

NTA JEE Mains Apr 2026 Paper I

Section : Mathematics Section A

Q.1

If $f: \mathbf{N} \rightarrow \mathbf{Z}$ is defined by

$$f(n) = \begin{vmatrix} n & -1 & -5 \\ -2n^2 & 3(2k+1) & 2k+1 \\ -3n^3 & 3k(2k+1) & 3k(k+2)+1 \end{vmatrix}, k \in \mathbf{N},$$

and $\sum_{n=1}^k f(n) = 98$, then k is equal to :

Options

1. 4
2. 3
3. 6
4. 5

Question Type : MCQ

Question ID : 691121453

Option 1 ID : 6911211540

Option 2 ID : 6911211539

Option 3 ID : 6911211542

Option 4 ID : 6911211541

Status : Answered

Chosen Option : 4

Q.2 Let O be the origin, $\vec{OP} = \vec{a}$ and $\vec{OQ} = \vec{b}$. If R is the point on \vec{OP} such that $\vec{OR} = 5\vec{OR}$, and M is the point such that $\vec{OQ} = 5\vec{RM}$, then \vec{PM} is equal to :

Options

1. $\frac{1}{5}(-\vec{b} + 4\vec{a})$

2. $\frac{1}{5}(-\vec{a} + 4\vec{b})$

3. $\frac{1}{5}(\vec{a} - 4\vec{b})$

4. $\frac{1}{5}(\vec{b} - 4\vec{a})$

Question Type : **MCQ**

Question ID : **691121466**

Option 1 ID : **6911211594**

Option 2 ID : **6911211593**

Option 3 ID : **6911211591**

Option 4 ID : **6911211592**

Status : **Not Answered**

Chosen Option : --

Q.3 Let $f : [1, \infty) \rightarrow \mathbb{R}$ be a differentiable function defined as $f(x) = \int_1^x f(t)dt + (1-x)(\log_e x - 1) + e$.

Then the value of $f(f(1))$ is :

Options

1. $(1 + e)$

2. $(1 + e^e)$

3. $1 + 2e$

4. $(1 + e + e^e)$

Question Type : **MCQ**

Question ID : **691121469**

Option 1 ID : **6911211604**

Option 2 ID : **6911211603**

Option 3 ID : **6911211606**

Option 4 ID : **6911211605**

Status : **Answered**

Chosen Option : **3**

Q.4 Let $f(x)$ and $g(x)$ be twice differentiable functions satisfying $f''(x) = g''(x)$ for all $x \in \mathbf{R}$, $f'(1) = 2g'(1) = 4$ and $g(2) = 3f(2) = 9$. Then $f(25) - g(25)$ is equal to :

Options

1. -20
2. 40
3. 20
4. -40

Question Type : **MCQ**

Question ID : **691121470**

Option 1 ID : **6911211609**

Option 2 ID : **6911211608**

Option 3 ID : **6911211607**

Option 4 ID : **6911211610**

Status : **Not Answered**

Chosen Option : --

Q.5

The coefficient of x^2 in the expansion of $\left(2x^2 + \frac{1}{x}\right)^{10}$, $x \neq 0$, is :

Options

1. 3600
2. 3240
3. 3360
4. 3480

Question Type : **MCQ**

Question ID : **691121457**

Option 1 ID : **6911211558**

Option 2 ID : **6911211555**

Option 3 ID : **6911211556**

Option 4 ID : **6911211557**

Status : **Not Answered**

Chosen Option : --

Q.6 Let $(2^{1-a} + 2^{1+a})$, $f(a)$, $(3^a + 3^{-a})$ be in A.P. and α be the minimum value of $f(a)$. Then the value of the integral $\int_{\log_e(\alpha-1)}^{\log_e(\alpha)} \frac{dx}{(e^{2x} - e^{-2x})}$ is :

Options

1. $\frac{1}{4} \log_e \left(\frac{4}{3} \right)$
2. $\frac{1}{4} \log_e \left(\frac{8}{5} \right)$
3. $\frac{1}{2} \log_e \left(\frac{8}{5} \right)$
4. $\frac{1}{2} \log_e \left(\frac{4}{3} \right)$

Question Type : **MCQ**

Question ID : **691121468**

Option 1 ID : **6911211600**

Option 2 ID : **6911211602**

Option 3 ID : **6911211601**

Option 4 ID : **6911211599**

Status : **Not Answered**

Chosen Option : --

Q.7 If the sum of the first 10 terms of the series $\frac{1}{1+1^4 \times 4} + \frac{2}{1+2^4 \times 4} + \frac{3}{1+3^4 \times 4} + \frac{4}{1+4^4 \times 4} + \dots$ is $\frac{m}{n}$, $\gcd(m, n) = 1$, then $m + n$ is equal to :

Options

1. **264**
2. **276**
3. **284**
4. **256**

Question Type : **MCQ**

Question ID : **691121455**

Option 1 ID : **6911211548**

Option 2 ID : **6911211549**

Option 3 ID : **6911211550**

Option 4 ID : **6911211547**

Status : **Not Answered**

Chosen Option : --

Q.8

Let a triangle PQR be such that P and Q lie on the line $\frac{x+3}{8} = \frac{y-4}{2} = \frac{z+1}{2}$ and are at a distance of 6 units from R (1, 2, 3). If (α, β, γ) is the centroid of ΔPQR , then $\alpha + \beta + \gamma$ is equal to :

Options

1. 4
2. 8
3. 6
4. 5

Question Type : MCQ

Question ID : 691121464

Option 1 ID : 6911211583

Option 2 ID : 6911211586

Option 3 ID : 6911211585

Option 4 ID : 6911211584

Status : Not Answered

Chosen Option : --

Q.9

Let α, β be the roots of the equation $x^2 - x + p = 0$ and γ, δ be the roots the equation $x^2 - 4x + q = 0$; $p, q \in \mathbb{Z}$. If $\alpha, \beta, \gamma, \delta$ are in G.P., then $|p + q|$ equals :

Options

1. 32
2. 38
3. 16
4. 34

Question Type : MCQ

Question ID : 691121451

Option 1 ID : 6911211532

Option 2 ID : 6911211534

Option 3 ID : 6911211531

Option 4 ID : 6911211533

Status : Not Answered

Chosen Option : --

Q.10 A box contains 5 blue, 6 yellow and 4 red balls. The number of ways, of drawing 8 balls containing at least two balls of each colour, is :

