

Osmania University Common Entrance Test

Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Question Paper Name:	MSc BCBTESFSGM 9th June 2018 Shift 2
Subject Name:	M.Sc. BCBTESFSGM
Creation Date:	2018-06-09 16:40:27
Duration:	90
Total Marks:	100
Display Marks:	No
Calculator:	None
Magnifying Glass Required?:	No
Ruler Required?:	No
Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No

PART A

Group Number :	1
Group Id :	359181143
Group Maximum Duration :	0
Group Minimum Duration :	0
Revisit allowed for view? :	Yes
Revisit allowed for edit? :	Yes
Break time:	0
Group Marks:	40

CHEMISTRY

Section Id :	359181307
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	40
Number of Questions to be attempted:	40
Section Marks:	40
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181327
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 35918114551 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of following complexes show geometrical and optical isomerism?

కింది సంక్లిష్టాలలో జ్యామితీయ, దృక్ సాదృశ్యాన్ని చూపేది ఏది ?

Options :

1. ✓ $[\text{CoCl}_2(\text{en})_2]\text{Cl}$
2. ✗ $[\text{CoCl}_2(\text{NH}_3)_4]\text{Cl}$
3. ✗ $[\text{Co}(\text{en})_3]\text{Cl}_3$
4. ✗ $[\text{CoCl}_2(\text{NH}_3)_2\text{en}]\text{Cl}$

Question Number : 2 Question Id : 35918114552 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What should be the value of X, for $\text{CoCl}_3 \cdot \text{XNH}_3$ to be a neutral complex?

$\text{CoCl}_3 \cdot \text{XNH}_3$ తటస్థ సంక్లిష్టంగా ఉండేందుకు, X విలువ ఎంత ?

Options :

1. ✗ 2
2. ✓ 3
3. ✗ 1
4. ✗ 0

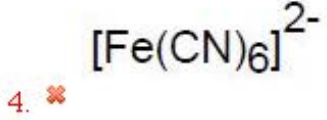
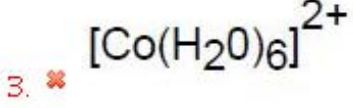
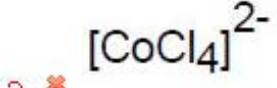
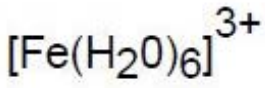
Question Number : 3 Question Id : 35918114553 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following metal complexes show diamagnetism?

కింది వాటిలో డయామయస్కాంతత్వము చూపే సంక్లిష్టమ ఏది ?

Options :



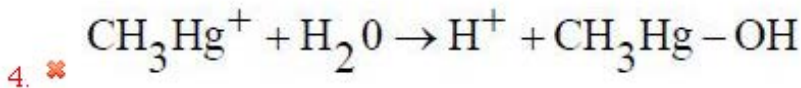
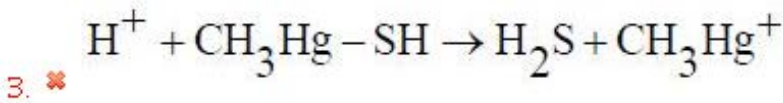
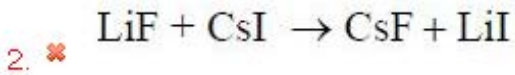
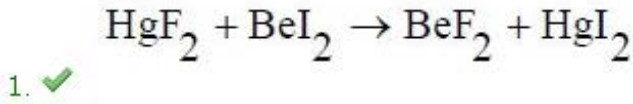
Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Question Number : 4 Question Id : 35918114554 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which one of the following reactions is feasible?

కింది చర్యలలో సాధ్యమైన చర్య ఏది ?

Options :



Question Number : 5 Question Id : 35918114555 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

An element useful in building cell wall and acts as a messenger in hormone reaction
is

హార్మోన్ చర్యలలో కణకుడ్య నిర్మాణంలో ఉపయోగపడే మూలకము

Options :

1. ✖ Fe^{2+}

2. ✔ Ca^{2+}

3. ✖ Mg^{2+}

4. ✖ Cu^{2+}

Question Number : 6 Question Id : 35918114556 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Match the following:

జత పరచండి

A) CO_3^{2-}

i) Square pyramidal / చతురస్ర సూచ్యాకారం

B) PF_5

ii) Pyramidal / సూచ్యాకారం

C) NH_3

iii) Tetrahedral / చతుర్ముఖీయం

D) CH_4

iv) Trigonal bipyramidal / త్రికోణీయ ద్విసూచ్యాకారం

v) Trigonal planar / త్రికోణీయ సమతలం

Options :

1. ✔

	A	B	C	D
v		iv	ii	iii

2. ✖

	A	B	C	D
v		i	ii	iii

3. ✖

	A	B	C	D
iv		i	v	iii

A B C D

4. ✖ v iv i ii

Question Number : 7 Question Id : 35918114557 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following solutions are mixed to give a dense white coloured mixture.

కింది వాటిలో ఏ ద్రావణాలు కలిపితే తెల్లటి సాంద్రతా మిశ్రమం వస్తుంది.

Options :

1. ✖

Copper sulphate and sodium carbonate / కాపర్ సల్ఫేట్, సోడియం కార్బోనేట్

2. ✔

Sodium carbonate and calcium nitrate / సోడియం కార్బోనేట్, కాల్షియం నైట్రేట్

3. ✖

Sodium chloride and sodium carbonate / సోడియం క్లోరైడ్, సోడియం కార్బోనేట్

4. ✖

Ferrous sulphate / ఫెర్రస్ సల్ఫేట్, సోడియం కార్బోనేట్

Question Number : 8 Question Id : 35918114558 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Calculate the volume of 0.02 M Ce^{4+} solution required for the complete reaction of

40 mL of 0.01 M Fe^{2+} solution.

40 మిలీ. 0.01 M Fe^{2+} ద్రావణం తో పూర్ణ చర్య జరిపే 0.02 M Ce^{4+} ద్రావణం ఘనపరిమాణం

లెక్కించుము

Options :

20

1. ✔

2. ✖ 30

3. ✖ 40

4. ✖ 25

Question Number : 9 Question Id : 35918114559 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The correct order of thermal stability of metal carbonates is

లోహ కార్బోనేట్ల ఉష్ణస్థిరత్వ సరైన క్రమం

Options :

1. ✖ $\text{CaCO}_3 > \text{MgCO}_3 > \text{BaCO}_3 > \text{SrCO}_3$

2. ✖ $\text{MgCO}_3 > \text{CaCO}_3 > \text{SrCO}_3 > \text{BaCO}_3$

3. ✔ $\text{BaCO}_3 > \text{SrCO}_3 > \text{CaCO}_3 > \text{MgCO}_3$

4. ✖ $\text{CaCO}_3 > \text{MgCO}_3 > \text{SrCO}_3 > \text{BaCO}_3$

Question Number : 10 Question Id : 35918114560 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Diborane is a Lewis acid forming addition compounds $\text{B}_2\text{H}_6 \cdot 2\text{NH}_3$ with NH_3 , a Lewis base. This

లెవిస్ ఆమ్లం డైబోరేన్, లెవిస్ క్షారమైన NH_3 తో కలిసి $\text{B}_2\text{H}_6 \cdot 2\text{NH}_3$ సంకలనాత్మక సమ్మేళనాన్ని

ఏర్పరుస్తుంది. ఇది

Options :

is ionic and exist as $[\text{BH}_2(\text{NH}_3)_2]^+$ and BH_4^- ions

అయానిక $[\text{BH}_2(\text{NH}_3)_2]^+$, BH_4^- అయాన్లుగా ఉంటాయి

1. ✔

On heating it is converted to $B_3N_3H_6$

2. ✖ వేడి చేసినప్పుడు $B_3N_3H_6$ గా పరివర్తనం చెందును

is ionic and exist as $[BH_2(NH_3)_2]^+$ and BH_4^- ions

అయానిక $[BH_2(NH_3)_2]^+$, BH_4^- అయాన్లుగా ఉంటాయి

and

On heating it is converted to $B_3N_3H_6$

3. ✖ వేడి చేసినప్పుడు $B_3N_3H_6$ గా పరివర్తనం చెందును

None

4. ✖ ఏది కాదు

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Question Number : 11 Question Id : 35918114561 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following series of metal ions have $3d^2$ electronic configuration?

కింది వాటిలో $3d^2$ ఎలక్ట్రాన్ విన్యాసం కలగిన లోహ అయాన్లు ఏవి ?

Options :

1. ✖ Ti^{3+} , V^{2+} , Cr^{3+} , Mn^{2+}

2. ✖ Ti^{4+} , V^{3+} , Cr^{2+} , Mn^{3+}

3. ✔ Ti^{2+} , V^{3+} , Cr^{4+} , Mn^{5+}

4. ✖ Ti^{3+} , V^{4+} , Cr^{3+} , Mn^{7+}

Question Number : 12 Question Id : 35918114562 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Lanthanide in which +2 and +3 oxidation states are common is:

+2, +3 ఆక్సీకరణ స్థితి కలిగిన లెంథనైడ్

Options :

1. ✓ Eu

2. ✗ Ce

3. ✗ Nb

4. ✗ La

Question Number : 13 Question Id : 35918114563 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The decreasing order of ease of hydrolysis in trichlorides of Group – 15 elements is:

గ్రూప్ 15 మూలకాల ట్రిక్లోరైడ్ల జలవిశ్లేషణక్రియ సౌలభ్యం తగ్గే క్రమం

Options :

1. ✓ $\text{NCl}_3 > \text{PCl}_3 > \text{AsCl}_3 > \text{SbCl}_3 > \text{BiCl}_3$

2. ✗ $\text{SbCl}_3 > \text{BiCl}_3 > \text{PCl}_3 > \text{NCl}_3 > \text{AsCl}_3$

3. ✗ $\text{AsCl}_3 > \text{SbCl}_3 > \text{NCl}_3 > \text{PCl}_3 > \text{BiCl}_3$

4. ✗ $\text{PCl}_3 > \text{NCl}_3 > \text{AsCl}_3 > \text{SbCl}_3 > \text{BiCl}_3$

Question Number : 14 Question Id : 35918114564 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The conversion of aryl ester to a mixture of o- and p-hydroxyphenyl ketone in the presence of AlCl_3 on heating is an example of

AlCl_3 సమక్షంలో వేడి చేసినపుడు, ఎరైల్ ఎస్టర్లను o-, p- హైడ్రాక్సీ ఎరైల్ కీటోన్ల మిశ్రమంగా

మార్చబడే చర్య దేనికి ఉదాహరణం

Options :

Substitution reaction

1. ✖ ప్రతిక్షేపణ చర్య

Addition reaction

2. ✖ సంకలన చర్య

Elimination reaction

3. ✖ విలోపన చర్య

Molecular rearrangement

4. ✔ అణుపునరమరిక

Question Number : 15 Question Id : 35918114565 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Methane can be prepared by

మిథేన్ ను ఈ కింది విధంగా తయారు చేయవచ్చు

Options :

The reaction of bromomethane with lithium dimethylcuprate

1. ✖ బ్రోమోమీథేన్ ను లీథియమ్ డైమిథైల్ క్యూప్రేట్ తో చర్య ద్వారా

The reaction of methyl magnesium bromide with methanol

2. ✔ మిథైల్ మెగ్నీషియమ్ బ్రోమైడ్ ను మిథనోల్ తో చర్య ద్వారా

Electrolysis of sodium acetate solution

3. ✖ సోడియమ్ ఎసిటేట్ విద్యుద్విశ్లేషణ ద్వారా

The reaction of iodomethane with sodium in dry ether.

ఇథర్లో అమోడియేషన్‌ను సోడియమ్ తో చర్య ద్వారా

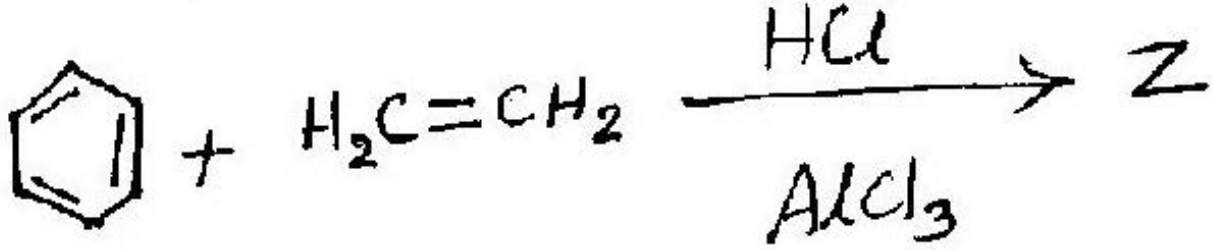
4. ✖

Question Number : 16 Question Id : 35918114566 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

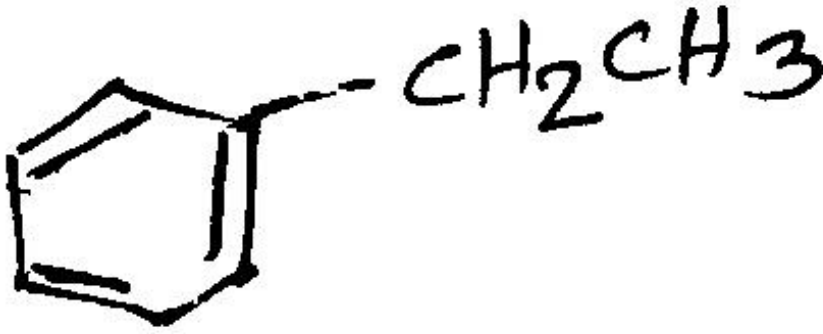
Correct : 1 Wrong : 0

In the given reaction

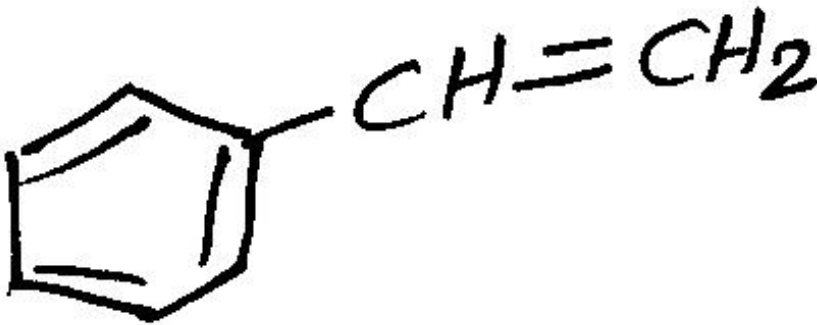
ఈ కింది చర్యలో



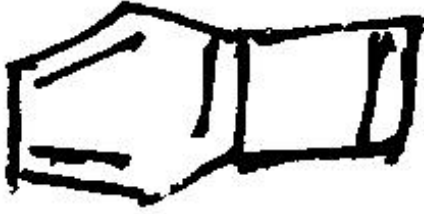
Options :



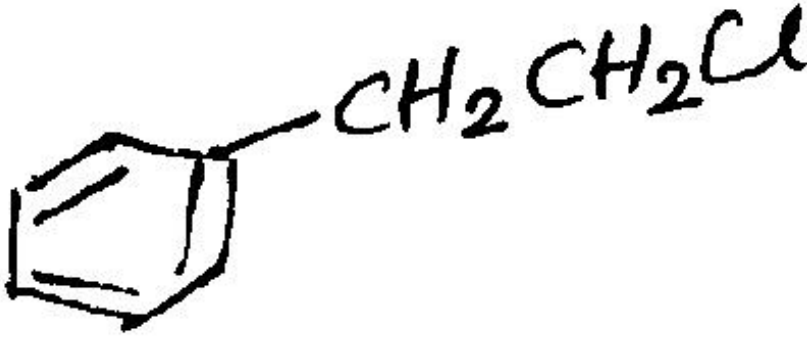
1. ✔



2. ✖



3. ✖



4. ✖

Question Number : 17 Question Id : 35918114567 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which one of the following statements is not true regarding S_N2 reaction.

