3}{7}$ . Then the maximum horizontal force that can be applied on the larger block so that the blocks move together is \_\_\_\_\_ N. (Round off to the Nearest Integer) [Take  $g$  as  $9.8 \text{ ms}^{-2}$ ]

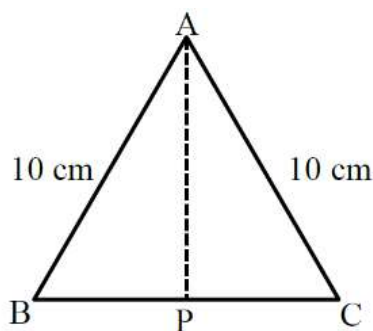


- Q4** If the maximum load carried by an elevator is 1400 kg (600 kg – Passenger + 800 kg – elevator), which is moving up with a uniform speed of  $3 \text{ ms}^{-1}$  and the frictional force acting on it is 2000 N, then the maximum power used by the motor is \_\_\_\_\_ kW ( $g = 10 \text{ m/s}^2$ ).
- Q5** A curved in a level road has a radius 75m. The maximum speed of a car turning this curved road can be 30 m/s without skidding. If radius of curved road is changed to 48 m and the coefficient of friction between the tyres and the road remains same, then maximum allowed speed would be \_\_\_\_\_ m/s.
- Q6** A body of mass 5 kg is moving with a momentum of  $10 \text{ kg ms}^{-1}$ . Now a force of 2 N acts on the body in the direction of its motion for 5 s. The increase in the Kinetic energy of the body is \_\_\_\_\_ J.

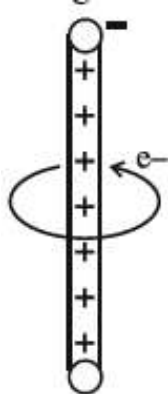
- Q7** A circular disc reaches from top to bottom of an inclined plane of length 'L'. When it slips down the plane, it takes time ' $t_1$ '. When it rolls down the plane, it takes time  $t_2$ . The value of  $\frac{t_2}{t_1}$  is  $\sqrt{\frac{3}{x}}$ . The value of x will be \_\_\_\_\_.
- Q8** The temperature of 3.00 mol. of an ideal diatomic gas is increased by 40.0 °C without changing the pressure of the gas. The molecules in the gas rotate but do not oscillate. If the ratio of change in internal energy of the gas to the amount of workdone by the gas is  $\frac{x}{10}$ . Then the value of x (round off to the nearest integer) is \_\_\_\_\_. (Given  $R = 8.31 \text{ J mol}^{-1} \text{ K}^{-1}$ )
- Q9** The displacement of a particle executing SHM is given by  $x = 10 \sin(\omega t + \frac{\pi}{3}) \text{ m}$ . The time period of motion is 3.14s. The velocity of the particle at  $t = 0$  is \_\_\_\_\_ m/s.
- Q10** The speed of a transverse wave passing through a string of length 50 cm and mass 10 g is  $60 \text{ ms}^{-1}$ . The area of cross-section of the wire is  $2.0 \text{ mm}^2$  and its Young's modulus is  $1.2 \times 10^{11} \text{ Nm}^{-2}$ . The extension of the wire over its natural length due to its tension will be  $x \times 10^{-5} \text{ m}$ . The value of x is \_\_\_\_\_.
- Q11** A tuning fork of frequency 340 Hz resonates in the fundamental mode with an air column of length 125 cm in a cylindrical tube closed at one end. When water is slowly poured in it, the minimum height of water required for observing resonance once again is \_\_\_\_\_ cm. (Velocity of sound in air is  $340 \text{ ms}^{-1}$ )
- Q12** A steel rod of length 1 m and cross sectional area  $10^{-4} \text{ m}^2$  is heated from 0°C to 200°C without being allowed to extend or bend. The compressive tension produced in the rod is \_\_\_\_\_  $\times 10^4 \text{ N}$ . (Given Young's modulus of steel =  $2 \times 10^{11} \text{ Nm}^{-2}$ , coefficient of linear expansion =  $10^{-5} \text{ K}^{-1}$ ).
- Q13** The water is filled upto height of 12 m in a tank having vertical sidewalls. A hole is made in one of the walls at a depth 'h' below the water level. The value of 'h' for which the emerging stream of water strikes the ground at the maximum range is \_\_\_\_\_ m.
- Q14** The surface tension of soap solution is  $3.5 \times 10^{-2} \text{ Nm}^{-1}$ . The amount of work done required to increase the radius of soap bubble from 10 cm to 20 cm is \_\_\_\_\_  $\times 10^{-4} \text{ J}$ .
- Q15** In an experiment to find acceleration due to gravity (g) using simple pendulum, time period of 0.5 s is measured from time of 100 oscillation with a watch of 1 s resolution. If measured value of length is 10 cm known to 1 mm accuracy. The accuracy in the determination of g is found to be x%. The value of x is \_\_\_\_\_.