- Options**
1. 4230
 2. 4100
 3. 4290
 4. 4140

Question Type : **MCQ**

Question ID : **691121459**

Option 1 ID : **6911211565**

Option 2 ID : **6911211563**

Option 3 ID : **6911211566**

Option 4 ID : **6911211564**

Status : **Not Answered**

Chosen Option : --

Q.11 Let the eccentricity e of a hyperbola satisfy the equation $6e^2 - 11e + 3 = 0$. If the foci of the hyperbola are $(3, 5)$ and $(3, -4)$, then the length of its latus rectum is :

- Options**
1. $\frac{17}{2}$
 2. $\frac{11}{3}$
 3. $\frac{17}{3}$
 4. $\frac{15}{2}$

Question Type : **MCQ**

Question ID : **691121463**

Option 1 ID : **6911211582**

Option 2 ID : **6911211579**

Option 3 ID : **6911211580**

Option 4 ID : **6911211581**

Status : **Answered**

Chosen Option : **1**

Q.12 The probabilities that players A and B of a team are selected for the captaincy for a tournament are 0.6 and 0.4, respectively. If A is selected the captain, the probability that the team wins the tournament is 0.8 and if B is selected the captain, the probability that the team wins the tournament is 0.7. Then the probability, that the team wins the tournament, is :

- Options**
1. 0.78
 2. 0.74
 3. 0.76
 4. 0.72

Question Type : **MCQ**

Question ID : **691121458**

Option 1 ID : **6911211562**

Option 2 ID : **6911211559**

Option 3 ID : **6911211560**

Option 4 ID : **6911211561**

Status : **Answered**

Chosen Option : **4**

Q.13 If the distance of the point (a, 2, 5) from the image of the point (1, 2, 7) in the line $\frac{x}{1} = \frac{y-1}{1} = \frac{z-2}{2}$ is 4, then the sum of all possible values of a is equal to :

- Options**
1. 4
 2. 6
 3. 9
 4. 11

Question Type : **MCQ**

Question ID : **691121465**

Option 1 ID : **6911211590**

Option 2 ID : **6911211589**

Option 3 ID : **6911211588**

Option 4 ID : **6911211587**

Status : **Answered**

Chosen Option : **2**

Q.14 Let M be a 3×3 matrix such that

$$M \begin{pmatrix} 1 \\ 0 \\ 0 \end{pmatrix} = \begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}, M \begin{pmatrix} 0 \\ 1 \\ 0 \end{pmatrix} = \begin{pmatrix} 0 \\ 1 \\ 2 \end{pmatrix} \text{ and } M \begin{pmatrix} 0 \\ 0 \\ 1 \end{pmatrix} = \begin{pmatrix} -1 \\ 1 \\ 1 \end{pmatrix}. \text{ If } M \begin{pmatrix} x \\ y \\ z \end{pmatrix} = \begin{pmatrix} 1 \\ 7 \\ 11 \end{pmatrix}, \text{ then } x + y + z \text{ equals :}$$

Options

1. 5
2. 11
3. 7
4. 4

Question Type : **MCQ**

Question ID : **691121454**

Option 1 ID : **6911211544**

Option 2 ID : **6911211546**

Option 3 ID : **6911211545**

Option 4 ID : **6911211543**

Status : **Not Answered**

Chosen Option : --

Q.15 Let $f(x) = \lim_{y \rightarrow 0} \frac{(1 - \cos(xy)) \tan(xy)}{y^3}$. Then the number of solutions of the equation $f(x) = \sin x$,

$x \in \mathbf{R}$ is :

Options

1. 0
2. 1
3. 2
4. 3

Question Type : **MCQ**

Question ID : **691121467**

Option 1 ID : **6911211595**

Option 2 ID : **6911211598**

Option 3 ID : **6911211596**

Option 4 ID : **6911211597**

Status : **Not Answered**

Chosen Option : --

Q.16 Let the point P be the vertex of the parabola $y = x^2 - 6x + 12$. If a line passing through the point P intersects the circle $x^2 + y^2 - 2x - 4y + 3 = 0$ at the points R and S, then the maximum value of $(PR + PS)^2$ is :

Options

1. 10
2. 25
3. 20
4. 5

Question Type : **MCQ**

Question ID : **691121461**

Option 1 ID : **6911211571**

Option 2 ID : **6911211573**

Option 3 ID : **6911211572**

Option 4 ID : **6911211574**

Status : **Not Answered**

Chosen Option : --

Q.17 Let $z_1, z_2 \in \mathbb{C}$ be the distinct solutions of the equation $z^2 + 4z - (1 + 12i) = 0$. Then $|z_1|^2 + |z_2|^2$ is equal to :

Options

1. 22
2. 29
3. 18
4. 34

Question Type : **MCQ**

Question ID : **691121452**

Option 1 ID : **6911211536**

Option 2 ID : **6911211537**

Option 3 ID : **6911211535**

Option 4 ID : **6911211538**

Status : **Not Answered**

Chosen Option : --

Q.18 Let the directrix of the parabola $P: y^2 = 8x$, cut x-axis at the point A. Let B (α, β) , $\alpha > 1$, be a point on P such that the slope of AB is $3/5$. If BC is a focal chord of P, then six times the area of ΔABC is :

Options

1. 174
2. 192
3. 160
4. 80

Question Type : MCQ

Question ID : 691121462

Option 1 ID : 6911211577

Option 2 ID : 6911211578

Option 3 ID : 6911211576

Option 4 ID : 6911211575

Status : Answered

Chosen Option : 1

Q.19 A variable X takes values $0, 0, 2, 6, 12, 20, \dots, n(n-1)$ with frequencies ${}^nC_0, {}^nC_1, {}^nC_2, {}^nC_3, {}^nC_4, {}^nC_5, \dots, {}^nC_n$ respectively. If the mean of this data is 60, then its median is :

Options

1. 42
2. 72
3. 56
4. 90

Question Type : MCQ

Question ID : 691121460

Option 1 ID : 6911211568

Option 2 ID : 6911211569

Option 3 ID : 6911211567

Option 4 ID : 6911211570

Status : Not Answered

Chosen Option : --

Q.20 Let $A_1, A_2, A_3, \dots, A_{39}$ be 39 arithmetic means between the numbers 59 and 159. Then the mean of A_{25}, A_{28}, A_{31} and A_{36} is equal to :

Options

1. 136
2. 131.50
3. 129
4. 134

Question Type : **MCQ**

Question ID : **691121456**

Option 1 ID : **6911211552**

Option 2 ID : **6911211553**

Option 3 ID : **6911211551**

Option 4 ID : **6911211554**

Status : **Answered**

Chosen Option : **3**

Section : Mathematics Section B

Q.21

If $S = \left\{ \theta \in [-\pi, \pi] : \cos \theta \cos \frac{5\theta}{2} = \cos 7\theta \cos \frac{7\theta}{2} \right\}$, then $n(S)$ is equal to _____.

