

**Q.1** The period of revolution of communication satellite is 24 hours. The period of satellite in an orbit at a distance three times that of the earth's radius above its surface will be

**Ans**

1. 4 days

2. 16 days

3. 24 hours

4. 8 days

Question Type : **MCQ**

Question ID : **37135113109**

Option 1 ID : **37135152434**

Option 2 ID : **37135152436**

Option 3 ID : **37135152433**

Option 4 ID : **37135152435**

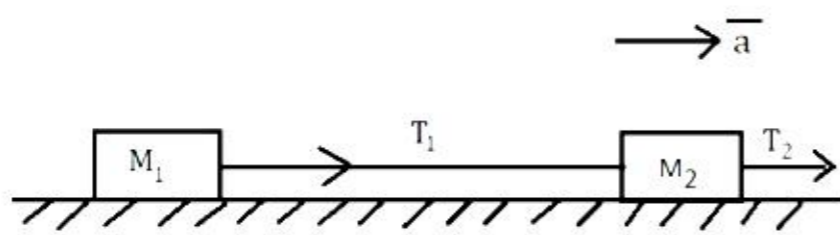
Status : **Answered**

Chosen Option : **1**

Q.2

Two masses  $M_1$  and  $M_2$  are accelerated uniformly on frictionless surface as shown

in figure. The ratio of the tensions  $\left(\frac{T_1}{T_2}\right)$  is



Ans

1.  $\frac{M_2}{M_1}$

2.  $\frac{M_1}{M_2}$

3.  $\frac{M_1}{(M_1 + M_2)}$

4.  $\frac{(M_1 + M_2)}{M_2}$

Question Type : MCQ

Question ID : 37135113133

Option 1 ID : 37135152530

Option 2 ID : 37135152529

Option 3 ID : 37135152532

Option 4 ID : 37135152531

Status : Answered

Chosen Option : 3

Q.3

In a transverse progressive wave of amplitude 'a', the maximum particle velocity is six times its wave velocity. The wavelength of wave is

Ans

✗ 1.  $6\pi a$

✗ 2.  $3\pi a$

✗ 3.  $\frac{\pi a}{6}$

✓ 4.  $\frac{\pi a}{3}$

Question Type : MCQ

Question ID : 37135113150

Option 1 ID : 37135152600

Option 2 ID : 37135152598

Option 3 ID : 37135152599

Option 4 ID : 37135152597

Status : Answered

Chosen Option : 1

Q.4

When a surface 1 cm thick is illuminated by light of wavelength ' $\lambda$ ', the stopping potential is ' $V_0$ '. When the same surface is illuminated by light of wavelength ' $3\lambda$ ', the stopping potential is  $\frac{V_0}{6}$ . The threshold wavelength for the metallic surface is

Ans

✓ 1.  $5\lambda$

✗ 2.  $2\lambda$

✗ 3.  $3\lambda$

✗ 4.  $4\lambda$

Question Type : MCQ

Question ID : 37135113140

Option 1 ID : 37135152557

Option 2 ID : 37135152560

Option 3 ID : 37135152559

Option 4 ID : 37135152558

Status : Answered

Chosen Option : 3



**Q.5** A cord is wound round the circumference of a wheel of radius 'r'. The axis of the wheel is horizontal and moment of inertia about it is 'I'. A block of mass 'm' is attached to free end of the cord, initially at rest. When the wheel rotates and the block moves vertically downwards through distance 'h', the angular velocity of the wheel will be

(Neglect the mass of cord. g = acceleration due to gravity)

Ans

✗ 1.  $\left(\frac{2gh}{I+mr}\right)^{\frac{1}{2}}$

✓ 2.  $\left(\frac{2mgh}{I+mr^2}\right)^{\frac{1}{2}}$

✗ 3.  $\left(\frac{2mgh}{I+2m}\right)^{\frac{1}{2}}$

✗ 4.  $(2gh)^{\frac{1}{2}}$

Question Type : **MCQ**

Question ID : **37135113125**

Option 1 ID : **37135152497**

Option 2 ID : **37135152498**

Option 3 ID : **37135152499**

Option 4 ID : **37135152500**

Status : **Answered**

Chosen Option : **3**

Q.6 Light rays are incident from air on a block of glass (Refractive Index = 1.5). The reflected and refracted rays are perpendicular to each other. The ratio of the wavelengths of the refracted and reflected light is

Ans

✓<sub>1</sub>. 0.66

✗<sub>2</sub>. 0.11

✗<sub>3</sub>. 0.44

✗<sub>4</sub>. 0.22

Question Type : MCQ

Question ID : 37135113104

Option 1 ID : 37135152413

Option 2 ID : 37135152416

Option 3 ID : 37135152414

Option 4 ID : 37135152415

Status : Answered

Chosen Option : 3

Q.7 A sonometer wire of length L between the two bridges vibrates in 3<sup>rd</sup> harmonic.

Antinodes are formed at

Ans

✗<sub>1</sub>.  $\frac{L}{4}, L, \frac{7L}{4}$

✗<sub>2</sub>.  $\frac{L}{2}, L, \frac{3L}{2}$

✗<sub>3</sub>.  $\frac{L}{3}, \frac{2L}{3}, \frac{5L}{3}$

✓<sub>4</sub>.  $\frac{L}{4}, \frac{3L}{4}, \frac{5L}{4}$

Question Type : MCQ

Question ID : 37135113120

Option 1 ID : 37135152479

Option 2 ID : 37135152477

Option 3 ID : 37135152478

Option 4 ID : 37135152480

Status : Answered

Chosen Option : 2

**Q.8** A ball at rest falls vertically on ground from a height of 5m. The coefficient of restitution is 0.4. The maximum height of the ball after the first rebound is  
[  $g = 10 \text{ m/s}^2$  ]

**Ans**

✓<sup>1.</sup> 0.8 m

✗<sup>2.</sup> 0.6 m

✗<sup>3.</sup> 0.2 m

✗<sup>4.</sup> 0.4 m

Question Type : **MCQ**

Question ID : 37135113144

Option 1 ID : 37135152573

Option 2 ID : 37135152574

Option 3 ID : 37135152576

Option 4 ID : 37135152575

Status : **Answered**

Chosen Option : 3

**Q.9** In parallel plate capacitor, electric field between the plates is 'E'. If the charge on the plates is 'Q', then the force on each plate is

**Ans**

1.  $QE$

2.  $\frac{QE}{2}$

3.  $QE^2$

4.  $\frac{QE^2}{2}$

Question Type : **MCQ**

Question ID : **37135113145**

Option 1 ID : **37135152578**

Option 2 ID : **37135152577**

Option 3 ID : **37135152580**

Option 4 ID : **37135152579**

Status : **Answered**

Chosen Option : **2**

Q.10 Average kinetic energy of  $H_2$  molecule at 300K is 'E'. At the same temperature, average kinetic energy of  $O_2$  molecule will be

Ans

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

2. E

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

4.  $\frac{E}{8}$

Question Type : MCQ

Question ID : 37135113111

Option 1 ID : 37135152442

Option 2 ID : 37135152441

Option 3 ID : 37135152443

Option 4 ID : 37135152444

Status : Answered

Chosen Option : 3

Q.11 A wire having a diameter of 3 mm is stretched by an external force to produce a longitudinal strain of  $3 \times 10^{-3}$ . If the Poisson's ratio of the wire is 0.4, the change in its diameter is

Ans

1.  $3.2 \times 10^{-6}$  mm

2.  $3.6 \times 10^{-3}$  mm

3.  $1.2 \times 10^{-6}$  mm

4.  $1.2 \times 10^{-3}$  mm

Question Type : MCQ

Question ID : 37135113105

Option 1 ID : 37135152420

Option 2 ID : 37135152419

Option 3 ID : 37135152418

Option 4 ID : 37135152417

Status : Answered

Chosen Option : 2



**Q.12** A body situated on earth's surface at its equator becomes weightless when the rotational kinetic energy of the earth reaches a critical value which is given by (M and R be the mass and radius of earth respectively)

Ans

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

2.  $\frac{MgR}{5}$

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

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

Question Type : **MCQ**

Question ID : **37135113135**

Option 1 ID : **37135152539**

Option 2 ID : **37135152540**

Option 3 ID : **37135152537**

Option 4 ID : **37135152538**

Status : **Answered**

Chosen Option : **1**

Q.13 The product of magnetic susceptibility ( $\chi$ ) and absolute temperature (T) is constant for a

Ans

✗ 1. ferromagnetic material.

✗ 2.

diamagnetic and ferromagnetic material.

✗ 3. diamagnetic material.

✓ 4. paramagnetic material.

Question Type : MCQ

Question ID : 37135113149

Option 1 ID : 37135152595

Option 2 ID : 37135152596

Option 3 ID : 37135152594

Option 4 ID : 37135152593

Status : Answered

Chosen Option : 3

Q.14 In a semiconductor, the number of holes and number of free electrons are represented as ' $n_h$ ' and ' $n_e$ ' respectively. Which one of the following statements is TRUE for the semiconductor?

Ans ✓ 1.

In an intrinsic semiconductor,  $n_e = n_h$

✗ 2.

In an extrinsic semiconductor,  $n_h = n_e$ .

✗ 3.

In an intrinsic semiconductor,  $n_e > n_h$ .

✗ 4.

In an intrinsic semiconductor,  $n_h > n_e$ .

Question Type : MCQ

Question ID : 37135113136

Option 1 ID : 37135152544

Option 2 ID : 37135152542

Option 3 ID : 37135152543

Option 4 ID : 37135152541

Status : Answered

Chosen Option : 1

**Q.15** Let ' $R_1$ ' and ' $R_2$ ' be radii of two mercury drops. A big mercury drop is formed from them under isothermal conditions. The radius of the resultant drop is

Ans

1.  $R = \sqrt{R_1^2 - R_2^2}$

2.  $R = (R_1^3 + R_2^3)^{\frac{1}{3}}$

3.  $R = \frac{R_1 + R_2}{2}$

4.  $R = \sqrt{R_1^2 + R_2^2}$

Question Type : **MCQ**

Question ID : **37135113122**

Option 1 ID : **37135152486**

Option 2 ID : **37135152487**

Option 3 ID : **37135152488**

Option 4 ID : **37135152485**

Status : **Answered**

Chosen Option : **3**

**Q.16** Two vectors  $\vec{P}$  and  $\vec{Q}$  have equal magnitudes. If  $|\vec{P} + \vec{Q}| = 5 |\vec{P} - \vec{Q}|$ , then angle between  $\vec{P}$  and  $\vec{Q}$  is

**Ans**

✓<sup>1.</sup>  $\cos^{-1} \left( \frac{12}{13} \right)$

✗<sup>2.</sup>  $\sin^{-1} \left( \frac{12}{13} \right)$

✗<sup>3.</sup>  $\cos^{-1} \left( \frac{3}{5} \right)$

✗<sup>4.</sup>  $\sin^{-1} \left( \frac{3}{5} \right)$

Question Type : **MCQ**

Question ID : **37135113118**

Option 1 ID : **37135152470**

Option 2 ID : **37135152469**

Option 3 ID : **37135152471**

Option 4 ID : **37135152472**

Status : **Answered**

Chosen Option : **3**

**Q.17** A thin wire of length 'L' and uniform linear mass density 'm' is bent into a circular loop. The moment of inertia of this loop about the tangential axis and in the plane of the coil is

Ans

1.  $\frac{3mL^3}{16\pi^2}$

2.  $\frac{3mL^3}{4\pi^2}$

3.  $\frac{3mL^3}{8\pi^2}$

4.  $\frac{3mL^3}{2\pi^2}$

Question Type : **MCQ**

Question ID : **37135113141**

Option 1 ID : **37135152562**

Option 2 ID : **37135152563**

Option 3 ID : **37135152564**

Option 4 ID : **37135152561**

Status : **Answered**

Chosen Option : **4**

Q.18 If  $v_n$  and  $v_p$  are orbital velocities in  $n^{\text{th}}$  and  $p^{\text{th}}$  orbit respectively, then the ratio

$v_p : v_n$  is

Ans

1.  $\frac{p^2}{n^2}$

2.  $\frac{n}{p}$

3.  $\frac{n^2}{p^2}$

4.  $\frac{p}{n}$

Question Type : MCQ

Question ID : 37135113106

Option 1 ID : 37135152422

Option 2 ID : 37135152423

Option 3 ID : 37135152424

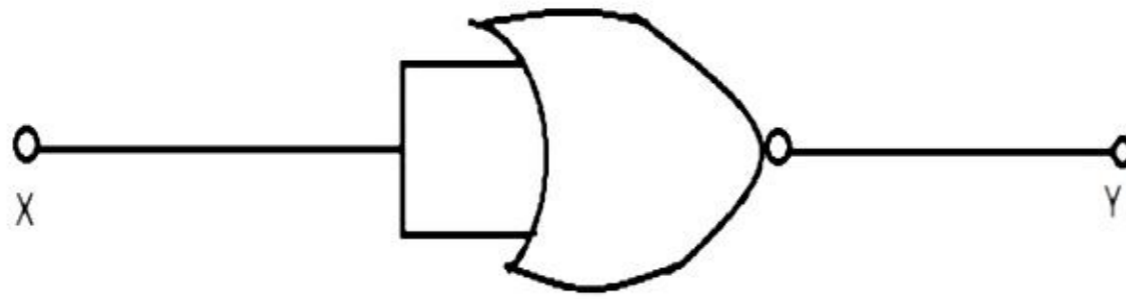
Option 4 ID : 37135152421

Status : Answered

Chosen Option : 1

Q.19

The gate represented in the given figure is



Ans

✓ 1. NOT

✗ 2. AND

✗ 3. OR

✗ 4. NOR

Question Type : MCQ

Question ID : 37135113117

Option 1 ID : 37135152467

Option 2 ID : 37135152465

Option 3 ID : 37135152466

Option 4 ID : 37135152468

Status : Answered

Chosen Option : 2

Q.20 The energy stored per unit volume is  $0.3 \text{ J/m}^3$  when a wire is stretched by  $0.125$  cm. When it is stretched by  $0.75$  cm, the increase in potential energy per unit volume stored in the wire is

Ans

✗ 1.  $10.3 \text{ J/m}^3$

✗ 2.  $10.1 \text{ J/m}^3$

✓ 3.  $10.5 \text{ J/m}^3$

✗ 4.  $10.8 \text{ J/m}^3$

Question Type : MCQ

Question ID : 37135113137

Option 1 ID : 37135152547

Option 2 ID : 37135152548

Option 3 ID : 37135152546

Option 4 ID : 37135152545

Status : Answered

Chosen Option : 3

**Q.21** The magnifying power of simple microscope is inversely proportional to its focal length ( $f$ ) and it is maximum when image is formed at  
[D = Distance of distinct vision (DDV).]