- Q16** Cross-section view of a prism is the equilateral triangle ABC in the figure. The minimum deviation is observed using this prism when the angle of incidence is equal to the prism angle. The time taken by light to travel from P (midpoint of BC) to A is  $\underline{\hspace{2cm}} \times 10^{-10}$  s.

(Given, speed of light in vacuum =  $3 \times 10^8$  m/s and  $\cos 30^\circ = \frac{\sqrt{3}}{2}$ )

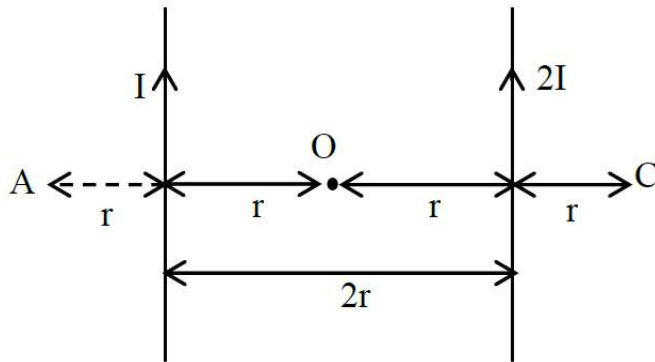


- Q17** An electron revolves around an infinite cylindrical wire having uniform linear charge density  $2 \times 10^{-8}$  C m<sup>-1</sup> in circular path under the influence of attractive electrostatic field as shown in the figure. The velocity of electron with which it is revolving is  $\underline{\hspace{2cm}} \times 10^6$  ms<sup>-1</sup>. Given mass of electron =  $9 \times 10^{-31}$  kg.

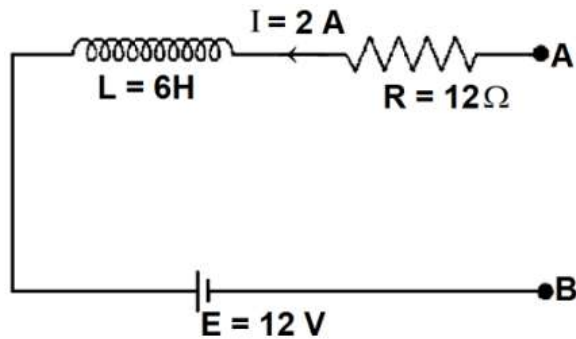


- Q18** If the acceleration due to gravity experienced by a point mass at a height  $h$  above the surface of earth is same as that of the acceleration due to gravity at a depth  $\alpha h$  ( $h \ll R_e$ ) from the earth surface. The value of  $\alpha$  will be  $\underline{\hspace{2cm}}$ . (use  $R_e = 6400$  km)
- Q19** A cylindrical wire of radius 0.5 mm and conductivity  $5 \times 10^7$  S/m is subjected to an electric field of 10 mV/m. The expected value of current in the wire will be  $x^3 \pi$  mA. The value of  $x$  is  $\underline{\hspace{2cm}}$ .
- Q20** A 60 pF capacitor is fully charged by a 20 V supply. It is then disconnected from the supply and is connected to another uncharged 60 pF capacitor in parallel. The electrostatic energy that is lost in this process by the time the charge is redistributed between them is (in nJ)  $\underline{\hspace{2cm}}$ .

