Q.1

For a transistor $\frac{1}{\alpha_{dc}} - \frac{1}{\beta_{dc}}$ is $(\alpha_{dc}$ and β_{dc} are current gains)

Ans

🗙 1. Zero

- \times 2. -1
- **√**3.]
- X 4. 2

Question Type : MCQ

Question ID: 37135112708

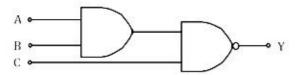
Option 1 ID: 37135150829

Option 2 ID : 37135150831 Option 3 ID : 37135150830

Option 4 ID: 37135150832

Status: Answered

 $\textbf{Q.2} \quad \text{For the following combination of logic gates, when all the three inputs are first high} \\$ and then low, the output 'Y' will respectively be



Ans

× 1 1 , 0

× 2. 0 , 0

Question Type : MCQ

Question ID: 37135112743 Option 1 ID: 37135150969 Option 2 ID: 37135150971 Option 3 ID: 37135150970 Option 4 ID: 37135150972

Status: Answered

When a ray of light is incident normally on one refracting surface of an equilateral

prism of refractive index 1.5, the emerging ray $\left[\sin^{-1}\left(\frac{1}{1.5}\right) = 41.8^{\circ}\right]$

Ans X 1.

just grazes the second refracting surface.

x2 is deviated by 20°.

x₃ is deviated by 30°.

J 4

undergoes total internal reflection at second refracting surface.

Question Type : MCQ

Question ID : 37135112727 Option 1 ID : 37135150907 Option 2 ID : 37135150905 Option 3 ID : 37135150906 Option 4 ID : 37135150908

Status : Answered Chosen Option : 4 Q.4 The mutual inductance between two coplanar concentric rings A and B of radii

'R $_1$ ' and 'R $_2$ ' placed in air when a current 'I' flows through ring A is (R $_1$ >> R $_2$)

 $(\mu_0 = permeability of free space)$

Ans

$$\frac{\mu_0 \pi R_2}{R_1}$$

$$\times_2 \frac{\mu_0 \pi R_1}{R_2}$$

$$\checkmark 3. \frac{\mu_0 \pi R_2^2}{2R_1}$$

$$\times_4$$
 $\frac{\mu_0\pi R_1^2}{2R_2}$

Question Type : MCQ

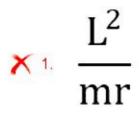
Question ID: 37135112718
Option 1 ID: 37135150871
Option 2 ID: 37135150872
Option 3 ID: 37135150869
Option 4 ID: 37135150870
Status: Answered



Q.5 A particle of mass 'm' is rotating in a circle of radius 'r' having angular momentum

 ${\rm `L'}$. Then the centripetal force will be

Ans



$$\times$$
 2. $\frac{L^2m}{r}$

$$\checkmark$$
³. $\frac{L^2}{mr^3}$

$$\frac{L^2}{mr^2}$$

Question Type : MCQ

Question ID: 37135112701
Option 1 ID: 37135150801
Option 2 ID: 37135150802
Option 3 ID: 37135150803
Option 4 ID: 37135150804
Status: Answered



Q.6 If $|\overrightarrow{A_1}| = 3$, $|\overrightarrow{A_2}| = 4$ and $|\overrightarrow{A_1} + \overrightarrow{A_2}| = 4$ the value of $(2\overrightarrow{A_1} + \overrightarrow{A_2}) \cdot (\overrightarrow{A_1} - \overrightarrow{A_2})$ is

Ans

- × 1. 4 · 5
- × 2. 5 · 5
- **√**³ 6 · 5
- × 4. 2 · 5

Question Type : MCQ

Question ID: 37135112714
Option 1 ID: 37135150854
Option 2 ID: 37135150855
Option 3 ID: 37135150856
Option 4 ID: 37135150853
Status: Answered

Chosen Option: 2

Q.7 The effective length of a magnet is 31·4 cm and its pole strength is 0·8 A m. The magnetic moment, if it is bent in the form of a semicircle is

Ans

- $\times 10.12 \text{ A m}^2$
- $\sqrt{2} \cdot 0.16 \text{ A m}^2$
- \times 3 1·2 A m²
- \times 4 1.6 A m²

Question Type : MCQ

Question ID: 37135112731
Option 1 ID: 37135150924
Option 2 ID: 37135150923
Option 3 ID: 37135150922
Option 4 ID: 37135150921
Status: Answered



Q.8 A force F = (10 + 0.5x) N acts on a particle in the x-direction. The work done by the force in displacing the particle from x = 0 to x = 2 metre is

Ans

Question Type: MCQ

Question ID : 37135112719
Option 1 ID : 37135150873
Option 2 ID : 37135150874
Option 3 ID : 37135150875
Option 4 ID : 37135150876
Status : Answered

A stone of mass 2kg attached at one end of a 2m long string is whirled in horizontal circle. The string makes an angle of 45° with the vertical then the centripetal force acting on the stone is $(g=10 \text{ m/s}^2, \tan 45^{\circ}=1)$

Ans

× 1. 30 N

× 2. 40 N

✓3 20 N

× 4 10 N

Question Type: MCQ

Question ID: 37135112711 Option 1 ID: 37135150843 Option 2 ID: 37135150844 Option 3 ID: 37135150842 Option 4 ID: 37135150841

Status : Not Attempted and Marked For Review



 $\mathbf{Q.10}$ The moment of inertia of a ring about an axis passing through its centre and perpendicular to its plane is 'I'. It is rotating with angular velocity 'ω'. Another identical ring is gently placed on it so that their centres coincide. If both the rings are rotating about the same axis, then loss in kinetic energy is

Ans

$$\times$$
 1. $I\omega^2/3$

$$\times 2 I\omega^2/2$$

×₁.
$$Iω2/3$$

×₂. $Iω2/2$
×₃. $Iω2/4$
×₄. $Iω2$

$$\times$$
 4. $I\omega^2$

Question Type: MCQ

Question ID: 37135112729 Option 1 ID: 37135150914 Option 2 ID: 37135150915 Option 3 ID: 37135150913 Option 4 ID: 37135150916 Status: Answered

Assuming the earth to be a sphere of uniform density, the ratio of acceleration due to gravity on the earth's surface to its value at halfway towards the centre of the earth, will be

Ans

✓ 1 2:1

×2 2:3

X 3. 1:1

 \times 4. 1 : 2

Question Type : MCQ

Question ID: 37135112723 Option 1 ID: 37135150889 Option 2 ID: 37135150890 Option 3 ID: 37135150891 Option 4 ID: 37135150892

Status: Answered

The Young's double-slit experiment is performed with the light of blue colour $(\lambda_b{=}4350~\textrm{Å})$ and then with green colour $(\lambda_g{=}5450~\textrm{Å}).$ Without changing experimental setup, if the distance of the sixth fringe from the centre is determined for both the colours as x_{blue} and x_{green} , then x_{blue} : x_{green} is nearly

Ans

- × 1. 0·2 × 2. 1·2
- ✓³ 0.8×⁴ 1.5

Question Type : MCQ

Question ID: 37135112730 Option 1 ID: 37135150920 Option 2 ID: 37135150918 Option 3 ID: 37135150919 Option 4 ID: 37135150917 Status: Answered

Q.13 A proton moving in perpendicular magnetic field possess energy 'E'. The magnetic field is increased four times. But the proton is constrained to move in the path of same radius. The kinetic energy will increase

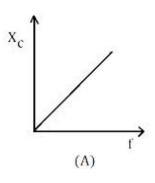
Ans

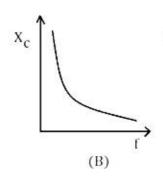
- √ 16 times.
- ×2 8 times.
- \times 3. 2 times.
- × 4 4 times.

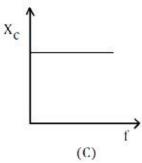
Question Type: MCQ

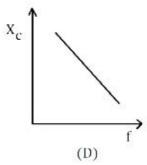
Question ID: 37135112738
Option 1 ID: 37135150949
Option 2 ID: 37135150950
Option 3 ID: 37135150952
Option 4 ID: 37135150951
Status: Answered

When an alternating emf is applied across a capacitor C , the graph of capacitive $\text{reactance } (X_c) \text{ with frequency (f) of the source of alternating signal is}$

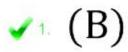








Ans





× 3. (C)

× 4. (D)

Question Type : MCQ

Question ID: 37135112733 Option 1 ID: 37135150930 Option 2 ID: 37135150929 Option 3 ID: 37135150931 Option 4 ID: 37135150932

Status : Answered

Q.15 Water rises in a capillary tube to a certain height such that the upward force due to surface tension is balanced by 63×10^{-4} N force due to the weight of the water. The surface tension of water is 7×10^{-2} N/m . The inner diameter of the capillary tube is nearly ($\pi = 22/7$)

Ans

$$\times 1.6.3 \times 10^{-1} \text{ m}$$

$$\checkmark$$
 2 3 × 10⁻² m

$$\times$$
 3. 7 × 10⁻² m

$$\times$$
 4 9 × 10⁻² m

Question Type : MCQ

Question ID: 37135112737
Option 1 ID: 37135150947
Option 2 ID: 37135150945
Option 3 ID: 37135150948
Option 4 ID: 37135150946
Status: Answered



Q.16

If
$$\vec{A} = a_1 \hat{i} + a_2 \hat{j} + a_3 \hat{k}$$
, then $\hat{i} \times (\hat{i} \times \vec{A})$ is

Ans

$$\times a_2\hat{j} - a_3\hat{k}$$

$$\times_2 a_1 \hat{j} + a_3 \hat{k}$$

✓
$$a_{2}\hat{j} - a_{3}\hat{k}$$

× $a_{3}\hat{j} - a_{2}\hat{k}$

Question Type: MCQ

Question ID: 37135112709 Option 1 ID: 37135150833 Option 2 ID: 37135150834 Option 3 ID: 37135150836

Option 4 ID: 37135150835 Status: Answered



A solenoid having 250 turns/metre has a core of a material with relative permeability 500. What is approximate value of the magnetisation of the core material, if a current of 2A is passed through it?

Ans

$$\times$$
 1 2 × 10⁵ A/m

$$\times$$
 2 1.5×10^5 A/m

$$\checkmark$$
 2·5 × 10⁵ A/m

$$\times$$
 4 1 × 10⁵ A/m

Question Type : MCQ

Question ID : 37135112721 Option 1 ID : 37135150883 Option 2 ID : 37135150882 Option 3 ID : 37135150884 Option 4 ID : 37135150881

Status : Answered



Q.18 If λ_1 and λ_2 are the wavelengths of the first spectral line of the Lyman and Paschen series respectively, then $\lambda_1{:}\lambda_2$ is

Ans

× 1 1:3

×2. 7:50

× 3. 1:30

✓⁴ 7:108

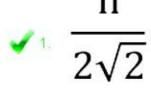
Question Type : MCQ

Question ID : 37135112713 Option 1 ID : 37135150849 Option 2 ID : 37135150851 Option 3 ID : 37135150850 Option 4 ID : 37135150852

Status : Answered

A string of length 'L' and linear density 'm' has a fundamental frequency 'n' when stretched by tension 'T'. The fundamental frequency of another string having double the length and double linear density, when same tension is applied is

Ans



$$\times$$
 3. $\frac{n}{2}$

$$\times$$
 4. $\frac{n}{\sqrt{2}}$

Question Type : MCQ

Question ID : 37135112735 Option 1 ID : 37135150940 Option 2 ID : 37135150937 Option 3 ID : 37135150939 Option 4 ID : 37135150938

Status : Answered

Q.20 A plano-convex lens is made from glass of refractive index 1.5. The radius of curvature of its curved surface is 'R'. Its focal length is

Ans

× 1.1.5 R

✓2. 2 R

× 3. R

× 4. R/2

Question Type : MCQ

Question ID : 37135112742
Option 1 ID : 37135150967
Option 2 ID : 37135150968
Option 3 ID : 37135150966
Option 4 ID : 37135150965
Status : Answered



The period of oscillation of a mass 'M' suspended from a spring of negligible mass

is 'T'. If along with it another mass M is also suspended, the period of oscillation now will be

Ans

$$\frac{T}{\sqrt{2}}$$

$$\sqrt{4}$$
 $\sqrt{2}$ T

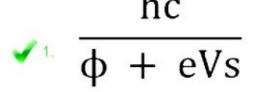
Question Type : MCQ

Question ID: 37135112707 Option 1 ID: 37135150825 Option 2 ID: 37135150827 Option 3 ID: 37135150826 Option 4 ID: 37135150828

Status: Answered

Q.22 For a photocell, the work function is ' φ ' and the stopping potential is ' V_s '. The wavelength of the incident radiation is

Ans



$$\frac{\phi + eVs}{hc}$$

$$\frac{\phi - eVs}{hc}$$

$$\frac{\text{hc}}{\phi - \text{eVs}}$$

Question Type: MCQ

Question ID: 37135112725 Option 1 ID: 37135150898 Option 2 ID: 37135150897 Option 3 ID: 37135150899 Option 4 ID: 37135150900

Status: Answered



Q.23 The fundamental frequency of a string stretched with a weight 'M' kg is 'n', hertz.