**Ans**

1. a distance greater than DDV.

2. DDV

3. a distance less than DDV.

4. infinity.

Question Type : MCQ

Question ID : 37135113128

Option 1 ID : 37135152510

Option 2 ID : 37135152511

Option 3 ID : 37135152512

Option 4 ID : 37135152509

Status : Answered

Chosen Option : 3

**Q.22** A vector  $\vec{F}_1$  is a unit vector along the positive direction of x - axis and  $\vec{F}_2$  is of magnitude 4. If the vector product of  $\vec{F}_1$  and  $\vec{F}_2$  is zero, then  $\vec{F}_2$  is

**Ans**

1.  $4\hat{j}$

2.  $2\sqrt{3}\hat{i} - 2\hat{j}$

3.  $2\hat{i} + 2\sqrt{3}\hat{j}$

4.  $-4\hat{i}$

Question Type : MCQ

Question ID : 37135113113

Option 1 ID : 37135152449

Option 2 ID : 37135152450

Option 3 ID : 37135152451

Option 4 ID : 37135152452

Status : Answered

Chosen Option : 4



**Q.23** The average force applied on the walls of a closed container depends as 'T<sup>x</sup>', where 'T' is the temperature of an ideal gas. The value of 'x' is

Ans

✓ 1. 1

✗ 2. zero

✗ 3. 2

✗ 4. 3

Question Type : MCQ

Question ID : 37135113132

Option 1 ID : 37135152526

Option 2 ID : 37135152525

Option 3 ID : 37135152527

Option 4 ID : 37135152528

Status : Answered

Chosen Option : 3

**Q.24** A given metal wire has length 1m, linear density  $0.6 \frac{\text{kg}}{\text{m}}$  and uniform cross-sectional area  $10^{-7} \text{ m}^2$  is fixed at both ends. The temperature of wire is decreased by  $40^\circ\text{C}$ . The fundamental frequency of the transverse wave is  $[Y = 2 \times 10^{11} \frac{\text{N}}{\text{m}^2}$ , coefficient of linear expansion of metal is  $= 1.2 \times 10^{-5} / ^\circ\text{C}$ ]

Ans

✗ 1. 0.5 Hz

✓ 2. 2 Hz

✗ 3. 1 Hz

✗ 4. 2.5 Hz

Question Type : MCQ

Question ID : 37135113143

Option 1 ID : 37135152569

Option 2 ID : 37135152571

Option 3 ID : 37135152570

Option 4 ID : 37135152572

Status : Answered

Chosen Option : 3

Q.25 For a photocell, the work function is ' $\phi$ ' and the stopping potential is ' $V_s$ '.  
The wavelength of the incident radiation can be expressed as

Ans

1.  $\frac{hc}{e\phi + V_s}$

2.  $\frac{hc}{\phi + eV_s}$

3.  $\frac{hc}{\phi - eV_s}$

4.  $\frac{hc}{\phi}$

Question Type : MCQ

Question ID : 37135113121

Option 1 ID : 37135152483

Option 2 ID : 37135152484

Option 3 ID : 37135152482

Option 4 ID : 37135152481

Status : Answered

Chosen Option : 3

Q.26 If the length and diameter of a wire are decreased, then for the same tension the  
natural frequency of stretched wire will

Ans

1. decrease.

2. not change.

3. become zero.

4. increase.

Question Type : MCQ

Question ID : 37135113116

Option 1 ID : 37135152461

Option 2 ID : 37135152464

Option 3 ID : 37135152463

Option 4 ID : 37135152462

Status : Answered

Chosen Option : 2



**Q.27** When a capillary is dipped vertically in water, rise of water in capillary is 'h'. The angle of contact is zero. Now the tube is depressed so that its length above the water surface is  $h/2$ . The new apparent angle of contact is  $[\cos \theta = 1]$

**Ans**

1.  $\sin^{-1}(0.5)$

2.  $\sin^{-1}(0.7)$

3.  $\cos^{-1}(0.5)$

4.  $\cos^{-1}(0.7)$

Question Type : **MCQ**

Question ID : 37135113127

Option 1 ID : 37135152505

Option 2 ID : 37135152506

Option 3 ID : 37135152508

Option 4 ID : 37135152507

Status : **Answered**

Chosen Option : 2

**Q.28** The vertical and horizontal components of earth's magnetic field at a place are  $2 \times 10^{-5}$  T and  $2\sqrt{3} \times 10^{-5}$  T respectively. The angle of dip and resultant earth's magnetic field is

**Ans**

1.  $\tan^{-1}(\sqrt{3}), 2 \times 10^{-10}$  T

2.  $\tan^{-1}(\sqrt{3}), 2 \times 10^{-5}$  T

3.  $\tan^{-1}\left(\frac{1}{\sqrt{3}}\right), 4 \times 10^{-10}$  T

4.  $\tan^{-1}\left(\frac{1}{\sqrt{3}}\right), 4 \times 10^{-5}$  T

Question Type : **MCQ**

Question ID : 37135113108

Option 1 ID : 37135152431

Option 2 ID : 37135152430

Option 3 ID : 37135152429

Option 4 ID : 37135152432

Status : **Answered**

Chosen Option : 2

Q.29

The frequency of a particle performing linear S.H.M. is  $\frac{7}{2\pi}$  Hz. The differential equation of S.H.M. is

Ans

1.  $\frac{d^2x}{dt^2} + 14x = 0$

2.  $\frac{d^2x}{dt^2} + 64x = 0$

3.  $\frac{d^2x}{dt^2} + 49x = 0$

4.  $\frac{d^2x}{dt^2} + 25x = 0$

Question Type : MCQ

Question ID : 37135113146

Option 1 ID : 37135152581

Option 2 ID : 37135152584

Option 3 ID : 37135152583

Option 4 ID : 37135152582

Status : Answered

Chosen Option : 3

Q.30

A motor cycle racer takes a round with speed 20 m/s on a curved road of radius 40 m. The leaning angle of motor cycle with vertical for safe turn is  
( $g = 10 \text{ m/s}^2$ ,  $\tan 45^\circ = 1$ )

Ans

1.  $75^\circ$

2.  $45^\circ$

3.  $60^\circ$

4.  $30^\circ$

Question Type : MCQ

Question ID : 37135113114

Option 1 ID : 37135152456

Option 2 ID : 37135152454

Option 3 ID : 37135152455

Option 4 ID : 37135152453

Status : Answered

Chosen Option : 3



**Q.31** Two parallel long wires 'A' and 'B' carry currents ' $i_1$ ' and ' $i_2$ ' ( $i_2 < i_1$ ). When ' $i_1$ ' and ' $i_2$ ' are in the same direction, the magnetic field at a point midway between the wires is  $10\mu\text{T}$ . If ' $i_2$ ' is reversed, then the field becomes  $30\mu\text{T}$ . The ratio of  $\frac{i_1}{i_2}$  is

$$\left[ \frac{\mu_0}{4\pi} = 10^{-7} \text{Wb/Am} \right]$$

Ans

1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **37135113123**

Option 1 ID : **37135152489**

Option 2 ID : **37135152490**

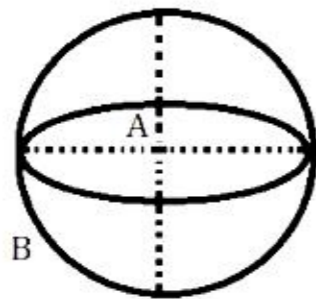
Option 3 ID : **37135152491**

Option 4 ID : **37135152492**

Status : **Answered**

Chosen Option : **3**

**Q.32** Two coils of wire A and B are placed mutually perpendicular as shown. When current is changed in any one coil,



Ans  1.

no current will be induced in another coil.

2.

magnetic field will be perpendicular to plane of another coil.

3.

magnetic flux linked with another coil is maximum.

4.

current induced in another coil is maximum.

Question Type : **MCQ**

Question ID : **37135113147**

Option 1 ID : **37135152585**

Option 2 ID : **37135152588**

Option 3 ID : **37135152586**

Option 4 ID : **37135152587**

Status : **Answered**

Chosen Option : **3**

**Q.33** A thin prism 'P' of angle  $4^\circ$  made up of glass of refractive index 1.48 is combined with another prism 'Q' made up of glass of refractive index 1.64 to produce dispersion without deviation. The angle of prism 'Q' is

Ans

1.  $5^\circ$

2.  $3^\circ$

3.  $6^\circ$

4.  $4^\circ$

Question Type : MCQ

Question ID : 37135113139

Option 1 ID : 37135152554

Option 2 ID : 37135152556

Option 3 ID : 37135152553

Option 4 ID : 37135152555

Status : Answered

Chosen Option : 3

**Q.34** The magnetic moment of a circular coil carrying current (I), having radius (r) and number of turns (n) is proportional to

Ans

1.  $r$

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

3.  $r^2$

4.  $\frac{1}{r^2}$

Question Type : MCQ

Question ID : 37135113110

Option 1 ID : 37135152439

Option 2 ID : 37135152438

Option 3 ID : 37135152440

Option 4 ID : 37135152437

Status : Answered

Chosen Option : 3

**Q.35** A galvanometer of resistance  $20\Omega$  gives a full scale deflection when a current of  $0.04\text{ A}$  is passed through it. To convert it into an ammeter of range  $20\text{A}$ , the resistance that must be connected in series with the coil of the galvanometer is (Galvanometer is shunted by  $0.05\Omega$ )

Ans

1.  $5.94\Omega$

2.  $4.95\Omega$

3.  $12.62\Omega$

4.  $9.45\Omega$

Question Type : **MCQ**

Question ID : **37135113142**

Option 1 ID : **37135152566**

Option 2 ID : **37135152565**

Option 3 ID : **37135152568**

Option 4 ID : **37135152567**

Status : **Answered**

Chosen Option : **3**

**Q.36** A parallel monochromatic beam of light is incident normally on a narrow slit. A diffraction pattern is formed on a screen placed perpendicular to the direction of incident beam. At the first maximum of the diffraction pattern, the phase difference between the rays coming from the edges of the slit is

Ans

1.  $\frac{\pi}{4}$  rad.

2.  $2\pi$  rad.

3.  $\frac{\pi}{2}$  rad.

4.  $\pi$  rad.

Question Type : **MCQ**

Question ID : **37135113138**

Option 1 ID : **37135152549**

Option 2 ID : **37135152552**

Option 3 ID : **37135152550**

Option 4 ID : **37135152551**

Status : **Answered**

Chosen Option : **3**

Q.37

The pressure at the bottom of a tank containing liquid does not depend upon the

Ans

✓ 1.

area of bottom surface.

✗ 2.

acceleration due to gravity.

✗ 3. density of liquid.

✗ 4. height of liquid column.

Question Type : MCQ

Question ID : 37135113148

Option 1 ID : 37135152591

Option 2 ID : 37135152589

Option 3 ID : 37135152590

Option 4 ID : 37135152592

Status : Answered

Chosen Option : 1

Q.38

Which of the following molecules is a polar molecule?

Ans

✗ 1. Oxygen ( $O_2$ )

✗ 2. Hydrogen ( $H_2$ )

✗ 3. Carbon dioxide ( $CO_2$ )

✓ 4. Hydrogen Chloride ( $HCl$ )

Question Type : MCQ

Question ID : 37135113119

Option 1 ID : 37135152473

Option 2 ID : 37135152474

Option 3 ID : 37135152475

Option 4 ID : 37135152476

Status : Answered

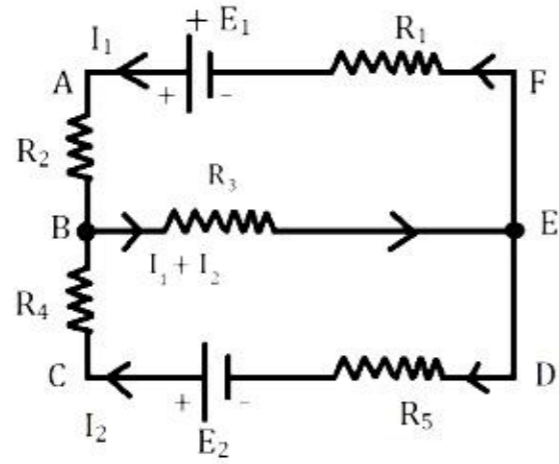
Chosen Option : 4





Q.39

In the given electrical network, the correct equation for the loop 'ABEFA' is



Ans  1.

$$E_1 - I_1(R_1 + R_2 + R_3) - I_2R_3 = 0$$

2.

$$E_1 - I_1(R_1 - R_2 + R_3) + I_2R_3 = 0$$

3.

$$E_1 - I_1(R_1 + R_2 + R_3) + I_2R_3 = 0$$

4.

$$-E_1 + I_1(R_1 + R_2 + R_3) - I_2R_3 = 0$$

Question Type : MCQ

Question ID : 37135113129

Option 1 ID : 37135152516

Option 2 ID : 37135152513

Option 3 ID : 37135152515

Option 4 ID : 37135152514

Status : Answered

Chosen Option : 1

**Q.40** A charged particle carrying a charge 'q' and moving with velocity 'v', enters into a solenoid carrying a current 'I', along its axis. If 'B' is the magnetic induction along the axis of solenoid, then the force 'F' acting on the charged particle will be

Ans

✓<sup>1.</sup>  $F = 0$

✗<sup>2.</sup>  $F = qvB$

✗<sup>3.</sup>  $F < qvB$

✗<sup>4.</sup>  $F > qvB$

Question Type : **MCQ**

Question ID : **37135113134**

Option 1 ID : **37135152534**

Option 2 ID : **37135152533**

Option 3 ID : **37135152535**

Option 4 ID : **37135152536**

Status : **Answered**

Chosen Option : **2**

**Q.41** A cube of mass 'M' and side 'L' is fixed on the horizontal surface. Modulus of rigidity of the material of cube is 'η'. A force is applied perpendicular to one of the side faces. When the force is removed, cube executes small oscillations. The time period is

Ans

1.  $\frac{2\pi\eta L}{M}$

2.  $\frac{M}{2\pi\eta L}$

3.  $2\pi \sqrt{\frac{M}{\eta L}}$

4.  $2\pi \sqrt{\frac{\eta L}{M}}$

Question Type : **MCQ**

Question ID : 37135113130

Option 1 ID : 37135152519

Option 2 ID : 37135152520

Option 3 ID : 37135152518

Option 4 ID : 37135152517

Status : **Answered**

Chosen Option : 1

Q.42 A body attached to a spring oscillates in horizontal plane with frequency 'n'. Its total energy is 'E'. If the velocity in the mean position is 'v', then the spring constant is

Ans

1.  $\frac{E\pi^2 n^2}{v^2}$

2.  $\frac{4E\pi^2 n^2}{v^2}$

3.  $\frac{8E\pi^2 n^2}{v^2}$

4.  $\frac{2E\pi^2 n^2}{v^2}$

Question Type : MCQ

Question ID : 37135113101

Option 1 ID : 37135152404

Option 2 ID : 37135152402

Option 3 ID : 37135152401

Option 4 ID : 37135152403

Status : Answered

Chosen Option : 3

Q.43 Two waves given as  $y_1 = 10\sin\omega t$  cm and  $y_2 = 10\sin(\omega t + \frac{\pi}{3})$  cm are superimposed.