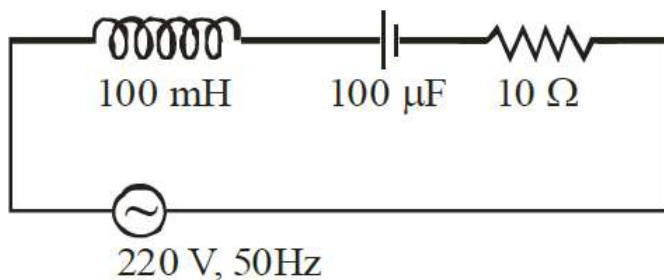
- Q21** Two parallel long current carrying wire separated by a distance  $2r$  are shown in the figure. The ratio of magnetic field at A to the magnetic field produced at C is  $\frac{x}{7}$ . The value of x is .



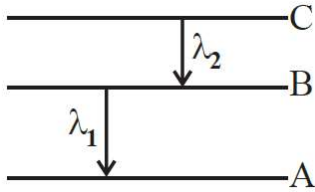
- Q22** As per the given figure, if  $\frac{dI}{dt} = -1 \text{ A/s}$  then the value of  $V_{AB}$  at this instant will be V.



- Q23** In a series LCR circuit, the inductance, capacitance and resistance are  $L = 100\text{mH}$ ,  $C = 100\mu\text{F}$  and  $R = 10\Omega$  respectively. They are connected to an AC source of voltage 220V and frequency of 50 Hz. The approximate value of current in the circuit will be A.



- Q24** As per given figure A, B and C are the first, second and third excited energy level of hydrogen atom respectively. If the ratio of the two wavelengths  $\left(\text{i.e. } \frac{\lambda_1}{\lambda_2}\right)$  is  $\frac{7}{4n}$ , then the value of n will be .....



- Q25** In a Young's double slit experiment, the slits are separated by 0.3 mm and the screen is 1.5 m away from the plane of slits. Distance between fourth bright fringes on both sides of central bright is 2.4 cm. The frequency of light used is \_\_\_\_\_  $\times 10^{14}$  Hz.

# Chemistry

## Numerical

- Q26** The complete combustion of 0.492 g of an organic compound containing 'C', 'H' and 'O' gives 0.793g of  $\text{CO}_2$  and 0.442 g of  $\text{H}_2\text{O}$ . The percentage of oxygen composition in the organic compound is \_\_\_\_\_. (Nearest integer)
- Q27** A 50 watt bulb emits monochromatic red light of wavelength of 795 nm. The number of photons emitted per second by the bulb is  $x \times 10^{20}$ . The value of x is \_\_\_\_\_.  
[Given :  $h = 6.63 \times 10^{-34}$  Js and  $c = 3.0 \times 10^8$  ms $^{-1}$ ]
- Q28** The number of 4f electrons in the ground state electronic configuration of  $\text{Gd}^{2+}$  is \_\_\_\_\_.  
[Atomic number of Gd = 64]
- Q29** Number of compounds with one lone pair of electrons on central atom amongst following is  $\text{O}_3$ ,  $\text{H}_2\text{O}$ ,  $\text{SF}_4$ ,  $\text{ClF}_3$ ,  $\text{NH}_3$ ,  $\text{BrF}_5$ ,  $\text{XeF}_4$
- Q30** The number of molecules or ions from the following, which do not have odd number of electrons are \_\_\_\_\_.  
(A)  $\text{NO}_2$       (B)  $\text{ICl}_4^-$       (C)  $\text{BrF}_3$       (D)  $\text{ClO}_2$   
(E)  $\text{NO}_2^+$       (F)  $\text{NO}$
- Q31** 10.0 ml of  $\text{Na}_2\text{CO}_3$  solution is titrated against 0.2 M  $\text{HCl}$  solution. The following titre values were obtained in 5 readings.  
4.8 ml, 4.9 ml, 5.0 ml, 5.0 ml and 5.0 ml  
Based on these readings, and convention of titrimetric estimation of concentration of  $\text{Na}_2\text{CO}_3$  solution is \_\_\_\_\_ mM.  
(Round off to the Nearest integer)
- Q32** The total number of intensive properties from the following is \_\_\_\_\_.  
Volume, Molar heat capacity, Molarity,  $E^\theta$  cell, Gibbs free energy change, Molar mass, Mole
- Q33** The equilibrium composition for the reaction  $\text{PCl}_3 + \text{Cl}_2 \rightleftharpoons \text{PCl}_5$  at 298 K is given below:  
 $[\text{PCl}_3]_{\text{eq}} = 0.2 \text{ mol L}^{-1}$   
 $[\text{Cl}_2]_{\text{eq}} = 0.1 \text{ mol L}^{-1}$ ,  
 $[\text{PCl}_5]_{\text{eq}} = 0.40 \text{ mol L}^{-1}$   
If 0.2 mol of  $\text{Cl}_2$  is added at the same temperature, the equilibrium concentrations of  $\text{PCl}_5$  is \_\_\_\_\_  $\times 10^{-2} \text{ mol L}^{-1}$ . (Given:  $K_c$ , for the reaction at 298 K is 20) [Nearest integer]
- Q34** The volume (in mL) of 0.1 N  $\text{NaOH}$  required to neutralise 10 mL of 0.1 N phosphinic acid is \_\_\_\_\_.