Keeping the vibrating length constant, the weight required to produce its octave is

Ans

× 1. M

× 2. 8 M

× 3. 2 M

√ 4. 4 M

Question Type : MCQ

Question ID: 37135112720
Option 1 ID: 37135150877
Option 2 ID: 37135150880
Option 3 ID: 37135150878
Option 4 ID: 37135150879
Status: Answered

Q.24 A mass 'm' suspended from a spring stretches it by 5cm when on the surface of the earth . The mass is then taken on to a height of 1600 km above earth's surface and again suspended from the same spring. At this altitude the extension of the spring is (Radius of earth = 6400 km)

Ans

× 1 6.4 cm

× 2 1.6 cm

✓ 3 3·2 cm

×4. 0⋅8 cm

Question Type : MCQ

Option 1 ID: 37135112750
Option 1 ID: 37135151000
Option 2 ID: 37135150998
Option 3 ID: 37135150999
Option 4 ID: 37135150997

Status: Answered



Q.25 The electron in the hydrogen atom is moving with a speed of $~2\times 10^6$ m/s in an orbit of radius 0.5 Å . The magnetic moment of the revolving electron is

Ans

$$\times 1.15 \times 10^{-24} \text{ Am}^2$$

$$\times 2 11 \times 10^{-24} \text{ Am}^2$$

$$\times$$
 3. 6 × 10⁻²⁴ Am²

$$\sqrt{4.8} \times 10^{-24} \text{ Am}^2$$

Question Type : MCQ

Question ID: 37135112748
Option 1 ID: 37135150992
Option 2 ID: 37135150991
Option 3 ID: 37135150989
Option 4 ID: 37135150990

Status: Answered



Q.26 In resonance tube, the first and second resonance are heard when water level is 24·1 cm and 74·1 cm respectively, below the open end of the tube. The inner diameter of the tube is

Ans

× 1. 5 cm

√ 2. 3 cm

× 3. 4 cm

×4. 2 cm

Question Type : MCQ

Question ID : 37135112703
Option 1 ID : 37135150812
Option 2 ID : 37135150810
Option 3 ID : 37135150811
Option 4 ID : 37135150809

Status: Answered



 $\mathbf{Q.27}$ A ring and a disc roll on horizontal surface without slipping with same linear velocity. If both have same mass and total kinetic energy of the ring is 4 J then total kinetic energy of the disc is

Ans

× 1. 2 J × 2. 6 J

×3. 8 J

Question Type : MCQ

Question ID: 37135112716 Option 1 ID: 37135150861 Option 2 ID: 37135150863 Option 3 ID: 37135150864 Option 4 ID: 37135150862

Status: Answered



Q.28 A positively charged particle (q) travelling at 30° with respect to the direction of magnetic field of strength 2.4×10^{-6} T experiences a force of 4.8×10^{-19} N. The speed of charged particle will be

[
$$q = 1.6 \times 10^{-19} \text{ C}$$
, $\sin 30^\circ = \frac{1}{2}$, $\cos 30^\circ = \sqrt{3}/2$]

Ans

$$\times$$
 1. 5 × 10⁶ m/s.

$$\sim 2.5 \times 10^6$$
 m/s.

$$\times$$
 3 2 × 10⁶ m/s.

$$\times$$
 4. 7.5 × 10⁶ m/s.

Question Type: MCQ

Question ID : 37135112741 Option 1 ID : 37135150962 Option 2 ID : 37135150963 Option 3 ID : 37135150964 Option 4 ID : 37135150961

Status: Answered



Q.29

In suspended type of moving coil galvanometer

Ans

- ★ 1 coil is stationary.
- ✓₂ magnet is stationary.
- x 3 magnet and coil are stationary.
- ×4 magnet and coil are moving.

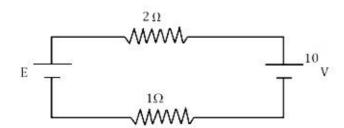
Question Type : MCQ

Question ID : 37135112715 Option 1 ID : 37135150858 Option 2 ID : 37135150857 Option 3 ID : 37135150860 Option 4 ID : 37135150859

Status : Answered



Q.30
A current of 3 A flows through the following circuit in anticlockwise direction as well as in clockwise direction. The value of E respectively is



Ans

× 1 3 V , 7 V

× 2 4 V , 8 V

× 3. 6 V , 10 V

✓ 4 1 V , 19 V

Question Type : MCQ

Question ID : 37135112704 Option 1 ID : 37135150816 Option 2 ID : 37135150814 Option 3 ID : 37135150813 Option 4 ID : 37135150815

Status: Answered



Q.31 The relation between force 'F' and density 'd' is $F \propto x/\sqrt{d}$. The dimensions of 'x'

are

Ans

$$I = \begin{bmatrix} L^{-\frac{1}{2}} & M^{\frac{3}{2}} & T^{-2} \end{bmatrix}$$

$$\times_2$$
 [L⁻² $M^{\frac{3}{2}}$ $T^{\frac{1}{2}}$]

$$\times_3$$
 [$L^2 M^{\frac{1}{2}} T^{\frac{3}{2}}$]

$$\times_4 \left[L^{\frac{1}{2}} M^{\frac{3}{2}} T^{-2} \right]$$

Question Type: MCQ

Question ID : 37135112705 Option 1 ID : 37135150819 Option 2 ID : 37135150820 Option 3 ID : 37135150818 Option 4 ID : 37135150817 Status : Answered



Q.32 In balanced metre bridge 5 Ω is connected in the left gap and R Ω in the right gap.

When R Ω is shunted with an equal resistance, the new balance point is at 1-6 ℓ_1

where ' ℓ_1 ' is the earlier balancing length. The value of ' ℓ_1 ' is

Ans



× 2 40 cm

× 3. 35 cm

×4. 30 cm

Question Type: MCQ

Question ID: 37135112734 Option 1 ID: 37135150933 Option 2 ID: 37135150936 Option 3 ID: 37135150935 Option 4 ID: 37135150934

Status : Answered



Q.33 Electric field intensity at a point outside uniformly charged thin infinite plane sheet is 'E1'. The electric field intensity at a point near and outside the surface of a positively charged conductor of any shape is ${}^{\prime}E_{2}{}^{\prime}$. The relation between magnitude of E_1 and E_2 is (assume air as the medium)

Ans

$$E_1 = E_2$$

$$2E_1 = E_2$$

$$E_1 = 2E_2$$
 $E_1 = 4E_2$

$$\times_4$$
 E₁ = 4E₂

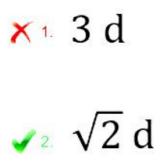
Question Type: MCQ

Question ID: 37135112712 Option 1 ID: 37135150845 Option 2 ID: 37135150847 Option 3 ID: 37135150846 Option 4 ID: 37135150848

Status: Answered

 $\textbf{Q.34} \quad In \ communication \ with \ the \ help \ of \ antenna \ , the \ range \ covered \ (for \ the \ line \ of \ sight$ propagation) is initially 'd'. If the height of antenna is doubled, the range covered would become

Ans



× 3. 4 d

×4. 2 d

Question Type : MCQ

Question ID: 37135112710 Option 1 ID: 37135150839 Option 2 ID: 37135150837 Option 3 ID: 37135150840 Option 4 ID: 37135150838 Status: Answered



Q.35 A body of mass 'm' is moving along a circle of radius 'r' with linear speed 'V'. Now,

to change the linear speed to $\frac{V}{2}$ and to move it along the circle of radius '4r',

required change in the centripetal force of the body is

Ans

- \checkmark decrease by $\frac{15}{16}$
- \times increase by $\frac{11}{16}$
- \times increase by $\frac{9}{16}$
- \times 4 decrease by $\frac{5}{16}$

Question Type: MCQ

Option 1 ID : 37135112726 Option 1 ID : 37135150902 Option 2 ID : 37135150901 Option 3 ID : 37135150904

Option 4 ID : 37135150903 Status : Answered

Q.36

Pascal's law is not applied in

Ans

- 🗙 1. a hydraulic jack.
- ×2 hydraulic breaks.
- x a hydraulic press.
- an autuomiser.

Question Type: MCQ

Question ID : 37135112722
Option 1 ID : 37135150888
Option 2 ID : 37135150887
Option 3 ID : 37135150886
Option 4 ID : 37135150885
Status : Answered



Q.37 A small mass 'm' is suspended at the end of a wire having (negligible mass) length 'L' and cross-sectional area 'A'. The frequency of oscillation for the S.H.M. along the vertical line is Y = Young's modulus of material of the wire

Ans

$$\times \frac{1}{2\pi} \left[\frac{\text{YAL}}{\text{m}} \right]^{\frac{1}{2}}$$

$$\frac{1}{2\pi} \left[\frac{\text{YA}}{\text{mL}} \right]^{\frac{1}{2}}$$

$$\times$$
 3. $\frac{1}{2\pi} \left[\frac{mA}{YL} \right]^{\frac{1}{2}}$

$$\times \frac{1}{2\pi} \left[\frac{\text{YL}}{\text{mA}} \right]^{\frac{1}{2}}$$

Question Type: MCQ

Option 1 ID: 37135112746
Option 1 ID: 37135150983
Option 2 ID: 37135150981
Option 3 ID: 37135150984
Option 4 ID: 37135150982
Status: Answered

A uniform wire has length 'L' and weight 'W'. One end of the wire is attached rigidly to a point in the roof and weight 'W₁' is suspended from its lower end. If 'A' is the cross-sectional area of the wire then the stress in the wire at a height $\frac{3L}{4}$ from its lower end is

Ans

$$\frac{4W_1 + 3W}{4A}$$

$$\times_{2.} \frac{3W_1 - 4W}{2A}$$

$$\frac{3W_1 + 4W}{2A}$$

$$\frac{4W_1 - 3W}{4A}$$

Question Type : MCQ

Question ID: 37135112740
Option 1 ID: 37135150960
Option 2 ID: 37135150958
Option 3 ID: 37135150957
Option 4 ID: 37135150959
Status: Answered



For an ideal gas, if the ratio of Molar specific heats $\gamma=1.4$, then the specific heat at constant pressure C_p , specific heat at constant volume C_v and corresponding molecule are respectively

Ans

$$\times \frac{5}{2}$$
 R, $\frac{3}{2}$ R, monoatomic.

$$\times \frac{9}{2}$$
 R, $\frac{7}{2}$ R, polyatomic.

X 3.

$$\frac{7}{2}$$
R, $\frac{5}{2}$ R, non-rigid diatomic.

$$\frac{7}{2}$$
 R, $\frac{5}{2}$ R, rigid diatomic.

Question Type: MCQ

Question ID: 37135112739
Option 1 ID: 37135150953
Option 2 ID: 37135150956
Option 3 ID: 37135150954
Option 4 ID: 37135150955
Status: Answered



The depth of an ocean is 2000m. The compressibility of water is 45×10^{-11} m²/N and density of water is 10^3 kg/m³. At the bottom of the ocean, the fractional compression of water will be $(g=10 \text{ m/s}^2)$

Ans

$$\times$$
 1 6 × 10⁻³

$$\checkmark$$
 3. 9 × 10⁻³

$$\times 4.3 \times 10^{-3}$$

Question Type: MCQ

Question ID : 37135112747
Option 1 ID : 37135150986
Option 2 ID : 37135150988
Option 3 ID : 37135150985
Option 4 ID : 37135150987
Status : Answered

Q.41 An ideal gas occupies a volume 'V' at a pressure 'P' and absolute temperature T.