What is the amplitude of the resultant wave?

$$\left| \cos \frac{\pi}{3} = \frac{1}{2} \right|$$

Ans

✗ 1.  $10\sqrt{2}$  cm

✗ 2.  $5\sqrt{3}$  cm

✓ 3.  $10\sqrt{3}$  cm

✗ 4. 10 cm

Question Type : MCQ

Question ID : 37135113124

Option 1 ID : 37135152494

Option 2 ID : 37135152495

Option 3 ID : 37135152496

Option 4 ID : 37135152493

Status : Answered

Chosen Option : 3

Q.44 In the equation  $P = \left(\frac{C+S}{D}\right)$ , P and S represent pressure and distance respectively.

The dimensions of  $\left(\frac{D}{C}\right)$  are

Ans

✗ 1.  $[L^1 M^1 T^2]$

✓ 2.  $[L^1 M^{-1} T^2]$

✗ 3.  $[L^1 M^0 T^{-1}]$

✗ 4.  $[L^0 M^1 T^1]$

Question Type : MCQ

Question ID : 37135113103

Option 1 ID : 37135152409

Option 2 ID : 37135152411

Option 3 ID : 37135152410

Option 4 ID : 37135152412

Status : Answered

Chosen Option : 3

**Q.45** In meter bridge experiment, null point was obtained at a distance ' $\ell$ ' from left end. The values of resistances in the left and right gaps are doubled and then interchanged. The new position of null point is

Ans

✓<sub>1.</sub>  $(100 - \ell)$

✗<sub>2.</sub>  $\left(100 - \frac{\ell}{4}\right)$

✗<sub>3.</sub>  $\left(100 - \frac{\ell}{2}\right)$

✗<sub>4.</sub>  $(100 - 2\ell)$

Question Type : **MCQ**

Question ID : 37135113115

Option 1 ID : 37135152459

Option 2 ID : 37135152460

Option 3 ID : 37135152458

Option 4 ID : 37135152457

Status : **Answered**

Chosen Option : 3

**Q.46** A sample of radioactive element contains  $8 \times 10^{16}$  active nuclei. The half-life of the element is 15 days. The number of nuclei decayed after 60 days is

Ans

✗<sub>1.</sub>  $0.5 \times 10^{16}$

✗<sub>2.</sub>  $2 \times 10^{16}$

✓<sub>3.</sub>  $7.5 \times 10^{16}$

✗<sub>4.</sub>  $4 \times 10^{16}$

Question Type : **MCQ**

Question ID : 37135113126

Option 1 ID : 37135152501

Option 2 ID : 37135152502

Option 3 ID : 37135152504

Option 4 ID : 37135152503

Status : **Answered**

Chosen Option : 3

Q.47 At any instant, the magnitude of the centripetal force on a particle of mass 'm' performing circular motion is given by  
( $\omega$  = angular velocity and  $v$  = linear velocity of the particle)

Ans

1.  $\frac{m^2 \omega^2}{v}$

2.  $\frac{m\omega^2}{v}$

3.  $\frac{mv^2}{\omega}$

4.  $m\omega v$

Question Type : MCQ

Question ID : 37135113131

Option 1 ID : 37135152521

Option 2 ID : 37135152523

Option 3 ID : 37135152524

Option 4 ID : 37135152522

Status : Answered

Chosen Option : 4

Q.48 A flywheel of mass 2 kg has radius of gyration 0.5m. If it makes 10 r.p.s. then its rotational kinetic energy will be

Ans

1.  $100\pi^2 \text{ J}$

2.  $50\pi^2 \text{ J}$

3.  $100\pi^2 \text{ erg}$

4.  $50\pi^2 \text{ erg}$

Question Type : MCQ

Question ID : 37135113107

Option 1 ID : 37135152426

Option 2 ID : 37135152428

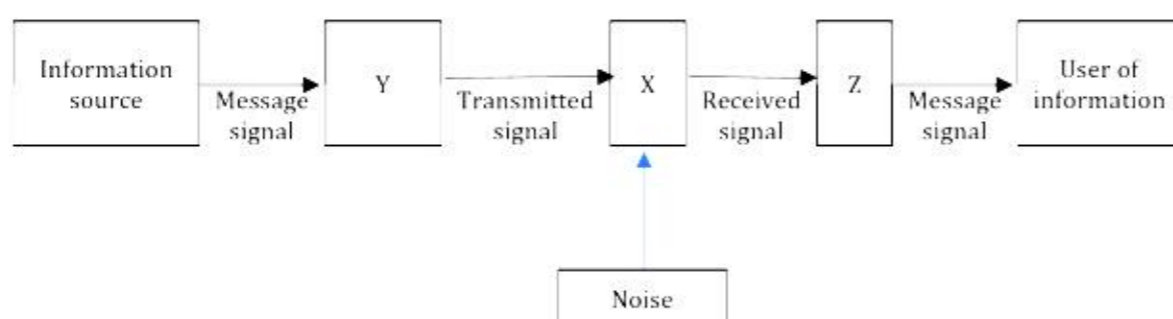
Option 3 ID : 37135152425

Option 4 ID : 37135152427

Status : Answered

Chosen Option : 3

Q.49 In the block diagram of generalised communication system, the element labelled as 'x' is



Ans

- 1. Receiver
- 2. Transmitter
- 3. Channel
- 4. Amplifier

Question Type : MCQ

Question ID : 37135113112

Option 1 ID : 37135152446

Option 2 ID : 37135152445

Option 3 ID : 37135152447

Option 4 ID : 37135152448

Status : Answered

Chosen Option : 1

Q.50 The coefficient of mutual induction is 2 H and induced e.m.f. across secondary is 2 kV. Current in the primary is reduced from 6 A to 3 A. The time required for the change of current is

Ans

- 1.  $6 \times 10^{-3}$  s
- 2.  $5 \times 10^{-3}$  s
- 3.  $3 \times 10^{-3}$  s
- 4.  $4 \times 10^{-3}$  s

Question Type : MCQ

Question ID : 37135113102

Option 1 ID : 37135152408

Option 2 ID : 37135152407

Option 3 ID : 37135152405

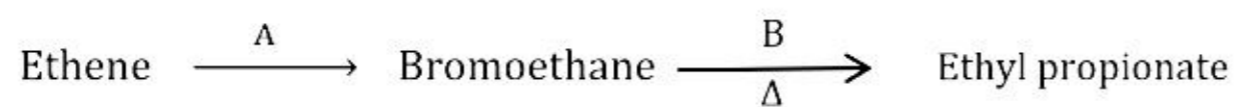
Option 4 ID : 37135152406

Status : Answered

Chosen Option : 3



Q.1 Identify A and B respectively in the following conversion



Ans

✗ 1.  $\text{Br}_2/\text{AlBr}_3$  ,  $\text{C}_2\text{H}_5\text{ONa}$

✗ 2.  $\text{Br}_2/\text{AlBr}_3$  ,  $\text{C}_2\text{H}_5\text{COO Ag}$

✗ 3.  $\text{HBr}$  ,  $\text{C}_2\text{H}_5\text{ONa}$

✓ 4.  $\text{HBr}$  ,  $\text{C}_2\text{H}_5\text{COOAg}$

Question Type : MCQ

Question ID : 37135113191

Option 1 ID : 37135152762

Option 2 ID : 37135152764

Option 3 ID : 37135152761

Option 4 ID : 37135152763

Status : Answered

Chosen Option : 4

Q.2

The most basic hydride of group 15 elements is

Ans

✓ 1.  $\text{NH}_3$

✗ 2.  $\text{PH}_3$

✗ 3.  $\text{SbH}_3$

✗ 4.  $\text{AsH}_3$

Question Type : **MCQ**

Question ID : 37135113163

Option 1 ID : 37135152651

Option 2 ID : 37135152650

Option 3 ID : 37135152649

Option 4 ID : 37135152652

Status : **Answered**

Chosen Option : 3

Q.3

IUPAC name of pinacol is

Ans

1. 2,3-dimethyl butane-1,4-diol

2. 2,2-dimethyl butane-1,3-diol

3. 2,3-dimethyl butane-2,3-diol

4. 2,3-dimethyl butane-1,3-diol

Question Type : MCQ

Question ID : 37135113179

Option 1 ID : 37135152713

Option 2 ID : 37135152715

Option 3 ID : 37135152716

Option 4 ID : 37135152714

Status : Answered

Chosen Option : 3



Q.4

When 46 g of ethyl alcohol is dissolved in 162 g of water, the mole fraction of ethyl alcohol and water respectively is

Ans

1. 0.9, 0.1

2. 0.78, 0.22

3. 0.1, 0.9

4. 0.22, 0.78

Question Type : MCQ

Question ID : 37135113180

Option 1 ID : 37135152718

Option 2 ID : 37135152720

Option 3 ID : 37135152717

Option 4 ID : 37135152719

Status : Answered

Chosen Option : 2

Q.5

What is the position of an element in long form of periodic table if the expected electronic configuration is  $[\text{Kr}]4d^95s^2$  ?

Ans

✗ 1. Group – 6, period – 5

✗ 2. Group – 9, period – 5

✗ 3. Group – 5, period – 6

✓ 4. Group – 11, period – 5

Question Type : **MCQ**

Question ID : 37135113177

Option 1 ID : 37135152706

Option 2 ID : 37135152708

Option 3 ID : 37135152705

Option 4 ID : 37135152707

Status : **Answered**

Chosen Option : 4

Q.6

The compound used in Holme's signals is

Ans

1. Ne

2. PH<sub>3</sub>

3. H<sub>2</sub>Se

4. P<sub>4</sub>O<sub>10</sub>

Question Type : MCQ

Question ID : 37135113182

Option 1 ID : 37135152727

Option 2 ID : 37135152728

Option 3 ID : 37135152726

Option 4 ID : 37135152725

Status : Answered

Chosen Option : 1



Q.7

A 5 % solution of cane sugar (molar mass 342) is isotonic with 1 % solution of non electrolyte substance X, the molar mass of substance X is

Ans

1.  $34.2 \text{ g mol}^{-1}$

2.  $171.2 \text{ g mol}^{-1}$

3.  $136.8 \text{ g mol}^{-1}$

4.  $68.4 \text{ g mol}^{-1}$

Question Type : MCQ

Question ID : 37135113164

Option 1 ID : 37135152655

Option 2 ID : 37135152654

Option 3 ID : 37135152656

Option 4 ID : 37135152653

Status : Answered

Chosen Option : 3

Q.8

0.4 g of an organic compound in Dumas method gives 22.4 mL of nitrogen collected at S. T. P. What is the percentage of nitrogen in the compound ?

Ans

1. 13.67 %

2. 7.0 %

3. 8.5 %

4. 10.0 %

Question Type : MCQ

Question ID : 37135113154

Option 1 ID : 37135152616

Option 2 ID : 37135152613

Option 3 ID : 37135152614

Option 4 ID : 37135152615

Status : Answered

Chosen Option : 4



Q.9

According to radius ratio rule if 'R' is radius of anion and 'r' is the radius of cation then for an atom to occupy octahedral hole, the possible relation between R and r is

Ans

1.  $r = 2.25 R$

2.  $r = 0.514 R$

3.  $r = 0.225 R$

4.  $r = 0.314 R$

Question Type : MCQ

Question ID : 37135113174

Option 1 ID : 37135152696

Option 2 ID : 37135152693

Option 3 ID : 37135152694

Option 4 ID : 37135152695

Status : Answered

Chosen Option : 2



Q.10

Molecular formula  $C_2H_7N$  represents

Ans

- 1. only  $2^\circ$  amine
- 2.  $1^\circ$  amine and  $2^\circ$  amine
- 3. only  $1^\circ$  amine
- 4.  $2^\circ$  amine and  $3^\circ$  amine

Question Type : MCQ

Question ID : 37135113173

Option 1 ID : 37135152691

Option 2 ID : 37135152690

Option 3 ID : 37135152689

Option 4 ID : 37135152692

Status : Answered

Chosen Option : 2

Q.11

Which of the following is obtained on dry distillation of equimolar mixture of calcium acetate and calcium propionate ?

Ans

1. Ethyl propyl ketone

2. Propionaldehyde

3. Acetaldehyde

4. Ethyl methyl ketone

Question Type : MCQ

Question ID : 37135113157

Option 1 ID : 37135152628

Option 2 ID : 37135152626

Option 3 ID : 37135152625

Option 4 ID : 37135152627

Status : Answered

Chosen Option : 4

Q.12

Which of the following solution is called as Lucas reagent ?

Ans

1.

Concentrated carbolic acid with zinc chloride.

2.

Concentrated hydrochloric acid with zinc chloride.

3.

Concentrated sulphuric acid with zinc sulphate.

4.

Concentrated nitric acid with zinc nitrate.

Question Type : MCQ

Question ID : 37135113194

Option 1 ID : 37135152776

Option 2 ID : 37135152774

Option 3 ID : 37135152773

Option 4 ID : 37135152775

Status : Answered

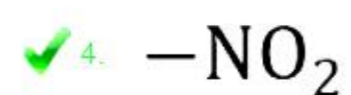
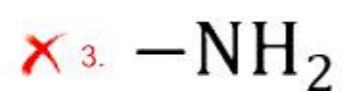
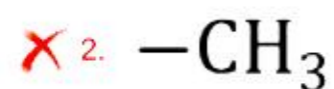
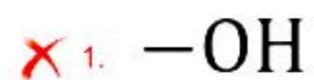
Chosen Option : 2



Q.13

Which among the following substituent groups increases the acidic strength of aromatic carboxylic acids ?