**Q35** A solution of sugar is obtained by mixing 200 g of its 25% solution and 500 g of its 40% solution (both by mass). The mass percentage of the resulting sugar solution is \_\_\_\_\_. (Nearest integer)

**Q36** The spin-only magnetic moment value of  $M^{3+}$  ion (in gaseous state) from the pairs  $Cr^{3+}/Cr^{2+}$ ,  $Mn^{3+}/Mn^{2+}$ ,  $Fe^{3+}/Fe^{2+}$  and  $Co^{3+}/Co^{2+}$  that has negative standard electrode potential, is B.M. [Nearest integer]

**Q37** For the reaction  $2Fe^{3+}(aq) + 2I^{-}(aq) \rightarrow 2Fe^{2+}(aq) + I_2(s)$  the magnitude of the standard molar free energy change,  $\Delta_r G_m^0 = -\dots\dots\dots$  kJ (Round off to the Nearest Integer).

$$\left[ \begin{array}{ll} E_{Fe^{2+}/Fe(s)}^0 = -0.440 \text{ V}; & E_{Fe^{3+}/Fe(s)}^0 = -0.036 \text{ V} \\ E_{I_2/2I^{-}}^0 = 0.539 \text{ V}; & F = 96500 \text{ C} \end{array} \right]$$

**Q38** The rate constant for a first order reaction is  $20 \text{ min}^{-1}$ . The time required for the initial concentration of the reactant to reduce to its  $\frac{1}{32}$  level is \_\_\_\_\_  $\times 10^{-2}$  min. (Nearest integer)  
(Given:  $\ln 10 = 2.303$ ,  $\log 2 = 0.3010$ )

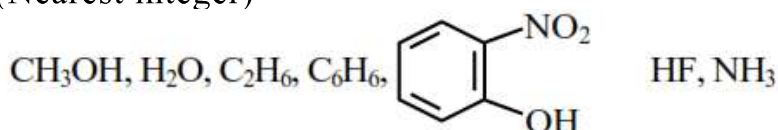
**Q39** Number of ambidentate ligands in a representative metal complex  $[M(en)(SCN)_4]$  is [en = ethylenediamine]

**Q40** The ratio of sigma and  $\pi$  bonds present in pyrophosphoric acid is \_\_\_\_\_.

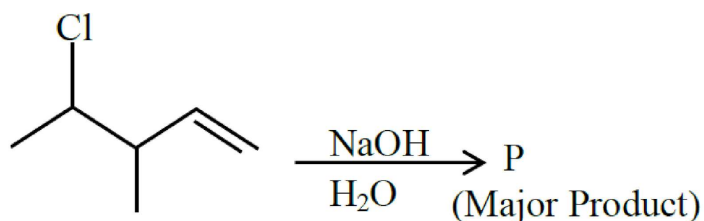
**Q41** The disproportionation of  $MnO_4^{2-}$  in acidic medium resulted in the formation of two manganese compounds A and B. If the oxidation state of Mn in B is smaller than that of A, then the spin-only magnetic moment ( $\mu$ ) value of B in BM is \_\_\_\_\_. (Nearest integer)

**Q42** The number of sigma bonds in  $\begin{array}{c} H_3C - C = CH - C \equiv C - H \\ | \\ H \end{array}$  is .....

**Q43** Number of molecules from the following which can exhibit hydrogen bonding is . (Nearest integer)

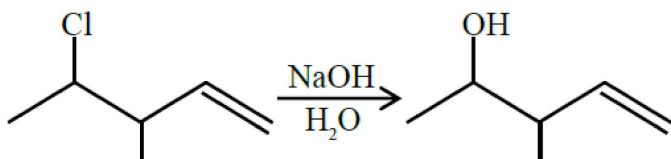


Q44



Consider the above reaction. The number of  $\pi$  electrons present in the product 'P' is \_\_\_\_.