The mass of each molecule is 'm'. If ' K_B ' is the Boltzmann's constant, then the density of gas is given by expression

Ans

$$\times$$
 1. $\frac{K_B \cdot T}{P \cdot m}$

$$\times_2 \frac{3K_B \cdot T}{2P \cdot m}$$

$$\times$$
 3. $\frac{P.m}{2 K_B.T}$

$$\begin{array}{c} P. m \\ \overline{K_B. T} \end{array}$$

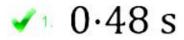
Question Type : MCQ

Question ID : 37135112732 Option 1 ID : 37135150928 Option 2 ID : 37135150927 Option 3 ID : 37135150926 Option 4 ID : 37135150925 Status : Answered



A body performs S.H.M. due to force ' F_1 ', with time period 0.8 s. If force is changed to ' F_2 ', it executes S.H.M. with time period 0.6 s. Now both the forces act simultaneously in the same direction on the same body. New periodic time is

Ans



× 2 0.24 s

× 3. 0·12 s

×4. 0.36 s

Question Type: MCQ

Question ID: 37135112728
Option 1 ID: 37135150912
Option 2 ID: 37135150910
Option 3 ID: 37135150909
Option 4 ID: 37135150911
Status: Answered



Q.43 A smooth sphere of mass 'M' moving with velocity 'u' directly collides elastically with another sphere of mass 'm' at rest. After collision, their final velocities are V' and V respectively. The value of V is given by

Ans

$$\frac{2 \text{ u}}{1 + \frac{\text{M}}{\text{m}}}$$

$$\times_2 \frac{2 \text{ u m}}{\text{M}}$$

$$\frac{2 \text{ u}}{1 + \frac{\text{m}}{\text{M}}}$$

$$\times$$
 4. $\frac{2 \text{ u M}}{\text{m}}$

Question Type : MCQ

Question ID : 37135112744
Option 1 ID : 37135150976
Option 2 ID : 37135150974
Option 3 ID : 37135150975
Option 4 ID : 37135150973
Status : Answered



What is the stopping potential, when a metal surface with work function 1.2 eV is

illuminated with light of energy 3 eV?

Ans

× 1. 2·0 V

× 2. 1·2 V

× 3. 1·4 V

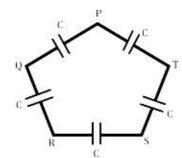
✓4 1.8 V

Question Type : MCQ

Question ID : 37135112702 Option 1 ID : 37135150808 Option 2 ID : 37135150805 Option 3 ID : 37135150806 Option 4 ID : 37135150807

Status : Answered

Five capacitors each of capacitance 'C' are connected as shown in the figure. The ratio of equivalent capacitance between P and R and the equivalent capacitance between P and Q is



Ans

✓ 1 2 : 3

X 2. 1:1

× 3. 3:1

× 4. 5:2

Question Type : MCQ

Question ID : 37135112706 Option 1 ID : 37135150823 Option 2 ID : 37135150824

Option 3 ID : **37135150821** Option 4 ID : **37135150822**

Status: Answered

Q.46 When a beam of unpolarised monochromatic light is incident on a plane glass plate at a polarising angle, then which one of the following statements is correct?

Ans



Reflected and refracted rays are completely polarised with their planes of polarisation perpendicular to each other.



Reflected light is partially polarised but refracted light is plane polarised.



Reflected and refracted rays are completely polarised with their planes of polarisation parallel to each other.



Reflected light is plane polarised light but transmitted light is partially polarised.

Question Type : MCQ

Option 1 ID : 37135112724 Option 1 ID : 37135150894 Option 2 ID : 37135150896 Option 3 ID : 37135150893 Option 4 ID : 37135150895

Status: Answered



Q.47 A note produces 4 beat/s with a tuning fork of frequency 510 Hz and 6 beat/s with

a fork of frequency 512 Hz. The frequency of the note is

Ans

✓ 506 Hz

× 2. 514 Hz

× 3. 518 Hz

× 4 510 Hz

Question Type : MCQ

Question ID : 37135112749
Option 1 ID : 37135150996
Option 2 ID : 37135150994
Option 3 ID : 37135150993
Option 4 ID : 37135150995
Status : Answered



According to Bohr's postulate, the centripetal force (F) necessary for the electron of mass 'm' in a hydrogen atom to revolve in n^{th} circular orbit round the nucleus , as the centre , is given by

[e = charge on electron, h = Planck's constant, $\epsilon_0 = permittivity of free space$]

Ans

$$\times_{1} \frac{\pi m^{2} e^{6}}{4 \in_{0}^{3} h^{4} n^{2}}$$

$$\sqrt{2} \frac{\pi m^2 e^6}{4 \in_0^3 h^4 n^4}$$

$$\times 3. \frac{\pi m^2 e^4}{4 \in _0^2 h^4 n^4}$$

$$\frac{\pi m e^4}{8 \in_0^2 h^2 n^2}$$

Question Type : MCQ

Question ID: 37135112745 Option 1 ID: 37135150979 Option 2 ID: 37135150977 Option 3 ID: 37135150978 Option 4 ID: 37135150980

Status : Answered

Q.49 A fix number of spherical drops of a liquid of radius 'r' coalesce to form a large drop

of radius 'R' and volume 'V'. If 'T' is the surface tension then energy

is neither released nor absorbed.

✓ 3 VT
$$\left(\frac{1}{r} - \frac{1}{R}\right)$$
 is released.

$$\times$$
 3. 4 VT $\left(\frac{1}{r} - \frac{1}{R}\right)$ is released.

$$\times$$
 4 3 VT $\left(\frac{1}{r} - \frac{1}{R}\right)$ is absorbed.

Question Type : MCQ

Question ID: 37135112717

Option 1 ID: 37135150868

Option 2 ID: 37135150867 Option 3 ID: 37135150866

Option 4 ID: 37135150865

Status: Answered



 $egin{align*} \textbf{Q.50} \\ \textbf{A microscope will have maximum resoving power, if to illuminate the specimen, it} \\ \textbf{uses light of} \\ \end{array}$

Ans

- × red colour.
- x2 green colour.
- x 3 yellow colour.
- ✓ ⁴ blue colour.

Question Type : MCQ

Question ID: 37135112736
Option 1 ID: 37135150941
Option 2 ID: 37135150943
Option 3 ID: 37135150942
Option 4 ID: 37135150944
Status: Answered

Chosen Option: 1

Postball Chemistry

 $^{Q.1}$ Which of the following metals reacts with dilute H_2SO_4 ?

Ans

- 🗸 : Fe
- 🗙 2. Bi
- 🗙 3. Cu
- X4. Hg

Question Type : MCQ

Question ID: 37135112753
Option 1 ID: 37135151010
Option 2 ID: 37135151011
Option 3 ID: 37135151009
Option 4 ID: 37135151012
Status: Answered



Q.2 Which of the following is NOT a tranquilizer?

Ans

- × 1 Iproniazid
- × 2. Serotonin
- × 3. Veronal
- Prontosil

Question Type: MCQ

Question ID : 37135112776
Option 1 ID : 37135151104
Option 2 ID : 37135151102
Option 3 ID : 37135151101
Option 4 ID : 37135151103
Status : Answered

Chosen Option: 3

Q.3 Which of the following elements is refined by zone refining?

Ans

- 🗸 Gallium
- X 2 Bismuth
- ×₃. Copper
- X4 Zinc

Question Type : MCQ

Question ID: 37135112769
Option 1 ID: 37135151073
Option 2 ID: 37135151076
Option 3 ID: 37135151074
Option 4 ID: 37135151075
Status: Answered



Q.4 Which of the following equations shows the relationship between heat of reaction at constant pressure and heat of reaction at constant volume if the temperature is not constant?

Ans

$$\times \cdot \Delta H - \Delta n = \Delta URT$$

$$\checkmark$$
₂ $\Delta H - \Delta U = \Delta nRT$

$$\times$$
 3. $\Delta H = \Delta nRT$

$$\times$$
 4. $\Delta H = \Delta U - RT$

Question Type : MCQ

Question ID : 37135112794
Option 1 ID : 37135151176
Option 2 ID : 37135151173
Option 3 ID : 37135151174
Option 4 ID : 37135151175
Status : Answered

Chosen Option: 2

Q.5 The rate of first order reaction $A \to B$ is 6.3×10^{-6} Ms⁻¹. if |A| = 0.3 M, what is the rate constant of the reaction?

Ans

$$\checkmark$$
 2·1 × 10⁻⁵ s⁻¹

$$\times 2 \cdot 1.2 \times 10^{-5} \text{ s}^{-1}$$

$$\times$$
 3. $1.3 \times 10^{-5} \text{ s}^{-1}$

$$\times 4.1.6 \times 10^{-5} \,\mathrm{s}^{-1}$$

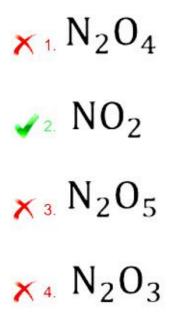
Question Type: MCQ

Question ID: 37135112781
Option 1 ID: 37135151123
Option 2 ID: 37135151121
Option 3 ID: 37135151122
Option 4 ID: 37135151124
Status: Answered



Which among the following oxides of nitrogen, the nitrogen atom contains one unpaired electron?

Ans



Question Type : MCQ

Question ID: 37135112763 Option 1 ID: 37135151051 Option 2 ID: 37135151049 Option 3 ID: 37135151052 Option 4 ID: 37135151050 Status: Answered

Chosen Option: 2

Q.7 Which among the following compounds is obtained when benzene is treated with CO and HCl in presence of catalyst anhydrous AlCl3 and Cu2Cl2 under high pressure?

Ans

- × 1. Toluene
- 🗶 2 Benzoic acid
- Benzaldehyde
- × 4. Acetophenone

Question Type: MCQ

Question ID: 37135112796 Option 1 ID: 37135151184 Option 2 ID: 37135151183 Option 3 ID: 37135151181 Option 4 ID: 37135151182 Status: Answered



Q.8 Which among the following is a first oxidation product of butan-2-ol?

Ans

- 🗙 1. Butanal
- 🗶 2. Butanoic acid
- X3. Propanoic acid and CO2
- 🗸 Butan-2-one

Question Type: MCQ

Question ID: 37135112786
Option 1 ID: 37135151141
Option 2 ID: 37135151142
Option 3 ID: 37135151144
Option 4 ID: 37135151143
Status: Answered

Chosen Option: 4

Q.9 Which among the following polymers is an example of addition polymer?

Ans

- X 1 Dacron
- 🔀 Ureaformaldehyde polymer
- 🗙 3. Nylon-6
- Polythene

Question Type: MCQ

Question ID : 37135112790
Option 1 ID : 37135151159
Option 2 ID : 37135151160
Option 3 ID : 37135151158
Option 4 ID : 37135151157
Status : Answered



Q.10 Which of the following compounds is obtained when C₂H₅NH₂ is treated with excess (CH₃CO)₂O in presence of pyridine?

Ans

- $_{\bullet}$ C₂H₅N(COCH₃)₂
- $\times_2 (C_2H_5)_2 NH$
- X3 C₂H₅COOH
- × ₄ C₂H₅NHCOCH₃

Question Type: MCQ

Question ID : 37135112779
Option 1 ID : 37135151116
Option 2 ID : 37135151114
Option 3 ID : 37135151113
Option 4 ID : 37135151115
Status : Answered

Chosen Option: 1

Q.11 Dumas method is used for estimation of

Ans

- 🗸 nitrogen
- x 2 sulphur
- 🗙 3. oxygen
- 🔀 4. carbon

Question Type : MCQ

Question ID: 37135112762
Option 1 ID: 37135151046
Option 2 ID: 37135151048
Option 3 ID: 37135151047
Option 4 ID: 37135151045
Status: Answered



 $^{Q.12}$ Which of the following is \underline{NOT} correct in hybridisation?



There should be very little difference in energy of involving orbitals



The shape of hybrid orbitals is same as that of atomic orbitals

X 3.

The number of hybrid gbitals formed is equal to number of atomic orbitals involved in hybridisation



Orbitals of an atom only undergo hybridisation

Question Type : MCQ

Question ID: 37135112791 Option 1 ID: 37135151162 Option 2 ID: 37135151164 Option 3 ID: 37135151163 Option 4 ID: 37135151161 Status: Answered

Chosen Option: 2

Q.13 An element crystallises in bcc structure. The number of unit cells of an element in 4 g of it is (given at mass=40)

Ans



$$\frac{0.1 \times N_A}{2}$$

$$\times_2 2 \times 0 \cdot 1N_A$$

$$\times$$
 3. $0 \cdot 1N_A$

$$\times$$
 4. 2 × N_A

Question Type: MCQ

Question ID: 37135112788 Option 1 ID: 37135151151 Option 2 ID: 37135151150 Option 3 ID: 37135151149 Option 4 ID: 37135151152 Status: Answered



In Merck's method, H₂O₂ is obtained from

Ans

$$\times$$
 1. BaO₂ + H₂SO₄

- $\sqrt{2}$ Na₂O₂ + H₂SO₄
- \times BaO₂ + H₃PO₄
- \times_4 BaO₂ + H₂O + CO₂

Question Type : MCQ

Question ID: 37135112782
Option 1 ID: 37135151125
Option 2 ID: 37135151126
Option 3 ID: 37135151128
Option 4 ID: 37135151127
Status: Answered

Chosen Option: 2

What is the melting point of zinc?