Ans



Question Type : MCQ

Question ID : 37135113165

Option 1 ID : 37135152658

Option 2 ID : 37135152657

Option 3 ID : 37135152660

Option 4 ID : 37135152659

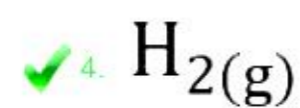
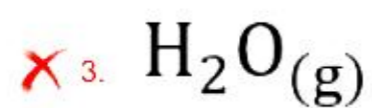
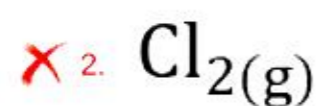
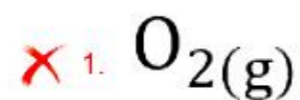
Status : Answered

Chosen Option : 1

Q.14

During electrolysis of aqueous NaCl, the product obtained at cathode is

Ans



Question Type : MCQ

Question ID : 37135113158

Option 1 ID : 37135152631

Option 2 ID : 37135152629

Option 3 ID : 37135152632

Option 4 ID : 37135152630

Status : Answered

Chosen Option : 2

Q.15

For zero order reaction, when  $[A]_t$  is plotted against time (t), the slope of the straight line obtained is equal to

Ans

✓ 1.  $-k$

✗ 2.  $k$

✗ 3.  $[A]_0$

✗ 4.  $-kt$

Question Type : MCQ

Question ID : 37135113169

Option 1 ID : 37135152675

Option 2 ID : 37135152674

Option 3 ID : 37135152673

Option 4 ID : 37135152676

Status : Answered

Chosen Option : 3

Q.16

How many moles of fructose and galactose respectively are obtained on hydrolysis of 1 mole stachyose ?

Ans

✗ 1. 1, 1

✗ 2. 2, 2

✗ 3. 3, 1

✓ 4. 1, 2

Question Type : MCQ

Question ID : 37135113175

Option 1 ID : 37135152697

Option 2 ID : 37135152698

Option 3 ID : 37135152699

Option 4 ID : 37135152700

Status : Answered

Chosen Option : 1



Q.17

In colloidal dispersion of starch maximum possible size of starch particle is

Ans

1. 0.1 nm

2. 1 nm

3. greater than  $10^3$  nm

4.  $10^3$  nm

Question Type : MCQ

Question ID : 37135113167

Option 1 ID : 37135152665

Option 2 ID : 37135152666

Option 3 ID : 37135152668

Option 4 ID : 37135152667

Status : Answered

Chosen Option : 3

Q.18

Which among the following is NOT paramagnetic in nature ?

Ans

1. Benzene

2. Oxygen

3.  $\text{Fe}^{3+}$

4.  $\text{Cu}^{2+}$

Question Type : MCQ

Question ID : 37135113160

Option 1 ID : 37135152640

Option 2 ID : 37135152639

Option 3 ID : 37135152638

Option 4 ID : 37135152637

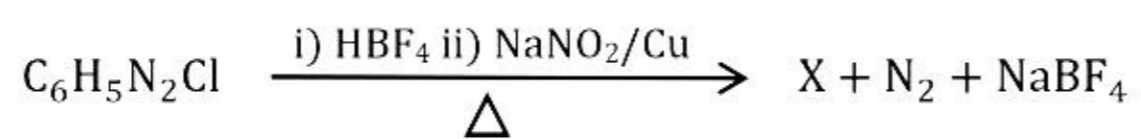
Status : Answered

Chosen Option : 1

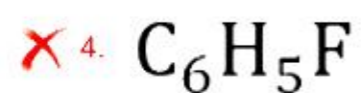
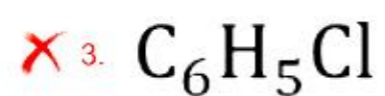
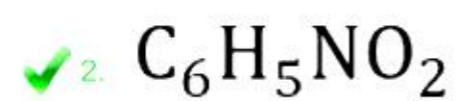
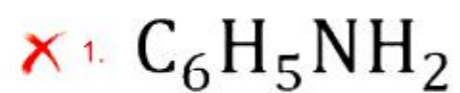


Q.19

What is the product X obtained in the following reaction ?



Ans



Question Type : MCQ

Question ID : 37135113159

Option 1 ID : 37135152636

Option 2 ID : 37135152635

Option 3 ID : 37135152633

Option 4 ID : 37135152634

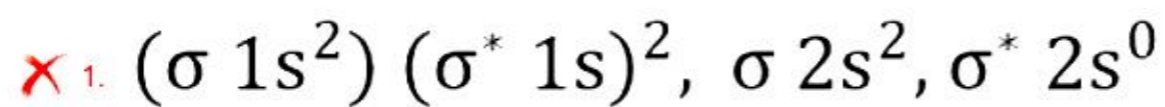
Status : Answered

Chosen Option : 2

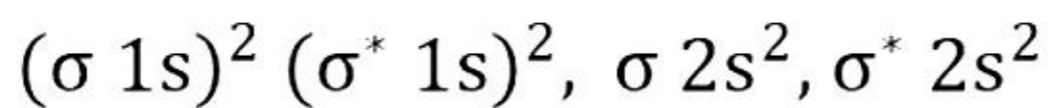
Q.20

The electronic configuration of  $\text{Be}_2$  molecule according MOT is

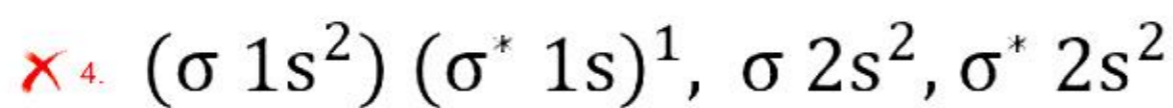
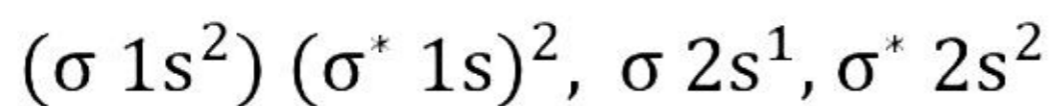
Ans



2.



3.



Question Type : MCQ

Question ID : 37135113162

Option 1 ID : 37135152648

Option 2 ID : 37135152645

Option 3 ID : 37135152647

Option 4 ID : 37135152646

Status : Answered

Chosen Option : 2



Q.21

Which among the following pairs of percentage of carbon and the property of cast iron is true ?

Ans  1.

0·2 to 2·0 % C , forms steel alloy

2. 0·2 to 2·0 % C , very soft

3. 4·0 % C , hard and brittle

4. Less than 0·2 % C , very soft

Question Type : MCQ

Question ID : 37135113178

Option 1 ID : 37135152709

Option 2 ID : 37135152712

Option 3 ID : 37135152710

Option 4 ID : 37135152711

Status : Answered

Chosen Option : 3



Q.22

Which of the following is an intensive property ?

Ans

1. Mass

2. Melting point

3. Internal energy

4. Volume

Question Type : **MCQ**

Question ID : 37135113172

Option 1 ID : 37135152686

Option 2 ID : 37135152685

Option 3 ID : 37135152688

Option 4 ID : 37135152687

Status : **Answered**

Chosen Option : 2

Q.23

Alkyl chloride when treated with sodium iodide in presence of dry acetone forms alkyl iodide. What is the name of this reaction ?

Ans

- 1. Swarts reaction
- 2. Wurtz reaction
- 3. Wurtz - Fittig reaction
- 4. Finkelstein reaction

Question Type : **MCQ**

Question ID : 37135113196

Option 1 ID : 37135152783

Option 2 ID : 37135152781

Option 3 ID : 37135152782

Option 4 ID : 37135152784

Status : **Answered**

Chosen Option : 4



Q.24

At constant temperature and pressure when 8 volumes of dihydrogen gas react with 4 volumes of dioxygen, the mass of water vapour produced is

Ans

1. 36 g

2. 72 g

3. 162 g

4. 144 g

Question Type : MCQ

Question ID : 37135113189

Option 1 ID : 37135152753

Option 2 ID : 37135152754

Option 3 ID : 37135152756

Option 4 ID : 37135152755

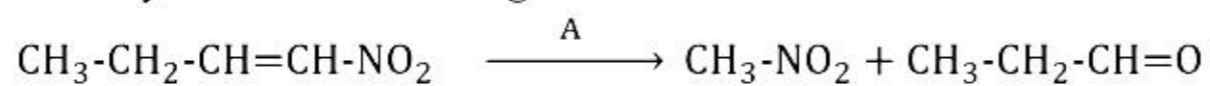
Status : Answered

Chosen Option : 3

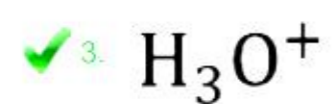
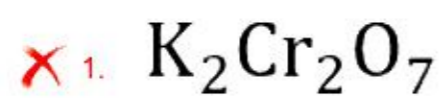


Q.25

Identify 'A' in the following reaction.



Ans



Question Type : MCQ

Question ID : 37135113186

Option 1 ID : 37135152743

Option 2 ID : 37135152741

Option 3 ID : 37135152742

Option 4 ID : 37135152744

Status : Answered

Chosen Option : 3

**Q.26** A first order reaction is 50 % completed in 16 minutes. The percentage of reactant that will react in 32 minutes is

**Ans**

1. 100 %

2. 12.5 %

3. 25 %

4. 75 %

Question Type : **MCQ**

Question ID : 37135113192

Option 1 ID : 37135152767

Option 2 ID : 37135152768

Option 3 ID : 37135152765

Option 4 ID : 37135152766

Status : **Answered**

Chosen Option : 1

Q.27

Which of the following reagents can bring about following conversion ?

But-1-ene  $\longrightarrow$  Butan-2-ol

Ans

1.  $\text{H}_2\text{O}_2$

2. KOH aqueous

3.

(i) cold Conc  $\cdot$   $\text{H}_2\text{SO}_4$  , (ii)  $\text{H}_2\text{O}$

4.  $\text{B}_2\text{H}_6$

Question Type : MCQ

Question ID : 37135113170

Option 1 ID : 37135152677

Option 2 ID : 37135152680

Option 3 ID : 37135152678

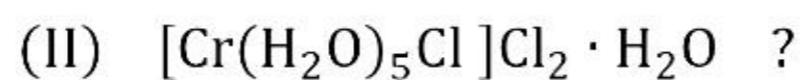
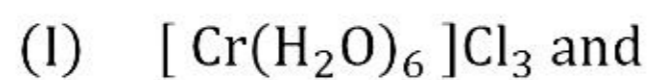
Option 4 ID : 37135152679

Status : Answered

Chosen Option : 3

Q.28

What type of isomerism is present between



Ans

1. Ionisation

2. Coordination

3. Hydrate

4. Linkage

Question Type : MCQ

Question ID : 37135113168

Option 1 ID : 37135152669

Option 2 ID : 37135152671

Option 3 ID : 37135152672

Option 4 ID : 37135152670

Status : Answered

Chosen Option : 1

Q.29

Identify the correct statement from the following.

Ans  1.

Vapour pressure of a solution containing a non volatile solute is always less than vapour pressure of pure solvent.

 2.

Liquids having greater intermolecular forces have lower boiling points.

 3.

Boiling point of pure solvent is always greater than boiling point of it's solution containing a non volatile solute.

 4.

Vapour pressure of a solution containing a non volatile solute is always greater than vapour pressure of pure solvent.

Question Type : **MCQ**

Question ID : **37135113193**

Option 1 ID : **37135152772**

Option 2 ID : **37135152769**

Option 3 ID : **37135152770**

Option 4 ID : **37135152771**

Status : **Answered**

Chosen Option : **1**



Q.30

Which among the following polymers is used to obtain bullet proof vests and helmets ?

Ans

1. Dynel

2. Glyptal

3. Nomex

4. Kevlar

Question Type : MCQ

Question ID : 37135113161

Option 1 ID : 37135152644

Option 2 ID : 37135152643

Option 3 ID : 37135152641

Option 4 ID : 37135152642

Status : Answered

Chosen Option : 4

Q.31

Which metal from following has highest tendency to undergo oxidation ?

Ans

1. Mg

2. Ag

3. Al

4. Fe

Question Type : MCQ

Question ID : 37135113156

Option 1 ID : 37135152624

Option 2 ID : 37135152621

Option 3 ID : 37135152623

Option 4 ID : 37135152622

Status : Answered

Chosen Option : 4



**Q.32** Which among the following elements has highest ionisation enthalpy and bears a diagonal relationship with aluminium ?

**Ans**

1. Magnesium

2. Beryllium

3. Calcium

4. Lithium

Question Type : **MCQ**

Question ID : 37135113198

Option 1 ID : 37135152790

Option 2 ID : 37135152789

Option 3 ID : 37135152791

Option 4 ID : 37135152792

Status : **Answered**


Chosen Option : 2

Q.33

Which of the following is cationic detergent ?

Ans  1.

n-hexadecyl trimethyl ammonium chloride

 2. Pentaerythrityl stearate

 3.

n-dodecyl benzene sulphonic acid

 4. Sodium lauryl sulphate

Question Type : MCQ

Question ID : 37135113187

Option 1 ID : 37135152748

Option 2 ID : 37135152747

Option 3 ID : 37135152745

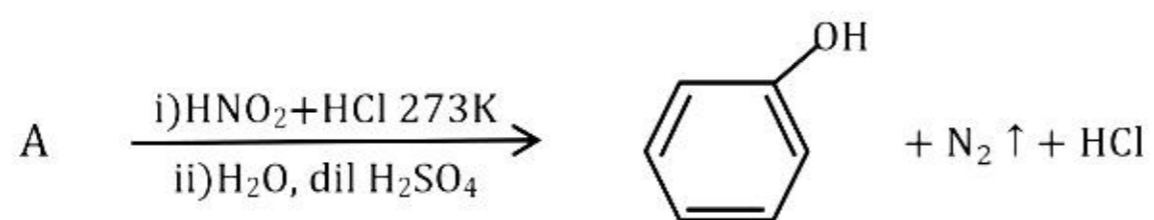
Option 4 ID : 37135152746

Status : Answered

Chosen Option : 3

Q.34

Identify compound 'A' in the following reaction.



Ans

1. Benzene

2. Chlorobenzene

3. Aniline

4. Cumene

Question Type : MCQ

Question ID : 37135113184

Option 1 ID : 37135152735

Option 2 ID : 37135152733

Option 3 ID : 37135152736

Option 4 ID : 37135152734

Status : Answered

Chosen Option : 2

Q.35

Strength of 20 volume solution of hydrogen peroxide is

Ans

✓<sub>1</sub>. 60.71 g/L

✗<sub>2</sub>. 6.8 g/L

✗<sub>3</sub>. 68 g/L

✗<sub>4</sub>. 6.071 g/L

Question Type : MCQ

Question ID : 37135113195

Option 1 ID : 37135152779

Option 2 ID : 37135152777

Option 3 ID : 37135152778

Option 4 ID : 37135152780

Status : Answered

Chosen Option : 3


Q.36 What type of geometry and magnetic behaviour is found in compound  $[\text{NiCl}_4]^{2-}$  ?  
(Atomic no. Ni = 28)

Ans  1.

Square planar and Paramagnetic

 2.

Tetrahedral and paramagnetic

 3. Pyramidal and diamagnetic

 4.