ఈ కింది అంశాలలో ఏది S_N2 చర్యకు సంబంధించి సరయినది కాదు ?

Options :

Weak bases are good leaving groups

బలహీన క్షారాలు తేలికగా విడిపోయే సమూహాలు

1. ✖

Polar aprotic solvents increases the rate of the reaction

ద్రవ అప్రోటిక్ ద్రావణాలు చర్య వేగాన్ని పెంచుతాయి

2. ✖

3. ✔

Decreasing polarizability of incoming nucleophile increases the rate of the reaction

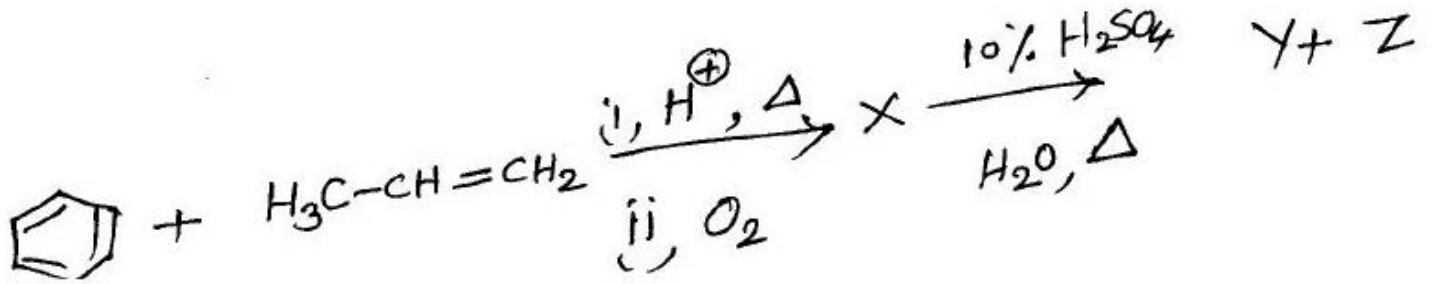
ద్రవణశీలత తక్కువగా ఉండే ప్రతేక్షేపితమయ్యే న్యూక్లియోఫైల్ చర్యవేగాన్ని పెంచుతుంది

4. ✖

Sterically bulky incoming nucleophiles decreases the rate of the reaction.

త్రిమితియ విఘాతం కలిగించే పెద్ద ప్రతిక్షేపితమయ్యే న్యూక్లియో ఫైల్ చర్యవేగాన్ని తగ్గిస్తుంది

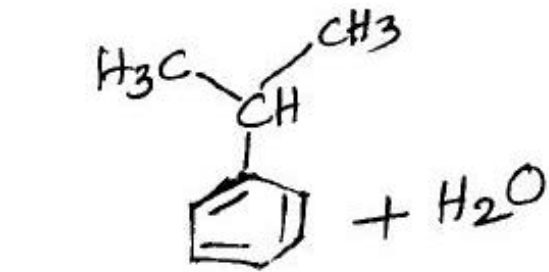
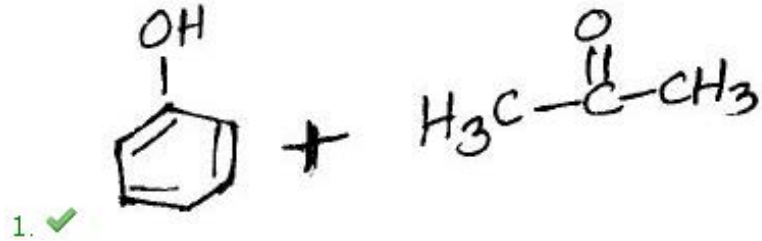
Question Number : 18 Question Id : 35918114568 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0



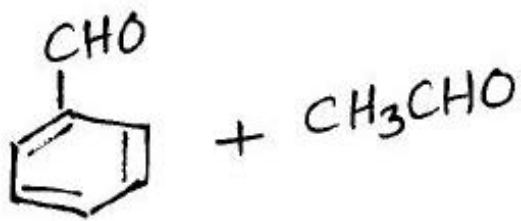
In the above reaction, the products 'Y' and 'Z' are

పై చర్యలో ఏర్పడే ఉత్పన్నాలు Y, Z లు

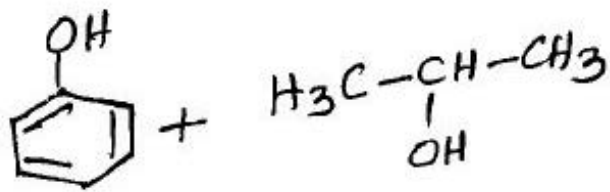
Options :



3. ✖



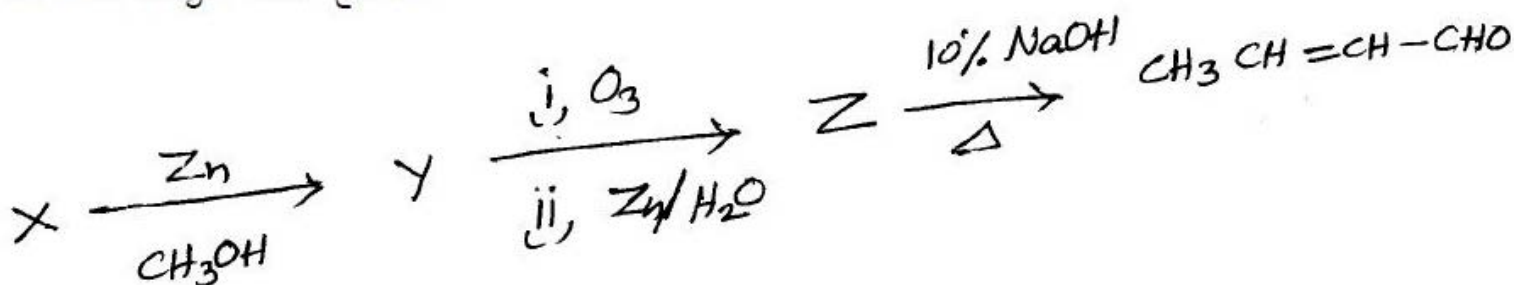
4. ✖



Question Number : 19 Question Id : 35918114569 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

In the following reaction sequence

ఈ కింది చర్యల వరస క్రమంలో

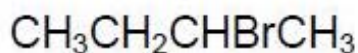


The reactant 'X' is

మొదటి క్రియాజనకం 'X' అనేది

Options :

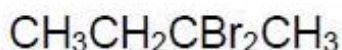
1. ✖



2. ✖



3. ✖



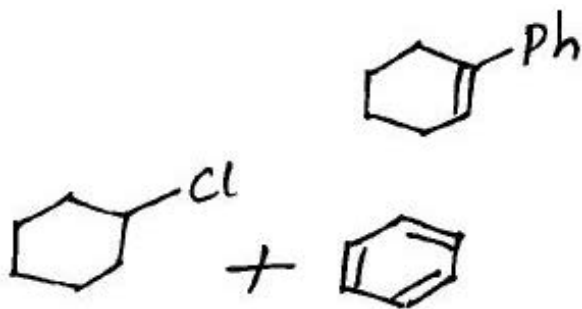
4. ✓ $\text{CH}_3\text{CHBrCHBrCH}_3$

Question Number : 20 Question Id : 35918114570 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

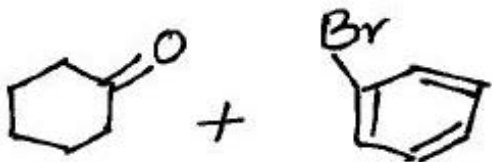
The suitable synthetic equivalents for the target molecule given below is

కింది ఇవ్వబడిన లక్ష్య అణువుకు తగిన సంశ్లేష్టతుల్యాలాలు

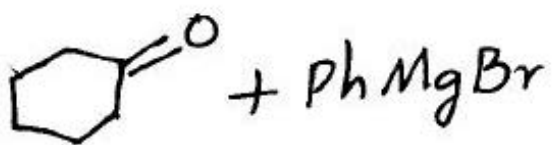
Options :



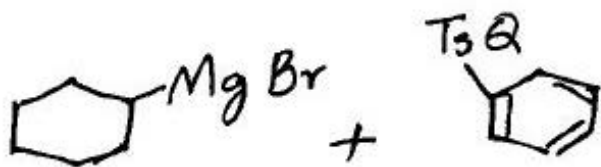
1. ✗



2. ✗



3. ✓



4. ✗

Question Number : 21 Question Id : 35918114571 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

If the compound is having two dissimilar chiral centres, the possible number of pairs of enantiomers is

సమ్మేకనము లో రెండు అసదృశకైరల్ కేంద్రాలుంటే, సాధ్యమయ్యే ఎనన్టిమోమర్ జతల సంఖ్య

Options :

1. ✖ 1

2. ✔ 2

3. ✖ 3

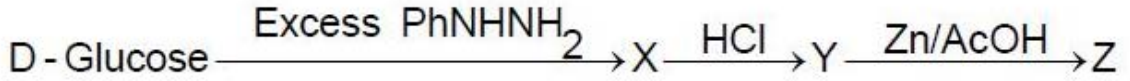
4. ✖ 4

Question Number : 22 Question Id : 35918114572 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In the following reaction sequence

ఈ కింది చర్యల వరసక్రమంలో



the product 'Z' is

అంత్య ఉత్పన్నం 'Z' అనేది

Options :

D-Mannose

1. ✖ D-మానోస్

L-Glucose

2. ✖ L-గ్లూకోస్

D-Fructose

3. ✔ D-ఫ్రక్టోస్

D-Arabinose

D-అరబిన్స్

4. ✖

Question Number : 23 Question Id : 35918114573 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Among the following amino acids, which contains two primary amino groups

ఈ కింది ఎమినో ఆమ్లాలలో, ఏది రెండు ప్రైమరీ ఎమైన్ గ్రూపులను కలిగి ఉంటుంది ?

Options :

Asparagine

ఆస్పరజైన్

1. ✖

Glutamine

గ్లూటమిన్

2. ✖

Histidine

హిస్టిడిన్

3. ✖

Lysine

లైసీన్

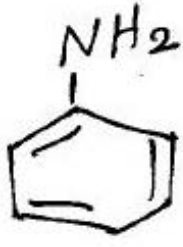
4. ✔

Question Number : 24 Question Id : 35918114574 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

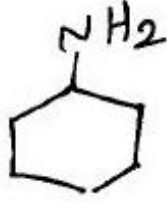
Correct : 1 Wrong : 0

Arrange the following amines in decreasing order of their basic strength

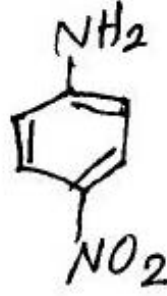
కింది ఎమీన్ల క్షారత్వం తగ్గేకమము వరసగా



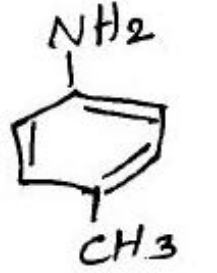
I



II



III



IV

Options :

II > IV > I > III

1. ✓

2. ✗ II > III > I > IV

3. ✗ III > I > IV > II

4. ✗ II > I > III > IV

Question Number : 25 Question Id : 35918114575 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Abacavir drug is used to treat

అబాకావిర్ మందు దీనిని నియంత్రించడానికి వాడుతారు

Options :

Malaria

1. ✗ మలేరియా

2. ✓ AIDS

Parkinson's disease

3. ✖ పార్కిన్సన్ వ్యాధి

Asthma

4. ✖ ఆస్తమా

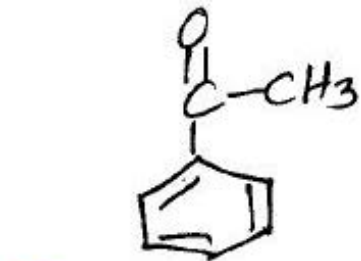
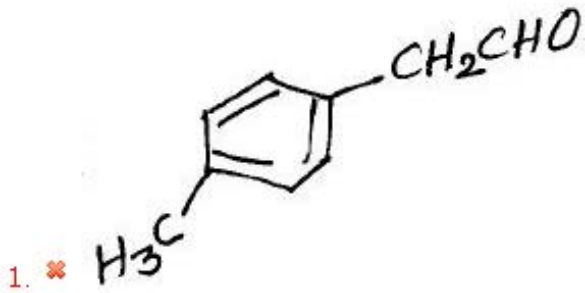
Question Number : 26 Question Id : 35918114576 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

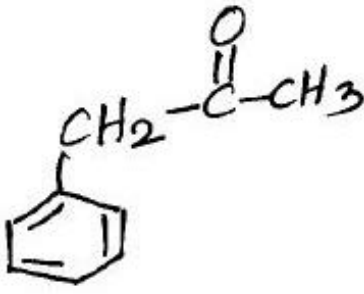
Correct : 1 Wrong : 0

An organic compound 'A' with molecular formula $C_9H_{10}O$, exhibited three singlet signals in its 1H -NMR spectrum at δ 2.1, 3.6 and 7.2 with peak area ratio 3:2:5. Its IR spectrum showed a absorption band at $\bar{\nu}$ 1715 cm^{-1} . A characteristic peak was observed at m/z 91 in mass spectrum. The structure for 'A' is