Given --
Answer :

Question Type : **SA**

Question ID : **691121473**

Status : **Not Answered**

Q.22

Let $f: \mathbf{R} \rightarrow \mathbf{R}$ be a function such that $f(x) + 3f\left(\frac{\pi}{2} - x\right) = \sin x$, $x \in \mathbf{R}$. Let the maximum value of f on \mathbf{R} be α . If the area of the region bounded by the curves $g(x) = x^2$ and $h(x) = \beta x^3$, $\beta > 0$, is α^2 , then $30\beta^3$ is equal to _____.

Given --
Answer :

Question Type : **SA**

Question ID : **691121474**

Status : **Not Answered**

Q.23 Let $A = \{1, 4, 7\}$ and $B = \{2, 3, 8\}$. Then the number of elements, in the relation $R = \{((a_1, b_1), (a_2, b_2)) \in (A \times B) \times (A \times B) : a_1 + b_2 \text{ divides } a_2 + b_1\}$ is _____.

Given --
Answer :

Question Type : SA
Question ID : 691121471
Status : Not Answered

Q.24 From the point $(-1, -1)$, two rays are sent making angles of 45° with the line $x + y = 0$. These rays get reflected from the mirror $x + 2y = 1$. If the equations of the reflected rays are $ax + by = 9$ and $cx + dy = 7$, $a, b, c, d \in \mathbb{Z}$, then the value of $ad + bc$ is _____.

Given --
Answer :

Question Type : SA
Question ID : 691121472
Status : Not Answered

Q.25 Let $y = y(x)$ be the solution of the differential equation $(\tan x)^{1/2} dy = (\sec^3 x - (\tan x)^{3/2} y) dx$, $0 < x < \frac{\pi}{2}$, $y\left(\frac{\pi}{4}\right) = \frac{6\sqrt{2}}{5}$. If $y\left(\frac{\pi}{3}\right) = \frac{4}{5} \alpha$, then α^4 equals _____.

Given --
Answer :

Question Type : SA
Question ID : 691121475
Status : Not Answered

Section : Physics Section A

Q.26 The maximum intensity in a Young's double slit experiment is I_0 . Distance between the slits (d) is 5λ , where λ is the wavelength of light used. The intensity of the fringe, exactly opposite to one of the slits on the screen, placed at $D=10d$ is _____.

Options

1. $\frac{I_0}{4}$

2. I_0

3. $\frac{3I_0}{4}$

4. $\frac{I_0}{2}$

Question Type : **MCQ**

Question ID : **691121492**

Option 1 ID : **6911211680**

Option 2 ID : **6911211682**

Option 3 ID : **6911211683**

Option 4 ID : **6911211681**

Status : **Not Answered**

Chosen Option : --

Q.27 A body of mass m is taken from the surface of earth to a height equal to twice the radius of earth (R_e). The increase in potential energy will be _____.
(g is acceleration due to gravity at the surface of earth)

Options

1. $\frac{1}{4}mgR_e$

2. $\frac{2}{3}mgR_e$

3. $\frac{3}{4}mgR_e$

4. $\frac{1}{2}mgR_e$

Question Type : **MCQ**

Question ID : **691121482**

Option 1 ID : **6911211642**

Option 2 ID : **6911211643**

Option 3 ID : **6911211641**

Option 4 ID : **6911211640**

Status : **Answered**

Chosen Option : **4**

Q.28 In a semiconductor p-n diode, the doping concentrations on p-side and n-side are 10^{15} atoms/cm³ and 10^{18} atoms/cm³, respectively. Which one of the following statements is true?

Options

1. The depletion region width is more on n-side compared to that in p-side
2. Widths of depletion region on either side of the interface are equal
3. The depletion region width is more on p-side compared to that in n-side
4. No depletion region forms because of unequal doping concentrations on p and n-sides

Question Type : **MCQ**

Question ID : **691121495**

Option 1 ID : **6911211694**

Option 2 ID : **6911211692**

Option 3 ID : **6911211693**

Option 4 ID : **6911211695**

Status : **Answered**

Chosen Option : **1**

Q.29 A metal rod of length L rotates about one end at origin with a uniform angular velocity ω . The magnetic field radially falls off as $B(r) = B_0 e^{-\lambda r}$; λ being a positive constant. The emf induced (neglecting the centripetal force on electrons in the rod) is :

Options

1. $B_0 \omega \left[\frac{1}{\lambda^2} + e^{-\lambda L} \left(\frac{1}{\lambda^2} + \frac{L}{\lambda} \right) \right]$

2. $B_0 \omega \left[\frac{4}{\lambda^2} - e^{-2\lambda L} \left(\frac{1}{\lambda^2} + \frac{2L}{\lambda} \right) \right]$

3. $B_0 \omega \left[\frac{3}{\lambda^2} - e^{-3\lambda L} \left(\frac{3}{\lambda^2} + \frac{L}{\lambda} \right) \right]$

4. $B_0 \omega \left[\frac{1}{\lambda^2} - e^{-\lambda L} \left(\frac{1}{\lambda^2} + \frac{L}{\lambda} \right) \right]$

Question Type : **MCQ**

Question ID : **691121486**

Option 1 ID : **6911211657**

Option 2 ID : **6911211658**

Option 3 ID : **6911211659**

Option 4 ID : **6911211656**

Status : **Answered**

Chosen Option : **4**

Q.30 A particle of charge q and mass m is projected from origin with an initial velocity $\vec{v} = \left(\frac{v_0}{\sqrt{2}} \hat{x} + \frac{v_0}{\sqrt{2}} \hat{y} \right)$. There exists a uniform magnetic field $\vec{B} = B_0 \hat{z}$ and a space varying electric field $\vec{E} = E_0 e^{-\lambda x} \hat{x}$ within the region $0 \leq x \leq L$. After travelling a distance such that x -coordinate has changed from $x=0$ to $x=L$, the change in the kinetic energy is _____.

Options

1. $q \left(\frac{E_0 + v_0 B_0}{\lambda} \right) \left[1 - e^{-\lambda L/2} \right]$

2. $\frac{q E_0}{\lambda} \left[1 - e^{-\lambda L} \right]$

3. $\left(\frac{v_0 q B_0}{2\lambda} \right) \left[2 - e^{-2\lambda L} \right]$

4. $\frac{q E_0}{\lambda} \left[1 + e^{-\lambda L} \right]$

Question Type : **MCQ**

Question ID : **691121488**

Option 1 ID : **6911211667**

Option 2 ID : **6911211664**

Option 3 ID : **6911211665**

Option 4 ID : **6911211666**

Status : **Answered**

Chosen Option : **2**

Q.31 Given below are two statements : one is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.