Square planar and paramagnetic

Question Type : MCQ

Question ID : 37135113155

Option 1 ID : 37135152617

Option 2 ID : 37135152619

Option 3 ID : 37135152618

Option 4 ID : 37135152620

Status : Answered

Chosen Option : 2

Q.37

Identify the compound having highest boiling point from following ?

Ans

1. Propanal

2. Methoxy ethane

3. Propane

4. Propan-1-ol

Question Type : MCQ

Question ID : 37135113199

Option 1 ID : 37135152795

Option 2 ID : 37135152796

Option 3 ID : 37135152793

Option 4 ID : 37135152794

Status : Answered

Chosen Option : 4

Q.38

Which among the following catalysts is used in manufacture of sulphuric acid by contact process ?

Ans

1. Ni

2. Fe with Mo

3.  $V_2O_5$

4.  $MnO_2$

Question Type : MCQ

Question ID : 37135113190

Option 1 ID : 37135152759

Option 2 ID : 37135152760

Option 3 ID : 37135152758

Option 4 ID : 37135152757

Status : Answered

Chosen Option : 3



**Q.39** A balloon contains 2.27 L air and has a pressure of  $1.013 \times 10^5 \text{ nm}^{-2}$ . The balloon rises to a certain height and expands to volume of 4540 mL.  
What is the final pressure of air in balloon ?

**Ans**

1.  $2.026 \times 10^2 \text{ Nm}^{-2}$

2.  $4.540 \times 10^4 \text{ Nm}^{-2}$

3.  $5.065 \times 10^{-4} \text{ Nm}^{-2}$

4.  $5.065 \times 10^4 \text{ Nm}^{-2}$

Question Type : **MCQ**

Question ID : **37135113181**

Option 1 ID : **37135152723**

Option 2 ID : **37135152724**

Option 3 ID : **37135152721**

Option 4 ID : **37135152722**

Status : **Answered**

Chosen Option : **1**



Q.40

Heat of combustion of liquid benzene to carbon dioxide and water is  $-3266 \text{ kJ mol}^{-1}$ . What is the amount of heat liberated when 780 mg of benzene is fully oxidised? (At mass of C = 12, H = 1)

Ans

✓<sup>1.</sup> 32.66 kJ

✗<sup>2.</sup> 326.6 kJ

✗<sup>3.</sup> 65.32 kJ

✗<sup>4.</sup> 16.33 kJ

Question Type : MCQ

Question ID : 37135113185

Option 1 ID : 37135152737

Option 2 ID : 37135152740

Option 3 ID : 37135152739

Option 4 ID : 37135152738

Status : Answered

Chosen Option : 2

Q.41 Total number of lone pairs of electron on oxygen atoms in carbondioxide are

Ans

1. 2

2. 3

3. 4

4. 1

Question Type : MCQ

Question ID : 37135113153

Option 1 ID : 37135152610

Option 2 ID : 37135152611

Option 3 ID : 37135152612

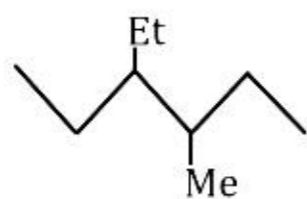
Option 4 ID : 37135152609

Status : Answered

Chosen Option : 3

Q.42

What is the molar mass of a compound represented below ?



Ans

✓ 1. 128 g mol<sup>-1</sup>

✗ 2. 108 g mol<sup>-1</sup>

✗ 3. 120 g mol<sup>-1</sup>

✗ 4. 126 g mol<sup>-1</sup>

Question Type : MCQ

Question ID : 37135113200

Option 1 ID : 37135152799

Option 2 ID : 37135152798

Option 3 ID : 37135152797

Option 4 ID : 37135152800

Status : Answered

Chosen Option : 1

Q.43

Which among the following polymers is a heteropolymer ?

Ans

1. Nylon-6

2. Polythene

3. Buna-N

4. Polystyrene

Question Type : **MCQ**

Question ID : **37135113183**

Option 1 ID : **37135152729**

Option 2 ID : **37135152731**

Option 3 ID : **37135152730**

Option 4 ID : **37135152732**

Status : **Answered**

Chosen Option : **3**

Q.44

Which of the following formulae is used to find edge length of bcc unit cell ?

Ans

1.  $\frac{\sqrt{3}}{4r}$

2.  $\sqrt{8} r$

3.  $\frac{4r}{\sqrt{3}}$

4.  $\sqrt{\frac{4r}{3}}$

Question Type : **MCQ**

Question ID : **37135113188**

Option 1 ID : **37135152751**

Option 2 ID : **37135152749**

Option 3 ID : **37135152750**

Option 4 ID : **37135152752**

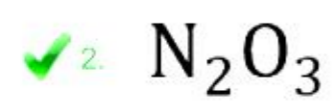
Status : **Answered**

Chosen Option : **3**

Q.45

What is the molecular formula of nitrogen sesquioxide ?

Ans



Question Type : **MCQ**

Question ID : 37135113151

Option 1 ID : 37135152604

Option 2 ID : 37135152601

Option 3 ID : 37135152602

Option 4 ID : 37135152603

Status : **Answered**

Chosen Option : 2

Q.46

Prolonged heating of glucose with HI to form n-Hexane, confirms

Ans

1. Presence of carbonyl group

2.

Presence of all six carbon atoms in a straight chain

3.

Presence of primary alcoholic group

4.

Presence of aldehydic carbonyl group

Question Type : **MCQ**

Question ID : 37135113171

Option 1 ID : 37135152681

Option 2 ID : 37135152683

Option 3 ID : 37135152684

Option 4 ID : 37135152682

Status : **Answered**

Chosen Option : 2

Q.47

When will be change in Gibb's free energy always negative ?

Ans  1.

$\Delta H = \text{positive}$ ,  $\Delta S = \text{negative}$  at all temperatures.

 2.

$\Delta H$  and  $\Delta S$  both positive at low temperature.

 3.

$\Delta H = \text{negative}$ ,  $\Delta S = \text{positive}$ , at all temperatures.

 4.

$\Delta H$  and  $\Delta S$  both negative at high temperature.

Question Type : **MCQ**

Question ID : **37135113197**

Option 1 ID : **37135152788**

Option 2 ID : **37135152786**

Option 3 ID : **37135152787**

Option 4 ID : **37135152785**

Status : **Answered**

Chosen Option : **3**



**Q.48** The conductivity of NaI solution is  $6.0 \times 10^{-4} \Omega^{-1} \text{cm}^{-1}$  and molar conductivity is  $120 \Omega^{-1} \text{cm}^2 \text{mol}^{-1}$ . Calculate the concentration of NaI solution

**Ans**

1. 0.05 M

2.  $2 \times 10^{-2}$  M

3. 0.005 M

4.  $7.2 \times 10^{-3}$  M

Question Type : **MCQ**

Question ID : 37135113152

Option 1 ID : 37135152606

Option 2 ID : 37135152608

Option 3 ID : 37135152605

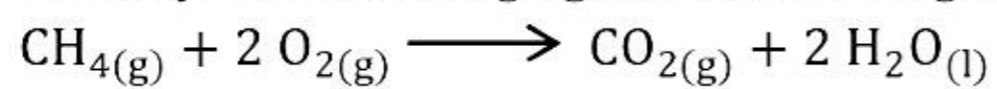
Option 4 ID : 37135152607

Status : **Answered**

Chosen Option : 2

Q.49

Identify the oxidising agent in following reaction.



Ans

1.  $\text{CH}_4(\text{g})$

2.  $\text{O}_2(\text{g})$

3.  $\text{CO}_2(\text{g})$

4.  $\text{H}_2\text{O}(\text{l})$

Question Type : MCQ

Question ID : 37135113176

Option 1 ID : 37135152701

Option 2 ID : 37135152702

Option 3 ID : 37135152703

Option 4 ID : 37135152704

Status : Answered

Chosen Option : 2

Q.50

Which of the following is NOT an antiseptic ?

Ans

1. Bithional

2. Penicillin

3. Chloroxylenol

4. Iodine

Question Type : MCQ

Question ID : 37135113166

Option 1 ID : 37135152664

Option 2 ID : 37135152662

Option 3 ID : 37135152661

Option 4 ID : 37135152663

Status : Answered

Chosen Option : 2

Section: Biology

Q.1 How many among the sixteen offsprings produced in the F<sub>2</sub> generation will have parental combinations of two genes controlling wheat kernel colour?

Ans  1.

Three

2. Four

3.

One

4.

Two

Question Type : MCQ

Question ID : 37135113217

Option 1 ID : 37135152866

Option 2 ID : 37135152865

Option 3 ID : 37135152868

Option 4 ID : 37135152867

Status : Answered

Chosen Option : 4

**Q.2** In herbivorous animals, appendix helps in digestion of \_\_\_\_\_.

- Ans**
- 1. cellulose
  - 2. glycogen
  - 3. polypeptides
  - 4. lactose

Question Type : **MCQ**  
Question ID : **37135113257**  
Option 1 ID : **37135153027**  
Option 2 ID : **37135153026**  
Option 3 ID : **37135153025**  
Option 4 ID : **37135153028**  
Status : **Answered**  
Chosen Option : **1**

**Q.3** One of the following cell organelles is involved in synthesis and storage of fat.

- Ans**
- 1. Glyoxysome
  - 2. Peroxisome
  - 3. Sphaerosome
  - 4. Ribosome

Question Type : **MCQ**  
Question ID : **37135113298**  
Option 1 ID : **37135153191**  
Option 2 ID : **37135153190**  
Option 3 ID : **37135153189**  
Option 4 ID : **37135153192**  
Status : **Answered**  
Chosen Option : **1**

Q.4 Eustachian valve guards the opening of \_\_\_\_\_.

Ans  1.  
coronary sinus

2.  
coronary artery

3.  
inferior venacava

4.  
superior venacava

Question Type : **MCQ**  
Question ID : 37135113265  
Option 1 ID : 37135153059  
Option 2 ID : 37135153060  
Option 3 ID : 37135153057  
Option 4 ID : 37135153058  
Status : **Answered**  
Chosen Option : 3

Q.5 The gene transfer between unrelated plants is brought about by \_\_\_\_\_.

Ans  1.  
cloning

2.  
genetic engineering

3.  
asexual reproduction

4.  
sexual reproduction

Question Type : **MCQ**  
Question ID : 37135113247  
Option 1 ID : 37135152988  
Option 2 ID : 37135152987  
Option 3 ID : 37135152986  
Option 4 ID : 37135152985  
Status : **Answered**  
Chosen Option : 2

**Q.6** The applications of DNA finger printing technique are following EXCEPT \_\_\_\_\_.

**Ans**  1.

to establish parentage in disputed cases.

2.

to study chromosomal types.

3.

to settle insurance claims.

4.

to study phylogeny of organisms.

Question Type : **MCQ**

Question ID : **37135113294**

Option 1 ID : **37135153173**

Option 2 ID : **37135153176**

Option 3 ID : **37135153175**

Option 4 ID : **37135153174**

Status : **Answered**

Chosen Option : **3**

**Q.7** The process of tubular secretion adds following substances to the renal fluid EXCEPT \_\_\_\_\_.

**Ans**  1.

hydrogen ions

2. creatinine

3.

potassium ions

4.

sodium ions

Question Type : **MCQ**

Question ID : **37135113299**

Option 1 ID : **37135153194**

Option 2 ID : **37135153196**

Option 3 ID : **37135153195**

Option 4 ID : **37135153193**

Status : **Answered**

Chosen Option : **2**

**Q.8** The sites of nitrogen fixation in blue green algae are\_\_\_\_\_.

**Ans**  1.  
vegetative cells

2.  
apical cells

3.  
heterocysts

4.  
basal cells

Question Type : **MCQ**  
Question ID : **37135113225**  
Option 1 ID : **37135152897**  
Option 2 ID : **37135152900**  
Option 3 ID : **37135152898**  
Option 4 ID : **37135152899**  
Status : **Answered**  
Chosen Option : **3**

**Q.9** On sensitization, activated B-lymphocytes multiply to form clone of specific  
\_\_A\_\_ which in turn produce \_\_B\_\_.

**Ans**  1.  
A-cytotoxic T-cells,      B-perforins

2.  
A- plasma cells,      B-antibodies

3.  
A-plasma cells,      B-antigens

4.  
A- memory T-cells,      B-lymphokines

Question Type : **MCQ**  
Question ID : **37135113273**  
Option 1 ID : **37135153091**  
Option 2 ID : **37135153089**  
Option 3 ID : **37135153092**  
Option 4 ID : **37135153090**  
Status : **Answered**  
Chosen Option : **4**

**Q.10** Pusa Shubhra a variety of cauliflower is produced to prevent \_\_\_\_\_.

- Ans**  1.  
black rot
2.  
leaf curl
3.  
stripe rust
4.  
Hill bunt

Question Type : **MCQ**  
Question ID : **37135113222**  
Option 1 ID : **37135152886**  
Option 2 ID : **37135152887**  
Option 3 ID : **37135152888**  
Option 4 ID : **37135152885**  
Status : **Answered**  
Chosen Option : **1**

**Q.11** The toxic substances released from *Bacillus thuringiensis* affects \_\_\_\_\_ of insect

- larva.
- Ans**  1.  
brain
2.  
gut
3.  
Malpighian tubules
4.  
trachea

Question Type : **MCQ**  
Question ID : **37135113248**  
Option 1 ID : **37135152989**  
Option 2 ID : **37135152990**  
Option 3 ID : **37135152991**  
Option 4 ID : **37135152992**  
Status : **Answered**  
Chosen Option : **2**



**Q.12** Which one of the following is NOT needed to construct solenoid fibre?

**Ans**  1.

Nucleosome

2.

DNA molecule

3.

RNA molecule

4.

Basic proteins histones

Question Type : **MCQ**

Question ID : **37135113232**

Option 1 ID : **37135152928**

Option 2 ID : **37135152927**

Option 3 ID : **37135152926**

Option 4 ID : **37135152925**

Status : **Answered**

Chosen Option : **3**

**Q.13** In Column - I there are names of viral diseases while in Column-II there are names of viruses. Find out INCORRECT pair.

Column - I

Column - II

**Ans**  1.

Yellow fever -- Flavi virus

2.

Swine flu -- H<sub>1</sub>N<sub>1</sub> virus

3.

Small pox -- Morbilli virus

4.

AIDS -- Retro virus

Question Type : **MCQ**

Question ID : **37135113201**

Option 1 ID : **37135152801**

Option 2 ID : **37135152802**

Option 3 ID : **37135152804**

Option 4 ID : **37135152803**

Status : **Answered**

Chosen Option : **4**

Q.14 Highest taxonomic category is \_\_\_\_\_.