Q45



20. The number of chiral alcohol(s) with molecular formula  $\text{C}_4\text{H}_{10}\text{O}$  is \_\_\_\_.

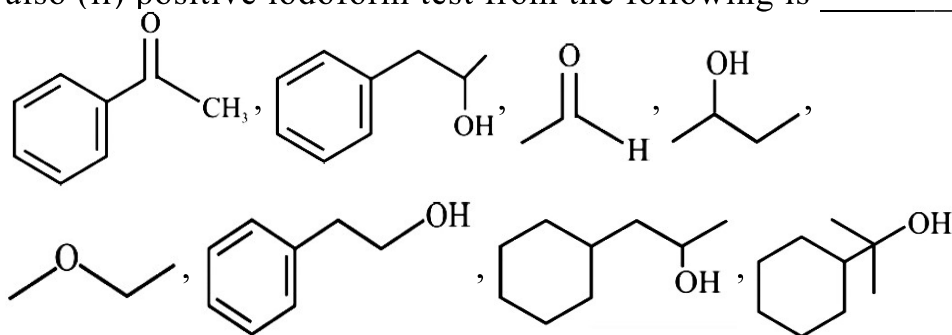
Q46 The compound formed by the reaction of ethanal with semicarbazide contains \_\_\_\_ number of nitrogen atoms.

Q47 Number of structural isomeric aromatic amines with molecular formula  $\text{C}_8\text{H}_{11}\text{N}$ , which can be synthesized by Gabriel Phthalimide synthesis is \_\_\_\_.

Q48 Number of bromo derivatives obtained on treating ethane with excess of  $\text{Br}_2$ , in diffused sunlight is...

Q49  $\text{C}_6\text{H}_{12}\text{O}_6 \xrightarrow{\text{Zymase}} \text{A} \xrightarrow[\Delta]{\text{NaOI}} \text{B} + \text{CHI}_3$   
The number of carbon atoms present in the product B is \_\_\_\_.

Q50 Number of compounds giving (i) red colouration with ceric ammonium nitrate and also (ii) positive iodoform test from the following is \_\_\_\_





## Mathematics

### Numerical

- Q51** The area (in sq. units) of the region  $\{(x, y) \in \mathbb{R}^2 \mid 4x^2 \leq y \leq 8x + 12\}$  is A then find  $3A$ .
- Q52** The coefficient of  $x^7$  in the expression  $(1 + x)^{10} + x(1 + x)^9 + x^2(1 + x)^8 + \dots + x^{10}$  is
- Q53** The diameter of the circle, whose centre lies on the line  $x + y = 2$  in the first quadrant and which touches both the lines  $x = 3$  and  $y = 2$ , is \_\_\_\_\_.
- Q54** Let  $u = \frac{2z+i}{z-ki}$ ,  $z = x + iy$  and  $k > 0$ . If the curve represented by  $\operatorname{Re}(u) + \operatorname{Im}(u) = 1$  intersects the y-axis at the point P and Q where  $PQ = 5$ , then the value of k is :
- Q55** If  $f(x) = \begin{cases} \frac{\sin(a+2)x + \sin x}{x} & ; x < 0 \\ b & ; x = 0 \\ \frac{(x+3x^2)^{1/3} - x^{1/3}}{x^{4/3}} & ; x > 0 \end{cases}$  is continuous at  $x = 0$ , then  $a + 2b$  is equal to
- Q56** Let  $[t]$  denote the greatest integer less than or equal to  $t$ . Then the value of  $\int_1^2 |2x - [3x]| dx$  is \_\_\_\_\_.
- Q57** Let  $A = \begin{bmatrix} x & 1 \\ 1 & 0 \end{bmatrix}$ ,  $x \in \mathbb{R}$  and  $A^4 = [a_{ij}]$ . If  $a_{11} = 109$ , then  $a_{22}$  is equal to \_\_\_\_\_.
- Q58** If  $\sin\left(\frac{y}{x}\right) = \log_e |x| + \frac{\alpha}{2}$  is the solution of the differential equation  $x \cos\left(\frac{y}{x}\right) \frac{dy}{dx} = y \cos\left(\frac{y}{x}\right) + x$  and  $y(1) = \frac{\pi}{3}$ , then  $\alpha^2$  is equal to
- Q59** Let S and S' be the foci of an ellipse and B be any one of the extremities of its minor axis. If  $\triangle S'BS$  is a right-angled triangle with right angle at B and area  $(\triangle S'BS) = 8$  sq. units, then the length of a latus rectum of the ellipse is
- Q60** The locus of the point of intersection of the lines  $(\sqrt{3})kx + ky - 4\sqrt{3} = 0$  and  $\sqrt{3}x - y - 4(\sqrt{3})k = 0$  is conic, whose eccentricity is \_\_\_\_\_.
- Q61** Let  $f(x)$  be a polynomial of degree 3 such that  $f(k) = -\frac{2}{k}$  for  $k = 2, 3, 4, 5$ . Then the value of  $52 - 10 f(10)$  is equal to :