Assertion (A) : The electromagnetic wave exerts pressure on the surface on which they are allowed to fall.

Reason (R) : There is no mass associated with the electromagnetic waves.

In the light of the above statements, choose the **correct answer** from the options given below :

Options 1.

Both **(A)** and **(R)** are true but **(R)** is **not** the correct explanation of **(A)**

2. **(A)** is true but **(R)** is false

3.

Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**

4. **(A)** is false but **(R)** is true

Question Type : **MCQ**

Question ID : **691121489**

Option 1 ID : **6911211669**

Option 2 ID : **6911211670**

Option 3 ID : **6911211668**

Option 4 ID : **6911211671**

Status : **Answered**

Chosen Option : **1**

Q.32 An electron is travelling with a velocity v in free space and when it enters a medium, its velocity is reduced by 20%. The de Broglie wavelength of electron in the medium is $\alpha\lambda_0$, where λ_0 is its de Broglie wavelength in free space. The value of α is _____.

Options

1. **1.25**

2. **1.20**

3. **1.0**

4. **0.75**

Question Type : **MCQ**

Question ID : **691121493**

Option 1 ID : **6911211686**

Option 2 ID : **6911211684**

Option 3 ID : **6911211685**

Option 4 ID : **6911211687**

Status : **Not Answered**

Chosen Option : **--**

Q.33 Assuming the experimental mass of $^{12}_6\text{C}$ as 12 u, the mass defect of $^{12}_6\text{C}$ atom is _____ MeV/c².

(Mass of proton = 1.00727 u, mass of neutron = 1.00866 u, 1 u = 931.5 MeV/c² and c is the speed of the light in vacuum).

Options

1. 92.0
2. 127.5
3. 272.0
4. 89.03

Question Type : **MCQ**

Question ID : **691121494**

Option 1 ID : **6911211691**

Option 2 ID : **6911211688**

Option 3 ID : **6911211690**

Option 4 ID : **6911211689**

Status : **Not Answered**

Chosen Option : --

Q.34 Match List - I with List - II.

List - I	List - II
A. Meter (L)	I. $\sqrt{\frac{hc}{G}}$
B. Second (S)	II. $\sqrt{\frac{Gh}{c^5}}$
C. Kilogram (M)	III. $\sqrt{\frac{K^2L^2c^3}{Gh}}$
D. Kelvin (K)	IV. $\sqrt{\frac{Gh}{c^3}}$

where h (Planck's constant), G (gravitational constant) and c (speed of light in vacuum) as fundamental units.

Choose the correct answer from the options given below :

Options

1. A-III, B-I, C-II, D-IV
2. A-IV, B-II, C-I, D-III
3. A-II, B-IV, C-I, D-III
4. A-IV, B-I, C-II, D-III

Question Type : **MCQ**

Question ID : **691121476**

Option 1 ID : **6911211619**

Option 2 ID : **6911211617**

Option 3 ID : **6911211616**

Option 4 ID : **6911211618**

Status : **Answered**

Chosen Option : **4**

Q.35 Match List - I with List - II.

List - I	List - II
A. $\sin^2 \omega t$	I. Periodic with time period $T = \frac{\pi}{\omega}$ but not simple harmonic motion (SHM)
B. $\sin^3(2\omega t)$	II. Periodic with time period $T = \frac{2\pi}{\omega}$ but Not SHM
C. $\sin(\omega t) + \cos(\pi\omega t)$	III. Periodic with time period $T = \frac{\pi}{\omega}$ and SHM
D. $\cos \omega t + \cos 2\omega t$	IV. Non-periodic

Choose the correct answer from the options given below :

Options

1. A-II, B-I, C-IV, D-III
2. A-III, B-I, C-IV, D-II
3. A-II, B-I, C-III, D-IV
4. A-III, B-II, C-IV, D-I

Question Type : **MCQ**

Question ID : **691121485**

Option 1 ID : **6911211655**

Option 2 ID : **6911211652**

Option 3 ID : **6911211653**

Option 4 ID : **6911211654**

Status : **Answered**

Chosen Option : **2**

Q.36 In an experiment to determine the resistance of a given wire using Ohm's law, the voltmeter and ammeter readings are noted as 10 V and 5 A, respectively. The least counts of voltmeter and ammeter are 500 mV and 200 mA, respectively. The estimated error in the resistance measurement is _____ Ω

Options

1. 2.5
2. 0.18
3. 0.25
4. 2

Question Type : **MCQ**

Question ID : **691121477**

Option 1 ID : **6911211622**

Option 2 ID : **6911211623**

Option 3 ID : **6911211620**

Option 4 ID : **6911211621**

Status : **Answered**

Chosen Option : **4**

Q.37 An ideal gas at pressure P and temperature T is expanding such that $PT^3 = \text{constant}$. The coefficient of volume expansion of the gas is _____.

Options

1. $\frac{2}{T}$

2. $\frac{3}{T}$

3. $\frac{4}{T}$

4. $\frac{1}{T}$

Question Type : **MCQ**

Question ID : **691121484**

Option 1 ID : **6911211648**

Option 2 ID : **6911211651**

Option 3 ID : **6911211650**

Option 4 ID : **6911211649**

Status : **Answered**

Chosen Option : **1**

Q.38 A wheel initially at rest is subjected to a uniform angular acceleration about its axis. In the first 2 s it rotates through an angle θ_1 and in the next 2 s it rotates through an angle θ_2 . The ratio $\frac{\theta_2}{\theta_1}$ is _____.

Options

1. **4**

2. **3**

3. $\frac{1}{3}$

4. **6**

Question Type : **MCQ**

Question ID : **691121480**

Option 1 ID : **6911211634**

Option 2 ID : **6911211633**

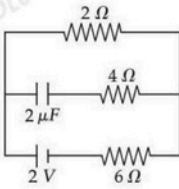
Option 3 ID : **6911211635**

Option 4 ID : **6911211632**

Status : **Not Answered**

Chosen Option : **--**

Q.39 Under steady state condition the potential difference across the capacitor in the circuit is _____ V.