- Ans  1.  
species
2.  
division
3.  
genus
4.  
kingdom

Question Type : **MCQ**  
Question ID : 37135113242  
Option 1 ID : 37135152965  
Option 2 ID : 37135152967  
Option 3 ID : 37135152966  
Option 4 ID : 37135152968  
Status : **Answered**  
Chosen Option : 4

Q.15 At how many places, Co-A is used in aerobic respiration after glycolysis?

- Ans  1.  
Three
2.  
Four
3.  
One
4.  
Two

Question Type : **MCQ**  
Question ID : 37135113203  
Option 1 ID : 37135152811  
Option 2 ID : 37135152812  
Option 3 ID : 37135152809  
Option 4 ID : 37135152810  
Status : **Answered**  
Chosen Option : 4

**Q.16** A gap present in upper jaw, between incisor and canine of ape is \_\_\_\_\_.

- Ans**  1.  
diastema
2.  
diapedesis
3.  
diaphysis
4.  
diarthrosis

Question Type : **MCQ**  
Question ID : 37135113271  
Option 1 ID : 37135153083  
Option 2 ID : 37135153082  
Option 3 ID : 37135153081  
Option 4 ID : 37135153084  
Status : **Answered**  
Chosen Option : 3

**Q.17** Increased blood pressure and heart rate, deposition of fats in eye sockets and weight loss are found in \_\_\_\_\_.

- Ans**  1.  
Addison's disease
2.  
Grave's disease
3.  
bleeder's disease
4.  
Cushing's disease

Question Type : **MCQ**  
Question ID : 37135113281  
Option 1 ID : 37135153122  
Option 2 ID : 37135153121  
Option 3 ID : 37135153124  
Option 4 ID : 37135153123  
Status : **Answered**  
Chosen Option : 4

Q.18 What proportion of photosynthetically fixed CO<sub>2</sub> goes back to atmosphere, in C<sub>3</sub> plants by photorespiration?

Ans

1.  $\frac{1}{6}$

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

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

4.  $\frac{5}{6}$

Question Type : MCQ

Question ID : 37135113211

Option 1 ID : 37135152842

Option 2 ID : 37135152844

Option 3 ID : 37135152841

Option 4 ID : 37135152843

Status : Answered

Chosen Option : 3

Q.19 Cranial capacity of Java man is \_\_\_\_\_.

Ans  1.

1600 c.c.

2.

1450 c.c.

3.

1200 c.c.

4.

940 c.c.

Question Type : MCQ

Question ID : 37135113264

Option 1 ID : 37135153056

Option 2 ID : 37135153055

Option 3 ID : 37135153054

Option 4 ID : 37135153053

Status : Answered

Chosen Option : 3

**Q.20** How many of the following statements is/are true?

- i) Alleles are located on different loci.
- ii) An allele individually controls a trait.
- iii) An allelic pair controls two traits.
- iv) An allelic pair controls a single trait.

Ans  1.

Two

2.

One

3.

**Four**

4.

Three

Question Type : **MCQ**

Question ID : 37135113244

Option 1 ID : 37135152975

Option 2 ID : 37135152976

Option 3 ID : 37135152973

Option 4 ID : 37135152974

Status : **Answered**

Chosen Option : 2

**Q.21** Branching tree like processes of white matter called A are located in B of CNS.

Ans  1.

A - funiculi,

B - spinal cord

2.

A - folia,

B - medulla oblongata

3.

A - corpora striata ,

B - cerebrum

4.

A - arbor vitae,

B - cerebellum

Question Type : **MCQ**

Question ID : 37135113260

Option 1 ID : 37135153038

Option 2 ID : 37135153039

Option 3 ID : 37135153037

Option 4 ID : 37135153040

Status : **Answered**

Chosen Option : 4

Q.22 Exudation of water from the cut end of basal part of stem is due to \_\_\_\_\_.

- Ans
- 1.  
osmotic pressure
  - 2.  
transpiration
  - 3.  
root pressure
  - 4.  
low temperature

Question Type : MCQ  
Question ID : 37135113249  
Option 1 ID : 37135152995  
Option 2 ID : 37135152993  
Option 3 ID : 37135152994  
Option 4 ID : 37135152996  
Status : Answered  
Chosen Option : 3

Q.23 In *Kalanchoe*, vegetative reproduction takes place by \_\_\_\_\_.

- Ans
- 1.  
root tuber
  - 2.  
stem tuber
  - 3.  
floral buds
  - 4.  
epiphyllous buds

Question Type : MCQ  
Question ID : 37135113206  
Option 1 ID : 37135152821  
Option 2 ID : 37135152822  
Option 3 ID : 37135152824  
Option 4 ID : 37135152823  
Status : Answered  
Chosen Option : 3

**Q.24** Which one of the following is NOT a characteristic of genetic code?

- Ans**  1.  
It is commaless.
2.  
It is in triplets.
3.  
It is degenerate.
4.  
It is ambiguous.

Question Type : **MCQ**  
Question ID : 37135113243  
Option 1 ID : 37135152969  
Option 2 ID : 37135152970  
Option 3 ID : 37135152972  
Option 4 ID : 37135152971  
Status : **Answered**  
Chosen Option : 3

**Q.25** A pea plant with genotype YyRr is crossed with another pea plant with genotype yyrr. The expected phenotypic ratio of individuals formed will be\_\_\_\_\_.

- Ans**  1.  
2:1:1
2.  
1:2:1
3.  
1:1:2
4.  
1:1:1:1

Question Type : **MCQ**  
Question ID : 37135113205  
Option 1 ID : 37135152818  
Option 2 ID : 37135152817  
Option 3 ID : 37135152820  
Option 4 ID : 37135152819  
Status : **Answered**  
Chosen Option : 4

Q.26 Generally lower pulse rate is observed in \_\_\_\_\_.

Ans  1.

males

2.

excitement

3.

standing position

4.

children

Question Type : MCQ

Question ID : 37135113259

Option 1 ID : 37135153036

Option 2 ID : 37135153034

Option 3 ID : 37135153033

Option 4 ID : 37135153035

Status : Answered

Chosen Option : 1

Q.27 Which one of the following is NOT an example of C<sub>4</sub> plant?

Ans  1.

Sugarcane

2.

Gram

3.

*Amaranthus*

4.

Maize

Question Type : MCQ

Question ID : 37135113207

Option 1 ID : 37135152828

Option 2 ID : 37135152827

Option 3 ID : 37135152825

Option 4 ID : 37135152826

Status : Answered

Chosen Option : 3



**Q.28** A protein is a sequence of amino acids. The end of polypeptide chain of - NH<sub>2</sub> end and at - COOH end are respectively called \_\_\_\_\_.

**Ans**  1.

$\alpha$ -terminal and  $\beta$ -terminal

2.

N-terminal and C-terminal

3.

C-terminal and N-terminal

4.

$\beta$ -terminal and  $\alpha$ -terminal

Question Type : **MCQ**

Question ID : **37135113238**

Option 1 ID : **37135152951**

Option 2 ID : **37135152949**

Option 3 ID : **37135152950**

Option 4 ID : **37135152952**

Status : **Answered**

Chosen Option : **1**

**Q.29** Usually at which pH, the human sperms become motile?

**Ans**  1.

4.5 to 5.0

2.

6.0 to 6.5

3.

7.5 to 8.5

4.

4.0 to 4.5

Question Type : **MCQ**

Question ID : **37135113258**

Option 1 ID : **37135153030**

Option 2 ID : **37135153031**

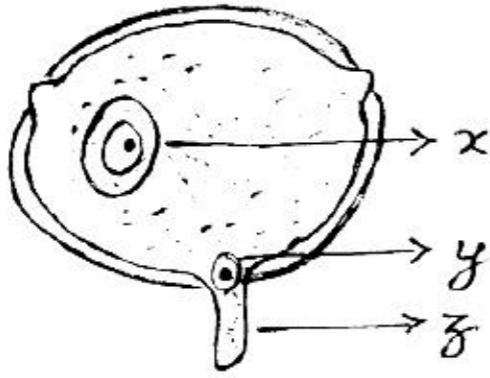
Option 3 ID : **37135153032**

Option 4 ID : **37135153029**

Status : **Answered**

Chosen Option : **2**

Q.30 Choose the correct set of labellings in the given diagram.



Ans  1.

x-generative cell, y-pollen tube, z-tube nucleus

2.

x-generative cell, y-tube nucleus, z-pollen tube

3.

x-pollen tube, y-tube nucleus, z-generative cell

4.

x-tube nucleus, y-generative cell, z-pollen tube

Question Type : MCQ

Question ID : 37135113223

Option 1 ID : 37135152889

Option 2 ID : 37135152890

Option 3 ID : 37135152891

Option 4 ID : 37135152892

Status : Answered

Chosen Option : 2

Q.31 *Psilotum nudum* is a/an \_\_\_\_\_ species.

Ans  1.

endangered

2.

rare

3.

extinct

4.

exotic

Question Type : MCQ

Question ID : 37135113278

Option 1 ID : 37135153109

Option 2 ID : 37135153112

Option 3 ID : 37135153110

Option 4 ID : 37135153111

Status : Answered

Chosen Option : 4

**Q.32** The endocrine nature of kidney is indicated by secretion of \_\_\_\_\_.

- Ans**  1.  
calcitriol
2.  
aldosterone
3.  
glucagon
4.  
vasopressin

Question Type : **MCQ**  
Question ID : **37135113268**  
Option 1 ID : **37135153071**  
Option 2 ID : **37135153069**  
Option 3 ID : **37135153070**  
Option 4 ID : **37135153072**  
Status : **Answered**  
Chosen Option : **2**

**Q.33** The law of dominance is not universally applicable because in some organisms few characters are \_\_\_\_\_.

- Ans**  1.  
completely dominant.
2.  
both, dominant and recessive
3.  
completely recessive.
4.  
incompletely dominant.

Question Type : **MCQ**  
Question ID : **37135113227**  
Option 1 ID : **37135152905**  
Option 2 ID : **37135152908**  
Option 3 ID : **37135152906**  
Option 4 ID : **37135152907**  
Status : **Answered**  
Chosen Option : **3**

Q.34 A single layer of cells that composes epicardium is called \_\_\_\_\_.

- Ans  1.  
endothelium
2.  
mesothelium
3.  
ependyma
4.  
epidermis

Question Type : **MCQ**  
Question ID : 37135113270  
Option 1 ID : 37135153080  
Option 2 ID : 37135153079  
Option 3 ID : 37135153077  
Option 4 ID : 37135153078  
Status : **Answered**  
Chosen Option : 1

Q.35 The  $pO_2$  of alveolar blood is \_\_\_\_\_ mmHg.

- Ans  1.  
90
2.  
50
3.  
104
4.  
40

Question Type : **MCQ**  
Question ID : 37135113283  
Option 1 ID : 37135153131  
Option 2 ID : 37135153130  
Option 3 ID : 37135153132  
Option 4 ID : 37135153129  
Status : **Answered**  
Chosen Option : 3

Q.36 The correct group of ureotelic animals is \_\_\_\_\_.

Ans  1.

frog, shark, *Labeo*

2.

land snail, toad, *Labeo*

3.

dog, *Labeo*, snake

4.

frog, turtle, rat

Question Type : MCQ

Question ID : 37135113262

Option 1 ID : 37135153045

Option 2 ID : 37135153048

Option 3 ID : 37135153046

Option 4 ID : 37135153047

Status : Answered

Chosen Option : 4

Q.37 Lymph contains all of the following components EXCEPT \_\_\_\_\_.

Ans  1.

platelets

2.

lymphocytes

3.

antibodies

4.

CO<sub>2</sub>

Question Type : MCQ

Question ID : 37135113253

Option 1 ID : 37135153010

Option 2 ID : 37135153011

Option 3 ID : 37135153012

Option 4 ID : 37135153009

Status : Answered

Chosen Option : 4

Q.38 Smallest bacterial genome is seen in \_\_\_\_\_.

Ans  1.

*Methanococcus jannaschii*

2.

*Mycobacterium genitalium*

3.

*Haemophilus influenzae*

4.

*Saccharomyces cerevisiae*

Question Type : MCQ

Question ID : 37135113282

Option 1 ID : 37135153127

Option 2 ID : 37135153125

Option 3 ID : 37135153126

Option 4 ID : 37135153128

Status : Answered

Chosen Option : 3

Q.39 Which of the following steps involved in Calvin cycle is in sequential manner?

1) Carboxylation – reduction – regeneration – synthesis

2) Carboxylation – reduction – synthesis- regeneration

3) Reduction- carboxylation- synthesis- regeneration

4) Carboxylation – synthesis – regeneration – reduction

Ans

1. 2

2. 4

3. 1

4. 3

Question Type : MCQ

Question ID : 37135113218

Option 1 ID : 37135152870

Option 2 ID : 37135152872

Option 3 ID : 37135152869

Option 4 ID : 37135152871

Status : Answered

Chosen Option : 3

Q.40 c DNA library is mostly constructed for organisms like \_\_\_\_\_.

Ans  1.

yeast

2.

cyanobacteria

3.

virus

4.

bacteria

Question Type : **MCQ**

Question ID : **37135113228**

Option 1 ID : **37135152909**

Option 2 ID : **37135152911**

Option 3 ID : **37135152912**

Option 4 ID : **37135152910**

Status : **Answered**

Chosen Option : **3**

Q.41 In genetic engineering, \_\_\_\_\_ serve as agents for gene transfer.

Ans  1.

plasmids

2.

ribosomes

3.

lysosomes

4.

microbodies

Question Type : **MCQ**

Question ID : **37135113290**

Option 1 ID : **37135153159**

Option 2 ID : **37135153157**

Option 3 ID : **37135153158**

Option 4 ID : **37135153160**

Status : **Answered**

Chosen Option : **1**

**Q.42** Neurotransmitter, at a synapse, is stored temporarily in \_\_\_\_\_.

**Ans**  1.

synaptic vesicles.

2.

synaptic cleft

3.

pre synaptic membrane

4.

post synaptic membrane

Question Type : **MCQ**

Question ID : **37135113274**

Option 1 ID : **37135153096**

Option 2 ID : **37135153095**

Option 3 ID : **37135153093**

Option 4 ID : **37135153094**

Status : **Answered**

Chosen Option : **2**

**Q.43** Lysozyme present in tears brings about lysis of \_\_\_\_\_.

**Ans**  1.

bacteria

2.

fungi

3.

protists

4.

viruses

Question Type : **MCQ**

Question ID : **37135113255**

Option 1 ID : **37135153017**

Option 2 ID : **37135153019**

Option 3 ID : **37135153020**

Option 4 ID : **37135153018**

Status : **Answered**

Chosen Option : **2**



**Q.44** At the end of gestation period, the foetal hormones, which cause decrease in progesterone level in mother's blood are \_\_\_\_\_.