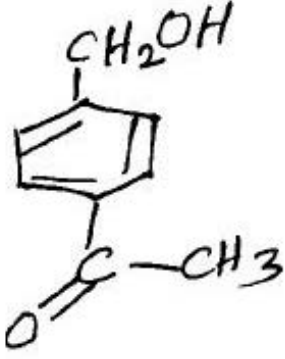
$C_9H_{10}O$ ఫార్ములా ఉన్న కర్బన సమ్మేళనం, 1H -NMR వర్ణపటంలో మూడు సింగిల్ సిగ్నల్స్ స్థానాలు δ 2.1, 3.6, 7.2 ప్రధాన శిఖరాలు విస్తీర్ణం నిష్పత్తి 3 : 2 : 5 తో చూపిస్తుంది. IR వర్ణపటంలో శోషణ పట్టిస్థానం $\bar{\nu}$ 1715 cm^{-1} . అభిలాక్షణిక శిఖర స్థానం m/z 91 ను ద్రవ్యరాశి వర్ణపటంలో గుర్తించబడింది 'A' కు నిర్మాణము

Options :





3. ✓



4. ✗

Question Number : 27 Question Id : 35918114577 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

For the reaction $A + 2B + C \rightarrow D + 2E$ the rate of formation of D becomes four times when [C] is doubled keeping [A] and [B] constant, the order in C is

$A + 2B + C \rightarrow D + 2E$ అనే చర్యలో క్రియాజనకము 'C' గాఢతను రెండు రెట్లు పెంచి, 'A' మరియు 'B' గాఢతలను స్థిరంగా ఉంచినపుడు, క్రియాజన్యము 'D' యొక్క రేటు నాలుగు రెట్లు పెరిగినచో, ఆ చర్యలో 'C' యొక్క క్రమాంకము

Options :

1. ✗ 0

2. ✗ 1

3. ✓ 2

4. ✗ $\frac{1}{2}$

Question Number : 28 Question Id : 35918114578 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The optical density of a solution, with reference to the solvent, is 0.3. the extinction coefficient of the solute is 3000 and the cell length is 10 cm. The concentration of the solute is

ఎక్స్టింక్షన్ గుణకము 3000 కలిగినటువంటి ఒక ద్రావణాన్ని 10 సెం.మీ. పొడువుగల సెల్ నుండి ప్రసరింపజేసినపుడు ఆ ద్రావణము ఆప్టికల్ సాంద్రత విలువ 0.3 అయినచో ఆ ద్రావితము గాఢత

Options :

1. ✖ 0.3 M
2. ✖ 1×10^{-3} M
3. ✖ 1×10^{-4} M
4. ✔ 1×10^{-5} M

Question Number : 29 Question Id : 35918114579 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In case of an ideal gas undergoing isothermal transformation, its energy

ఒక ఆదర్శ వాయువు సమోష్ణ ప్రక్రియలో పాల్గొన్నపుడు దాని అంతర్గత శక్తి

Options :

Decreases as the pressure increases

1. ✖ ఖీడనము పెరిగినపుడు తగ్గుతుంది

Decreases as the volume decreases

2. ✖ వాయు ఘనపరిమాణము తగ్గినపుడు తగ్గుతుంది

Increases as the pressure increases

3. ✖ వాయు ఖీడనము పెరిగినపుడు పెరుగుతుంది

Remains fixed

4. ✔ స్థిరంగా ఉంటుంది

Correct : 1 Wrong : 0

Equal numbers of polymer molecules with $M_1 = 10,000$ and $M_2 = 40,000$ are mixed to give a polymer mixture. The number average molar mass is

10,000 మరియు 40,000 ద్రవ్యరాశి గల సమాన సంఖ్యలో పాలిమర్ అణువులను కలిగిన మిశ్రమము యొక్క సరాసరి సంఖ్యా అణుభారము విలువ

Options :

1. ✖ 50,000

2. ✔ 25,000

3. ✖ 30,000

4. ✖ 34,000

Correct : 1 Wrong : 0

Catalyst used in Haber's process is

హాబర్ సంశ్లేషణ ప్రక్రియలో వాడే ఉత్ప్రేరకము

Options :

1. ✖ Platinum gauze
ప్లాటినం గేజ్

2. ✖ Iron oxide
ఐరన్ ఆక్సైడ్

3. ✔ Finely divided iron
ఇనుము సూక్ష్మరేణువులు

4. ✖ Platinum, V_2O_5
ప్లాటినమ్, V_2O_5

Correct : 1 Wrong : 0

The number of Joules associated with 2-Einsteins of UV radiation of wavelength $3000 \text{ \AA}$ absorbed is

$3000 \text{ \AA}$ తరంగదైర్ఘ్యము గల అతినీలలోహిత కిరణాలను రెండు ఐన్‌స్టీన్‌లను శోషించినపుడు, జౌల్‌ల సంఖ్య

Options :

1. ✓ 7.98×10^5

2. ✗ 7.98×10^2

3. ✗ 1.2×10^4

4. ✗ 3.98×10^4

Question Number : 33 Question Id : 35918114583 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The wave character of an electron was experimentally verified by ఎలక్ట్రాన్ తరంగ స్వభావాన్ని ప్రయోగాత్మకంగా నిరూపించినది

Options :

1. ✗ Einstein
ఐన్‌స్టీన్

2. ✗ de Broglie
డీబ్రోగ్లీ

3. ✓ Germer
జెర్మర్

4. ✗ Planck
ప్లాంక్

Question Number : 34 Question Id : 35918114584 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The S.I. Units of vander Waal's parameter 'a' are

వాండర్వాల్ స్థిరాంకము 'a' యొక్క S.I. ప్రమాణాలు

Options :

1. ✖ $\text{Pa.m}^3.\text{mol}^{-1}$

2. ✖ $\text{N.m}^4.\text{mol}^{-2}$

3. ✖ $\text{J.m}^4.\text{mol}^{-2}$

4. ✔ $\text{Pa.m}^6.\text{mol}^{-2}$

Question Number : 35 Question Id : 35918114585 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The structure of KCl as determined by X-ray studies is

కిరణాల ప్రయోగాల ఫలితాల ఆధారంగా పొటాషియం క్లోరైడ్ క్రింది నిర్మాణాన్ని కలిగి ఉంటుంది

Options :

1. ✔ Simple cubic

2. ✖ bcc

3. ✖ fcc

4. ✖ Rhombic

Question Number : 36 Question Id : 35918114586 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The law which relates the solubility of a gas to its pressure is called

వాయు ద్రావణీయతకు మరియు పీడనానికి మధ్య సంబంధాన్ని తెలియచేసే నియమము

Options :

Raoult's law

1. ✖ రౌల్ట్ నియమము

The distribution law

2. ✖ వితరణ నియమము

Henry's law

3. ✔ హెన్రీ నియమము

Ostwald's law

4. ✖ ఆస్ట్వాల్డ్ నియమము

Question Number : 37 Question Id : 35918114587 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

At the same temperature, 0.1 M solution of urea is isotonic with

ఒకే ఉష్ణోగ్రత వద్ద క్రింది ఏ ద్రావణము 0.1 M యూరియా ద్రావణంతో ఐసోటోనిక్ ద్రావణంగా పిలుస్తారు ?

Options :

0.1 M glucose solution

1. ✔ 0.1 M గ్లూకోజ్ ద్రావణం

0.1 M NaCl solution

2. ✖ 0.1 M సోడియం క్లోరైడ్ ద్రావణం

0.05 M urea solution

3. ✖ 0.05 M యూరియా ద్రావణం

0.1 M BaCl₂ solution

4. ✖ 0.1 M BaCl₂ ద్రావణం

Question Number : 38 Question Id : 35918114588 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In KCl – NaCl – H₂O system the number of components are

KCl – NaCl – H₂O వ్యవస్థలోని అనుఘటకాల సంఖ్య

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 39 Question Id : 35918114589 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Tyndall effect is not observed in

క్రింది ఏ పదార్థములో టిండాల్ ప్రభావము కనిపించదు

Options :

Suspensions

1. ✖ అవక్షేపితము

True solutions

2. ✔ నిజ ద్రావణాలు

Emulsions

3. ✖ ఎమల్షన్

Colloidal solutions

4. ✖ కొల్లాయిడ్ల ద్రావణాలు

Question Number : 40 Question Id : 35918114590 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The equivalent conductance of a 1N solution of an electrolyte is nearly 1N గాఢత గల విద్యుద్విశ్లేష్య ద్రావణము యొక్క తుల్యాంక వాహకత సుమారుగా

Options :

Same as specific conductance

1. ✖ విశిష్ట వాహకతకు సమానము

10^3 times more than its specific conductance

2. ✔ విశిష్ట వాహకతకు కంటే వెయ్యి రెట్లు ఎక్కువ

10^{-3} times its specific conductance

3. ✖ విశిష్ట వాహకతకు కంటే వెయ్యి రెట్లు తక్కువ

100 times its specific conductance

4. ✖ విశిష్ట వాహకతకు కంటే వంద రెట్లు ఎక్కువ

PART B

Group Number :	2
Group Id :	359181144
Group Maximum Duration :	0
Group Minimum Duration :	90
Revisit allowed for view? :	Yes
Revisit allowed for edit? :	Yes
Break time:	0
Group Marks:	60

PHYSICS

Section Id :	359181308
Section Number :	1
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181328
Question Shuffling Allowed :	No

Correct : 1 Wrong : 0

Frequency of oscillation of a simple harmonic oscillator when mass of the spring can't be neglected is

సరళ హరాత్మక డోలకము యొక్క స్ప్రింగు ద్రవ్యరాశిని కూడా లెక్కలోకి తీసికొన్నప్పుడు దాని యొక్క డోలన పౌనః పున్యము

Options :

Lesser than that of mass less spring system

1. ✓ ద్రవ్యరాశి లేని స్ప్రింగ్ వ్యవస్థ కంటే తక్కువ

Greater than that of mass less spring system

2. ✗ ద్రవ్యరాశి లేని స్ప్రింగ్ వ్యవస్థ కంటే ఎక్కువ

Same as that of mass less spring system

3. ✗ ద్రవ్యరాశి లేని స్ప్రింగ్ వ్యవస్థతో సమానంగా

Infinite

4. ✗ అనంతము

Correct : 1 Wrong : 0

Effect of damping is to increase the

అవరోధము యొక్క ఫలితము దేనిని వృద్ధి చేస్తుంది

Options :

Relaxation time

1. ✗ విరామకాలము

Quality factor

క్షమతా గుణకము

2. ✖

Logarithmic decrement

సంవర్గమాన తగ్గుదల

3. ✔

Relaxation time and Quality factor

విరామకాలము మరియు క్షమతా గుణకము

4. ✖

Question Number : 43 Question Id : 35918114593 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following waves has the constant displacement between

$t = 0$ to $t = T/2$ where T is the time constant

ఈ క్రింది తరంగాలలో దేని స్థానభ్రంశము $t = 0$ మరియు $t = T/2$ మధ్య స్థిరంగా ఉంటుంది (T ఆవర్తన కాలము)

Options :

Saw tooth

రంపపు పన్ను తరంగము

1. ✖

Triangular

త్రిభుజాకార తరంగము

2. ✖

Square

చతురస్రాకార తరంగము

3. ✔

Sine

సైను తరంగము

4. ✖

Question Number : 44 Question Id : 35918114594 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The first Fourier coefficient is same for the following waves

మొదటి ఫోరియర్ గుణకము విలువ సమానంగా ఉండే తరంగాలు

Options :

Square and triangular

1. ✖ చతురస్రాకార మరియు త్రిభుజాకార

Triangular and Saw-Tooth

2. ✔ త్రిభుజాకార మరియు రంపపు పన్ను ఆకార

Square and Saw-Tooth

3. ✖ చతురస్రాకార మరియు రంపపు పన్ను ఆకార

Square, Triangular and Saw-Tooth

4. ✖ చతురస్రాకార, త్రిభుజాకార మరియు రంపపు పన్ను ఆకార

Question Number : 45 Question Id : 35918114595 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The ratio of harmonics, as per Fourier Analysis, in case of Saw-Tooth and Triangular waves respectively is

ఫోరియర్ విశ్లేషణ ప్రకారము రంపపు పన్ను మరియు త్రిభుజాకార తరంగముల హరాత్మకముల నిష్పత్తులు వరుసగా

Options :

1:2:3:& 1:3:5:

1. ✔

1:3:5:& 1:5:9:

2. ✖

1:5:9:& 1:7:13:

3. ✖

1:3:5:& 1:2:3:

4. ✖

Question Number : 46 Question Id : 35918114596 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Twin paradox in special theory of relativity pertains to

సాపేక్షతా సిద్ధాంతమునుసరించి "ట్విన్ ప్యారడాక్స్" అనునది దీనికి సంబంధించినది

Options :

Length contraction

1. ✖ పొడవు సంకోచము

Time dilation

కాలవ్యాకోచము

2. ✔

Galilean transformation

3. ✖ గెలీలియన్ రూపాంతరము

All

4. ✖ అన్ని

Question Number : 47 Question Id : 35918114597 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The frequencies of harmonics, in case of a string fixed at both ends, are in the ratio

రెండు చివరల బిగించబడిన ఒక తీగలోని హరాత్మక పౌనఃపున్యాల నిష్పత్తి

Options :

1. ✖ 1:2:1

2. ✖ 1:1:2

3. ✖ 1:3:5

4. ✓ 1:2:3

Question Number : 48 Question Id : 35918114598 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which one of the following represents the velocity of energy transport

క్రింది వాటిలో ఏది శక్తి రవాణా యొక్క వేగాన్ని సూచించును

Options :

Phase velocity

దశావేగము

1. ✗

Wave velocity

తరంగ వేగము

2. ✓

Group velocity

సమూహవేగము

3. ✗

Particle velocity

కణవేగము

4. ✗

Question Number : 49 Question Id : 35918114599 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

"The flux of the curl of vector function **A** over the surface **S** of any shape is equal to the line integral of the vector field **A** over the boundary **C** of the surface" is the statement of

"ఏదైనా ఆకారపు ఉపరితలము **S** పై సదిశ ప్రమేయము **A** కు గల కర్ల్ యొక్క అభివాహము అనునది పరిబద్ధ వక్రపు **C** ఉపరితలము పై సదిశా క్షేత్రము యొక్క రేఖీయ సమాకలని కి సమానము" అనునది

Options :

Gauss divergence theorem

1. ✖ గాస్ అపసరణీ సిద్ధాంతము

Stoke's theorem

2. ✔ స్టోక్ సిద్ధాంతము

Green's theorem

3. ✖ గ్రీన్ సిద్ధాంతము

depends on vector function **A**

4. ✖ సదిశప్రమేయము **A** పై ఆధారపడును

Question Number : 50 Question Id : 35918114600 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If $\mathbf{F} = \text{Grad}(2x^2 - 3y^2 + 4z^2)$, then the curl $\mathbf{F}$ is

$\mathbf{F} = \text{Grad}(2x^2 - 3y^2 + 4z^2)$ అయినచో curl $\mathbf{F}$ విలువ

Options :

1. ✖ $4x - 6y + 8z$

2. ✖ $4xi - 6yj + 8zk$

3. ✔ zero సున్నా

4. ✖ 3

Question Number : 51 Question Id : 35918114601 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following vectors are perpendicular to each other