Ans

- × 1. 473 K
- × 2 1193 K
- × 3. 423 K
- ✓4 692 K

Question Type: MCQ

Question ID : 37135112780
Option 1 ID : 37135151119
Option 2 ID : 37135151117
Option 3 ID : 37135151120
Option 4 ID : 37135151118
Status : Answered



Q.16 van't Hoff factor (i) for centimolal solution of K₃ [Fe(CN)₆] is 3·333. What is it's percentage dissociation?

Ans

× 1. 80 %

× 2. 70 %

×3 33·33 %

✓⁴ 77·7 %

Question Type : MCQ

Question ID : 37135112756
Option 1 ID : 37135151024
Option 2 ID : 37135151022
Option 3 ID : 37135151021
Option 4 ID : 37135151023
Status : Answered

Chosen Option: 4

Q.17 The H-H bond energy is 430 kJ mol $^{-1}$ and Cl-Cl bond energy is 240 kJ mol $^{-1}$. Δ_f H for HCl is- 90kJ. Then H-Cl bond energy is

Ans

 \times 360 kJ mol⁻¹

 \times 2 213 kJ mol⁻¹

 \times 3. 180 kJ mol⁻¹

 425 kJ mol^{-1}

Question Type: MCQ

Question ID : 37135112797
Option 1 ID : 37135151186
Option 2 ID : 37135151187
Option 3 ID : 37135151185
Option 4 ID : 37135151188
Status : Answered



Q.18 Which of the following compounds is used to avoid oxidation in food?

Ans

- O- hydroxy benzoic acid
- X2. Acetyl salicylic acid
- ★ 3. Ethyl Salicylate
- Butylated Hydroxy Anisole

Question Type: MCQ

Question ID : 37135112784
Option 1 ID : 37135151133
Option 2 ID : 37135151134
Option 3 ID : 37135151136
Option 4 ID : 37135151135
Status : Answered

Chosen Option: 3

Q.19 The volume of 400 cm³ chlorine gas at 400 mm of Hg is decreased to 200 cm³ at constant temperature. What is the new pressure of gas?

Ans

- √ 800 mm of Hg
- × 2 200 mm of Hg
- × 3. 1600 mm of Hg
- **×**₄ 600 mm of Hg

Question Type : MCQ

Question ID : 37135112764
Option 1 ID : 37135151055
Option 2 ID : 37135151053
Option 3 ID : 37135151056
Option 4 ID : 37135151054
Status : Answered



Q.20 Identify the polymer from following, that contains amide linkage

Ans

- × 1 Terylene
- × 2. PHBV
- √₃ Nylon-6,6
- ×4. Dextron

Question Type : MCQ

Question ID: 37135112800
Option 1 ID: 37135151197
Option 2 ID: 37135151200
Option 3 ID: 37135151198
Option 4 ID: 37135151199
Status: Answered

Chosen Option: 3

Q.21 Which of the following solution will have highest freezing point depression?

Ans

- × 1 M glucose
- 🗙 2. 1 M sucrose
- 🗙 3. 1 M urea
- ✓₄ 1 M KCl

Question Type: MCQ

Question ID : 37135112768
Option 1 ID : 37135151070
Option 2 ID : 37135151072
Option 3 ID : 37135151069
Option 4 ID : 37135151071
Status : Answered



What is the bond length of C-H bond in alkanes?

- × 154 pm
- x 2 120 pm
- 🗙 3. 133 pm
- 🗸 112 pm

Question Type: MCQ

Question ID: 37135112751 Option 1 ID: 37135151001 Option 2 ID: 37135151004 Option 3 ID: 37135151003 Option 4 ID: 37135151002

Status: Answered Chosen Option: 1

Q.23

What is molecular formula of allyl bromide?

Ans

- \times 1. C_2H_4Br
- \times_2 C_2H_3Br C_3H_5Br C_3H_6Br

Question Type: MCQ

Question ID: 37135112766 Option 1 ID: 37135151062 Option 2 ID: 37135151061 Option 3 ID: 37135151063 Option 4 ID: 37135151064 Status: Answered



Q.24 Which of following regents is used to avoid further oxidation of aldehydes?

Ans

- ✓ C₅H₅NH⁺CrO₃Cl
- \times_2 K₂Cr₂O₇/dil. H₂SO₄
- \times_3 dil. HNO₃
- ×4 CrO₃

Question Type: MCQ

Question ID : 37135112757
Option 1 ID : 37135151026
Option 2 ID : 37135151025
Option 3 ID : 37135151027
Option 4 ID : 37135151028
Status : Answered

Chosen Option: 1

Q.25 Copper crystallises as face centered cubic lattice, with edge length of unit cell 361 pm. Calculate the radius of copper atom.

Ans

- × 108 ⋅ 6 pm
- ✓2 127 · 65 pm
- ×₃ 181 · 6 pm
- ×4 157 · 6 pm

Question Type: MCQ

Question ID: 37135112798
Option 1 ID: 37135151189
Option 2 ID: 37135151190
Option 3 ID: 37135151192
Option 4 ID: 37135151191
Status: Answered



Q.26 Which of the following statements is NOT true for glyceraldehyde?

Ans

- X1 It is a sugar molecule.
- × 2 It is optically active.



It contains two asymmetric carbon atoms.



It has carbonyl and hydroxyl group.

Question Type : MCQ

Question ID : 37135112773
Option 1 ID : 37135151092
Option 2 ID : 37135151090
Option 3 ID : 37135151091
Option 4 ID : 37135151089
Status : Answered

Chosen Option: 3

Q.27 Aniline reacts with bromine water at room temperature to give

Ans

- × 1. 3- Bromoaniline
- 🗶 2 Bromoaniline
- x 3. 4- Bromoaniline
- 2,4,6 tribromoaniline

Question Type: MCQ

Option 1 ID: 37135112758
Option 1 ID: 37135151030
Option 2 ID: 37135151029
Option 3 ID: 37135151031
Option 4 ID: 37135151032

Status : Answered



Q.28 Which among the following electrical properties has SI unit siemens per meter,

Ans

- × 1. Conductance
- Conductivity
- × 3. Resistance
- × 4. Resistivity

Question Type: MCQ

Question ID : 37135112765 Option 1 ID : 37135151059 Option 2 ID : 37135151060 Option 3 ID : 37135151057 Option 4 ID : 37135151058 Status : Answered

Chosen Option: 1

Q.29 Identify the product 'B' in following reaction.

2, 2-Dichloropropane
$$\frac{aq.KOH}{\Delta}$$
 \rightarrow A $\frac{i) Mg,Benzene}{ii) H+}$ B

Ans

- 🗙 1. Propanal
- × 2. Propanone
- x 3. Isopropyl magnesium chloride
- 🗸 Pinacol

Question Type: MCQ

Question ID : 37135112799
Option 1 ID : 37135151195
Option 2 ID : 37135151194
Option 3 ID : 37135151193
Option 4 ID : 37135151196
Status : Answered



Q.30 Which of the following is the strongest reducing agent?

Ans

- × 1. Na
- × 2. Mg
- X 4. Ca

Question Type : MCQ

Question ID : 37135112774
Option 1 ID : 37135151095
Option 2 ID : 37135151094
Option 3 ID : 37135151096
Option 4 ID : 37135151093
Status : Answered

Chosen Option: 3

Q.31 Which of the following elements has six unpaired electrons in observed electronic configuration?

Ans

$$\times$$
 4 Mn (Z=25)

Question Type : MCQ

Question ID : 37135112770
Option 1 ID : 37135151080
Option 2 ID : 37135151079
Option 3 ID : 37135151078
Option 4 ID : 37135151077
Status : Answered



Q.32 Aluminium crystallises in face centred cubic structure, having atomic radius 125 pm. The edge length of the unit cell of aluminium is

Ans

×₁ 253·5 pm

- ✓2 353·5 pm
- × 3. 465·0 pm
- ×4. 250·0 pm

Question Type: MCQ

Question ID: 37135112759
Option 1 ID: 37135151036
Option 2 ID: 37135151033
Option 3 ID: 37135151034
Option 4 ID: 37135151035
Status: Answered

Chosen Option: 2

Q.33 Which of the following statements is true for pyran?

Ans

X 1.

It is saturated aliphatic compound

x 2. It is homocyclic compound

3

It is heterocyclic with oxygen atom in ring

X 4.

Molecular formula of pyran is C₅H₅S

Question Type: MCQ

Question ID : 37135112760
Option 1 ID : 37135151037
Option 2 ID : 37135151038
Option 3 ID : 37135151039
Option 4 ID : 37135151040
Status : Answered



Q.34 Which of the following is <u>NOT</u> found in hybridization?

 \times Formation of σ bonds

X 2.

Mixing and recasting of atomic orbitals

- x 3. Excitation of electrons
- Loss and gain of electron

Question Type: MCQ

Question ID: 37135112792 Option 1 ID: 37135151168 Option 2 ID: 37135151166 Option 3 ID: 37135151165 Option 4 ID: 37135151167 Status: Answered

Chosen Option: 4

When slaked lime is passed through excess CO2, it forms

- X₁. CaCO₃
- X 2 CaCl₂
- \sim Ca(HCO₃)₂ \sim Ca₂HCO₃

Question Type : MCQ

Option 1 ID: 37135151081 Option 2 ID: 37135151082 Option 3 ID: 37135151083 Option 4 ID: 37135151084

Status: Answered Chosen Option: 3



Q.36 What is the number of moles of silver chloride precipitated when excess of aqueous silver nitrate is treated with [Co(NH₃)₄Cl₂]Cl?

- **√** 1.0 mole
- × 2. 3.0 mole
- × 3. 2.0 mole
- × 4. 4.0 mole

Question Type: MCQ

Question ID: 37135112793 Option 1 ID: 37135151172 Option 2 ID: 37135151170 Option 3 ID: 37135151171 Option 4 ID: 37135151169 Status: Answered

Chosen Option: 1

What is oxidation state of iron in potassium ferrate?

Ans

$$\times$$
 2. +4

$$\times 4. +2$$

Question Type: MCQ

Question ID: 37135112783 Option 1 ID: 37135151130 Option 2 ID : 37135151131 Option 3 ID: 37135151132 Option 4 ID: 37135151129 Status: Answered



Q.38 Which among the following is <u>NOT</u> an octahedral complex?

- $\times_1 [lr(C_2O_4)_2Cl_2]^{3-}$
- \times_2 [CoCl₂(en)₂]⁺
- \times_3 [Co(en)₂ (NO₃)₂]⁺
- \checkmark ₄ [Pt (NH₃)₂Cl₂]

Question Type: MCQ

Question ID: 37135112785 Option 1 ID: 37135151139 Option 2 ID: 37135151137 Option 3 ID: 37135151138 Option 4 ID: 37135151140 Status: Answered

Chosen Option: 4

What is the number of hydroxyl groups present in lactic acid?

Ans

- × 1 Zero
- X 2 Three
- × 3. Two

 value one

Question Type: MCQ

Question ID: 37135112775 Option 1 ID: 37135151097 Option 2 ID: 37135151100 Option 3 ID: 37135151099 Option 4 ID: 37135151098 Status: Answered



Which of the following alcohols is \underline{NOT} having C_{SP^3} – OH bond?

Ans

- × 1 Phenylmethanol
- ×2 2 Methyl propan 2 ol
- 🗙 3. Propan 2 ol
- Vinyl alcohol

Question Type: MCQ

Question ID: 37135112767
Option 1 ID: 37135151067
Option 2 ID: 37135151066
Option 3 ID: 37135151065
Option 4 ID: 37135151068
Status: Answered

Chosen Option: 4

Q.41 0.0210 M solution of N_2O_5 is allowed to decompose at 43°C. How long will it take to reduce to 0.0150M? (Given $k = 6.0 \times 10^{-4} \text{ sec}^{-1}$)

Ans

- × 1. 5600 sec
- × 2 360·0 sec
- ✓3 560·0 sec
- ×4. 3364 sec

Question Type: MCQ

Question ID : 37135112761
Option 1 ID : 37135151042
Option 2 ID : 37135151043
Option 3 ID : 37135151041
Option 4 ID : 37135151044
Status : Answered



Q.42 How many tertiary carbon atoms and primary carbon atoms respectively are present in 2-iodo-3, 3- dimethyl pentane?