**Ans**  1.

adrenaline and nor-adrenaline

2.

parathyroid hormones

3.

thyroid hormones

4.

corticosteroids

Question Type : **MCQ**

Question ID : 37135113272

Option 1 ID : 37135153088

Option 2 ID : 37135153087

Option 3 ID : 37135153086

Option 4 ID : 37135153085

Status : **Answered**

Chosen Option : 1

**Q.45** Total number of complete spirals occurring in a segment of DNA having 100 nucleotides will be \_\_\_\_\_.

**Ans**  1.

5

2.

6

3.

3

4.

4

Question Type : **MCQ**

Question ID : 37135113221

Option 1 ID : 37135152882

Option 2 ID : 37135152881

Option 3 ID : 37135152884

Option 4 ID : 37135152883

Status : **Answered**

Chosen Option : 4

Q.46 Protozoan disease of poultry is \_\_\_\_\_.

Ans  1.

Favus

2.

Pullorum

3.

Ranikhet

4.

Coccidiosis

Question Type : MCQ

Question ID : 37135113275

Option 1 ID : 37135153099

Option 2 ID : 37135153098

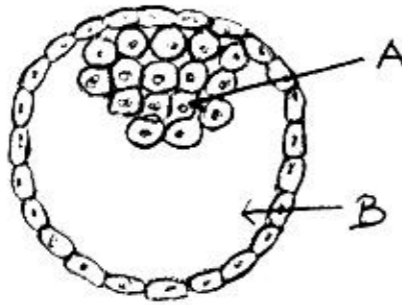
Option 3 ID : 37135153097

Option 4 ID : 37135153100

Status : Answered

Chosen Option : 4

Q.47 One of the human embryonic developmental stages has been shown in the diagram. What do the A and B indicate?



Ans  1.

A- Inner mass of cells; B- Blastocoel

2.

A- Inner mass of cells; B- Antrum

3.

A- Trophoblasts; B- Yolk sac

4.

A- Ectoderm; B- Amniotic cavity

Question Type : MCQ

Question ID : 37135113286

Option 1 ID : 37135153142

Option 2 ID : 37135153143

Option 3 ID : 37135153144

Option 4 ID : 37135153141

Status : Answered

Chosen Option : 3

**Q.48** Which one of the following is the correct structural organization of any animal?

**Ans**  1.

Tissues → Organs → Systems → Cells

2.

Cells → Tissues → Organs → Systems

3.

Cells → Organs → Systems → Tissues

4.

Systems → Organs → Cells → Tissues

Question Type : **MCQ**

Question ID : **37135113251**

Option 1 ID : **37135153003**

Option 2 ID : **37135153001**

Option 3 ID : **37135153002**

Option 4 ID : **37135153004**

Status : **Answered**

Chosen Option : **2**

**Q.49** How many ATP molecules would be produced from complete aerobic breakdown of one molecule of acetyl Co-A?

**Ans**  1.

38

2.

15

3.

36

4.

12

Question Type : **MCQ**

Question ID : **37135113250**

Option 1 ID : **37135153000**

Option 2 ID : **37135152998**

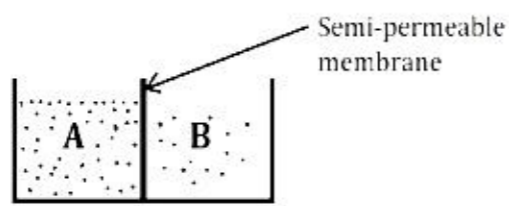
Option 3 ID : **37135152999**

Option 4 ID : **37135152997**

Status : **Answered**

Chosen Option : **2**

**Q.50** The figure below is showing two chambers A and B having different concentration of solutions separated by a semi-permeable membrane. Identify the correct statement.



**Ans**  1.

Movement of solute molecules takes place from chamber 'B' to chamber 'A' till equilibrium.

2.

There is no movement of solvent between chamber 'A' and 'B'.

3.

Movement of solvent molecules takes place from chamber 'A' to chamber 'B' till equilibrium.

4.

Movement of solvent molecules takes place from chamber 'B' to chamber 'A' till equilibrium.

Question Type : **MCQ**

Question ID : **37135113215**

Option 1 ID : **37135152860**

Option 2 ID : **37135152859**

Option 3 ID : **37135152857**

Option 4 ID : **37135152858**

Status : **Answered**

Chosen Option : **4**

**Q.51** The source of oxygen evolved during photosynthesis is \_\_\_\_\_.

**Ans**  1.

light

2.

chlorophyll

3.

CO<sub>2</sub>

4.

water

Question Type : **MCQ**

Question ID : **37135113241**

Option 1 ID : **37135152961**

Option 2 ID : **37135152963**

Option 3 ID : **37135152962**

Option 4 ID : **37135152964**

Status : **Answered**

Chosen Option : **4**

Q.52 The initial acceptor of electrons among the cytochromes in respiratory chain is

\_\_\_\_\_.

- Ans
- 1. cytochrome - a<sub>3</sub>
  - 2. cytochrome - a
  - 3. cytochrome - c
  - 4. cytochrome - b-c<sub>1</sub>

Question Type : **MCQ**  
Question ID : 37135113213  
Option 1 ID : 37135152850  
Option 2 ID : 37135152852  
Option 3 ID : 37135152849  
Option 4 ID : 37135152851  
Status : **Answered**  
Chosen Option : 2

Q.53 During \_\_\_\_\_, variations are created.

- Ans
- 1. sexual reproduction
  - 2. vegetative propagation
  - 3. cloning
  - 4. asexual reproduction

Question Type : **MCQ**  
Question ID : 37135113209  
Option 1 ID : 37135152834  
Option 2 ID : 37135152835  
Option 3 ID : 37135152836  
Option 4 ID : 37135152833  
Status : **Answered**  
Chosen Option : 1

**Q.54** If a person experiences difficulty in movements of pharynx, neck and shoulders, \_\_\_ cranial nerve may be injured.

**Ans**  1.

abducens

2.

hypoglossal

3.

spinal accessory

4.

vagus

Question Type : **MCQ**

Question ID : 37135113287

Option 1 ID : 37135153148

Option 2 ID : 37135153147

Option 3 ID : 37135153145

Option 4 ID : 37135153146

Status : **Answered**

Chosen Option : 1

**Q.55** During glycolysis, ATP generation -II step occurs between which of the two intermediates?

**Ans**  1.

2- PGA and PEPA

2.

PEPA and pyruvate

3.

3- PGA and 2 -PGA

4.

1,3-diPGA and 3 -PGA

Question Type : **MCQ**

Question ID : 37135113219

Option 1 ID : 37135152875

Option 2 ID : 37135152876

Option 3 ID : 37135152874

Option 4 ID : 37135152873

Status : **Answered**

Chosen Option : 4

**Q.56** Which auxin should be used to eradicate dicotyledonous weeds from a monocotyledonous crop field?

- Ans**  1.  
2, 4 -D
2.  
IBA
3.  
IAA
4.  
NAA

Question Type : **MCQ**  
Question ID : 37135113208  
Option 1 ID : 37135152830  
Option 2 ID : 37135152831  
Option 3 ID : 37135152832  
Option 4 ID : 37135152829  
Status : **Answered**  
Chosen Option : 3

**Q.57** A test cross is a back cross but back cross is not necessarily a test cross. Because a test cross is always between\_\_\_\_\_.

- Ans**  1.  
F<sub>1</sub> hybrid with another F<sub>1</sub> hybrid
2.  
F<sub>1</sub> hybrid and recessive parent.
3.  
F<sub>1</sub> hybrid and dominant parent.
4.  
F<sub>1</sub> hybrid and F<sub>2</sub> hybrid

Question Type : **MCQ**  
Question ID : 37135113210  
Option 1 ID : 37135152839  
Option 2 ID : 37135152838  
Option 3 ID : 37135152837  
Option 4 ID : 37135152840  
Status : **Answered**  
Chosen Option : 3

**Q.58** In human beings, which of the following is NOT the function of vagina?

**Ans**  1.

It acts as a passage for urine.

2.

It receives penis during copulation.

3.

It serves as the birth canal.

4.

It allows passage of menstrual flow.

Question Type : **MCQ**

Question ID : **37135113266**

Option 1 ID : **37135153064**

Option 2 ID : **37135153061**

Option 3 ID : **37135153063**

Option 4 ID : **37135153062**

Status : **Answered**

Chosen Option : **1**

**Q.59** During gametogenesis, unequal cytoplasmic divisions take place in \_\_\_\_\_.

**Ans**  1.

multiplication phase of oogenesis.

2.

maturation phase of spermatogenesis.

3.

multiplication phase of spermatogenesis.

4.

maturation phase of oogenesis.

Question Type : **MCQ**

Question ID : **37135113289**

Option 1 ID : **37135153154**

Option 2 ID : **37135153156**

Option 3 ID : **37135153153**

Option 4 ID : **37135153155**





Status : **Answered**

Chosen Option : **3**







**Q.60** Match Column - I with Column -II considering mode of asexual reproduction.

Column - I	Column - II
a) Binary fission	i) <i>Spirogyra</i>
b) Conidia	ii) Yeast
c) Budding	iii) <i>Amoeba</i>
d) Fragmentation	iv) <i>Penicillium</i>

- Ans**  1.  
a-iii, b-iv, c-ii, d-i
-  2.  
a-iv, b-iii, c-ii, d-i
-  3.  
a-iii, b-i, c-ii, d-iv
-  4.  
a-i, b-ii, c-iii, d-iv

Question Type : **MCQ**  
Question ID : **37135113236**  
Option 1 ID : **37135152942**  
Option 2 ID : **37135152941**  
Option 3 ID : **37135152944**  
Option 4 ID : **37135152943**  
Status : **Answered**  
Chosen Option : 1

**Q.61** Select the correct statement.

- Ans**  1.  
Striated muscles fibres are spindle shaped and show cross striations.
-  2.  
Cardiac muscles show presence of intercalated disc.
-  3.  
Smooth muscles show presence of large number of peripheral nuclei.
-  4.  
Pace maker consists of nerve fibres in human beings.

Question Type : **MCQ**  
Question ID : **37135113295**  
Option 1 ID : **37135153178**  
Option 2 ID : **37135153179**  
Option 3 ID : **37135153177**  
Option 4 ID : **37135153180**  
Status : **Answered**  
Chosen Option : 2

**Q.62** Smooth leaved and nectarless cotton varieties are NOT affected by \_\_\_\_\_.

- Ans**  1.  
bollworms
2.  
jassids
3.  
fruit borers
4.  
stem borers

Question Type : **MCQ**  
Question ID : **37135113234**  
Option 1 ID : **37135152933**  
Option 2 ID : **37135152936**  
Option 3 ID : **37135152935**  
Option 4 ID : **37135152934**  
Status : **Answered**  
Chosen Option : **3**

**Q.63** Which of the following prevents entry of food particles into the respiratory passage?

- Ans**  1.  
Tongue
2.  
Epiglottis
3.  
Pharynx
4.  
Glottis

Question Type : **MCQ**  
Question ID : **37135113263**  
Option 1 ID : **37135153049**  
Option 2 ID : **37135153050**  
Option 3 ID : **37135153052**  
Option 4 ID : **37135153051**  
Status : **Answered**  
Chosen Option : **2**

**Q.64** Select the correct match from Column-I with Column-II

Column-I	Column-II
a) Fibrous pericardium	i) Mesothelium
b) Lymphocyte	ii) Scavenger
c) Bundle of His	iii) Circular with kidney shaped nucleus
d) Erythrocyte	iv) Connection with AV node
	v) Interventricular septum

**Ans**  1.

a - V

2.

c - iv

3.

d - ii

4.

b - iii

Question Type : **MCQ**

Question ID : **37135113280**

Option 1 ID : **37135153117**

Option 2 ID : **37135153119**

Option 3 ID : **37135153120**

Option 4 ID : **37135153118**

Status : **Answered**

Chosen Option : **3**

**Q.65** The relation between herbivore and carnivore is an example of \_\_\_\_\_.

**Ans**  1.

commensalism

2.

predation

3.

parasitism

4.

mutualism

Question Type : **MCQ**

Question ID : **37135113261**

Option 1 ID : **37135153041**

Option 2 ID : **37135153044**

Option 3 ID : **37135153043**

Option 4 ID : **37135153042**

Status : **Answered**

Chosen Option : **2**

Q.66 Match Column-I with Column-II and select the correct option.

Column-I	Column-II
a) <i>Seymouria</i>	i) fish and amphibian
b) <i>Ichthyostegia</i>	ii) reptiles and birds
c) <i>Archaeopteryx</i>	iii) ape and man
d) <i>Australopithecus</i>	iv) amphibians and reptiles

Ans  1.

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

 2.

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

 3.

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

 4.

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

Question Type : **MCQ**

Question ID : 37135113291

Option 1 ID : 37135153164

Option 2 ID : 37135153161

Option 3 ID : 37135153163

Option 4 ID : 37135153162

Status : **Answered**

Chosen Option : 1

Q.67 The correct group of Indian breeds of buffalo is \_\_\_\_\_.

Ans  1.

Murrah, Nagpuri, Nili

 2.

Nili, Surati, Sindhi

 3.

Sahiwal, Jersey, Brown swiss

 4.

Sindhi , Gir, Holstein

Question Type : **MCQ**

Question ID : 37135113300

Option 1 ID : 37135153199

Option 2 ID : 37135153200

Option 3 ID : 37135153198

Option 4 ID : 37135153197

Status : **Answered**

Chosen Option : 1

Q.68 Runners are slender wire like structures which develop from \_\_\_\_\_.

- Ans  1.  
underground part of stem.
2.  
internodes of the stem.
3.  
subaerial axillary buds of the stem.
4.  
apical meristem.

Question Type : MCQ  
Question ID : 37135113230  
Option 1 ID : 37135152920  
Option 2 ID : 37135152919  
Option 3 ID : 37135152918  
Option 4 ID : 37135152917  
Status : Answered  
Chosen Option : 2

Q.69 During lytic cycle the enzyme endolysin causes break down of \_\_\_\_\_.

- Ans  1.  
bacteriophage DNA
2.  
host cell wall
3.  
host DNA
4.  
virions

Question Type : MCQ  
Question ID : 37135113233  
Option 1 ID : 37135152929  
Option 2 ID : 37135152932  
Option 3 ID : 37135152930  
Option 4 ID : 37135152931  
Status : Answered  
Chosen Option : 1

**Q.70** 16) Match Column-I with Column-II and select the correct option.

Column-I	Column-II
a) Sunflower	i) Protogyny
b) Castor	ii) Self incompatibility
c) <i>Michelia</i>	iii) Protandry
d) Orchid	iv) Unisexuality

**Ans**  1.

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

 2.

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

 3.

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

 4.