క్రింది సదిశలలో ఏవి ఒకదానికి కొకటి అభిలంబంగా ఉంటాయి

- i) $2\mathbf{i}-2\mathbf{j}+4\mathbf{k}$ ii) $10\mathbf{i}+8\mathbf{j}+12\mathbf{k}$ iii) $3\mathbf{i}+11\mathbf{j}+4\mathbf{k}$

Options :

i) and ii)

i) మరియు ii)

1. ✖

i) and iii)

i) మరియు iii)

2. ✔

ii) and iii)

ii) మరియు iii)

3. ✖

All

అన్ని

4. ✖

Question Number : 52 Question Id : 35918114602 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following physical quantities is related to second law of Thermodynamics

ఈ క్రింది వాటిలో ఏ భౌతికరాశి ఉష్ణగతిక శాస్త్ర రెండవ సిద్ధాంతానికి సంబంధించినది

Options :

Momentum

ద్రవ్యవేగము

1. ✖

Pressure

ఘనము

2. ✖

Entropy

ఎంట్రోపీ

3. ✓

Volume

ఘనపరిమాణము

4. ✗

Question Number : 53 Question Id : 35918114603 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following processes is related to low temperature physics

ఈ క్రింది వాటిలో ఏది అల్ప ఉష్ణోగ్రత భౌతిక శాస్త్రమునకు సంబంధించింది

Options :

Adiabatic demagnetization

స్థిరోష్ణక నిరయ స్కాంతీకరణము

1. ✓

Isothermal demagnetization

సమోష్ణోగ్రత నిరయ స్కాంతీకరణము

2. ✗

Adiabatic magnetization

స్థిరోష్ణక అయస్కాంతీకరణము

3. ✗

Isothermal magnetization

సమోష్ణోగ్రత అయస్కాంతీకరణము

4. ✗

Question Number : 54 Question Id : 35918114604 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In an isochoric process the physical quantity that remains constant is

ఐసో కోరిక్ ప్రక్రియలో స్థిరంగా ఉండే భౌతిక రాశి

Options :

Temperature

ఉష్ణోగ్రత

1. ✖

Volume

ఘనపరిమాణము

2. ✔

Pressure

ఢీడనము

3. ✖

Entropy

ఎంట్రోపీ

4. ✖

Question Number : 55 Question Id : 35918114605 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Principle of un-attainability of absolute zero is contained in which of the following laws of thermodynamics

పరమ ఉష్ణోగ్రత శూన్యాన్ని చేరుకోలేము అనే సూత్రము ఈ ఉష్ణగతిక శాస్త్రం నియమములో

ఉన్నది

Options :

Zeroth

శూన్య

1. ✖

First

ఒకటవ

2. ✖

Second

రెండవ

3. ✖

Third
మూడవ

4. ✓

Question Number : 56 Question Id : 35918114606 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following equations is not Maxwell's equation

క్రింది వాటిలో ఏది మ్యాక్స్వెల్ సమీకరణము కాదు

Options :

1. ✗ $\text{Curl} \mathbf{E} = - \partial \mathbf{B} / \partial t$

2. ✓ $\text{Div} \mathbf{D} = \mathbf{J} + \partial \mathbf{B} / \partial t$

3. ✗ $\text{Curl} \mathbf{H} = \mathbf{J} + \partial \mathbf{D} / \partial t$

4. ✗ $\text{Div} \mathbf{B} = 0$

Question Number : 57 Question Id : 35918114607 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In canonical ensemble the following physical quantities are constant

కెనానికల్ ఎన్సెంబుల్ లో స్థిరంగా ఉండే భౌతికరాశులు

Options :

Energy and temperature

1. ✗ శక్తి మరియు ఉష్ణోగ్రత

Temperature and entropy

2. ✗ ఉష్ణోగ్రత మరియు ఎంట్రోపీ

Entropy and energy

ఎంట్రోపీ మరియు శక్తి

3. ✗

Temperature and density

ఉష్ణోగ్రత మరియు సాంద్రత

4. ✓

Question Number : 58 Question Id : 35918114608 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For interference in thin films, the condition for bright fringe in the transmitted light is

ప్రసారిత కాంతివలన పలిచని పొరలలో జరిగే వ్యతికరణమునందు కాంతి వంతమైన పట్టికకు కావలసిన నియమము

Options :

1. ✓ 0,+1,-1

2. ✗ +1, 0,-1

3. ✗ 0,-1, +1

4. ✗ +1,-1,0

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Question Number : 59 Question Id : 35918114609 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In black body radiation, Rayleigh-Jeans law gives good agreement with experimental data at

క్రిష్ణవస్తు వికిరణంలో ప్రయోగ ఫలితాలను రేలీ-జీన్స్ నియమము ఈ క్రింది తరంగాలకు సరితూగుతుంది

Options :

Long wavelengths

1. ✓ దీర్ఘతరంగ దైర్ఘ్యాలు

Short wavelength

2. ✖ ప్రాస్వతరంగదైర్ఘ్యాలు

High frequencies

3. ✖ అధిక పౌనపున్య

Intermediate frequencies

4. ✖ మధ్యంతర పౌనపున్య

Question Number : 60 Question Id : 35918114610 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Fuel in a rocket is burnt at the rate of 100gms/sec.. If the exhaust velocity of gases is 5000mts/sec., the thrust acting on the rocket is

రాకెట్ లోని ఇందనము 100 గ్రా / సెకన్ రేటు తో మండుతున్నప్పుడు వాయు రేచక వేగము 500 మీ / సెకన్ ఉన్నచో రాకెట్ పై పనిచేయు అభిబలము

Options :

1. ✖ $5 \times 10^5 \text{N}$

2. ✖ $5 \times 10^3 \text{N}$

3. ✔ 50 N

4. ✖ 5N

Question Number : 61 Question Id : 35918114611 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Without undergoing change in its mass if Earth's radius becomes half of its present value, the duration of the day becomes

భూమి ద్రవ్యరాశిలో మార్పులేకుండా దాని వ్యాసార్థము సగము అయినప్పుడు ఒక రోజు యొక్క
అవధి

Options :

1. ✖ 12hrs
2. ✖ 8hrs
3. ✔ 6hrs
4. ✖ 4hrs

Question Number : 62 Question Id : 35918114612 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Newton's first law of linear motion refers to the physical quantity

క్రింది భౌతిక రాశులలో ఏది రేఖీయగమనమునకు సంబంధించిన న్యూటన్ మొదటి నియమము

Options :

Energy

1. ✖ శక్తి

Velocity

2. ✖ వేగము

Mass

3. ✔ ద్రవ్యరాశి

Time

4. ✖ కాలము

Question Number : 63 Question Id : 35918114613 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which one of the following relations among various elastic constants (Y-Young's modulus, B-Bulk modulus, η - Rigidity modulus, σ - Poison's ratio) is wrong

స్థితిస్థాపక స్థిరాంకాలను కలిపే క్రింది సంబంధాలలో ఏది సరికాదు (Y-యంగ్ గుణకము, B-అయతన గుణకము, η - ధృఢతాగుణకము, σ - పాయిసన్ నిష్పత్తి)

Options :

1. ✓ $Y = 3K(1-2\sigma)$

2. ✗ $Y = 2\eta (1-2\sigma)$

3. ✗ $Y = 2K(1-2\sigma)$

4. ✗ $Y = 3\eta (1-2\sigma)$

Question Number : 64 Question Id : 35918114614 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gravitational force

గురుత్వ బలము అనునది

Options :

is a conservative force

నిత్యత్వ బలము

1. ✗

is a central force

కేంద్రీయ బలము

2. ✗

forms an action reaction pair

క్రియ మరియు ప్రక్రియ యుగ్మము

3. ✗

All

4. ✓ అన్ని

Question Number : 65 Question Id : 35918114615 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The ratio of first and second overtones of longitudinal wave propagation in a bar fixed at two ends and one end respectively are

రెండు చివరల మరియు ఒక చివర బిగించబడిన ఒక కడ్డీలో అనుదైర్ఘ్య తరంగ వ్యాపనము చెందునపుడు ప్రథమ మరియు ద్వితీయ అతిస్వరాలు మధ్య నిష్పత్తి వరుసగా

Options :

1. ✓ 2:3 & 3:5
2. ✗ 1:2 & 2:3
3. ✗ 3:5 & 1:3
4. ✗ 1:3 & 3:5

Question Number : 66 Question Id : 35918114616 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The velocity of ultrasonic waves in air is

గాలిలో అతి ధ్వని తరంగాల యొక్క వేగము

Options :

- 4200 m/sec
1. ✗ 4200 మీ/సె
- 330 m/sec
2. ✓ 330 మీ/సె
- 120 m/sec
3. ✗ 120 మీ/సె
- 3×10^8 m/sec
4. ✗ 3×10^8 మీ/సె

Correct : 1 Wrong : 0

Which one of the following forms the principle of production of ultrasonic waves

అతిధ్వని తరంగాల ఉత్పత్తి ఏ సూత్రం ఆధారంగా జరుగును

Options :

Pyroelectric effect

1. ✖ టైరో విద్యుత్ ప్రభావము

Photo electric effect

2. ✖ కాంతి విద్యుత్ ఫలితము

Piezoelectric effect

3. ✔ పీడన విద్యుత్ ఫలితము

Peltier effect

4. ✖ పెల్టియర్ విద్యుత్ ఫలితము

Correct : 1 Wrong : 0

The quantity PV/kT represents

PV/kT అనే రాశి క్రింది వాటిలో దేనిని సూచిస్తుంది

Options :

Kinetic energy of the gas

1. ✖ వాయు గతి శక్తి

Mass of the gas

2. ✖ వాయు ద్రవ్య రాశి

Number of molecules of the gas

వాయు అణువుల సంఖ్య

3. ✖

Number of moles of the gas

వాయు మోల్ సంఖ్య

4. ✔

Question Number : 69 Question Id : 35918114619 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The process in the Porus plug experiment is

పోరస్ ప్లగ్ ప్రయోగములో జరిగే ప్రక్రియ

Options :

Isenthalpic

సమఎంతాల్పి

1. ✔

Isobaric

సమభీడన

2. ✖

Adiabatic

స్థిరోష్ణక

3. ✖

Isothermal

సమోష్ణక

4. ✖

Question Number : 70 Question Id : 35918114620 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Viscosity of fluid is the measure of

స్నిగ్ధత అనునది ద్రవయు యొక్క దేనికి కొలమానము

Options :

Volume

1. ✘ ఘన పరిమానము

Mass

2. ✘ ద్రవ్యరాశి

Internal friction

3. ✔ అంతర్గత ఘర్షణ

External friction

4. ✘ బాహ్యఘర్షణ

Question Number : 71 Question Id : 35918114621 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following is not true in the phenomenon of photoelectric effect

కాంతి విద్యుత్ ఫలితమునకు సంబంధించి క్రింది వాటిలో ఏది నిజం కాదు

Options :

1. ✘

The velocity of photoelectron is directly proportional to the frequency of radiation

ఫోటో ఎలక్ట్రాన్ వేగము వికిరణ పౌన పున్యమునకు అనులో మానుపాతములో ఉండును

2. ✔

The velocity of photoelectron is directly proportional to intensity of radiation

ఫోటో ఎలక్ట్రాన్ వేగము వికిరణ త్రివతకు అనులో మానుపాతములో ఉండును

The threshold frequency that varies with the nature of the emitter

ఆరంభ పౌనపున్యము ఉద్గారక స్వభావము పై ఆధారపడును

3. ✖

The process of photoemission is instantaneous

ఫోటో ఉద్గారకము తక్షణక ప్రక్రియ

4. ✖

Question Number : 72 Question Id : 35918114622 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Through what potential difference the electrons are to be accelerated to have the wavelength 5461A

5461A తరంగ దైర్ఘ్యమును పొందుటకు ఎలక్ట్రానులను త్వరణము చెందించటానికి కావలసిన పొటెన్షియల్ భేదము

Options :

1. ✖ 50V

2. ✖ 5.0V

3. ✖ 5.0 mV

4. ✔ 5.0μV

Question Number : 73 Question Id : 35918114623 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The energy eigen value of a particle confined in a box is given by

L పొడవుగల ఒక పెట్టెలో ఉంచబడిన m ద్రవ్యరాశిగల కణము యొక్క శక్తి ఐగన్ విలువ

Options :

1. ✔ $n^2h^2/8mL^2$

2. ✖ $nh^2/2mL^2$

nh/4mL

3. ✖

nh/6mL

4. ✖

Question Number : 74 Question Id : 35918114624 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The impedance of a resonant circuit is

అనునాదవలయము యొక్క ఇంపిడెన్స్

Options :

Purely resistive

1. ✔ శుద్ధ నిరోధము

Purely inductive

2. ✖ శుద్ధ ప్రేరకము

Purely capacitive

3. ✖ శుద్ధ క్షమత్వము

inductive and capacitive

4. ✖ ప్రేరక మరియు క్షమత్వ

Question Number : 75 Question Id : 35918114625 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The α , β , γ rays have the ionization power in the order of

α , β , γ కిరణాల అయణీకరణ సామర్థ్యముల మధ్య సంబంధము

Options :

1. ✖ $\alpha = \beta = \gamma$

2. ✖ $\alpha < \beta < \gamma$

3. ✔ $\alpha > \beta > \gamma$

4. ✖ $\alpha = 2\beta = 3\gamma$

Question Number : 76 Question Id : 35918114626 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

A radioactive element disintegrates for an interval equal to its mean life time, then the fraction of element that remains is

ఒక రేడియోధార్మిక మూలకము విఘటనము చెందిన సమయాంతరము దాని యొక్క సగటు జీవిత కాలమునకు సమానమైనపుడు మిగిలిన మూలకము యొక్క భిన్నము

Options :

1. ✖ $[1 - 1/e]$

2. ✔ $1/e$

3. ✖ $1/\lambda$

4. ✖ $0.693/\lambda$

Question Number : 77 Question Id : 35918114627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The splitting of spectral lines of atoms having non-zero spin angular momentum in a magnetic field is called

స్పిన్ కోణీయ వేగము కలిగిన పరమాణువును అయస్కాంత క్షేత్రము లో ఉంచినపుడు ఏర్పడిన వర్ణపట రేఖలచీలికలను తెలియజేయునది

Options :

Paschen Bach effect

1. ✖ పాష్చన్ బ్యాక్ ఫలితము

Stark effect

2. ✖ స్టార్క్ ఫలితము

Zeeman effect

3. ✖ జీమన్ ఫలితము

Anomalous Zeeman effect

4. ✔ అసంగత జీమన్ ఫలితము

Question Number : 78 Question Id : 35918114628 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The phenomenon of Raman Effect is due to

రామన్ ఫలితము అనే దృగ్బిక్షయమునకు కారణము

Options :