Ans

- √2. 0, 4
- × 3. 2, 3
- × 4. 1, 3

Question Type : MCQ

Question ID : 37135112754
Option 1 ID : 37135151016
Option 2 ID : 37135151015
Option 3 ID : 37135151014
Option 4 ID : 37135151013
Status : Answered

Chosen Option : 2

What is the standard emf of following cell?

$$Ni_{(s)}\left|Ni_{(aq)}^{2+}\right|\left|Au_{(aq)}^{3+}\left|Au\left(s\right)\right|$$

$$(1M)$$
 $(1M)$

if
$$E_{Ni}^{\circ} = -0.25V$$
, $E_{Au}^{\circ} = 1.50V$

Ans

$$\times 1 - 1.25V$$

$$\times$$
 4. -1.75 V

Question Type : MCQ

Question ID: 37135112755 Option 1 ID: 37135151019 Option 2 ID: 37135151018 Option 3 ID: 37135151017 Option 4 ID: 37135151020

Status: Answered



Q.44 What is the quantity of gold chloride obtained when 4.5 g gold and 2.1 g chlorine when sealed in a tube and heated at 150° C? (At.masses of Au = 196.97, Cl = 35.45 u)

Ans

× 1.4.5 g

- × 2. 4·8 g
- **√**₃ 6·07 g
- ×4. 20·7 g

Question Type : MCQ

Option 1 ID : 37135112752 Option 1 ID : 37135151007 Option 2 ID : 37135151008 Option 3 ID : 37135151005 Option 4 ID : 37135151006

Status : Answered

Chosen Option: 3

Q.45 Identify the product B in following conversion.

Chlorobenzene +
$$H_2O \xrightarrow{Cu,673K} A \xrightarrow{conc.H_2SO_4} B$$

Ans

- **1**1.
- 4 Hydroxybenzene sulphonic acid
- X2 Benzene sulphonic acid
- **X** 3.
- 3 Hydroxybenzene sulphonic acid
- X 4.
- 2 Hydroxybenzene sulphonic acid

Question Type: MCQ

Question ID : 37135112777
Option 1 ID : 37135151108
Option 2 ID : 37135151105
Option 3 ID : 37135151107
Option 4 ID : 37135151106
Status : Answered



Q.46 If $C_{(s)} + O_{2_{(g)}} \to CO_{2_{(g)}} \Delta H = -396 \text{ kJ mol}^{-1}$, calculate heat liberated during formation of $0.154 \text{ kg of } CO_2$?

Ans

- **√** 1386·0 kJ
- × 2 346.5 kJ
- × 3. 693·0 kJ
- × 4 1039 · 5 kJ

Question Type : MCQ

Question ID: 37135112787 Option 1 ID: 37135151148 Option 2 ID: 37135151145 Option 3 ID: 37135151146 Option 4 ID: 37135151147 Status: Answered

Chosen Option : 1

Q.47 What products are expected from the disproportionation reaction of orthophosphorus acid?

Ans

$$H_3PO_3 + PH_3$$

$$\checkmark$$
₂ $H_3PO_4 + PH_3$

$$\times_3$$
 PH₃ + P₂O₅

$$H_3PO_3 + P_2O_5$$

Question Type: MCQ

Question ID: 37135112772
Option 1 ID: 37135151088
Option 2 ID: 37135151085
Option 3 ID: 37135151087
Option 4 ID: 37135151086
Status: Answered



Q.48 6.022×10^{20} molecules of urea are present in 100 mL of it's solution. The concentration of solution is

Ans

× 1. 0·10 M

× 2 0·02 M

√ 3. 0·01 M

× 4. 0.001 M

Question Type : MCQ

Question ID: 37135112778
Option 1 ID: 37135151112
Option 2 ID: 37135151111
Option 3 ID: 37135151110
Option 4 ID: 37135151109
Status: Answered

Chosen Option: 3

Pumice stone is an example of

Ans

×₁ Solid sol

X2 Emulsion

× 3. Aerosol

Solid foam

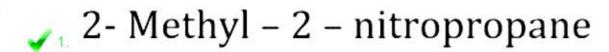
Question Type : MCQ

Question ID: 37135112795
Option 1 ID: 37135151179
Option 2 ID: 37135151177
Option 3 ID: 37135151178
Option 4 ID: 37135151180
Status: Answered



Q.50 Which of the following nitroalkane does not react with nitrous acid?

Ans



- × 2. 2- Nitropropane
- × 3. Nitroethane
- ×4. 1- Nitropropane

Question Type: MCQ

Question ID: 37135112789
Option 1 ID: 37135151156
Option 2 ID: 37135151155
Option 3 ID: 37135151153
Option 4 ID: 37135151154

Status: Answered

Chosen Option: 1

Section Biology



Match the Column-I with Column-II and select the correct option.

Column - I

Column - II

A. Fibrinogen i) contractions in female reproductive tract

ii) prevent fungal infection B. Fructose

C. Prostaglandins iii) coagulation of semen

D. Lactobacilli in vagina iv) source of energy

Ans X 1.

A- (ii), B- (iii), C-(iv),

D-(i)

X 2.

A- (i), B- (ii), C-(iii),

D-(iv)

A- (iii), B- (iv), C-(i),

D-(ii)

X 4. A- (iv), B- (i), C-(ii),

D-(iii)

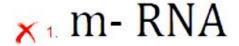
Question Type: MCQ

Question ID: 37135112879 Option 1 ID: 37135151514 Option 2 ID: 37135151513 Option 3 ID : 37135151515 Option 4 ID: 37135151516

Status: Answered

Q.2 Which one of the following molecule is NOT needed during translation in protein synthesis?

Ans





× 3. r- RNA

×4. t- RNA

Question Type : MCQ

Question ID: 37135112813 Option 1 ID: 37135151250 Option 2 ID: 37135151249 Option 3 ID: 37135151251 Option 4 ID: 37135151252 Status: Answered

Chosen Option: 2

Q.3 The process of non-cyclic photophosphorylation occurs in_

Ans X 1.

aerobic conditions, high CO2 conc. and low light intensity.



anaerobic conditions, high CO2 conc. and enough light intensity.



aerobic conditions, high CO2 conc. and enough light intensity.



aerobic conditions, low CO2 conc. and enough light intensity.

Question Type: MCQ

Question ID: 37135112817 Option 1 ID: 37135151267 Option 2 ID: 37135151265 Option 3 ID: 37135151268 Option 4 ID: 37135151266 Status: Answered



Renin is secreted by the cells of ______.

Ans

- JG apparatus
- ×₂ collecting tubule
- x₃ collecting duct
- × 4. PCT

Question Type : MCQ

Question ID : 37135112892
Option 1 ID : 37135151568
Option 2 ID : 37135151567
Option 3 ID : 37135151566
Option 4 ID : 37135151565
Status : Answered

Chosen Option: 4

Q.5 A molecule of chlorophyll which acts as reaction centre in pigment system – II

is _____.

Ans

$$\times 1 P - 650$$

$$\times_2 P - 700$$

$$\times$$
 3. P - 673

Question Type : MCQ

Question ID: 37135112840
Option 1 ID: 37135151360
Option 2 ID: 37135151357
Option 3 ID: 37135151359
Option 4 ID: 37135151358
Status: Answered



Q.6 How many base pairs are present in a segment of m-RNA having 100 nucleotides?

Ans

- × 1. 100
- × 2. 50
- **√**3. 00
- ×4. 25

Question Type : MCQ

Question ID : 37135112806 Option 1 ID : 37135151221 Option 2 ID : 37135151222 Option 3 ID : 37135151224 Option 4 ID : 37135151223

Status : Answered Chosen Option : 2

Q.7 Following are prokaryotic cells EXCEPT______.

Ans

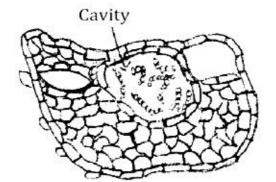
- X1 Anabaena
- X 2 Streptococcus
- X 3. Nostoc
- ✓ Paramoecium

Question Type : MCQ

Question ID: 37135112876
Option 1 ID: 37135151502
Option 2 ID: 37135151501
Option 3 ID: 37135151503
Option 4 ID: 37135151504
Status: Answered



Q.8	The figure given below is T.S. of Azolla leaf, the filaments present in the cavity of the
	leaf are of



T.S of Azolla leaf

Ans

- NostocTolypothrix
- **√**₃ Anabaena
- × 4 Oscillatoria

Question Type : MCQ

Question ID: 37135112843 Option 1 ID: 37135151370 Option 2 ID: 37135151372 Option 3 ID: 37135151371 Option 4 ID: 37135151369

Status: Answered



^{Q.9} The average life span of blood platelets is ____ days.

Ans

- \times 1. 3 4
- × 2. 1 3
- × 3. 11 15
- **√**⁴ 5 − 10

Question Type : MCQ

Question ID: 37135112853
Option 1 ID: 37135151411
Option 2 ID: 37135151412
Option 3 ID: 37135151409
Option 4 ID: 37135151410
Status: Answered

Chosen Option: 1

Q.10 What will be the genotype of a carrier individual who shows sickle cell anaemic trait?

Ans

- × 1 Hb^B Hb^B
- ✓2 Hb^A Hb^S
- X 3. HbS HbS
- × 4. Hb^A Hb^A

Question Type : MCQ

Question ID : 37135112838
Option 1 ID : 37135151352
Option 2 ID : 37135151351
Option 3 ID : 37135151350
Option 4 ID : 37135151349
Status : Answered



Q.11 Specialized cells that are sensitive to vibration, pain and tension are called_____.

Ans

- Proprioceptors
- × 2 Baroreceptors
- x statoacoustic receptors
- ★ frigidoreceptors

Question Type: MCQ

Question ID : 37135112870
Option 1 ID : 37135151480
Option 2 ID : 37135151479
Option 3 ID : 37135151478
Option 4 ID : 37135151477
Status : Answered

Chosen Option: 3

Q.12 Fructose is contributed to the semen by _____.

Ans

- seminal vesicles
- × 2 testis
- x 3 prostate gland
- Cowper's gland

Question Type: MCQ

Option 1 ID : 37135112852
Option 1 ID : 37135151406
Option 2 ID : 37135151405
Option 3 ID : 37135151407
Option 4 ID : 37135151408
Status : Answered



What is true about C₄ plants ______.

Ans



C₃ pathway reactions take place in bundle sheath chloroplast and C₄ pathway reactions in mesophyll chloroplast.



Both reactions occur in mesophyll chloroplast.



Both reactions occur in bundle sheath chloroplast.



C₃ pathway reaction take place in mesophyll chloroplast and C₄ pathway reactions in bundle sheath chloroplast.

Question Type : MCQ
Question ID : 37135112823
Option 1 ID : 37135151289
Option 2 ID : 37135151291
Option 3 ID : 37135151292
Option 4 ID : 37135151290

Status : Answered

Chosen Option: 1

Q.14 Proteins attached with a prosthetic group are called _____ proteins.

Ans

- × 1. structural
- × 2 simple
- × 3. contractile
- conjugated

Question Type: MCQ

Question ID: 37135112805 Option 1 ID: 37135151217 Option 2 ID: 37135151220 Option 3 ID: 37135151219 Option 4 ID: 37135151218

Status : Answered



Q.15 The shortest phase of cardiac cycle is ______. Ans 🔀 joint cardiac diastole x 2 ventricular systole x a atrial diastole ✓ atrial systole Question Type: MCQ Question ID: 37135112866 Option 1 ID: 37135151464 Option 2 ID: 37135151463 Option 3 ID: 37135151461 Option 4 ID: 37135151462 Status: Answered Chosen Option: 3 Q.16 Match the Column - I with Column-II and select the correct option Column- I Column- II a) Female banded Krait i) Humulin b) Pancreas from dog ii) DNA sample iii) Insulin extracted and purified c) Hair root of human d) E. coli iv) DNA probe Ans X 1. d-iii b-ii, c-iv, a- i, X 2. d-iv b-i, a- ii, c-iii, **X** 3. d-i b-iv, c-ii, a- iii, d-i b-iii, a- iv, C-II, Question Type: MCQ

Option 1 ID : 37135112890 Option 1 ID : 37135151560 Option 2 ID : 37135151557 Option 3 ID : 37135151558

Option 4 ID : 37135151559 Status : Answered



Q.17 Which one of the following is NOT characteristics of plasmid?