- Q62** The projection of the line segment joining the point  $(1, -1, 3)$  and  $(2, -4, 11)$  on the line joining the points  $(-1, 2, 3)$  and  $(3, -2, 10)$  is \_\_\_\_\_
- Q63** Let  $f(x) = \int \frac{dx}{(3+4x^2)\sqrt{4-3x^2}}$ ,  $|x| < \frac{2}{\sqrt{3}}$ . If  $f(0) = 0$  and  $f(1) = \frac{1}{\alpha\beta} \tan^{-1}\left(\frac{\alpha}{\beta}\right)$ ,  $\alpha, \beta > 0$ , then  $\alpha^2 + \beta^2$  is equal to \_\_\_\_\_.
- Q64**  $50 \tan \left( 3 \tan^{-1}\left(\frac{1}{2}\right) + 2 \cos^{-1}\left(\frac{1}{\sqrt{5}}\right) \right) + 4\sqrt{2} \tan \left( \frac{1}{2} \tan^{-1}(2\sqrt{2}) \right)$  is equal to \_\_\_\_\_.
- Q65** Let  $[t]$  denote the greatest integer  $\leq t$ . If for some  $\lambda \in \mathbb{R} - \{0, 1\}$ ,  $\lim_{x \rightarrow 0} \left| \frac{1-x+|x|}{\lambda-x+[x]} \right| = L$ , then  $L$  is equal to :
- Q66** If  $f(x) = \sin \left( \cos^{-1} \left( \frac{1-2^{2x}}{1+2^{2x}} \right) \right)$  and its first derivative with respect to  $x$  is  $-\frac{b}{a} \log_e 2$  when  $x = 1$ , where  $a$  and  $b$  are integers, then the minimum value of  $|a^2 - b^2|$  is \_\_\_\_\_.
- Q67** If the surface area of a cube is increasing at a rate of  $3.6 \text{ cm}^2/\text{sec}$ , retaining its shape; then the rate of change of its volume (in  $\text{cm}^3/\text{sec}$ ), when the length of a side of the cube is  $10 \text{ cm}$ , is:
- Q68** A test consists of 6 multiple choice questions, each having 4 alternative answers of which only one is correct. The number of ways, in which a candidate answers all six questions such that exactly four of the answers are correct, is \_\_\_\_\_.
- Q69** The probability of a man hitting a target is  $\frac{1}{10}$ . The least number of shots required, so that the probability of his hitting the target at least once is greater than  $\frac{1}{4}$ , is \_\_\_\_\_.
- Q70** Let  $a, b \in \mathbb{R}$ ,  $a \neq 0$  be such that the equation,  $ax^2 - 2bx + 5 = 0$  has a repeated root  $\alpha$ , which is also a root of the equation,  $x^2 - 2bx - 10 = 0$ . If  $\beta$  is the other root of this equation, then  $\alpha^2 + \beta^2$  is equal to:
- Q71** Let  $A = \{2, 3, 4, 5, \dots, 30\}$  and ' $\simeq$ ' be an equivalence relation on  $A \times A$ , defined by  $(a, b) \simeq (c, d)$ , if and only if  $ad = bc$ . Then the number of ordered pairs which satisfy this equivalence relation with ordered pair  $(4, 3)$  is equal to :
- Q72** Five number are in A.P., whose sum is 25 and product is 2520. If one of these five numbers is  $-\frac{1}{2}$ , then the greatest number amongst them is :