Options

1. 2
2. 1.5
3. 0.5
4. 0

Question Type : **MCQ**

Question ID : **691121487**

Option 1 ID : **6911211663**

Option 2 ID : **6911211661**

Option 3 ID : **6911211660**

Option 4 ID : **6911211662**

Status : **Answered**

Chosen Option : 1

Q.40 An object AB is placed 15 cm on the left of a convex lens P of focal length 10 cm. Another convex lens Q is now placed 15 cm right of lens P . If the focal length of lens Q is 15 cm, the final image is _____.

Options

1. virtual, formed at 7.5 cm right of lens Q , with a size bigger than that of AB
2. formed at infinity.
3. real, formed at 7.5 cm right of lens Q , with a size same as that of AB
4. real, formed at 7 cm right of lens Q , with a size smaller than that of AB

Question Type : **MCQ**

Question ID : **691121491**

Option 1 ID : **6911211676**

Option 2 ID : **6911211678**

Option 3 ID : **6911211677**

Option 4 ID : **6911211679**

Status : **Not Answered**

Chosen Option : --

Q.41 A thin convex lens and a thin concave lens are kept in contact and are co-axial. Which of the following statements is correct for this combination of two lenses ?

Options 1.

Focal length of the lens system will change if the positions of two lenses are interchanged

2. behaves as concave lens if $|f_{\text{convex}}| < |f_{\text{concave}}|$
3. behaves as concave lens if $|f_{\text{convex}}| > |f_{\text{concave}}|$
4. behaves as convex lens if $|f_{\text{convex}}| > |f_{\text{concave}}|$

Question Type : **MCQ**

Question ID : **691121490**

Option 1 ID : **6911211675**

Option 2 ID : **6911211673**

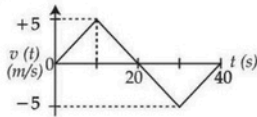
Option 3 ID : **6911211672**

Option 4 ID : **6911211674**

Status : **Answered**

Chosen Option : **4**

Q.42 The velocity (v) versus time (t) plot of a particle is shown in the figure, for a time interval of 40 s. The total distance travelled by the particle and the average velocity during this period are, respectively _____.



Options 1.

1. 100 m and zero
2. 100 m and 2.5 m/s
3. 25 m and zero
4. 50 m and zero

Question Type : **MCQ**

Question ID : **691121479**

Option 1 ID : **6911211630**

Option 2 ID : **6911211631**

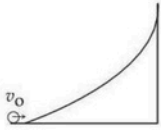
Option 3 ID : **6911211628**

Option 4 ID : **6911211629**

Status : **Answered**

Chosen Option : **1**

Q.43 An object of uniform density rolls up the curved path with the initial velocity v_0 as shown in the figure. If the maximum height attained by an object is $\frac{7v_0^2}{10g}$ (g = acceleration due to gravity), the object is a _____.



Options

1. disc
2. solid sphere
3. ring
4. solid cylinder

Question Type : **MCQ**

Question ID : **691121481**

Option 1 ID : **6911211638**

Option 2 ID : **6911211639**

Option 3 ID : **6911211637**

Option 4 ID : **6911211636**

Status : **Not Answered**

Chosen Option : --

Q.44 A mass of 1 kg is kept on a inclined plane with 30° inclination with respect to horizontal plane and it is at rest initially. Then the whole assembly is moved up with constant velocity of 4 m/s. The work done by the frictional force in time 2 s is _____ J. (Take $g = 10 \text{ m/s}^2$)

Options

1. 10
2. 20
3. 30
4. 25

Question Type : **MCQ**

Question ID : **691121478**

Option 1 ID : **6911211627**

Option 2 ID : **6911211624**

Option 3 ID : **6911211626**

Option 4 ID : **6911211625**

Status : **Not Answered**

Chosen Option : --

Q.45 Eight mercury drops, each of radius r , coalesce to form a bigger drop. The surface energy released in this process is _____. (S is the surface tension of mercury).

Options

1. $64\pi r^2 S$

2. $4\pi r^2 S$

3. $8\pi r^2 S$

4. $16\pi r^2 S$

Question Type : **MCQ**

Question ID : **691121483**

Option 1 ID : **6911211646**

Option 2 ID : **6911211647**

Option 3 ID : **6911211644**

Option 4 ID : **6911211645**

Status : **Not Answered**

Chosen Option : --

Section : **Physics Section B**

Q.46 A circular loop of radius 20 cm and resistance $2\ \Omega$ is placed in a time varying magnetic field $\vec{B} = (2t^2 + 2t + 3)\ \text{T}$. At $t=0$, for the plane of the loop being perpendicular to the magnetic field and, the induced current in the loop at $t=3\ \text{s}$ is $\frac{\alpha}{50}\ \text{A}$. The value of α is _____.
(Take $\pi = 22/7$)

Given --
Answer :

Question Type : **SA**

Question ID : **691121500**

Status : **Not Answered**

Q.47 The heat extracted out of x gram of water initially at 50°C to cool it down to 0°C is sufficient to evaporate $(1000 - x)$ gram of water also initially at 50°C . The value of x (closest integer) is _____.
(Take latent heat of water $2256\ \text{kJ/kg}$, K , specific heat capacity of water $4200\ \text{J/kg}\cdot\text{K}$)

Given --
Answer :

Question Type : **SA**

Question ID : **691121497**

Status : **Not Answered**

Q.48 A series LCR circuit with $R=20\ \Omega$, $L=1.6\ \text{H}$ and $C=40\ \mu\text{F}$ is connected to a variable frequency a.c. source. The inductive reactance at resonant frequency is _____ Ω .

Given --
Answer :

Question Type : SA
Question ID : 691121498
Status : Not Answered

Q.49 When an external resistance of $5\ \Omega$ is connected across terminals of a cell, a current of $0.25\ \text{A}$ flows through it. When the $5\ \Omega$ resistor is replaced by a $2\ \Omega$ resistor, a current of $0.5\ \text{A}$ flows through it. The internal resistance of the cell is _____ Ω .

Given --
Answer :

Question Type : SA
Question ID : 691121499
Status : Not Answered

Q.50 A copper wire of length $3\ \text{m}$ is stretched by $3\ \text{mm}$ by applying an external force. The volume of the wire is $600 \times 10^{-6}\ \text{m}^3$. The elastic potential energy stored in the wire in stretched condition would be _____ J.
(Given Young modulus of copper = $1.1 \times 10^{11}\ \text{N/m}^2$)

Given --
Answer :

Question Type : SA
Question ID : 691121496
Status : Not Answered

Section : Chemistry Section A

Q.51 Given below are two statements :

Statement I : The condensation reaction between $\text{CH}_3-\text{CH}=\text{O}$ and $\text{H}_2\text{N}-\underset{\text{H}}{\underset{\text{O}}{\parallel}}\text{N}-\text{C}-\text{NH}_2$

under optimum pH will produce $\text{CH}_3-\text{CH}=\text{N}-\overset{\text{H}}{\underset{\text{O}}{\parallel}}\text{C}-\text{N}-\text{NH}_2$

Statement II : The molecule, $\text{Ph}-\text{CH}\begin{cases} \text{O}-\text{H} \\ \text{O}-\text{CH}_3 \end{cases}$ will generate $\text{Ph}-\text{CH}=\text{O}$ in the presence of dilute acid.