Elastic scattering

1. ✖ స్థితిస్థాపక పరిక్షేపణము

Absorption of light

2. ✖ కాంతి శోషణము

Emission of light

3. ✖ కాంతి ఉద్గారము

Inelastic scattering

4. ✔ అస్థితిస్థాపక పరిక్షేపణము

Question Number : 79 Question Id : 35918114629 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The energy released when an electron drops down from outer orbit to inner orbit to fill a hole is sometimes used to eject a loosely bound electron of the atom. This ejection is called

జాహ్యకర్పరము నుండి అంతర్కర్పరానికి ఎలక్ట్రాన్ సంక్రమణము జరిగినపుడు వైలుడవడే శక్తి మరొక కర్పరములోని ఎలక్ట్రానును విడుదలయుటకు ఉపయోగపడుటను _____ అందురు

Options :

Zeeman effect

1. ✖ జీమన్ ఫలితము

Stark effect

2. ✖ స్టార్క్ ఫలితము

Auger effect

3. ✔ ఆగర్ ఫలితము

Photoelectric effect

4. ✖ కాంతి విద్యుత్ ఫలితము

Question Number : 80 Question Id : 35918114630 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Packing factor for a Face Centered Cubic Crystal structure is

FCC స్ఫటిక నిర్మాణము యొక్క సంపుటికరణభిన్నము

Options :

1. ✖ 0.52

2. ✖ 0.68

3. ✔ 0.74

0.36

4. ✖

Question Number : 81 Question Id : 35918114631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The essential condition for Bragg's reflection to occur is

బ్రాగ్ పరావర్తనము చెందుటకు ముఖ్యమైన నియమము

Options :

1. ✓ $\lambda \leq 2d$

2. ✖ $\lambda < d$

3. ✖ $\lambda > 2d$

4. ✖ $\lambda \geq 2d$

Question Number : 82 Question Id : 35918114632 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In the direction of the electric field the electric potential

విద్యుత్ క్షేత్ర దిశలో విద్యుత్ పొటెన్షియల్

Options :

Is zero

1. ✖ శూన్యము

Increases

2. ✖ పెరుగును

Remains unchanged

3. ✖ మారదు

Decreases

4. ✓ తగ్గును

Question Number : 83 Question Id : 35918114633 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An electric dipole of moment P is placed in a uniform electric field E . The torque required to rotate, when the dipole makes an angle θ with initial position is

ఏక రీతి విద్యుత్ క్షేత్రము E నందు P భ్రామకము కలిగిన విద్యుత్ ద్విధృవాన్ని ఉంచినపుడు పూర్వ స్థితి నుండి ద్విధృవము θ కోణము చేయుటకు అవసరమగ కోణీయ బలము

Options :

1. ✗ $PE \cos\theta$

2. ✓ $PE \sin\theta$

3. ✗ $P \tan\theta$

4. ✗ $P \cos\theta$

Question Number : 84 Question Id : 35918114634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The relation between D , P , and E is

D , P , E ల మధ్యగల సంబంధము

Options :

1. ✗ $D = \epsilon_0 P + E$

2. ✗ $E = \epsilon_0 P + D$

3. ✓ $D = \epsilon_0 E + P$

4. ✗ $D = \epsilon_0 E/P$

Question Number : 85 Question Id : 35918114635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The energy stored in a capacitor is increased by 300%, its potential difference increases by

కెపాసిటర్ లో శక్తిని నిలువ చేసే సామర్థ్యము 300% పెరిగినపుడు దాని పై పెరిగే పొటెన్షియల్ భేదము

Options :

1. ✖ 900%
2. ✖ 600%
3. ✖ 200%
4. ✔ 100%

Question Number : 86 Question Id : 35918114636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Magnetic susceptibility is defined as

అయస్కాంత వశ్యత నిర్వచనము

Options :

1. ✔ $\frac{M}{H}$
2. ✖ $M \times H$
3. ✖ M^2/H^2
4. ✖ $\frac{H}{M}$

Question Number : 87 Question Id : 35918114637 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Retentivity is maximum for

ధారణశీలత అత్యధికంగా ఉన్న పదార్థము

Options :

Brass

ఇత్తడి

1. ✖

Copper

2. ✖ రాగి

Soft Iron

సామ్యఇనుము

3. ✖

Steel

4. ✔ స్టీల్

Question Number : 88 Question Id : 35918114638 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Magnetic Lorentz force experienced by a charged particle moving in the magnetic field is given by

అయస్కాంత క్షేత్రములో కదులుతున్న ఆవేశకణము పై పని చేసే అయస్కాంత లారెంట్జ్ బలము

Options :

1. ✔ $\frac{q}{[V \times B]}$

2. ✖ $\frac{[V \times B]}{q}$

3. ✖ $q[V \times B]$

$$q\mathbf{E} + q[\mathbf{V} \times \mathbf{B}]$$

4. ✖

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Question Number : 89 Question Id : 35918114639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The direction of propagation of electromagnetic wave is given by

విద్యుదయస్కాంత తరంగము యొక్క వ్యాపన దిశను తెలుపునది

Options :

1. ✖ $\mathbf{E} \cdot \mathbf{H}$

2. ✖ $\mathbf{E}$

3. ✖ $\mathbf{H}$

4. ✔ $\mathbf{E} \times \mathbf{H}$

Question Number : 90 Question Id : 35918114640 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The phenomenon of production of emf in a current carrying metallic strip on applying a magnetic field along a direction perpendicular to the flow of current is known as

విద్యుత్ ప్రవహిస్తున్న లోహ పుపలకను అయస్కాంత క్షేత్ర దిశకు అభిలంబంగా ఉంచినపుడు ప్రవాహ మరియు అయస్కాంత క్షేత్ర దిశల రెండింటికీ అభిలంబంగా ఏర్పడే విద్యుచ్ఛాలక బలము emf ఏర్పడే ఫలితాన్ని

Options :

Seebeck effect

1. ✖ సీబెక్

Peltier effect

2. ✖ పెల్టియర్

Hall effect

3. ✓ హాల్

Joule effect

4. ✗ జౌల్

Question Number : 91 Question Id : 35918114641 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The total impedance of an ac series LCR circuit is given by

LCR శ్రేణి వలయంలోని ఇంపిడెన్స్ మొత్తము

Options :

1. ✗ $\sqrt{R^2 - (X_C^2 + X_L^2)}$

2. ✗ $\sqrt{R^2 + (X_C^2 - X_L^2)}$

3. ✗ $\sqrt{R^2 - (X_C^2 - X_L^2)}$

4. ✓ $\sqrt{R^2 + (X_L^2 - X_C^2)}$

Question Number : 92 Question Id : 35918114642 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The speed of EM wave in vacuum is equal to

శూన్యములో EM తరంగము యొక్క వడిని తెలిపే సూత్రము

Options :

1. ✖ $\sqrt{\epsilon_0 \mu_0}$

2. ✔ $\frac{1}{\epsilon_0 \mu_0}$

3. ✖ $\epsilon_0 \mu_0$

4. ✖ $\frac{1}{\sqrt{\epsilon_0 \mu_0}}$

Question Number : 93 Question Id : 35918114643 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The equation of continuity is

సాతంత్య సమీకరణము

Options :

1. ✔ $\text{Div.} J = \frac{\partial \rho}{\partial t}$

2. ✖ $\text{Div.} J = 0$

3. ✖ $\text{Div } \rho = J$

4. ✖ $\text{Div.} J = - \frac{\partial \phi}{\partial t}$

Question Number : 94 Question Id : 35918114644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The quality factor of LCR parallel resonant circuit is

LCR సమాంతర అనునాద వలయము యొక్క క్షమతా గుణకము

Options :

1. ✖ $\frac{1}{R} \sqrt{\frac{C}{L}}$

2. ✔ $\frac{1}{R} \sqrt{\frac{L}{C}}$

3. ✖ $\frac{1}{L} \sqrt{\frac{R}{C}}$

4. ✖ $\frac{1}{C} \sqrt{\frac{R}{L}}$

Question Number : 95 Question Id : 35918114645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In reverse bias a Zener diode behaves as a ----- source

ఉత్క్రమ బయాస్ లో జీనర్ డయోడ్ ----- జనకం గా పనిచేస్తుంది

Options :

Constant current

1. ✖ స్థిర ప్రవాహం

Constant voltage

2. ✔ స్థిర వోల్టేజి

Variable current

చర ప్రవాహ

3. ✖

Variable voltage

చర వోల్టేజి

4. ✖

Question Number : 96 Question Id : 35918114646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Quantum dots are

క్వాంటమ్ డాట్స్ యొక్క పరిమితి

Options :

Zero dimensional

0-D

1. ✔

One dimensional

1-D

2. ✖

Two dimensional

2-D

3. ✖

Three dimensional

3-D

4. ✖

Question Number : 97 Question Id : 35918114647 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In superconducting state, the material becomes

అతివాహకము యొక్క అయస్కాంత స్థితి

Options :

Ferromagnetic

1. ✖ షెర్రో

Diamagnetic

2. ✔ డయా

Paramagnetic

3. ✖ పారా

Ferrimagnetic

4. ✖ షెర్రి

Question Number : 98 Question Id : 35918114648 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For interference in thin films, the condition for bright fringe in the transmitted light is

ప్రసారిత కాంతివలన పలిచని పొరలలో జరిగే వ్యతిరేకరణమునందు కాంతి వంతమైన పట్టికకు
కావలసిన నియమము

Options :

1. ✔ $2\mu t \cos r = n\lambda$

2. ✖ $2\mu t \cos r \pm \lambda/2 = n\lambda$

3. ✖ $2\mu t \cos r \pm \lambda = n\lambda$

4. ✖ $2\mu t \cos r - \lambda = n\lambda$

Question Number : 99 Question Id : 35918114649 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If f_1, f_2 and μ_1, μ_2 are focal lengths and refractive indices of two lenses respectively then the Petzwal's condition for no curvature

f_1, f_2 మరియు μ_1, μ_2 నాభ్యంతరాలు మరియు వక్రీభవన గుణకాలు వరుసగా కలిగిన రెండు కటాకాల వ్యవస్థలో వక్రత లేమికి కలనియమము

Options :

1. ✓ $\frac{1}{f_1 \mu_1} + \frac{1}{f_2 \mu_2} = 0$

2. ✗ $\frac{1}{f_1 \mu_1} + \frac{1}{f_2 \mu_2} = 1$

3. ✗ $\frac{1}{f_1 \mu_1} - \frac{1}{f_2 \mu_2} = 0$

4. ✗ $\frac{1}{f_1 \mu_1} - \frac{1}{f_2 \mu_2} = 1$

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Question Number : 100 Question Id : 35918114650 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The refractive indices of core (μ_1) and cladding (μ_2) of an optical fibre satisfy the relation

ఆప్టికల్ ఫైబర్‌లోని కోర్ మరియు క్లాడింగ్‌ల వక్రీభవన గుణకాలు వరుసగా μ_1 మరియు μ_2 లు అయినచో

Options :

1. ✓ $\mu_1 > \mu_2$

2. ✗ $\mu_1 < \mu_2$

3. ✗ $\mu_1 = \mu_2$

$$\mu_1 = 2\mu_2$$

4. ✖

BOTANY

Section Id :	359181309
Section Number :	2
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181329
Question Shuffling Allowed :	No

Question Number : 101 Question Id : 35918114651 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The maximum biodiversity in India occurs at

భారతదేశంలో అత్యధిక జీవవైవిధ్యం ఉన్న ప్రాంతం?

Options :

Western Himalayas

1. ✖ పశ్చిమ హిమాలయాలు

Western Ghats

2. ✔ పశ్చిమ కనుమలు

Eastern Ghats

3. ✖ తూర్పు కనుమలు

North East Himalayas

4. ✖ తూర్పు ఉత్తర హిమాలయాలు

Question Number : 102 Question Id : 35918114652 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The maximum rate of natural increase of a population that can occur under ideal condition is the

యుక్తతమ పరిస్థితులలో గరిష్ఠ వృద్ధి చెందగలిగే జనాభా లక్షణం

Options :

Population Growth

1. ✖ జనాభా పెరుగుదల

Biotic potential

2. ✔ జీవశక్తి

Carrying capacity

3. ✖ క్యారింగ్ కెపాసిటీ

Steady State

4. ✖ నిలకడస్థానం

Question Number : 103 Question Id : 35918114653 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Substrate level phosphorylation occurs during which step of Kreb's Cycle

క్రెబ్స్ వలయంలో అధస్తస్థాయి పాస్ఫోరిలేషన్ ఏ చర్యలో జరుగుతుంది?

Options :

Succinyl CoA——> Succinic Acid

1. ✔ సక్సిన్యైల్ CoA → సక్సినిక్ ఆమ్లం

Isocitric acid——>Oxalosuccinic acid

2. ✖ ఐసోసిట్రైక్ ఆమ్లం → ఆక్సాలో సక్సినిక్ ఆమ్లం

Oxalosuccinic acid——> α -Ketoglutaric acid

3. ✖ ఆక్సాలో సక్సినిక్ ఆమ్లం → α -కీటో గ్లూటారిక్ ఆమ్లం

Malic acid————>OAA

4. ✖ మాలిక్ ఆమ్లం → OAA

Question Number : 104 Question Id : 35918114654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The first order in Bentham and Hookers System of classification is

బెంథమ్ - హుకర్ వర్గీకరణలో మొదటి క్రమం

Options :

Geraniales

1. ✖ జెరానియేల్స్

Asterales

2. ✖ ఆస్టరేల్స్

Liliales

3. ✖ లిలియేల్స్

Ranales

4. ✔ రానేల్స్

Question Number : 105 Question Id : 35918114655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Endostome and exostome are aprt of

ఎండోస్టోమ్ మరియు ఎక్సోస్టోమ్ అనేవి ఎందులోని భాగాలు

Options :

Nucellus

అండాంత కణజాలం

1. ✖

Chalaza

చలాజా

2. ✖

Pollen wall

పరాగ నాళ గోడ

3. ✖

Micropyle

అండద్వారం

4. ✔

Question Number : 106 Question Id : 35918114656 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Porous wood is characterized by

రంధ్ర దారువు లక్షణం?

Options :

Presence of Vessels

దారునాళాలు ఉండటం

1. ✔

Absence of tracheids

దారుకణాలు లోపించడం

2. ✖

Absence of vessels

దారునాళాలు లేకపోవడం

3. ✖

Presence of sieve-tubes

చాలనీ నాళాలు లోపించడం

4. ✖

Question Number : 107 Question Id : 35918114657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The heterosporous pteridophyte belonging to the class Lycopsidea is

తైకాస్పిడా తరగతి నుండి భిన్న సిద్ధబీజతను చూపించేది.

Options :

Psilotum

1. ✖ పైలోటం

Selaginella

2. ✔ సెలాజినెల్లా

Equisetum

3. ✖ ఈక్విజిటం

Pteris

4. ✖ ప్టెరిస్

Question Number : 108 Question Id : 35918114658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following statement is false?