Help bacteria survive and reproduce under unfavourable conditions

- × 2 Double stranded
- ×₃ Self-replicating



Heredity material of bacterium

Question Type: MCQ

Question ID: 37135112804 Option 1 ID: 37135151216 Option 2 ID: 37135151215 Option 3 ID: 37135151214 Option 4 ID: 37135151213 Status: Answered

Chosen Option: 1

Q.18 The subaerial branch which creeps horizontally on soil and helps in vegetative propagation is called_

Ans

- runner
- ×2 offset
- x 3. stolon
- ×4 sucker

Question Type : MCQ

Question ID: 37135112836 Option 1 ID: 37135151342 Option 2 ID: 37135151341 Option 3 ID: 37135151343 Option 4 ID: 37135151344 Status: Answered



Q.19 Who postulated three laws that are known as Mendel's Law of Inheritance based on Mendel's findings?

Ans

- Hugo De Vries
- ✓₂ Karl Correns
- × 3 Johannsen
- **X4** Erich Tschermak

Question Type: MCQ

Question ID: 37135112848
Option 1 ID: 37135151389
Option 2 ID: 37135151391
Option 3 ID: 37135151392
Option 4 ID: 37135151390
Status: Answered

Chosen Option: 3

Q.20 In angiospermic flowers, the filament of stamen is attached to the anther by _____.

Ans

- × placenta
- × 2 hilum
- 🗙 3. funicle
- connective

Question Type : MCQ

Question ID : 37135112807 Option 1 ID : 37135151226 Option 2 ID : 37135151225 Option 3 ID : 37135151228 Option 4 ID : 37135151227 Status : Answered



Q.21 The dead leucocytes are destroyed in the following organs / fluid EXCEPT _____.

Ans

- 🗸 spleen
- ×2 lymph node
- X 3. blood
- X4 liver

Question Type : MCQ

Question ID: 37135112882
Option 1 ID: 37135151525
Option 2 ID: 37135151526
Option 3 ID: 37135151528
Option 4 ID: 37135151527
Status: Answered

Chosen Option: 1

Q.22 A 22 year old girl is about to face interview. She is restless, is sweating and her heart beats have increased. These symptoms are due to increased secretion mainly

of_____

Ans

- * thymosins
- ✓₂ catecholamines
- x 3. aldosterone
- ×4 androgens

Question Type: MCQ

Question ID : 37135112888
Option 1 ID : 37135151552
Option 2 ID : 37135151549
Option 3 ID : 37135151550
Option 4 ID : 37135151551
Status : Answered



Q.23 Water present in the form of hydrated oxides of silicon and aluminium in soil is called _____water.

Ans

- gravitational
- x 2 capillary
- ×₃ hygroscopic
- √ combined

Question Type: MCQ

Question ID : 37135112839
Option 1 ID : 37135151353
Option 2 ID : 37135151356
Option 3 ID : 37135151355
Option 4 ID : 37135151354

Status : Answered Chosen Option : 3

Q.24 With reference to agricultural crop, which of the following are considered as critical

elements?

Ans

- × Mg, Fe, Zn
- × 2 C, H, O
- ✓ 3. N, P, K
- 🔀 Mn, Cl, Ca

Question Type : MCQ

Question ID : 37135112811
Option 1 ID : 37135151244
Option 2 ID : 37135151241
Option 3 ID : 37135151243
Option 4 ID : 37135151242
Status : Answered



Lemurs are found in_____.

Ans

- X 1 Central America
- × 2 East Indies
- Madagascar
- × 4 South Africa

Question Type : MCQ

Question ID: 37135112873
Option 1 ID: 37135151491
Option 2 ID: 37135151489
Option 3 ID: 37135151490
Option 4 ID: 37135151492
Status: Answered

Chosen Option: 1

Q.26 Match the correct phenotype and genotype of *Drosophila* for their wing sizes.

Phenotype

Genotype

- i) Normal wings
- a) vgno
- ii) Nicked wings
- b) vg
- iii) Notched wings
- c) Vg+
- iv) Strap wings
- d) vgst
- v) Vestigeal wing
- e) vgni

Ans



- (i) -e,
- (ii) d,
- (iii) c,
- (iv) b,
- (v) -a

X 2.

- (i) -a,
- (ii) b,
- (iii) c
- (iv) d,
- (v) -e

X 3.

- (i) -d,
- (ii) a,
- (iii) b,
- (iv) e,
- (v) -c

4.

- (i) -c,
- (ii) e,
- (iii) a,
- (iv) d,
- (v) -b

Question Type: MCQ

Question ID: 37135112801
Option 1 ID: 37135151204
Option 2 ID: 37135151203
Option 3 ID: 37135151202
Option 4 ID: 37135151201
Status: Answered

Chosen Option: 2

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Q.27 Cretaceous, Jurassic and Triassic periods are included in the ____era.

Ans

- × Palaeozoic
- ✓₂ Mesozoic
- X 3. Proterozoic
- X4 Cenozoic

Question Type : MCQ

Question ID: 37135112857
Option 1 ID: 37135151427
Option 2 ID: 37135151426
Option 3 ID: 37135151428
Option 4 ID: 37135151425
Status: Answered

Chosen Option: 3

Q.28 Gargi constructed m-RNA in laboratory. Which of the following codons will she have as initiating and terminating the m-RNA respectively.

Ans

- ✓ AUG-UAG
- X2 GUG-UAC
- X 3. UAC-AUG
- × 4 AUG-UCA

Question Type : MCQ

Question ID : 37135112829
Option 1 ID : 37135151315
Option 2 ID : 37135151314
Option 3 ID : 37135151313
Option 4 ID : 37135151316
Status : Answered



With reference to human beings, find out the mis-match pair.



Insemination — Discharge of semen into the vagina of a female.

1 2.

Implantation — Setting of zygote in the endometrium uterus.

X 3.

Menopause —Total arrest of menstrual cycle forever.

X 4.

Menarche—Begining of menstrual cycle for the first time in life.

Question Type : MCQ

Question ID: 37135112884 Option 1 ID: 37135151536 Option 2 ID: 37135151534 Option 3 ID: 37135151533 Option 4 ID: 37135151535 Status: Answered

Chosen Option: 1

Which of the following is NOT involved in glycolysis?

Ans

- ★ Release of water
- X₂ Utilization of ATP
- **X**³ Formation of ATP
- ✓ * Release of CO₂

Question Type: MCQ

Question ID: 37135112808 Option 1 ID: 37135151230 Option 2 ID: 37135151232 Option 3 ID: 37135151229 Option 4 ID: 37135151231 Status: Answered



Q.31 In a population of an organism, allele 'A' has the frequency of 0.7 and allele 'a' has the frequency of 0.3. What is the frequency of homozygous dominant allele?

Ans

- **0.49**
- × 2. 0.14
- × 3. 1.4
- × 4. 4.9

Question Type: MCQ

Question ID: 37135112881
Option 1 ID: 37135151522
Option 2 ID: 37135151524
Option 3 ID: 37135151523
Option 4 ID: 37135151521
Status: Answered

Chosen Option: 3

Q.32 Mortality of a region is assessed by _____ of individuals per unit area per unit time.

Ans

- ×1 births
- ×2 immigration
- 🔀 3. emigration
- ✓ 4 deaths

Question Type: MCQ

Question ID : 37135112878
Option 1 ID : 37135151512
Option 2 ID : 37135151510
Option 3 ID : 37135151509
Option 4 ID : 37135151511
Status : Answered



Q.33 In ornithophilous plants, flowers lack______.

Ans

- x sticky pollen grains
- x 2 nectar
- 🔀 bright colour
- fragrance

Question Type : MCQ

Question ID : 37135112818
Option 1 ID : 37135151272
Option 2 ID : 37135151271
Option 3 ID : 37135151269
Option 4 ID : 37135151270
Status : Answered

i) Symport

 a) shrinking of protoplasm in a plant cell when placed in hypertonic solution.

ii) Facilitated diffusion b) transport of two types of molecules in same direction across cell membrane.

iii) Antiport c) selective transport of molecules across the membrane through proteins.

iv) Plasmolysis d) transport of two types of molecules in opposite direction across cell membrane.

Ans X 1.

(i) -a, (ii)-d, (iii)-c, (iv)-b

(i) -b, (ii)-c, (iii)-d, (iv)-a

(i) -b, (ii)-a, (iii)-c, (iv)-d

(i) -b, (ii)-c, (iii)-a, (iv)-d

Question Type: MCQ
Question ID: 37135112830
Option 1 ID: 37135151320
Option 2 ID: 37135151318
Option 3 ID: 37135151319
Option 4 ID: 37135151317
Status: Answered

Q.35 Hydra and yeast reproduce asexually by______.

- ★ binary fission
- ✓₂ budding
- × 3. zoospores
- ×4 conidia

Question Type : MCQ

Question ID: 37135112831 Option 1 ID: 37135151321 Option 2 ID: 37135151322 Option 3 ID: 37135151323 Option 4 ID: 37135151324 Status: Answered

Chosen Option: 2

Taq polymerase isolated from *Thermus aquaticus* can withstand temperature up

Ans

× 1. 84° C

× 2. 91° C

✓³. 94° C× ₄. 60° C

Question Type: MCQ

Question ID: 37135112809 Option 1 ID: 37135151235 Option 2 ID: 37135151234 Option 3 ID: 37135151233 Option 4 ID: 37135151236 Status: Answered



Q.37 Internal valves are present in the ______.

Ans

- **x**¹ arterioles
- ✓₂ lymphatic vessels
- x 3 vascular capillaries
- ×4 lymph capillaries

Question Type: MCQ

Question ID : 37135112889
Option 1 ID : 37135151555
Option 2 ID : 37135151556
Option 3 ID : 37135151554
Option 4 ID : 37135151553
Status : Answered

Chosen Option: 1

Select the INCORRECT statement.

Ans

X 1.

Female bird is heterogametic.

X 2

Holandric genes are present on non-homologous region of Y chromosome.



Queen bee and worker bees have haploid number of chromosomes.



Father is responsible for sex of the child in human beings.

Question Type: MCQ

Question ID: 37135112894
Option 1 ID: 37135151575
Option 2 ID: 37135151576
Option 3 ID: 37135151573
Option 4 ID: 37135151574
Status: Answered



Q.39 Excessive haemolysis of R.B.C.s with over production of bilirubin and abnormal function of ______ is observed in Jaundice.

Ans

- × lungs
- ×2 heart
- √₃ liver
- ×4 stomach

Question Type : MCQ

Question ID: 37135112900
Option 1 ID: 37135151598
Option 2 ID: 37135151597
Option 3 ID: 37135151599
Option 4 ID: 37135151600
Status: Answered

Chosen Option: 3

Q.40 Empirical formula of chlorophyll -a is ______.

Ans

- × 1 C55 H72 O4 N5 Mg
- ×2 C72 H55 O5 N4 Mg
- ×3. C55 H70 O5 N4 Mg
- ✓ 4 C55 H72 O5 N4 Mg

Question Type : MCQ

Question ID : 37135112845 Option 1 ID : 37135151380 Option 2 ID : 37135151377 Option 3 ID : 37135151378 Option 4 ID : 37135151379 Status : Answered



Select the correct statement.

Ans X 1.

The ovum secretes antifertilizin.

1 2

The sperm secretes antifertilizin.

X 3.

The zygote secretes fertilizin.

X 4.

The sperm secretes fertilizin.

Question Type: MCQ

Option 1 ID : 37135112862
Option 1 ID : 37135151446
Option 2 ID : 37135151447
Option 3 ID : 37135151448
Option 4 ID : 37135151445
Status : Answered

Chosen Option: 1

^{Q.42} Breasts are the modified ____glands.

Ans

× 1 sebaceous

× 2 ceruminous

√₃ sweat

×4 vestibular

Question Type : MCQ

Question ID: 37135112872
Option 1 ID: 37135151485
Option 2 ID: 37135151488
Option 3 ID: 37135151486
Option 4 ID: 37135151487
Status: Answered



Q.43 Proximal convoluted tubule differs from distal convoluted tubule being lined by _.

Ans X 1.

squamous cells with few microvilli

X 2.

squamous cells with many microvilli

X 3.

cuboidal cells with few microvilli

cuboidal cells with many microvilli

Question Type: MCQ

Question ID: 37135112877 Option 1 ID: 37135151508 Option 2 ID: 37135151505 Option 3 ID: 37135151506 Option 4 ID: 37135151507

Status: Answered

Chosen Option: 3

Q.44 Which one of the following is cause of inflammation of cornea, called snow blindness cataract?