- Q73** If the variance of the first  $n$  natural numbers is 10 and the variance of the first  $m$  even natural numbers is 16, then  $m + n$  is equal to\_\_\_\_\_.
- Q74** Let two points be  $A(1, -1)$  and  $B(0, 2)$ . If a point  $P(x', y')$  be such that the area of  $\Delta PAB = 5$  sq. units and it lies on the line,  $3x + y - 4\lambda = 0$ , then a value of  $\lambda$  is
- Q75** If  $\frac{\sqrt{2} \sin \alpha}{\sqrt{1 + \cos 2\alpha}} = \frac{1}{7}$  and  $\sqrt{\frac{1 - \cos 2\beta}{2}} = \frac{1}{\sqrt{10}}$ ,  $\alpha, \beta \in \left(0, \frac{\pi}{2}\right)$ , then  $\tan (\alpha + 2\beta)$  is equal to \_\_\_\_\_.

## Answer Key

|             |            |            |           |            |           |            |           |            |           |           |
|-------------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|-----------|
| Que.        | 1          | 2          | 3         | 4          | 5         | 6          | 7         | 8          | 9         | 10        |
| <b>Ans.</b> | <b>80</b>  | <b>2</b>   | <b>21</b> | <b>48</b>  | <b>24</b> | <b>30</b>  | <b>2</b>  | <b>25</b>  | <b>10</b> | <b>15</b> |
| Que.        | 11         | 12         | 13        | 14         | 15        | 16         | 17        | 18         | 19        | 20        |
| <b>Ans.</b> | <b>50</b>  | <b>4</b>   | <b>6</b>  | <b>264</b> | <b>5</b>  | <b>5</b>   | <b>8</b>  | <b>2</b>   | <b>5</b>  | <b>6</b>  |
| Que.        | 21         | 22         | 23        | 24         | 25        | 26         | 27        | 28         | 29        | 30        |
| <b>Ans.</b> | <b>5</b>   | <b>30</b>  | <b>22</b> | <b>5</b>   | <b>5</b>  | <b>46</b>  | <b>2</b>  | <b>7</b>   | <b>4</b>  | <b>3</b>  |
| Que.        | 31         | 32         | 33        | 34         | 35        | 36         | 37        | 38         | 39        | 40        |
| <b>Ans.</b> | <b>50</b>  | <b>4</b>   | <b>49</b> | <b>10</b>  | <b>36</b> | <b>4</b>   | <b>45</b> | <b>17</b>  | <b>4</b>  | <b>6</b>  |
| Que.        | 41         | 42         | 43        | 44         | 45        | 46         | 47        | 48         | 49        | 50        |
| <b>Ans.</b> | <b>4</b>   | <b>10</b>  | <b>5</b>  | <b>2</b>   | <b>1</b>  | <b>3</b>   | <b>5</b>  | <b>9</b>   | <b>1</b>  | <b>3</b>  |
| Que.        | 51         | 52         | 53        | 54         | 55        | 56         | 57        | 58         | 59        | 60        |
| <b>Ans.</b> | <b>128</b> | <b>330</b> | <b>3</b>  | <b>2</b>   | <b>0</b>  | <b>1</b>   | <b>10</b> | <b>3</b>   | <b>4</b>  | <b>2</b>  |
| Que.        | 61         | 62         | 63        | 64         | 65        | 66         | 67        | 68         | 69        | 70        |
| <b>Ans.</b> | <b>26</b>  | <b>8</b>   | <b>28</b> | <b>29</b>  | <b>2</b>  | <b>481</b> | <b>9</b>  | <b>135</b> | <b>3</b>  | <b>25</b> |
| Que.        | 71         | 72         | 73        | 74         | 75        |            |           |            |           |           |
| <b>Ans.</b> | <b>7</b>   | <b>16</b>  | <b>18</b> | <b>3</b>   | <b>1</b>  |            |           |            |           |           |