ఈ క్రింది వాటిలో తప్పుగా ఉన్నవాక్యం

Options :

TMV has double-stranded RNA molecules

1. ✖ టి.ఎమ్.వి - ద్విపోచ ఆర్.ఎన్.ఎ వైరస్

Most plant viruses are RNA viruses

2. ✖ చాలా మొక్కల వైరస్లు - ఆర్.ఎన్.ఎ కేంద్ర కాముం కల్గి ఉంటాయి

The bacteriophage has a double stranded DNA molecule

3. ✔ బాక్టీరియోఫేజ్ ద్విపోచ డిఎన్ఎ ను కల్గి ఉంటాయి.

Most animal viruses are DNA viruses

చాలా జంతు వైరస్‌ల జన్యు పదార్థం డిఎన్ఎ

4. ✖

Question Number : 109 Question Id : 35918114659 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Identify the corect matching of the crop, its disease and the corresponding pathogen

సరియైన మొక్క వ్యాధి - వ్యాధికారకం ఏది?

Options :

Apple - Crown galls - *Streptomyces*

అపిల్ - కణుతులు - *స్ట్రెప్టోమైసిస్*

1. ✖

Citrus - Canker - *Pseudomonas*

నిమ్మ గజ్జితెగులు - సూడోమోనాస్

2. ✖

Potato - Late blight - *Fusarium*

బంగాళదుంప - లేటుబ్లైట్ - ఫ్యూజేరియం

3. ✖

Rice - Blight - *Xanthomonas*

వరి ఎండుతెగులు - జాంథోమోనాస్

4. ✔

Question Number : 110 Question Id : 35918114660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Pruning of Tea plants is done to discard the effects of

తేయాకు మొక్కల ఖండన వలన ఈ క్రింది హార్మోన్ నిరోధింపబడుతుంది

Options :

Ethylene

ఇథిలన్

1. ✖

Cytokinin

సైటోకైనిన్

2. ✖

Auxin

3. ✓ ఆక్సిన్

ABA

4. ✗ అబ్సెసిక్ ఆమ్లం

Question Number : 111 Question Id : 35918114661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

During Photosynthesis when PGA is changed into Phosphoglyceraldehyde, which of the following reaction occurs

కిరణజన్య సంయోగ క్రియలో ఫాస్ఫోగ్లిజరిక్ ఆమ్లం నుండి ఫాస్ఫోగ్లిసరాల్డిహైడ్ ఏ చర్యలో ఏర్పడుతుంది

Options :

Oxidation

1. ✗ ఆక్సీకరణ

Reduction

2. ✓ క్షయకరణం

Dehydration

3. ✗ నిర్జలాకరణం

Hydrolysis

4. ✗ జలాకరణం

Question Number : 112 Question Id : 35918114662 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

To which family does Sarpagandha belong

సర్పగంధి ఏ కుటుంబపు మొక్క

Options :

Asclepiadaceae

1. ✖ అస్క్లిపియడేసి

Liliaceae

2. ✖ లిలియేసి

Apocynaceae

3. ✔ అపోసైనేసి

Solanaceae

4. ✖ సోలనేసి

Question Number : 113 Question Id : 35918114663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following tissues originate from ray initials of cambium?

పుంజం యొక్క రేఖా విభాజ్య కణజాలం నుండి ఏర్పడేది?

Options :

Tracheids& Vessels

1. ✖ దారు కణాలు మరియు దారునాళాలు

Radial rows of parenchyma

2. ✔ మృదుకణజాల వ్యాసార్థ వరుసలు

Xylem & Phloem fibres

3. ✖ దారువు మరియు పోషక నారలు

Sieve tubes & Companion Cells

4. ✖ చాలనీ నాళాలు మరియు సహాయ కణాలు

Correct : 1 Wrong : 0

Eubacteria which oxidise inorganic chemicals such as Ammonia, nitrates, nitrites etc are

నిజ బాక్టీరియాలో అమ్మోనియం, నైట్రేట్, నైట్రైట్లను ఆక్సీకరణం చేసేవి?

Options :

Chemosynthetic Autotrophic

1. ✓ రసాయన స్వయం పోషిత

Chemosynthetic heterotrophic

2. ✗ రసాయన పరపోషక

Photosynthetic Autotrophic

3. ✗ కిరణజన్య సంయోగక్రియ స్వయంపోషిత

Photosynthetic Heterotrophic

4. ✗ కిరణజన్య సంయోగక్రియ పరపోషిత

Correct : 1 Wrong : 0

Inversion without involving the centromere is called

సెంట్రోమియర్ ప్రమేయంలేని విలోమం?

Options :

Paracentric

1. ✓ పారాసెంట్రీక్

Pericentric

2. ✗ పెరిసెంట్రీక్

Tautomerization

టాటోమెరికరణ

3. ✖

Monosomy

మోనోజమి

4. ✖

Question Number : 116 Question Id : 35918114666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which process is most capable of slowing global warming ?

హరితగృహ ప్రభావాన్ని చాలా వరకు తగ్గించే ప్రక్రియ?

Options :

Chemosynthesis

రసాయన సంశ్లేషణ

1. ✖

Decomposition

విచ్ఛిన్నం

2. ✖

Respiration

శ్వాసక్రియ

3. ✖

Photosynthesis

కిరణజన్య సంయోగక్రియ

4. ✔

Question Number : 117 Question Id : 35918114667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Nuclear envelope is the derivative of

కేంద్రక త్వచం దేని నుండి ఏర్పడుతుంది?

Options :

Microtubules

1. ✖ సూక్ష్మనాళికలు

Rough Endoplasmic Reticulum

2. ✔ గురుకు అంతర్జీవ ద్రవ్య జాలం

Membrane of Golgi

3. ✖ గాల్జి త్వచం

Smooth endoplasmic Reticulum

4. ✖ సునువు అంతర్జీవ ద్రవ్యజాలం

Question Number : 118 Question Id : 35918114668 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Photosynthesis, the light-independent reactions take place at

కిరణ జన్య సంయోగ క్రియలో నిష్కాంతి చర్యలు ఎక్కడ జరుగుతాయి

Options :

Photosystem-I

1. ✖ కాంతి వ్యవస్థ - I

Photosystem-II

2. ✖ కాంతి వ్యవస్థ - II

Thylakoid Lumen

3. ✖ థైలకాయిడ్ ల్యుమెన్

Stroma

4. ✔ అవర్ణిక

Correct : 1 Wrong : 0

The framework system of classification in which various taxonomic categories are arranged in order of logical sequence is called

వర్గీకరణలోని అంశాలను ఒక క్రమపద్ధతిలో అమర్చడాన్ని ఏమంటారు

Options :

Systematics

1. ✖ సిస్టమాటిక్స్

Classification

2. ✖ వర్గీకరణ

Taxon

3. ✖ టాక్సాన్

Hierarchy

4. ✔ హైరార్చి

Question Number : 120 Question Id : 35918114670 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The bark of Cinnamon is stripped off from the plants by a special process called

దాల్చిన చెక్కను సేకరించేందుకు వాడే ప్రత్యేక పద్ధతి?

Options :

Scaling

1. ✖ స్కేలింగ్

Coppicing

2. ✔ కోపింగ్

Chapping

చాపింగ్

3. ✖

Layering

లేయరింగ్

4. ✖

Question Number : 121 Question Id : 35918114671 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The scutellum observed in a grain of wheat or maize is comparable to this part of seed in other monocotyledons

గోధుమ మరియు మొక్కజొన్నలోని స్కూటేల్లం అనే భాగం మిగతా ఏక దళ బేజాలలోని దేనితో సమానం

Options :

Aleurone layer

అల్యూరాన్ పొర

1. ✖

Cotyledon

బీజదళం

2. ✔

Endosperm

అంకురచ్ఛదం

3. ✖

Plumule

ప్రథమాక్షం

4. ✖

Question Number : 122 Question Id : 35918114672 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The movement of homologous chromosomes to opposite poles occur by contraction of spindle fibres during

క్రింది ఏ దశలో సమజాత క్రోమోజోమ్లు వ్యతిరేక దృవాలకు వెళతాయి?

Options :

Anaphase

చలనదశ

1. ✖

Metaphase

మధ్యదశ

2. ✖

Anaphase-I

చలనదశ -I

3. ✔

Anaphase-II

చలనదశ -II

4. ✖

Question Number : 123 Question Id : 35918114673 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Promotion of apical dominance and removal of apical dominance is controlled by which hormones respectively

క్రింది వాటిలో అగ్రాధిత్యతను పెంచే మరియు నిరోధించే హార్మోన్ల జత

Options :

ABA and Auxin

ఎబీఎ మరియు ఆక్సిన్

1. ✖

Auxin and Cytokinin

ఆక్సిన్ మరియు సైటోకైనిన్

2. ✔

Auxin and Ethylene

ఆక్సిన్ మరియు ఇథిలీన్

3. ✖

ABA and Cytokinin

ABA మరియు సైటోకైనిన్

4. ✖

Correct : 1 Wrong : 0

Tetramerous flowers with superior ovary is characteristic of

చతుర్భాగయుత పుష్పాలు, ఊర్ధ్వ అండాశయం క్రింది ఏ కుటుంబ లక్షణం

Options :

Brassicaceae

1. ✓ బ్రాసికేసి

Cucurbitaceae

2. ✗ కుకుర్బిటేసి

Papilionaceae

3. ✗ పాపిలియోనేసి

Solanaceae

4. ✗ సోలనేసి

Question Number : 125 Question Id : 35918114675 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Select the correct pair amongst the following

క్రింది వాటిలో సరియైన జత

Options :

Spring wood - light colour, high density

1. ✗ శరద్దారువు - లేతరంగు - అధికసాంద్రత

Spring wood - dark colour, low density

2. ✗ శరద్దారువు - ముదురురంగు - అల్ప సాంద్రత

Autumn wood - light colour, high density

వసంత దారువు - లేత రంగు - అధిక సాంద్రత

3. ✖

Autumn wood - dark colour, high density

వసంత దారువు - ముదురు రంగు - అధిక సాంద్రత

4. ✔

Question Number : 126 Question Id : 35918114676 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

'Callase' enzyme which dissolves callose of tetrad of microspores to separate four microspores is provided by

కాలేజ్ అనే ఎంజైమ్, పరాగచతుష్కమును విడదీస్తుంది. ఇది దేనిలో ప్రవించబడుతుంది

Options :

Endothecium

ఎండోథీసియం

1. ✖

Middle layer

మధ్యత్వచాలు

2. ✖

Tapetum

టాపెటం

3. ✔

Pollen grains

పరాగరేణువులు

4. ✖

Question Number : 127 Question Id : 35918114677 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The extracts of this plant are used in restoring memory power

పునరుజ్జీవన శక్తి నిచ్చే మొక్క

Options :

Rauwolfia serpentina

1. ✖ సర్పగంధి

Tinospora cordifolia

2. ✖ తిప్ప తీగ

Piper longum

3. ✖ పిప్పళ్ళు

Bacopamonneri

4. ✔ జలబ్రహ్మ

Question Number : 128 Question Id : 35918114678 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The reactions of Pentose Phosphate Pathway (PPP) takes place in

పెంటోస్ పాస్ఫేట్ పథం ఎక్కడ జరుగుతుంది

Options :

Mitochondria

1. ✖ మైటోకాండ్రియా

Cytoplasm

2. ✔ కణద్రవ్యం

Chloroplast

3. ✖ హరిత రేణువు

Peroxisomes

పెరాక్సిజోమ్లు

4. ✖

Question Number : 129 Question Id : 35918114679 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Phenetic Classification refers to

దృగ్విషయాత్మక వర్గీకరణ ఈ క్రింది దేనిలో ఒక భాగం?

Options :

Cytotaxonomy

1. ✖

కణాధార వర్గీకరణ శాస్త్రం

Biochemical Systematics

2. ✖

జీవరసాయనాధారం

Numerical taxonomy

3. ✔

సంఖ్యాక వర్గీకరణ శాస్త్రం

Taxonomy

4. ✖

వర్గీకరణ శాస్త్రం

Question Number : 130 Question Id : 35918114680 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

A cross between F_1 plant with a plant which is phenotypically and genotypically similar to any parent is called

F_1 తరపు మెక్కతో దృశ్యరూప లేదా జన్యురూపంలో సమానంగా వచ్చేందుకు జరిపే సంకరణ

Options :

Test Cross

1. ✖

పరీక్షా సంకరణం

Back Cross

పశ్చాత్సంకరణం

2. ✓

Hybrid Cross

సంకర సంకరణం

3. ✗

Inbred Cross

ప్రజనన సంకరణం

4. ✗

Question Number : 131 Question Id : 35918114681 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which term describes the “Occupation” of an organism within the community?

సమాజ అవరణంలో - ఉనికి - అనే అర్థం వచ్చే క్రింది పదం ఏది?

Options :

Mimicry

అనుకరణ

1. ✗

Habitat

అవాసం

2. ✗

Niche

నిచ్చే

3. ✓

Competition

పోటీ

4. ✗

Question Number : 132 Question Id : 35918114682 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Identify the Non Heterocystous Anaerobic Nitrogen fixing Cyanobacteria

హెటిరోసిస్ట్ లేని నీలి ఆకుపచ్చ చైవలం?

Options :

Nostoc

1. ✖ నాస్టాక్

Oscillatoria

2. ✔ అసిల్లటోరియా

Anabaena

3. ✖ అనబీనా

Spirulina

4. ✖ స్పైరూలినా

Question Number : 133 Question Id : 35918114683 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

During replication, removal of Okazaki fragments and gap filling is done by

ప్రతికృతి చర్యలో ఒకజాతి ముక్కను విడదీసి మరియు ఖాళీలను నింపే ఎంజైమ్‌ల జతుఏది?

Options :

DNA polymease II and DNA Ligase

1. ✖ DNA పాలిమరేజ్ II & DNA లైగేజ్

DNA polymease III and DNA Ligase

2. ✖ DNA పాలిమరేజ్ III & DNA లైగేజ్

DNA polymease I and DNA Ligase

DNA పాలిమరేజ్ I & DNA లైగేజ్

3. ✓

RNA polymease and DNA Ligase

RNA పాలిమరేజ్ & DNA లైగేజ్

4. ✗

Question Number : 134 Question Id : 35918114684 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The single greatest current threat to biodiversity

జీవవైవిధ్యంకు పొంచి ఉన్న ప్రస్తుత ప్రధాన ముప్పు

Options :

Habitat destruction

అవాస విచ్ఛిన్నం

1. ✓

Global Warming

భూగోళం వేడెక్కడం

2. ✗

Overhunting

అతిగా వేటాడటం

3. ✗

Introduction of exotics

ఇతర దేశ జీవులను తీసుకురావడం

4. ✗

Question Number : 135 Question Id : 35918114685 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The lichen used in tanning leather

తోలు పరిశ్రమలో ఉపయోగించే లైకెన్?