In the light of the above statements, choose the correct answer from the options given below :

Options

- Both **Statement I** and **Statement II** are false
- Both **Statement I** and **Statement II** are true
- Statement I** is true but **Statement II** is false
- Statement I** is false but **Statement II** is true

Question Type : **MCQ**

Question ID : **691121516**

Option 1 ID : **6911211762**

Option 2 ID : **6911211761**

Option 3 ID : **6911211763**

Option 4 ID : **6911211764**

Status : **Answered**

Chosen Option : **1**

Q.52 The covalent radii of atoms A and B are r_A and r_B , respectively. The covalent bond length and total length of AB molecule are respectively

Options

- $2(r_A + r_B), \frac{1}{2}(r_A + r_B)$
- $\frac{1}{2}(r_A + r_B), (r_A + r_B)$
- $(r_A + r_B), (r_A + r_B)$
- $(r_A + r_B), 2(r_A + r_B)$

Question Type : **MCQ**

Question ID : **691121503**

Option 1 ID : **6911211712**

Option 2 ID : **6911211710**

Option 3 ID : **6911211711**

Option 4 ID : **6911211709**

Status : **Answered**

Chosen Option : **3**

Q.53

IUPAC name of the some alkenes are given below.

Find out the correct stability order.

- A. 2-Methylbut-2-ene
- B. *cis*-But-2-ene
- C. 2, 3-Dimethylbut-2-ene
- D. Prop-1-ene

Choose the correct answer from the options given below :

Options

- 1. $C > A > D > B$
- 2. $C > A > B > D$
- 3. $B > D > A > C$
- 4. $A > B > C > D$

Question Type : MCQ

Question ID : 691121513

Option 1 ID : 6911211750

Option 2 ID : 6911211749

Option 3 ID : 6911211751

Option 4 ID : 6911211752

Status : Answered

Chosen Option : 2

Q.54

Given below are two statements :

Statement I : Aluminium upon reaction with NaOH forms $[Al(OH)_6]^{3-}$ ion.

Statement II : The geometry of ICl_4^- , ClO_3^- and IBr_2^- is square planar, pyramidal and linear respectively.

In the light of the above statements, choose the correct answer from the options given below :

Options

- 1. Both **Statement I** and **Statement II** are false
- 2. **Statement I** is false but **Statement II** is true
- 3. Both **Statement I** and **Statement II** are true
- 4. **Statement I** is true but **Statement II** is false

Question Type : MCQ

Question ID : 691121509

Option 1 ID : 6911211734

Option 2 ID : 6911211736

Option 3 ID : 6911211733

Option 4 ID : 6911211735

Status : Answered

Chosen Option : 2

Q.55

Given below are two statements :

Statement I : Presence of large number of unpaired electrons in transition metal atoms results in higher enthalpies of their atomisation.

Statement II : $d_{xy} = d_{xz} = d_{yz} < d_{x^2-y^2} = d_{z^2}$ and $d_{x^2-y^2} = d_{z^2} < d_{xy} = d_{xz} = d_{yz}$ are the d-orbital splittings in $[\text{Fe}(\text{H}_2\text{O})_6]^{3+}$ and $[\text{Ni}(\text{Cl})_4]^{2-}$ complex ions respectively.

In the light of the above statements, choose the correct answer from the options given below :

Options

1. **Statement I is correct but Statement II is incorrect**
2. **Both Statement I and Statement II are incorrect**
3. **Statement I is incorrect but Statement II is correct**
4. **Both Statement I and Statement II are correct**

Question Type : MCQ

Question ID : 691121510

Option 1 ID : 6911211739

Option 2 ID : 6911211738

Option 3 ID : 6911211740

Option 4 ID : 6911211737

Status : Not Answered

Chosen Option : --

Q.56Identify the **correct** statements from the following

- A. $[\text{Fe}(\text{C}_2\text{O}_4)_3]^{3-}$ is the most stable complex among $[\text{Fe}(\text{OH})_6]^{3-}$, $[\text{Fe}(\text{C}_2\text{O}_4)_3]^{3-}$ and $[\text{Fe}(\text{SCN})_6]^{3-}$
- B. The stability of $[\text{Cu}(\text{NH}_3)_4]^{2+}$ is greater than that of $[\text{Cu}(\text{en})_2]^{2+}$
- C. The hybridization of Fe in $\text{K}_4[\text{Fe}(\text{CN})_6]$ is d^2sp^3
- D. $[\text{Fe}(\text{NO}_2)_3\text{Cl}_3]^{3-}$ exhibits linkage isomerism
- E. NO_2^- and SCN^- ligands are NOT ambidentate ligands

Choose the **correct** answer from the options given below :**Options**

1. A, C and D only
2. A, B, C, D and E
3. B, C and D only
4. A, C and E only

Question Type : **MCQ**Question ID : **691121511**Option 1 ID : **6911211743**Option 2 ID : **6911211741**Option 3 ID : **6911211742**Option 4 ID : **6911211744**Status : **Answered**Chosen Option : **1**

Q.57 Match List - I with List - II.

List - I	List - II
Purification technique	Used to separate
A. Simple distillation	I. Steam volatile compound
B. Fractional distillation	II. Two liquids with large difference in boiling points
C. Steam distillation	III. Liquid decomposing at its boiling point
D. Distillation under reduced pressure	IV. Two liquids with close boiling points

Choose the **correct** answer from the options given below :

Options

1. A-II, B-IV, C-I, D-III
2. A-IV, B-III, C-II, D-I
3. A-II, B-IV, C-III, D-I
4. A-II, B-III, C-I, D-IV

Question Type : **MCQ**

Question ID : **691121512**

Option 1 ID : **6911211746**

Option 2 ID : **6911211748**

Option 3 ID : **6911211747**

Option 4 ID : **6911211745**

Status : **Answered**

Chosen Option : **1**

Q.58 Which of the following statement(s) is/are true ?