Ans

- * The gamma rays
- X High dose of cosmic rays
- High dose of UV-B rays
- X4 The infrared rays

Question Type: MCQ

Question ID: 37135112816 Option 1 ID: 37135151263 Option 2 ID: 37135151261 Option 3 ID: 37135151262 Option 4 ID: 37135151264 Status: Answered



Q.45 Gaurav visited a zoo where he saw tiger, lion, camel, musk deer, red fox, one-horned rhinoceros, great Indian bustard and peacock. He wanted to report the endangered species from the above list. The number will be _____.

Ans

- × 1. 3
- **√** 2. 4
- X 3. 5
- × 4. 8

Question Type : MCQ

Question ID : 37135112898
Option 1 ID : 37135151592
Option 2 ID : 37135151591
Option 3 ID : 37135151590
Option 4 ID : 37135151589
Status : Answered

Chosen Option: 3

Q.46 Which one of the following is a heteropolysaccharide?

Ans

- × Cellulose
- × 2. Starch
- ×₃ Glycogen
- Hyaluronic acid

Question Type : MCQ

Option 1 ID : 37135112844

Option 1 ID : 37135151376

Option 2 ID : 37135151373

Option 3 ID : 37135151374

Option 4 ID : 37135151375

Status : Answered



Q.47 Which one of the following animal has longer loop of Henle?

Ans

- ✓ Camel
- X2 Rat
- × 3 Monkey
- ×4 Labeo

Question Type : MCQ

Question ID: 37135112868
Option 1 ID: 37135151472
Option 2 ID: 37135151471
Option 3 ID: 37135151470
Option 4 ID: 37135151469
Status: Answered

Chosen Option: 3

Q.48 Wine and beer are produced without ______.

Ans

- distillation
- × 2 malting
- x₃ fermentation
- ×4 mashing

Question Type : MCQ

Option 1 ID : 37135112850
Option 1 ID : 37135151400
Option 2 ID : 37135151399
Option 3 ID : 37135151397
Option 4 ID : 37135151398
Status : Answered



Q.49 Which one of the following blood vessels carries oxygenated blood?

- × 1. coronary sinus
- 🗸 coronary artery
- × 3. pulmonary artery
- × 4 coronary vein

Question Type: MCQ

Question ID: 37135112861 Option 1 ID: 37135151443 Option 2 ID: 37135151442 Option 3 ID: 37135151444 Option 4 ID: 37135151441 Status: Answered

Chosen Option: 1

Q.50 Which one of the following lichens are used to obtain usnic acid?

Ans 🧹 👖

Usnea and *Cladonia*

X 2.

Evernia and Ramalina

* Rocella and Lassalia

X4 Usnea and Citraia

Question Type: MCQ

Question ID: 37135112819 Option 1 ID: 37135151276 Option 2 ID: 37135151273 Option 3 ID: 37135151274 Option 4 ID: 37135151275 Status: Answered



Q.51 The _____brings about dilation of blood vessels?

Ans

- histamine
- x 2 gastrin
- × 3 elastin
- ×4 heparin

Question Type : MCQ

Question ID : 37135112875 Option 1 ID : 37135151499 Option 2 ID : 37135151498 Option 3 ID : 37135151497 Option 4 ID : 37135151500 Status : Answered

Chosen Option: 3

Q.52 Inflammation of alveoli, consolidation and exudation in lungs, are characteristics of disease.

Ans

- × Malaria
- X2 Amoebiasis
- ×3 Filariasis
- Pneumonia

Question Type: MCQ

Question ID : 37135112896 Option 1 ID : 37135151581 Option 2 ID : 37135151582 Option 3 ID : 37135151584 Option 4 ID : 37135151583 Status : Answered



Q.53 Select the correct statement with reference to AIDS.

Ans X 1.

It spreads through casual contact with HIV infected person.

×2 It is easily curable.



Patients called non-progressors develop AIDS very slowly or never at all.



It is transmitted through insect bite.

Question Type : MCQ

Question ID: 37135112854 Option 1 ID: 37135151413 Option 2 ID: 37135151415 Option 3 ID: 37135151416 Option 4 ID: 37135151414 Status: Answered

Chosen Option: 3

Q.54 Grafting is NOT possible in monocots because they do not possess ______.

Ans

- × 1. branches
- ×2 buds
- 🗙 3. apical meristem
- 🗸 cambium

Question Type : MCQ

Question ID: 37135112802 Option 1 ID: 37135151208 Option 2 ID: 37135151207 Option 3 ID: 37135151205 Option 4 ID: 37135151206 Status: Answered



Q.55 Photosynthetic organisms which lack chlorophyll-a are ____.

Ans

- vascular plants
- × 2 algae
- photosynthetic bacteria
- × 4 bryophytes

Question Type : MCQ

Question ID: 37135112803
Option 1 ID: 37135151210
Option 2 ID: 37135151209
Option 3 ID: 37135151211
Option 4 ID: 37135151212
Status: Answered

Chosen Option: 3

Q.56 Which one of the following heavy metals in water is responsible to cause haemolysis, diarrhoea, abdominal and chest pain in humans?

Ans

- × Selenium
- ×2 Arsenic
- ✓ ™ Mercury
- ×4 Lead

Question Type: MCQ

Option 1 ID : 37135112885 Option 1 ID : 37135151538 Option 2 ID : 37135151540 Option 3 ID : 37135151539 Option 4 ID : 37135151537 Status : Answered



Q.57 Match the C	olumn-I with Columi	n-II and select the c	orrect option.
Column-I	Column-I		
A. Tidal volume		i) 2500-3000 ml	l
B. Inspiratory reserve volume		ii) 1000 ml	
C. Residual volume		iii) 4500 ml	
D. Vital capacity		iv) 500 ml	
Ans X 1.			
A- iii,	B-iv,	C-i,	D-ii
× 2.		= 101	
A- ii,	B-iii,	C-iv,	D-i
√ 3.	.	.	
A- iv,	B-i,	C-ii,	D-iii
X 4.	_0.0		
A- iv,	B-ii,	C-iii,	D-i
			Question Type : MCQ Question ID : 37135112893

Q.58 In the process of digestion, lipids present in oily and fried foods are digested and split into __ and ____.

Ans

- fatty acids and glycerol
- x 2 glucose and glycerol
- x3 fatty acids and amino acids
- x4 glucose and amino acids

Question Type : MCQ

Option 1 ID : 37135112874

Option 1 ID : 37135151496

Option 2 ID : 37135151493

Option 3 ID : 37135151495

Option 4 ID : 37135151494

Status: Answered

Option 1 ID : 37135151572 Option 2 ID : 37135151571 Option 3 ID : 37135151570 Option 4 ID : 37135151569 Status : Answered

Chosen Option: 1

Chosen Option: 3

collegedunia

Q.59	$\label{thm:content} \mbox{High aspartic acid, low nitrogen and sugar content in maize variety makes it}$
	resistant to .

Ans

- ×1 leaf curl
- ×2 black rot
- x₃ stripe rust
- ✓ stem borer

Question Type : MCQ

Question ID : 37135112812 Option 1 ID : 37135151245 Option 2 ID : 37135151248 Option 3 ID : 37135151247 Option 4 ID : 37135151246 Status : Answered

Chosen Option: 3

Q.60 Cartilage forming cells are called_____

Ans

- × 1 osteoblasts
- ✓₂ chondroblasts
- x₃ adipocytes
- ×4 osteocytes

Question Type: MCQ

Question ID : 37135112863
Option 1 ID : 37135151452
Option 2 ID : 37135151450
Option 3 ID : 37135151449
Option 4 ID : 37135151451
Status : Answered



Q.61 Which phytohormone promotes seed germination in cereals by synthesizing amylase enzyme?

Ans

- ✓ Gibberellin
- X 2 Abscisic acid
- X 3. Auxin
- Cytokinin

Question Type: MCQ

Question ID: 37135112820 Option 1 ID: 37135151277 Option 2 ID: 37135151279 Option 3 ID: 37135151278 Option 4 ID: 37135151280 Status: Answered

Chosen Option: 1

Q.62 In recombinant DNA technology after the bacteriophage infects a bacterial cell, plaques are formed by the _____.

Ans X 1.

new colonies of bacterial cells

- ×2 infecting bacteriophages
- ✓ s lysed bacterial cells
- × 4. virions

Question Type : MCQ

Question ID: 37135112827 Option 1 ID: 37135151308 Option 2 ID: 37135151306 Option 3 ID: 37135151307 Option 4 ID: 37135151305 Status: Answered



Q.63 The number of carbon atoms per molecule of citric acid, oxaloacetic acid and pyruvic acid respectively are_____.

Ans

- \times 4, 6 and 3
- ✓2 6, 4 and 3
- \times 3 6, 3 and 2
- \times 4, 4 and 3

Question Type: MCQ

Question ID : 37135112815 Option 1 ID : 37135151257 Option 2 ID : 37135151260 Option 3 ID : 37135151258 Option 4 ID : 37135151259 Status : Answered

Chosen Option: 3

Q.64 Spinal cord is enclosed in ____ of vertebral column.

Ans

- ✓ neural canal
- X2 Volkmann's canal
- ×₃ inguinal canal
- X4 central canal

Question Type: MCQ

Option 1 ID : 37135112880
Option 1 ID : 37135151518
Option 2 ID : 37135151520
Option 3 ID : 37135151519
Option 4 ID : 37135151517
Status : Answered



Q.65	Majority of kidney stones are formed by	
	Majority of Mulicy Stoffes are formed by	

Ans

- × uric acid
- x 2 urea
- ✓ a calcium oxalate
- ×4. cystine

Question Type: MCQ

Question ID: 37135112869
Option 1 ID: 37135151475
Option 2 ID: 37135151474
Option 3 ID: 37135151473
Option 4 ID: 37135151476
Status: Answered

Chosen Option: 1

Q.66 The product of syngamy in angiosperms is _____.

Ans

- x . egg
- × 2. PEN
- × 3. oosphere
- √₄ oospore

Question Type : MCQ

Option 1 ID : 37135112814 Option 1 ID : 37135151255 Option 2 ID : 37135151256 Option 3 ID : 37135151254 Option 4 ID : 37135151253



Q.67 The vector phage lambda is commonly used for gene transfer in _____.

Ans

- × plant cell
- 🗶 yeast
- √₃ bacteria
- ×4 insect

Question Type: MCQ

Question ID : 37135112849
Option 1 ID : 37135151395
Option 2 ID : 37135151393
Option 3 ID : 37135151394
Option 4 ID : 37135151396
Status : Answered

Chosen Option: 3

What is the percentage of methane in biogas?

Ans

- × 15-45
- × 2 91-95
- × 3. 85-90
- **√**₄ 50-80

Question Type : MCQ

Question ID: 37135112828
Option 1 ID: 37135151309
Option 2 ID: 37135151312
Option 3 ID: 37135151311
Option 4 ID: 37135151310
Status: Answered



Select the INCORRECT statement.

Ans



Hisardale is an example of cross-breeding experiment.



Genetic mother in MOET technique serves for multiple ovulation.



Apis mellifera and Apis florea are domesticated species of honey bee.



Layers management includes processes like culling and debeaking.

Question Type : MCQ
Question ID : 37135112871
Option 1 ID : 37135151482
Option 2 ID : 37135151483
Option 3 ID : 37135151481

Option 4 ID: 37135151484 Status: Answered

Chosen Option: 1

Q.70 The number of phenotypic and genotypic individuals produced during a typical Mendelian monohybrid cross will be ____ and ____ respectively.

Ans

- \times 2 and 2
- \times 2 3 and 2
- ✓ 2 and 3
- × 4 3 and 3

Question Type : MCQ

Question ID : 37135112841
Option 1 ID : 37135151364
Option 2 ID : 37135151361
Option 3 ID : 37135151362
Option 4 ID : 37135151363
Status : Answered



Q.71 Norman Borlaug developed semi-dwarf varieties of wheat in _____.

Ans

- Mexico
- X 2. USA
- × 3. Philippines
- ×4 India

Question Type : MCQ

Question ID: 37135112825
Option 1 ID: 37135151300
Option 2 ID: 37135151297
Option 3 ID: 37135151299
Option 4 ID: 37135151298
Status: Answered

Chosen Option: 3

Q.72 Genetic material present in prokaryotes is ______.

Ans

- × 1 nucleosome
- × 2 nucleus
- × 3. nucleolus
- ✓ a nucleoid

Question Type: MCQ

Question ID: 37135112891
Option 1 ID: 37135151562
Option 2 ID: 37135151561
Option 3 ID: 37135151563
Option 4 ID: 37135151564
Status: Answered



Q.73 In plant breeding, biofortification is a method_ Ans 🎻 🚹 to increase the nutritional value of crop plants. X 2. to make the crop plants disease resistant.