Options :

Lobaria pulmonaria

1. ✓ లోబేరియా పల్మోనేరియా

Usnea

2. ✗ అస్సీయా జాతి

Parmelia

3. ✗ పార్మిలియా జాతి

Cladonia

4. ✗ క్లాడోనియాజాతి

Question Number : 136 Question Id : 35918114686 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Primary productivity at the climax stage of a succession is

అనుక్రమక చివరి దశలో ప్రాథమిక ఉత్పాదకత?

Options :

Higher than consumption

1. ✗ వినియోగం కన్నా ఎక్కువ

Not related to Consumption

2. ✗ వినియోగంతో సంబంధం లేదు

Equal to Consumption

3. ✓ వినియోగంతో దాదాపు సమానం

Lower than consumption

వినియోగం కన్నా తక్కువ

4. ✖

Question Number : 137 Question Id : 35918114687 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A genus with racemose inflorescence and drupe is

అనిశ్చిత పుష్ప విన్యాసం మరియు టెంక ఫలం గల మొక్క

Options :

Cocos

1. ✖ కొబ్బరి

Crotalaria

2. ✖ జనుము

Asparagus

3. ✖ పిల్లితీగలు

Mangifera

4. ✔ మామిడి

Question Number : 138 Question Id : 35918114688 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Amino acid playing an important role in Nitrogen metabolism is

నత్రజని జీవ క్రియలో ప్రముఖపాత్ర పోషించే అమైనో ఆమ్లం

Options :

Glutamic Acid

1. ✔ గ్లూటామిక్ ఆమ్లం

Tryptophan

ట్రీప్టోఫాన్

2. ✖

Methionine

మిథియోనైన్

3. ✖

Phenylalanine

ఫీనైల్ అలనైన్

4. ✖

Question Number : 139 Question Id : 35918114689 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which light necessary for germination of photoblastic seeds

కాంతి ఆధార - జన్మిత విత్తనాలకు కావలసిన కాంతి ఏది?

Options :

Red

ఎరుపు

1. ✔

Green

ఆకుపచ్చ

2. ✖

Far Red

దూరారుణ

3. ✖

Blue

నీలిరంగు

4. ✖

Question Number : 140 Question Id : 35918114690 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Polymers of glucuronic acid are hydrolysed by

గాలక్టురోనిక్ అమ్లంను జలవిశ్లేషణ చేసేవి?

Options :

Proteases

1. ✖ ప్రొటియేజ్లు

Pectinase

2. ✔ పెక్టినేజ్లు

Invertases

3. ✖ కేంద్రకం

Lipases

4. ✖ లైపోజోమ్

Question Number : 141 Question Id : 35918114691 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Polymorphic Cell Organelles is

బహురూపక కణాంగం

Options :

Ribosome

1. ✖ రైబోజోమ్

Peroxisome

2. ✖ పెరాక్సిజోమ్

Nucleus

3. ✖ కేంద్రకం

Lysosome

4. ✔ లైసోజోమ్

Question Number : 142 Question Id : 35918114692 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Geranium plants are propagated by

జీరానియం మొక్కలను వ్యాప్తిచేసే విధానం

Options :

Stem tip cutting

1. ✖ కాండ అగ్ర ఛేదనం

Leaf Bud Cutting

2. ✖ పత్ర మొగ్గ ఛేదనం

Herbaceous cutting

3. ✔ గుల్మ ఛేదనం

Soft wood Cutting

4. ✖ లేతదారు ఛేదనం

Question Number : 143 Question Id : 35918114693 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If a plant is heterozygous tall and produced tall as well as dwarf in F_2 generation, it represents the law of

ఏదైనా ఒక జీవి F_2 తరంలో విషమ యుగ్మజ మరియు అంతర్గత లక్షణాన్ని చూపిస్తే అది ఏ సిద్ధాంతాన్ని ఋజువు చేస్తుంది.

Options :

Dominance

ఐహిర్గత

1. ✖

Purity of gametes

సంయోగ బీజాల స్వచ్ఛత

2. ✖

Independent assortment

స్వతంత్ర వ్యూహన సిద్ధాంతం

3. ✔

RNA polymease and DNA Ligase

RNA పాలిమరేజ్ & DNA లైగేజ్

4. ✖

Question Number : 144 Question Id : 35918114694 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The single greatest current threat to biodiversity

జీవవైవిధ్యంకు పొంచి ఉన్న ప్రస్తుత ప్రధాన ముప్పు

Options :

Habitat destruction

అవాస విచ్ఛిన్నం

1. ✔

Global Warming

భూగోళం వేడెక్కడం

2. ✖

Overhunting

3. ✖

అతిగా వేటాడటం

Introduction of exotics

4. ✖

ఇతర దేశ జీవులను తీసుకురావడం

Question Number : 145 Question Id : 35918114695 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An enzyme found at the tip of tail of bacteriophage is

బాక్టీరియా ఫేజ్ తోక చిరవన ఉండే ఎంజైమ్

Options :

Protease

1. ✖

ప్రోటియోజ్

Lysozyme

2. ✔

లైసోజైమ్

Replicase

3. ✖

రెప్లికేజ్

Reverse Trascriptase

4. ✖

రివర్స్ ట్రాన్స్ క్రిప్టేజ్

Question Number : 146 Question Id : 35918114696 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The first earth summit was held in

మొట్ట మొదటి ధరిత్రీ సదస్సు ఎక్కడ జరిగింది.

Options :

Hyderabad

1. ✖ హైదరాబాదు

Reo de Janeiro

2. ✔ రియోడి జెనెరో

Copenhagen

3. ✖ కొపెన్హేగ్

Luxembourg

4. ✖ లక్సెమ్ బర్గ్

Question Number : 147 Question Id : 35918114697 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

All genes located on the same chromosome

అన్ని జన్యువులు ఒకే క్రోమోజోమ్‌పై ఉంటే?

Options :

Form different groups based on their relative distance

1. ✖ వాటి దూరం ఆధారంగా వివిధ వర్గాలను ఏర్పరుస్తాయి

Form one linkage group

2. ✔ ఒకే సహ లగ్నతా సమూహంగా ఉంటాయి

Will not form any linkage group

3. ✖ ఎటువంటి సహలగ్నతను చూపించవు

Form phenotype groups

4. ✖ దృశ్యరూపాలు ఏర్పడును

Question Number : 148 Question Id : 35918114698 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

“Funori” glue is obtained from

‘ఫ్యునేరి’ అనే జిగురు పదార్థం ఏ వైవలం నుండి లభిస్తుంది.

Options :

Polysiphonia

1. ✖ పాలిసైసోనియా

Gelidium

2. ✖ జిలిడియం

Laminaria

3. ✖ లామినేరియా

Gloeopeltis

4. ✔ గ్లోయోపెల్టిస్

Question Number : 149 Question Id : 35918114699 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Bryophytes used as ‘antiseptic bandage’ is

క్రింది ఏ బ్రయోఫైట్ మొక్కను సూక్ష్మజీవ రహిత పట్టీగా వాడతారు

Options :

Sphagnum

1. ✔ స్ఫాగ్నమ్

Ricciafluitans

2. ✖ రిక్సియా ఫ్లూటియన్స్

Marchantia

మార్కాన్టియా

3. ✖

Porella

పోరెల్లా

4. ✖

Question Number : 150 Question Id : 35918114700 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Select the correct pair

సరియైన జత ఏది

Options :

Cedar wood oil - *Cedrus*

దేవదారు నూనె - దేవదారు

1. ✖

Taxol - *Ginkgo*

టాక్సాల్ - గింకో

2. ✖

Chilgoza - *Pinus gerardiana*

చిల్గోజా - పైనస్ జెరార్డియానా

3. ✔

Canada balsum - *Ephedra*

కెనెడా బాల్సమ్ - ఎఫ్డ్రా

4. ✖

Question Number : 151 Question Id : 35918114701 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gymnosperms are also called soft wood spermatophytes because they lack

వివృత బేజాలను మృదుకలపనిచ్చే విత్తనదారి మొక్కలు అంటారు వాటిలో లోపించినవి

Options :

Phloem fibres

1. ✖

పోషక నారలు

Xylem fibres

2. ✔

దారునారలు

Cambium

3. ✖

పుంజం

Thick walled tracheids

మందమైన దారు కణాలు

4. ✖

Question Number : 152 Question Id : 35918114702 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The protein Nucleoplasmin occurs in

న్యూక్లియో ప్లాస్మిన్ అనే ప్రొటీన్ - ఎందులో కనిపిస్తుంది

Options :

Nuclear pore complex

1. ✔

కేంద్రక రంధ్ర సంక్లిష్టం

Cytoplasm

2. ✖

కణద్రవ్యం

Heterochromatin

3. ✖

హెటెరోక్రోమాటిన్

Nucleolus

4. ✖

కేంద్రకాంశం

Question Number : 153 Question Id : 35918114703 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A technique of micropropagation is

సూక్ష్మవ్యాప్తిలో ఎక్కువగా వాడేది

Options :

Protoplast fusion

1. ✖ జీవ పదార్థాల సంయోగం

Embryo rescue

2. ✖ పిండం తొలగింపు

Somatic embryogenesis

3. ✔ శారీరక పిండాభాలు

Somatic hybridization

4. ✖ శారీరక సంకరణాలు

Question Number : 154 Question Id : 35918114704 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

This system of medicine is based on Natural Law of Healing

ఏది కారకమో అదే మందు అనే సిద్ధాంతం ఏ విధానంలో వాడతారు

Options :

Ayurveda

1. ✖ ఆయుర్వేదం

Siddha

2. ✖ సిద్ధ

Homeopathy

3. ✔ హోమియోపతి

Unani

యునాని

4. ✖

Question Number : 155 Question Id : 35918114705 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Phylogenetic system differs from Natural system in its stress on

వర్గ వికాస వర్గీకరణ, సహజ వర్గీకరణతో భేదించే ప్రధాన అంశం

Options :

Anatomical details

1. ✖

అంతర్నిర్మాణ సంబంధ

Physiological details

2. ✖

శరీరధర్మ సంబంధ

Morphological traits

3. ✖

స్వరూప సంబంధ

Origin and evolutionary trends

4. ✔

పుట్టుక మరియు పరిణామం

Question Number : 156 Question Id : 35918114706 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following has xylans and galactans in their cell walls

క్రింది ఏ తరగతి చైవలాలలో కణ కవచంలో జైలాన్ మరియు గాలక్టాన్లు ఉంటాయి

Options :

Bacillariophyceae

1. ✖

బానిల్లారియో ఫైసి

Cyanophyceae

2. ✖

సయానోఫైసి

Pheophyceae

3. ✖ ఫియోఫైసి

Rhodophyceae

4. ✔ రోడోఫైసి

Question Number : 157 Question Id : 35918114707 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The method of curving the trunk or branches of bonsai plants in the desired direction is called

మనకు కావాల్సిన విధంగా బొన్సాయ్ మొక్కల కాండాలను లేదా కొమ్మలను వంచే విధానం

Options :

Pruning

1. ✖ ప్రూనింగ్

Punching

2. ✖ పంచింగ్

Training

3. ✔ ట్రైనింగ్

Repotting

4. ✖ రీపాటింగ్

Question Number : 158 Question Id : 35918114708 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

“Imperfect fungi” is a group represented by fungal species which have

అసంపూర్ణ శిలీంధ్రాలు అనగా

Options :

Simple Mycelia

సరళ శిలీంధ్ర జాలం

1. ✖

Unknown mechanism of Sexual reproduction

2. ✔ లైంగిక ప్రత్యుత్పత్తి గురించి తెలియని శిలీంధ్రాలు

Unknown Phylogenetic Relationship

3. ✖ వర్గ వికాసం తెలియని శిలీంధ్రాలు

Lost survival mechanism due to environmental factors

4. ✖ వాతావరణంలో తేడాను తట్టుకోలేనివి

Question Number : 159 Question Id : 35918114709 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Knots are formed in wood by

మొక్క కాండంపై మిగిలి ఉండే గుర్తులు అనగా

Options :

Injuries caused by animals

1. ✖ జంతువుల వల్ల కలిగే గాయాలు

Insects

2. ✖ కీటకాల వల్ల గాయాలు

Branches falling off and leaving scars

3. ✔ కొమ్మలు రాలిపోయినప్పుడు ఏర్పడే గుర్తులు

Chopping

4. ✖ తొలవడం

Correct : 1 Wrong : 0

Identify the correct pair

సరియైనజత

Options :

Piper longum-KawathaChurna

1. ✖ పైపర్ లాంగమ్ - కవాత చూర్ణం

Tinospora cordifolia-Tribhuvanakirtirasa

2. ✖ తిప్పతీగ - త్రిభువన క్రితరసం

Ocimum tenuiflorum-Kumariasanam

3. ✖ తులసి - కుమారి అసనం

Terminalia chebula - Triphalachurnam

4. ✔ కరక్కాయ - త్రిఫల చూర్ణం

ZOOLOGY

Section Id :	359181310
Section Number :	3
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181330
Question Shuffling Allowed :	No

Correct : 1 Wrong : 0

One of the following Protozoa exhibit bioluminescence

ఈ క్రింది వానిలో జీవసందీప్తిని ప్రదర్శించు ప్రోటోజోవన్

Options :

1. ✖ Elphidium
ఎల్ఫీడియం

2. ✔ Noctiluca
నాక్టిల్యూకా

3. ✖ Trypanosoma
ట్రైపానోసోమా

4. ✖ Leshmania
లీష్మానియా

Question Number : 162 Question Id : 35918114712 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Aristotle's lantern is present in

అరిస్టాటిల్ లాంతర్ను కలిగి ఉన్నది.