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

Question Type : **MCQ**

Question ID : **37135113216**

Option 1 ID : **37135152862**

Option 2 ID : **37135152864**

Option 3 ID : **37135152863**

Option 4 ID : **37135152861**

Status : **Answered**

Chosen Option : **3**

**Q.71** Presence of whole sets of chromosomes in an organism are indicated by the following EXCEPT \_\_\_\_\_.

**Ans**  1.

diploidy

 2.

aneuploidy

 3.

triploidy

 4.

polyploidy

Question Type : **MCQ**

Question ID : **37135113256**

Option 1 ID : **37135153021**

Option 2 ID : **37135153023**

Option 3 ID : **37135153024**

Option 4 ID : **37135153022**

Status : **Answered**

Chosen Option : **2**

Q.72 The initial development of male gametophyte from the pollen grain in angiosperms is \_\_\_\_\_.

- Ans
- 1. *in vitro*
  - 2. *ex situ*
  - 3. *in situ*
  - 4. *ex partite*

Question Type : MCQ  
Question ID : 37135113226  
Option 1 ID : 37135152901  
Option 2 ID : 37135152903  
Option 3 ID : 37135152902  
Option 4 ID : 37135152904  
Status : Answered  
Chosen Option : 2

Q.73 Normal value of serum bilirubin is usually \_\_\_\_\_  $\mu$  mol/L.

- Ans
- 1. 19 to 29
  - 2. 3 to 13
  - 3. 15 to 25
  - 4. 33 to 37

Question Type : MCQ  
Question ID : 37135113297  
Option 1 ID : 37135153187  
Option 2 ID : 37135153185  
Option 3 ID : 37135153186  
Option 4 ID : 37135153188  
Status : Answered  
Chosen Option : 3

**Q.74** Select vestigial organs from the following.

**Ans**  1.

Vermiform appendix, wings of bat and coccyx of man.

2.

Vermiform appendix, nictitating membrane and coccyx of man.

3.

Forelimbs of whale, lizard and bat.

4.

Wings of bat, nictitating membrane and wings of insects.

Question Type : **MCQ**

Question ID : **37135113276**

Option 1 ID : **37135153101**

Option 2 ID : **37135153102**

Option 3 ID : **37135153104**

Option 4 ID : **37135153103**

Status : **Answered**

Chosen Option : **2**

**Q.75** Out of the 56 % of sunlight reaching the earth's atmosphere \_\_\_\_\_ is used for photosynthesis.

**Ans**  1.

0.05 %

2.

0.02 %

3.

10 %

4.

0.2 %

Question Type : **MCQ**

Question ID : **37135113239**

Option 1 ID : **37135152955**

Option 2 ID : **37135152956**

Option 3 ID : **37135152953**

Option 4 ID : **37135152954**

Status : **Answered**

Chosen Option : **4**



Q.76 In human beings, if the spermatozoa are not ejaculated, then \_\_\_\_\_.

Ans  1.

they are inactivated within the seminal vesicles.

2.

they are permanently stored in cauda epididymis.

3.

they are permanently stored in caput epididymis.

4.

they are re-absorbed in the vas deferens.

Question Type : **MCQ**

Question ID : 37135113296

Option 1 ID : 37135153184

Option 2 ID : 37135153183

Option 3 ID : 37135153181

Option 4 ID : 37135153182

Status : **Answered**

Chosen Option : 1

Q.77 Detritus food chain always begins with \_\_\_\_\_.

Ans  1.

lichens

2.

dead organic matter

3.

phytoplanktons

4.

trees

Question Type : **MCQ**

Question ID : 37135113246

Option 1 ID : 37135152982

Option 2 ID : 37135152983

Option 3 ID : 37135152981

Option 4 ID : 37135152984

Status : **Answered**

Chosen Option : 2

Q.78 Telomere has a unique property of \_\_\_\_\_.

Ans  1.

condensation of chromatin network.

2.

prevention of ends of the chromosomes from sticking together.

3.

attaching to spindle fibres.

4.

regulation of protein synthesis.

Question Type : **MCQ**

Question ID : 37135113284

Option 1 ID : 37135153135

Option 2 ID : 37135153133

Option 3 ID : 37135153134

Option 4 ID : 37135153136

Status : **Answered**

Chosen Option : 3

Q.79 Which of the following is affected by injury to Broca's area of cerebrum?

Ans  1.

Vision

2.

Speech

3.

Hearing

4.

Smell

Question Type : **MCQ**

Question ID : 37135113252

Option 1 ID : 37135153007

Option 2 ID : 37135153006

Option 3 ID : 37135153005

Option 4 ID : 37135153008

Status : **Answered**

Chosen Option : 2

**Q.80** Which of the following is NOT a unique feature of acquired immunity?

**Ans**  1.

Discrimination between self and non-self

2.

Non- specificity

3.

Memory

4.

Diversity

Question Type : **MCQ**

Question ID : **37135113288**

Option 1 ID : **37135153152**

Option 2 ID : **37135153150**

Option 3 ID : **37135153151**

Option 4 ID : **37135153149**

Status : **Answered**

Chosen Option : **2**

**Q.81** How many of the nitrogen containing bases are common among both DNA and RNA?

**Ans**  1.

Four

2.

Two

3.

Three

4.

One

Question Type : **MCQ**

Question ID : **37135113220**

Option 1 ID : **37135152880**

Option 2 ID : **37135152878**

Option 3 ID : **37135152879**

Option 4 ID : **37135152877**

Status : **Answered**

Chosen Option : **3**

**Q.82** The white adipose tissue appears opaque due to \_\_\_\_\_.

**Ans**  1.

large amount of intra-cellular protein.

2.

large amount of extra-cellular fat.

3.

large number of adipocytes.

4.

more number of white fibres.

Question Type : **MCQ**

Question ID : **37135113269**

Option 1 ID : **37135153075**

Option 2 ID : **37135153073**

Option 3 ID : **37135153074**

Option 4 ID : **37135153076**

Status : **Answered**

Chosen Option : **2**

**Q.83** Neeta is assigned a project of integrated organic farming in village. Which ideal sustainable method will she use for this?

She will

**Ans**  1.

include the activities of bee-keeping, dairy management, water harvesting, composting along with agriculture in the village.

2.

educate the rural women for establishment of self help groups to encourage cottage industry.

3.

form groups of youths to do street plays to educate the villagers for reduction and recycling of wastes.

4.

guide the villagers to design and build an effluent treatment and biogas plant.

Question Type : **MCQ**

Question ID : **37135113293**

Option 1 ID : **37135153171**

Option 2 ID : **37135153169**

Option 3 ID : **37135153172**

Option 4 ID : **37135153170**

Status : **Answered**

Chosen Option : **1**

**Q.84** One of the following is an example of incomplete sex linkage\_\_\_\_\_.

**Ans**  1.

Red green colour blindness

2.

Myopia

3.

Retinitis pigmentosa

4.

Haemophilia

Question Type : **MCQ**

Question ID : **37135113277**

Option 1 ID : **37135153105**

Option 2 ID : **37135153108**

Option 3 ID : **37135153106**

Option 4 ID : **37135153107**

Status : **Answered**

Chosen Option : **3**

**Q.85** Binomial system of nomenclature was introduced by \_\_\_\_\_.

**Ans**  1.

R. H. Whittaker

2.

H. J. Lam

3.

Carl Woese

4.

Carl Linnaeus

Question Type : **MCQ**

Question ID : **37135113245**

Option 1 ID : **37135152980**

Option 2 ID : **37135152979**

Option 3 ID : **37135152977**

Option 4 ID : **37135152978**

Status : **Answered**

Chosen Option : **4**

**Q.86** The photosynthetic pigments present only in red algae are\_\_\_\_\_.

- Ans**  1.  
xanthophyll
2.  
carotene
3.  
phycobilins
4.  
anthocyanin

Question Type : **MCQ**  
Question ID : **37135113224**  
Option 1 ID : **37135152893**  
Option 2 ID : **37135152894**  
Option 3 ID : **37135152895**  
Option 4 ID : **37135152896**  
Status : **Answered**  
Chosen Option : **2**

**Q.87** Mark the mismatch pair.

- Ans**  1.  
Mixing of chromosomes of male and female pronuclei -- Karyogamy
2.  
Morphogenetic movements so as to form germinal layers -- Gastrulation.
3.  
Discharge of semen in vagina during copulation -- Fertilization
4.  
A series of rapid mitotic divisions in zygote -- Cleavage

Question Type : **MCQ**  
Question ID : **37135113279**  
Option 1 ID : **37135153113**  
Option 2 ID : **37135153116**  
Option 3 ID : **37135153114**  
Option 4 ID : **37135153115**  
Status : **Answered**  
Chosen Option : **3**

**Q.88** During germination of seed, water absorption takes place by \_\_\_\_\_.

**Ans**  1.  
endosmosis

2.  
osmotic pressure

3.  
exosmosis

4.  
imbibition

Question Type : **MCQ**

Question ID : **37135113237**

Option 1 ID : **37135152945**

Option 2 ID : **37135152948**

Option 3 ID : **37135152946**

Option 4 ID : **37135152947**

Status : **Answered**

Chosen Option : **1**

**Q.89** What are the sediments in the settling tanks of tertiary treatment in STP called?

**Ans**  1.  
Activated Sludge

2.  
Contaminants

3.  
Effluents

4.  
Sewage

Question Type : **MCQ**

Question ID : **37135113214**

Option 1 ID : **37135152855**

Option 2 ID : **37135152856**

Option 3 ID : **37135152854**

Option 4 ID : **37135152853**

Status : **Answered**

Chosen Option : **2**

**Q.90** Wobble hypothesis explains \_\_\_\_\_.

**Ans**  1.  
polarity of DNA molecule.

2.  
synthesis of protein.

3.  
degeneracy of genetic code.

4.  
triplets of nucleotides.

Question Type : **MCQ**

Question ID : **37135113235**

Option 1 ID : **37135152940**

Option 2 ID : **37135152937**

Option 3 ID : **37135152938**

Option 4 ID : **37135152939**

Status : **Answered**

Chosen Option : **4**

**Q.91** The step followed during DNA profiling in which DNA sample is subjected to restriction endonuclease is \_\_\_\_\_.

**Ans**  1.  
Hybridization

2.  
DNA isolation

3.  
DNA amplification

4.  
DNA fragmentation

Question Type : **MCQ**

Question ID : **37135113285**

Option 1 ID : **37135153139**

Option 2 ID : **37135153140**

Option 3 ID : **37135153137**

Option 4 ID : **37135153138**

Status : **Answered**

Chosen Option : **3**



Q.92

Bacteria possess following appendages EXCEPT\_\_\_\_\_.

Ans  1.

flagella

2. fimbriae

3.

cilia

4. pili

Question Type : MCQ

Question ID : 37135113292

Option 1 ID : 37135153165

Option 2 ID : 37135153168

Option 3 ID : 37135153166

Option 4 ID : 37135153167

Status : Answered

Chosen Option : 4

Q.93 Generally callus produced during tissue culture is a mass of \_\_\_\_ cells.

Ans  1.

sclerenchyma

2.

collenchyma

3.

parenchyma

4.

chlorenchyma

Question Type : MCQ

Question ID : 37135113204

Option 1 ID : 37135152814

Option 2 ID : 37135152815

Option 3 ID : 37135152813

Option 4 ID : 37135152816

Status : Answered

Chosen Option : 4

**Q.94** Which of the following intermediates of Krebs cycle undergoes both oxidation and decarboxylation reactions?

**Ans**  1.

Oxalo acetate

2.

Oxalo succinate

3.

$\alpha$  - ketoglutarate

4.

Succinyl Co-A

Question Type : **MCQ**

Question ID : 37135113229

Option 1 ID : 37135152916

Option 2 ID : 37135152913

Option 3 ID : 37135152915

Option 4 ID : 37135152914

Status : **Answered**

Chosen Option : 2

**Q.95** Cell walls become brittle due to lack of \_\_\_\_\_ elements.

**Ans**  1.

Calcium

2.

Potassium

3.

Boron

4.

Copper

Question Type : **MCQ**

Question ID : 37135113240

Option 1 ID : 37135152958

Option 2 ID : 37135152960

Option 3 ID : 37135152959

Option 4 ID : 37135152957

Status : **Answered**

Chosen Option : 1

**Q.96** Which one of the following is NOT an example of mutualism?

**Ans** ✓ 1.

*Plasmodium* and Man

✗ 2.

Ruminants and bacteria

✗ 3.

Mycorrhiza

✗ 4.

Lichen

Question Type : **MCQ**

Question ID : 37135113267

Option 1 ID : 37135153068

Option 2 ID : 37135153066

Option 3 ID : 37135153067

Option 4 ID : 37135153065

Status : **Answered**

Chosen Option : 3

**Q.97** The narrow passage, which connects the abdominal cavity with the scrotal sacs, is

**Ans** ✓ 1.

inguinal canal

✗ 2.

iter

✗ 3.

gubernaculum

✗ 4.

ejaculatory duct

Question Type : **MCQ**

Question ID : 37135113254

Option 1 ID : 37135153013

Option 2 ID : 37135153016

Option 3 ID : 37135153015

Option 4 ID : 37135153014

Status : **Answered**

Chosen Option : 3

**Q.98** After completing his civil engineering degree, Ramesh was appointed as trainee in the R and D city development office, he was to work on the project of laying water repellent roads in the city, which one of the following method will he decide to implement for sustainability?

**Ans**  1.

Mixing 'Polyblend' in bitumen to be used.

2.

Adding plastic powder in the cement to be used.

3.

Mixing wax in the cement to be used.

4.

Adding cement in the mixture to be used.

Question Type : **MCQ**

Question ID : **37135113231**

Option 1 ID : **37135152922**

Option 2 ID : **37135152923**

Option 3 ID : **37135152924**

Option 4 ID : **37135152921**

Status : **Answered**

Chosen Option : **1**

**Q.99** During the development of male gametes in angiosperms, the microspore mother cell undergoes \_\_\_\_\_meiosis and \_\_\_\_mitosis respectively.

**Ans**  1.

two and two

2.

two and one

3.

one and two

4.

one and three

Question Type : **MCQ**

Question ID : **37135113202**

Option 1 ID : **37135152808**

Option 2 ID : **37135152806**

Option 3 ID : **37135152805**

Option 4 ID : **37135152807**

Status : **Answered**

Chosen Option : **2**

**Q.100** Corona in passion flower helps the plant in achieving \_\_\_\_pollination.

Ans  1.

bat

 2.

bird

 3.

wind

 4.

insect

Question Type : **MCQ**

Question ID : **37135113212**

Option 1 ID : **37135152847**

Option 2 ID : **37135152846**

Option 3 ID : **37135152848**

Option 4 ID : **37135152845**

Status : **Answered**

Chosen Option : **4**