X 3. to improve the yield of the crop plant.

X 4. to make the crop plants pest resistant.

> Question Type: MCQ Question ID: 37135112835 Option 1 ID: 37135151339 Option 2 ID: 37135151338 Option 3 ID: 37135151337 Option 4 ID: 37135151340 Status: Answered Chosen Option: 1

Q.74 A man working in a furnace room suffered from asphyxiation. What should be the main reason?

Ans X 1.

More O₂ level in the furnace room.

2.

CO poisoning due to high CO level in the furnace room.

X 3.

More O2 as well as fumes in the furnace room.

X 4.

Less O₂ level in the furnace room.

Question Type: MCQ Question ID: 37135112856 Option 1 ID: 37135151421 Option 2 ID: 37135151423 Option 3 ID: 37135151424 Option 4 ID: 37135151422 Status: Answered



Q.75 In Morgan's experiment on *Drosophila* cross between yellow bodied, white eyed female with wild type male gives _____% of parental gene combination in F₂ generation.

Ans

- × 1. 37.2 %
- × 2 1.3 %
- × 3. 62.8 %
- **✓** 98.7 %

Question Type : MCQ

Question ID: 37135112864 Option 1 ID: 37135151454 Option 2 ID: 37135151453 Option 3 ID: 37135151455 Option 4 ID: 37135151456

Status : Answered Chosen Option : 3

Q.76 The size of genome of Methanococcus jannaschii is _____

Ans

- × 1830 kb
- ✓2 1660 kb
- ×₃ 569 kb
- × 4 12,500 kb

Question Type: MCQ

Question ID : 37135112860
Option 1 ID : 37135151439
Option 2 ID : 37135151438
Option 3 ID : 37135151437
Option 4 ID : 37135151440
Status : Answered



Q.77 Damage to VI cranial nerve in human, may affect the movements of ______.

Ans

- ×1 neck
- x 2. jaw
- x3. tongue
- ✓ eye

Question Type : MCQ

Question ID: 37135112886 Option 1 ID: 37135151541 Option 2 ID: 37135151542 Option 3 ID: 37135151544 Option 4 ID: 37135151543 Status: Answered

Chosen Option: 1

Q.78 The enzymes needed for Krebs cycle are located in _____.

Ans

- × oxysomes of mitochondria
- ✓₂ matrix of mitochondria
- x 3. cytoplasm of cell

X 4.

outer membrane of mitochondria

Question Type : MCQ

Option 1 ID : 37135112842
Option 1 ID : 37135151367
Option 2 ID : 37135151366
Option 3 ID : 37135151365
Option 4 ID : 37135151368
Status : Answered



Q.79 Sexual reproduction is absent in the members of _____.

Ans

✓¹ Deuteromycetes

ײ Phycomycetes

׳ Basidiomycetes

×⁴ Ascomycetes

Question Type: MCQ
Question ID: 37135112834
Option 1 ID: 37135151336
Option 2 ID: 37135151333
Option 3 ID: 37135151335
Option 4 ID: 37135151334
Status: Answered

Chosen Option: 3

Eukaryotic cells do NOT possess______.

- a) ribosomes
- b) mesosomes
- c) fimbriae
- d) mitochondria

Ans

- × only b
- ✓² b and c
- x 3 a and b
- ×4 only d

Question Type : MCQ

Question ID: 37135112855 Option 1 ID: 37135151417 Option 2 ID: 37135151420 Option 3 ID: 37135151419 Option 4 ID: 37135151418

Status: Answered



Q.81 An individual produced during a cross between two pure plants differing in two pairs of contrasting characters is always ______. Ans X 1. homozygous for the two selected traits. **1** 2. heterozygous for the two selected traits. **X** 3. heterozygous for none of the traits. X 4. homozygous for one trait and heterozygous for other trait. Question Type: MCQ Question ID: 37135112810 Option 1 ID: 37135151237 Option 2 ID: 37135151238 Option 3 ID: 37135151240 Option 4 ID: 37135151239 Status: Answered Chosen Option: 1 Q.82 Arrange the following events a,b,c,d of chemical evolution in correct sequence and select the option. a) Transformation of heterotrophs into autotrophs. b) Formation of amino acids, purines and pyrimidines. c) Formation of protoproteins. d) Heavy elements like iron and nickel form the solid core of earth. X 1. C, a, b,
✓² d, b, c,
X 3. a, c, d,

×⁴. b, d,

Question Type : MCQ

Question ID: 37135112899
Option 1 ID: 37135151594
Option 2 ID: 37135151593
Option 3 ID: 37135151595
Option 4 ID: 37135151596

Status : Answered



Q.83 The uterus of a woman is attached to her body wall by a double fold of peritoneum called____

- × perimetrium
- ✓₂ Mesometrium
- x 3 mesosalpinx
- × 4. myometrium

Question Type : MCQ

Question ID: 37135112867 Option 1 ID: 37135151465 Option 2 ID: 37135151467 Option 3 ID: 37135151468 Option 4 ID: 37135151466 Status: Answered

Chosen Option: 3

Q.84 Identify the set of plants bearing exalbuminous seeds.

Ans X 1.

Castor, Bean, Pea, Sunflower

X 2.

Sunflower, Coconut, Maize, Wheat

🗙 3 Pea, Bean, Gram, Castor



Pea, Bean, Gram, Ground-nut

Question Type: MCQ

Question ID: 37135112821 Option 1 ID: 37135151282 Option 2 ID: 37135151283 Option 3 ID: 37135151284 Option 4 ID: 37135151281 Status: Answered



Q.85 Net productivity is the rate of storage of organic matter which is not used by the consumer, it is expressed as ______.

Ans



production of Carbon g/m²/day

- X2 Chl/g dry wt/unit area
- x₃ Chl/g/ m²/unit area
- CO2 fixed /g Chl/ hour

Question Type: MCQ

Question ID : 37135112832 Option 1 ID : 37135151328 Option 2 ID : 37135151325 Option 3 ID : 37135151326 Option 4 ID : 37135151327 Status : Answered

Chosen Option: 1

Q.86 The unfertilized human female gamete is usually about ____in diameter.

Ans

$$\times$$
 2. 70μ

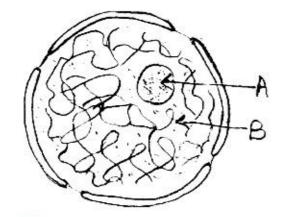
√₄ 100 μ

Question Type : MCQ

Question ID : 37135112858
Option 1 ID : 37135151430
Option 2 ID : 37135151431
Option 3 ID : 37135151429
Option 4 ID : 37135151432
Status : Answered



Q.87 Identify labels A and B in the given diagram of nucleus and select the correct option.



Ans

X 1

A-central granule, B-cytoskeleton



A- nucleolus, B – chromatin network

X 3.

A – cell sap, B- endoplasmic reticulum

×4 A- nucleoid, B – axoneme

Question Type: MCQ

Option 1 ID : 37135112897 Option 1 ID : 37135151588 Option 2 ID : 37135151587 Option 3 ID : 37135151585 Option 4 ID : 37135151586

Status : Answered Chosen Option : 1

Q.88 Cerebral cortex is highly folded due to elevations and depressions on it. The elevations are called______.

Ans

×₁ funiculi

× 2. fovea

🗸 3. gyri

× 4. sulci

Question Type: MCQ

Question ID: 37135112883 Option 1 ID: 37135151532 Option 2 ID: 37135151531 Option 3 ID: 37135151529 Option 4 ID: 37135151530

Status: Answered



Q.89 These muscle fibres can be best described as ______. Nucleus striated, voluntary and skeletal. X 2. unstriated, involuntary and skeletal. **3**. unstriated, involuntary and visceral. X 4. striated, voluntary and cardiac. Question Type : MCQ Question ID: 37135112895 Option 1 ID: 37135151580 Option 2 ID: 37135151579 Option 3 ID: 37135151578 Option 4 ID: 37135151577

Status: Answered

Q.90	^{Q.90} DNAase is used to treat			
Ans	cystic fibrosis			
	×2 haemophilia			
	🔀 3. pituitary dwarfism			
	× 4. burns			
		Question Type : MCQ		
		Question ID : 37135112851		
		Option 1 ID: 37135151402		
		Option 2 ID : 37135151401		
		Option 3 ID : 37135151403		
		Option 4 ID : 37135151404 Status : Answered		
		Chosen Option : 2		
Q.91	Syphilis is caused by			
Ans	a spirochaete bacterium called <i>Treponema pallidum</i>			
	× 2. a spirochaete bacterium called <i>Neisseria gonorrhoeae</i>			
	X 3. a diplococcus bacterium called <i>Treponema pallidum</i>			

× 4. a diplococcus bacterium called *Neisseria gonorrhoeae*

Question Type: MCQ
Question ID: 37135112887
Option 1 ID: 37135151545
Option 2 ID: 37135151547
Option 3 ID: 37135151548
Option 4 ID: 37135151546

Status : **Answered** Chosen Option : **3**



Q.92 Marijuana is obtained from ____ part of *Cannabis sativa*.

Ans

- × latex
- x 2 leaf
- ✓ s inflorescence
- ×4. root

Question Type: MCQ

Question ID : 37135112865 Option 1 ID : 37135151457 Option 2 ID : 37135151460 Option 3 ID : 37135151458 Option 4 ID : 37135151459 Status : Answered

Chosen Option: 4

Q.93 Which of the following compounds/intermediates of Krebs cycle do NOT undergo either decarboxylation or oxidation?

Ans

- ×₁ Isocitric acid
- ×₂ ∝ ketoglutaric acid
- ✓ Fumaric acid
- ×4 Malic acid

Question Type : MCQ

Option 1 ID : 37135112822
Option 1 ID : 37135151285
Option 2 ID : 37135151287
Option 3 ID : 37135151288
Option 4 ID : 37135151286
Status : Answered



Viroids attack mainly _____.

Ans X 1.

plants, animals and bacteria

- x 2 animals only
- x animals and plants
- plants only

Question Type: MCQ

Question ID : 37135112846 Option 1 ID : 37135151384 Option 2 ID : 37135151382 Option 3 ID : 37135151383 Option 4 ID : 37135151381

Status : Answered

Chosen Option: 2

Q.95 In DNA molecule, pairing between two complementary nucleotides takes place by

bonds.

Ans

- × phospho-di-ester
- × 2 peptide
- hydrogen
- × 4 glycosidic

Question Type: MCQ

Option 1 ID : 37135112837 Option 1 ID : 37135151345 Option 2 ID : 37135151347 Option 3 ID : 37135151346 Option 4 ID : 37135151348

Status : Answered



Q.96 The breed of _____called Hisardale is developed in Punjab by cross -breeding technique.

Ans

- ✓ sheep
- ×2 donkey
- × 3. horse
- ×4 mule

Question Type : MCQ

Question ID: 37135112859
Option 1 ID: 37135151433
Option 2 ID: 37135151436
Option 3 ID: 37135151435
Option 4 ID: 37135151434
Status: Answered

Chosen Option : 4

Q.97 The RQ of fats and proteins is _____ respectively.

Ans

- \checkmark 0.7 and 0.9
- \times 2 0.7 and 1.0
- \times 0.9 and 0.7
- \times 1.0 and 0.7

Question Type : MCQ

Question ID : 37135112833
Option 1 ID : 37135151329
Option 2 ID : 37135151332
Option 3 ID : 37135151330
Option 4 ID : 37135151331
Status : Answered



Q.98 The growth of lichens followed by mosses, herbs, shrubs and trees is an example of

Ans

- × 1 zonation
- xerarch succession
- x 3 stratification
- * hydrarch succession

Question Type : MCQ

Question ID: 37135112824
Option 1 ID: 37135151293
Option 2 ID: 37135151296
Option 3 ID: 37135151294
Option 4 ID: 37135151295
Status: Answered

Chosen Option: 2

Q.99 The term "Grand period of growth" was given by _____.

Ans

- × Gane
- × 2 F.W.Went
- ✓ s Sachs
- × 4 Kurosawa

Question Type : MCQ

Question ID: 37135112847
Option 1 ID: 37135151388
Option 2 ID: 37135151385
Option 3 ID: 37135151387
Option 4 ID: 37135151386
Status: Answered



Q.100 The layer of anther wall, which help in its dehiscence is _____.

Ans

- × 1. epidermis
- √₂ endothecium
- x 3. tapetum
- ×4 middle layers

Question Type: MCQ

Option 1 ID : 37135112826 Option 1 ID : 37135151301 Option 2 ID : 37135151302 Option 3 ID : 37135151304 Option 4 ID : 37135151303

Status: Answered