- A. If two orbitals have the same value of $(n + l)$, the orbital with lower value of n will have lower energy.
 - B. Energies of the orbitals in the same subshell increase with increase in atomic number.
 - C. The size of $2p_x$ orbital is less than the size of $3p_x$ orbital.
 - D. Among $5f$, $6s$, $4d$, $5p$ and $5d$ orbitals, none of the orbitals have 2 radial nodes.
- Choose the correct answer from the options given below :

Options

1. A and C only
2. A only
3. C and D only
4. A, B and C only

Question Type : **MCQ**

Question ID : **691121502**

Option 1 ID : **6911211706**

Option 2 ID : **6911211708**

Option 3 ID : **6911211707**

Option 4 ID : **6911211705**

Status : **Answered**

Chosen Option : **4**

Q.59 One half cell in a voltaic cell is constructed by dipping silver rod in AgNO_3 solution of unknown concentration, other half cell is Zn rod dipped in 1 molar solution of ZnSO_4 .
A voltage of 1.60 V is measured at 298 K for this cell. What is the concentration of Ag^+ ions used in terms of $\log x$ ($x = [\text{Ag}^+]$)?

$$E_{\text{Zn}^{2+}/\text{Zn}}^{\circ} = -0.76\text{V}, \quad E_{\text{Ag}^+/\text{Ag}}^{\circ} = +0.80\text{V}, \quad \frac{2.303RT}{F} = 0.059\text{V}$$

Options

1. $\frac{2.9}{2}$

2. $\frac{5.9}{4}$

3. $\frac{4}{5.9}$

4. $\frac{2}{3.9}$

Question Type : **MCQ**

Question ID : **691121507**

Option 1 ID : **6911211727**

Option 2 ID : **6911211728**

Option 3 ID : **6911211726**

Option 4 ID : **6911211725**

Status : **Answered**

Chosen Option : **2**

Q.60 Given below are two statements :

Statement I : The number of pairs among $[Al_2O_3, Cr_2O_3]$, $[Cl_2O_7, Mn_2O_7]$, $[Na_2O, V_2O_3]$ and $[CO, N_2O]$ that contain oxides of same nature (acidic, basic, neutral or amphoteric) is 4.

Statement II : Among Na_2O , Al_2O_3 , CO and Cl_2O_7 , the most basic and acidic oxides are Na_2O and Cl_2O_7 , respectively.

In the light of the above statements, choose the correct answer from the options given below :

Options

1. **Statement I is false but Statement II is true**
2. **Statement I is true but Statement II is false**
3. **Both Statement I and Statement II are true**
4. **Both Statement I and Statement II are false**

Question Type : **MCQ**

Question ID : **691121508**

Option 1 ID : **6911211732**

Option 2 ID : **6911211731**

Option 3 ID : **6911211729**

Option 4 ID : **6911211730**

Status : **Not Answered**

Chosen Option : --

Q.61 The reaction $A(g) \rightleftharpoons B(g) + C(g)$ was initiated with the amount 'a' of A(g). At equilibrium it is found that the amount of A(g) remaining is (a - x) at a total pressure of p. The equilibrium constant K_p of the reaction can be calculated from the expression :

Options

1. $\frac{x^2}{a^2 - x^2} \times p$
2. $\frac{a^2 - x^2}{x^2} \times p$
3. $\frac{x^2}{a^2 + x^2} \times p$
4. $\frac{a + x^2}{x^2} \times p$

Question Type : **MCQ**

Question ID : **691121506**

Option 1 ID : **6911211722**

Option 2 ID : **6911211724**

Option 3 ID : **6911211721**

Option 4 ID : **6911211723**

Status : **Answered**

Chosen Option : **2**

Q.62 A paper dipped in a dil. H_2SO_4 solution of 'X' upon treatment with SO_2 gas turns into green. The compound 'X' is :

Options

1. $K_2Cr_2O_7$
2. $KMnO_4$
3. KI-starch
4. $Pb(CH_3COO)_2$

Question Type : **MCQ**

Question ID : **691121520**

Option 1 ID : **6911211780**

Option 2 ID : **6911211778**

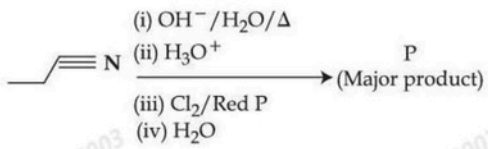
Option 3 ID : **6911211777**

Option 4 ID : **6911211779**

Status : **Not Answered**

Chosen Option : **--**

Q.63 Complete the following reaction sequence and give the name of major product 'P'.



Options

1. 2-Chloropropanoic acid
2. 3-Chloropropanoic acid
3. 1-Chloropropane
4. 2-Chloropropane

Question Type : **MCQ**

Question ID : **691121515**

Option 1 ID : **6911211757**

Option 2 ID : **6911211758**

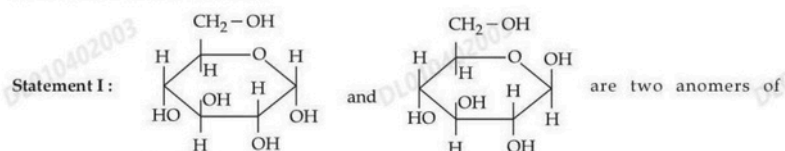
Option 3 ID : **6911211759**

Option 4 ID : **6911211760**

Status : **Not Answered**

Chosen Option : --

Q.64 Given below are two statements :



D-(+)-glucose.

Statement II : The open chain forms of D-glucose and D-fructose contain three similar chiral carbons at C₃, C₄ and C₅.

In the light of the above statements, choose the correct answer from the options given below :

Options

1. **Statement I is true but Statement II is false**
2. **Both Statement I and Statement II are true**
3. **Both Statement I and Statement II are false**
4. **Statement I is false but Statement II is true**

Question Type : **MCQ**

Question ID : **691121519**

Option 1 ID : **6911211775**

Option 2 ID : **6911211773**

Option 3 ID : **6911211774**

Option 4 ID : **6911211776**

Status : **Answered**

Chosen Option : **1**

Q.65 Identify the correct IUPAC name of hydrocarbon (x) containing three primary carbon atoms and with molar mass 72 g mol⁻¹.

Options

1. **2, 2 - Dimethylpropane**
2. **1, 1 - Dimethylcyclopropane**
3. **n-pentane**
4. **2 - Methylbutane**

Question Type : **MCQ**

Question ID : **691121514**

Option 1 ID : **6911211754**

Option 2 ID : **6911211753**

Option 3 ID : **6911211756**

Option 4 ID : **6911211755**

Status : **Not Answered**

Chosen Option : **--**

- Q.66** Given below are two statements :
- Statement I :** Heating benzamide with bromine in an ethanolic solution of sodium hydroxide will give benzylamine.
- Statement II :** Nitration of aniline with $\text{HNO}_3/\text{H}_2\text{SO}_4$ at 288 K produces *m*-nitroaniline in higher amount than *o*-nitroaniline (pH adjusted).
- In the light of the above statements, choose the correct answer from the options given below :

- Options**
1. **Statement I is true but Statement II is false**
 2. **Both Statement I and Statement II are false**
 3. **Both Statement I and Statement II are true**
 4. **Statement I is false but Statement II is true**

Question Type : **MCQ**
Question ID : **691121517**
Option 1 ID : **6911211767**
Option 2 ID : **6911211766**
Option 3 ID : **6911211765**
Option 4 ID : **6911211768**
Status : **Answered**
Chosen Option : **3**

- Q.67** The correct order of molar heat capacities measured at 298 K and 1 bar is :

- Options**
1. **Bromine(l) > Copper(s) > Helium(g)**
 2. **Copper(s) > Bromine(l) > Helium(g)**
 3. **Helium(g) > Bromine(l) = Copper(s)**
 4. **Helium(g) > Bromine(l) > Copper(s)**

Question Type : **MCQ**
Question ID : **691121505**
Option 1 ID : **6911211718**
Option 2 ID : **6911211717**
Option 3 ID : **6911211720**
Option 4 ID : **6911211719**
Status : **Answered**
Chosen Option : **4**

Q.68 Identify the **incorrect** statement about tertiary structure of proteins.

Options

1. They can be fibrous or globular in structure.

2.

The structure remains intact when exposed to pH changes.

3.

The main forces that stabilize the structure are hydrogen bonding, disulphide links, van der Waals and electrostatic forces of attraction.

4.

A linear polypeptide chain will convert to a secondary structure and then further folding of the secondary structure will convert to tertiary structure.

Question Type : **MCQ**

Question ID : **691121518**

Option 1 ID : **6911211769**

Option 2 ID : **6911211771**

Option 3 ID : **6911211770**

Option 4 ID : **6911211772**

Status : **Not Answered**

Chosen Option : --

Q.69 What volume of hydrogen gas at STP would be liberated by action of 50 mL of H_2SO_4 of 50% purity (density = 1.3 g mL^{-1}) on 20 g of zinc ?
Given : Molar mass of H, O, S, Zn are 1, 16, 32, 65 g mol^{-1} respectively.

Options

1. 7.428 L

2. 8.375 L

3. 6.892 L

4. 5.824 L

Question Type : **MCQ**

Question ID : **691121501**

Option 1 ID : **6911211702**

Option 2 ID : **6911211704**

Option 3 ID : **6911211703**

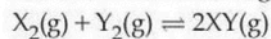
Option 4 ID : **6911211701**

Status : **Not Answered**

Chosen Option : --

Q.70

Consider the following data for the reaction

at 600 K. The $\Delta_r G^\ominus$ (in kJ mol^{-1}) for the reaction is :

Compound	$\Delta_f H_{600\text{K}}^\ominus$ (kJ mol^{-1})	$S_{600\text{K}}^\ominus$ ($\text{J mol}^{-1} \text{K}^{-1}$)
XY(g)	42	200
$X_2(g)$	8	140
$Y_2(g)$	80	250

Options

1. - 1000
2. - 9.012
3. - 21000
4. - 10

Question Type : MCQ

Question ID : 691121504

Option 1 ID : 6911211715

Option 2 ID : 6911211716

Option 3 ID : 6911211713

Option 4 ID : 6911211714

Status : Not Answered

Chosen Option : --

Section : Chemistry Section B

Q.71

RMgI when treated with ice cold water liberated a gas which occupied $1.4 \text{ dm}^3/\text{g}$ at STP. The gas produced is further reacted with iodine in presence of HIO_3 to give compound (X). Compound (X) in presence of Na and dry ether produced compound (Y). Molar mass of compound (Y) is _____ g mol^{-1} . (Nearest integer)

Given --

Answer :

Question Type : SA

Question ID : 691121522

Status : Not Answered

Q.72 At 298 K, the molar conductivity of $x\%$ (w/w) MX solution (aqueous) is $123.5 \text{ S cm}^2 \text{ mol}^{-1}$. The conductance of same solution is $1.9 \times 10^{-3} \text{ S}$. The value of x is $\text{_____} \times 10^{-2}$.
(Given : cell constant = 1.3 cm^{-1} ; molar mass of MX is 75 g mol^{-1} , density of aqueous solution of MX at 298 K is 1.0 g mL^{-1})

Given --
Answer :

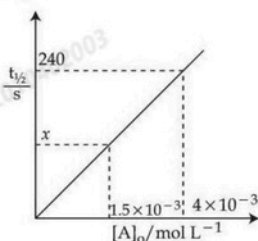
Question Type : SA
Question ID : 691121524
Status : Not Answered

Q.73 The total number of unpaired electrons present in the d^3 , d^4 (low spin) d^5 (high spin), d^6 (high spin) and d^7 (low spin) octahedral complex systems is _____.

Given --
Answer :

Question Type : SA
Question ID : 691121521
Status : Not Answered

Q.74 For a reaction $A \rightarrow P$ at T K, the half life ($t_{1/2}$) is plotted as a function of initial concentration $[A]_0$ of A as given below.



The value of x in the given figure is _____ s (Nearest integer)

Given --
Answer :

Question Type : SA
Question ID : 691121525
Status : Not Answered

Q.75 20 g hemoglobin in a 1 L aqueous solution (A) at 300 K is separated from pure water by semi permeable membrane. At equilibrium the height of solution in a tube dipped in a solution (A) is found to be 80.0 mm higher than the tube dipped in water.
The molar mass of hemoglobin is _____ kg mol^{-1} . (Nearest integer)
(Given : $g = 10 \text{ m s}^{-2}$, $R = 8.3 \text{ kPa dm}^3 \text{ K}^{-1} \text{ mol}^{-1}$, density of solution = 1000 kg m^{-3})

Given --
Answer :

Question Type : SA
Question ID : 691121523
Status : Not Answered

Exam Summary						
B. Tech						
Section Name	No. of Questions	Answered	Not Answered	Marked for Review	Answered & Marked for Review	Not Visited
Mathematics Section A	20	7	13	0	0	0
Mathematics Section B	5	0	1	0	0	4
Physics Section A	20	12	8	0	0	0
Physics Section B	5	0	1	0	0	4
Chemistry Section A	20	12	8	0	0	0
Chemistry Section B	5	0	2	0	0	3

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