Options :

1. ✔ Echinus
ఇకైనస్

2. ✖ Star fish
సముద్ర నక్షత్రం

3. ✖ Ophiothrix
ఒఫియోత్రిక్స్

4. ✖ Brittle star
బ్రిటిల్ స్టార్

Correct : 1 Wrong : 0

The type of ribosome in Prokaryotic cell is

కేంద్రకపూర్వ కణాలు కలిగి ఉండే రైబోజోముల రకం

Options :

1. ✖ 70S

2. ✖ 60S

3. ✔ 5S

4. ✖ 80S

Correct : 1 Wrong : 0

Which class of mollusca exhibit torsion

ఏ తరగతి మొలస్కా జీవులు మెలికను ప్రదర్శించును

Options :

1. ✖ Cephalopoda
సెఫాలోపోడా

2. ✔ Gastropoda
గాస్ట్రోపోడా

3. ✖ Pelicypoda
పెలిసిపోడా

4. ✖ Placophora
ప్లాకోఫోరా

Correct : 1 Wrong : 0

Genetic equilibrium has been expressed as $p + q = 1$. p denotes

జన్యు సమతాస్థితి $p + q = 1$ అయిన p అనునది

Options :

Frequency of one allele in population

1. ✓ ఒక జనాభాలోని ఒక యుగ్మ వికల్పక పౌనఃపున్యం

Frequency of second allele

2. ✗ ద్వితీయ యుగ్మవికల్పక పౌనఃపున్యం

Population

3. ✗ జనాభా

an allele

4. ✗ ఒక యుగ్మ వికల్పం

Question Number : 166 Question Id : 35918114716 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Hypoxia is

హైపాక్సియా అనగా

Options :

Inadequate Oxygen supply

1. ✓ అక్సీజన్ సరఫరా తగినంతగా లేకపోవడం

No Oxygen supply

2. ✗ అక్సీజన్ సరఫరా లేకపోవడం

Excess Oxygen supply

3. ✗ అక్సీజన్ అధికంగా సరఫరా కావటం

Normal Oxygen supply

4. ✗ సాధారణ అక్సీజన్ సరఫరా

Correct : 1 Wrong : 0

One of the following is an anti diuretic hormone

ఈ క్రింది వాటిలో అతిమూత్ర నిరోధక హార్మోను

Options :

Vasopressin

1. ✓ వాసోప్రెసిన్

Adrenalin

2. ✗ అడ్రినలిన్

Thyroxin

3. ✗ థైరాక్సిన్

Epinephrine

4. ✗ ఎపినెఫ్రిన్

Question Number : 168 Question Id : 35918114718 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Protozoan s regulate water and ionic balance through

ప్రోటోజువన్లు వేటి ద్వారా నీరు మరియు అయానులను క్రమపరచుకొనును

Options :

Food vacuole

1. ✗ ఆహార రిక్తిక

Contractile vacuule

2. ✓ సంకోచరిక్తిక

Nucleus

3. ✗ కేంద్రకం

Cytoplasm

కణద్రవ్యం

4. ✖

Question Number : 169 Question Id : 35918114719 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Brunners glands are found in

బ్రన్నర్స్ గ్రంధులు కల ప్రాంతం

Options :

Stomach

జీర్ణాశయం

1. ✖

Duodenum

అంత్రములం

2. ✔

Ileum

శేషాంతరికం

3. ✖

Large intestine

పెద్దప్రేగు

4. ✖

Question Number : 170 Question Id : 35918114720 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The water cycle is also known as

నీటి వలయానికి గల మరొక పేరు

Options :

Geochemical cycle

భౌమరసాయనిక వలయం

1. ✖

Hydrologic cycle

జలవలయం

2. ✔

Biochemical cycle

జీవ రసాయనిక వలయం

3. ✖

Chemical cycle

రసాయనిక వలయం

4. ✖

Question Number : 171 Question Id : 35918114721 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Amphibian exhibiting parental care

సంతాన పాలన ప్రదర్శించు ఉభయచరం

Options :

Ichthyophis

1. ✔ ఇక్టియోఫిస్

Siren

2. ✖ సైరన్

Rhacophorus

3. ✖ రాఖోఫోరస్

Amblystoma

4. ✖ అంబ్లిస్టోమా

Question Number : 172 Question Id : 35918114722 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The respiratory pigment in the blood of mollusca is

మొలస్కా జీవుల రక్తంలోని శ్వాసవర్ణకం

Options :

Haemocyanin

1. ✔ హీమోసైనిన్

Venidium

వెనీడియం

2. ✖

Haemoglobin

హీమోగ్లోబిన్

3. ✖

Haemo erythrin

హీమోఎరిథ్రిన్

4. ✖

Question Number : 173 Question Id : 35918114723 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In which coelenterate the medusoid form is predominant while polypoid form is reduced or absent

పాలిప్డశ తక్కువగా లేక పూర్తిగా లోపించి ఉండి మెడ్యూసా

దశను బాగా ప్రదర్శించే సీలెంటిరేటా

Options :

Physalia

ఫైసాలియా

1. ✖

Aurelia

ఆరీలియా

2. ✔

Metridium

మెట్రీడియం

3. ✖

Madrepora

మాడ్రీపొరా

4. ✖

Question Number : 174 Question Id : 35918114724 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The second stage larva in the life history of Taenia solium is

టీనియా సోలియం జీవిత చక్రంలో గల రెండవ లార్వా దశ

Options :

Cysticercus

1. ✓ సిస్టీసర్కుస్

Hexacanth

2. ✗ హెక్సాకాంత

Onchosphere

3. ✗ ఆంకోస్ఫియర్

Miracidium

4. ✗ మీరా సిడియం

Question Number : 175 Question Id : 35918114725 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The coelome developed by splitting of mesodermal somites is called

మధ్యస్త్వచ కండర కండితాల యొక్క చీలిక వలన ఏర్పడు శరీర కుహరం

Options :

Shizocoelome

1. ✓ షైజోసీలోమ్

Enterocoelome

2. ✗ ఎంటిరోసీలోమ్

Pseudocoelome

3. ✗ సూడోసీలమ్

Eucoelome

4. ✗ యూసిలోమ్

Question Number : 176 Question Id : 35918114726 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The pathogen of bubonic plague is transmitted through the bite of

దేని కాటు వలన బ్యుబోనిక్ ప్లేగు వ్యాధికారకం సంక్రమించును.

Options :

Pediculus humanus

1. ✖ పేను

Glossina palpalis

2. ✖ గ్లాసినాపాల్పాలిస్

Aedes

3. ✖ ఏడిస్

Xenopsylla cheopis

4. ✔ గ్జీనోప్సిల్లా కియోపిస్

Question Number : 177 Question Id : 35918114727 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following stages is not found in the life history of blood flukes.

ఈ క్రింది వానిలో బ్లడ్ ఫ్లూక్ జీవిత చరిత్ర యందు కనిపించని దశ

Options :

Miracidium

1. ✖ మీరా సీడియం

Cercaria

2. ✖ సర్కేరియ

Redia

3. ✔ రేడియం

Sporocyst

4. ✖ స్పోరోసిస్ట్

Correct : 1 Wrong : 0

The notochord is extended up to head and is retained throughout life in

దేనియందు పృష్ఠవంశము తల వరకు విస్తరించి మరియు వాటి జీవితాంతం ఉండును

Options :

Herdmania

1. ✘ హెర్మానియా

Amphioxus

2. ✔ అంఫియాక్షస్

Balanoglossus

3. ✘ బెలనోగ్లాసస్

Frog

4. ✘ కప్ప

Correct : 1 Wrong : 0

Petromyzon is

పెట్రోమైజాన్ ఒక

Options :

Anadromous

1. ✔ అనాడ్రోమస్

Catadromous

2. ✘ కెటాడ్రోమస్

Brackish

3. ✘ బ్రాకిష్

Esturine

యూస్టైరైన్

4. ✖

Question Number : 180 Question Id : 35918114730 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is a true fish

ఈ క్రింది వానిలో నిజమైన చేప

Options :

Devil fish

1. ✖ దెయ్యపు చేప

Flying fish

2. ✔ ఎగిరే చేప

Cray fish

3. ✖ క్రే చేప

Cuttle fish

4. ✖ కటిల్ చేప

Question Number : 181 Question Id : 35918114731 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Neotony is found in

నియోటని ప్రదర్శించునది

Options :

Axolotal

1. ✔ ఆక్సోలోటల్

Hyla

2. ✖ హైలా

Salamander

3. ✖ సాలమాండర్

Salamander

4. ✖ సాలమాండర్

Question Number : 182 Question Id : 35918114732 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The most highly abundance characters in crocodilia is the presence of

క్రొకడీలియాలో ఉన్న బాగా అభివృద్ధి చెందిన లక్షణం

Options :

Powerful jaws

1. ✖ శక్తివంతమైన దవడలు

Shelled eggs

2. ✖ కర్పరయుత అండాలు

Thecodont teeth

3. ✖ థీకోడాంట్ దంతాలు

Four chambered heart

4. ✔ నాలుగు గదులు గల హృదయం

Question Number : 183 Question Id : 35918114733 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The capability of young birds to return to the original grounds of parents is due to

పక్షిపిల్లలు వాటి తల్లిదండ్రుల యొక్క అసలైన నివాస స్థలాలకు తిరిగి రావడానికి దోహదపడేది

Options :

Behavior

1. ✖ ప్రవర్తన

Instinct

2. ✓ సహజాతం

Intelligence and intention

వివేకం & ఉద్దేశపూర్వకం

3. ✗

Intention and Instinct

ఉద్దేశపూర్వకం మరియు సహజాతం

4. ✗

Question Number : 184 Question Id : 35918114734 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Protein part of enzyme is called

ఎంజైమ్ నందలి ప్రోటీన్ భాగము

Options :

Prosthetic group

ప్రోస్తటిక్ గ్రూప్

1. ✗

Apo enzyme

అపో ఎంజైమ్

2. ✓

Holoenzyme

హోలో ఎంజైము

3. ✗

Iso enzyme

ఐసో ఎంజైము

4. ✗

Question Number : 185 Question Id : 35918114735 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Chloride shift is required for transport of

క్లోరైడ్ షిఫ్ట్ వేటి యొక్క రవాణాకు తోడ్పడును.

Options :

1. ✖ Nitrogen
నైట్రోజన్
2. ✖ Oxygen
ఆక్సిజన్
3. ✔ CO2
కార్బన్ డై ఆక్సైడ్

4. ✖ Carbon monoxide
కార్బన్ మోనాక్సైడ్

Question Number : 186 Question Id : 35918114736 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The nerve axon takes part in
నాడితంత్రికాక్షం దేనిలో పాలుపంచుకొనును.

Options :

1. ✖ Receiving impulse
ప్రచోధనాన్ని గ్రహించుటలో
2. ✖ Transformation of energy
శక్తి ప్రసరణలో
3. ✔ Conduction of impulse
ప్రచోదన వహనంలో
4. ✖ providing energy for impulse transmission
ప్రచోదన ప్రసరణకు కావలసిన శక్తి అందించుటలో

Question Number : 187 Question Id : 35918114737 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

An animal learns to associate one of its behaviors with reward or punishment

ఒక జంతువు బహుమతి లేక దండన వలన తన ప్రవర్తనాభ్యాసనం లో మార్పు చేసుకొనుటను

Options :

Classical conditioning

1. ✖ శాస్త్రీయ నిబంధన

Operant conditioning

2. ✔ యాంత్రిక నిబంధన

Fixed action pattern

3. ✖ ఫిక్స్డ్ యాక్షన్ పాటర్న్

Habituation

4. ✖ అలవాటుపడటం

Question Number : 188 Question Id : 35918114738 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Factors involved in formation of new species are

కొత్త జాతుల ఏర్పాటుకు తోడ్పడే కారకాలు

Options :

Competition and variation

1. ✖ పోటీ మరియు వైవిధ్యం

Isolation and competition

2. ✖ వివక్షత మరియు పోటీ

Competition and mutations

3. ✖ పోటీ మరియు ఉత్తరీవర్తనాలు

Isolation and mutations

వివక్షత మరియు ఉత్పరివర్తనాలు

4. ✓

Question Number : 189 Question Id : 35918114739 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The enzyme commonly used in genetic engineering are

జన్యు సాంకేతిక ప్రక్రియలో సాధారణంగా ఉపయోగించే ఎంజైములు

Options :

Restriction endonuclease and polymerase

రిస్ట్రిక్షన్ ఎండోన్యూక్లియేజ్లు మరియు పాలిమరేజ్లు

1. ✗

Endonuclease and ligases

ఎండోన్యూక్లియేజ్లు మరియు లైగేజ్లు

2. ✗

Restriction endonuclease and ligase

రిస్ట్రిక్షన్ ఎండో న్యూక్లియేజ్లు మరియు లైగేజ్లు

3. ✓

Ligase and polymerase

లైగేజ్లు మరియు పాలిమరేజ్లు

4. ✗

Question Number : 190 Question Id : 35918114740 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The primitive mammal is

ప్రాచీన క్షీరదం

Options :

Echidna

ఎఖిడ్న

1. ✓

Opposum

2. ✖ అపోజం

Marsupia

3. ✖ మార్సుపియా

Macropus

4. ✖ మాక్రోపస్

Question Number : 191 Question Id : 35918114741 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

In the rabbit Diastema is a gap between

కుందేలులో వేటి మధ్యగల ఖాళీ ప్రదేశాన్ని డయాస్టీమా అంటారు.

Options :

Incisors and premolars

1. ✔ కుంతకాలు మరియు అగ్రచర్వణకాలు

Molars and premolars

2. ✖ చర్వణకాలు మరియు అగ్రచర్వణకాలు

Canines and molars

3. ✖ రదనికలు మరియు చర్వణకాలు

Incisors and molars

4. ✖ కుంతకాలు మరియు చర్వణకాలు

Question Number : 192 Question Id : 35918114742 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Balanoglossus belongs to

బెలనోగ్లాసస్ దేనికి చెందినది

Options :

1. ✓ Hemichordata
హెమికార్డేటా

2. ✗ Cephalochordata
సెఫలోకార్డేటా

3. ✗ Urochordata
యూరోకార్డేటా

4. ✗ Chordata
కార్డేటా

Question Number : 193 Question Id : 35918114743 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Nematodes are considered as
నెమటోడ్లను ఏ విధంగా గుర్తించనైనది

Options :

1. ✗ Mesofauna of soil
మృత్తికల మధ్యమ జంతుకాలు

2. ✓ Microfauna of soil
మృత్తికల సూక్ష్మజంతుకాలు

3. ✗ Macrofauna of soil
మృత్తికల స్థూలజంతుకాలు

4. ✗ Micronutrients
సూక్ష్మపోషకాలు

Question Number : 194 Question Id : 35918114744 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which one is essential for normal muscle contraction

సాధారణ కండర సంకోచానికి అవసరమైనది

Options :

1. ✖ Na

2. ✔ Ca

3. ✖ K

4. ✖ Pb

Question Number : 195 Question Id : 35918114745 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Thalassemia is due to imbalance in the synthesis of

వేటి యొక్క అసమాన ఉత్పత్తి వలన థలాసేమియా సంభవించును.

Options :

1. ✔ Global chain
గ్లోబల్ చైన్

2. ✖ Porpyrin
పోర్పైరిన్

3. ✖ Heme
హీమ్

4. ✖ Total haemoglobin
మొత్తం హీమోగ్లోబిన్

Question Number : 196 Question Id : 35918114746 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Mammalian heart is

క్షీరదాల హృదయం

Options :

Neurogenic

1. ✖ నాడీజన్య

Myogenic

2. ✔ కండరజన్య

Neuro myogenic

3. ✖ నాడీ కండరజన్య

Myoneurogenic

4. ✔ కండరనాడీజన్య

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 197 Question Id : 35918114747 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In which of the following inborn errors of metabolism abnormal conditions are caused in brain due to increased levels of phenol pyruvic acid

ఈ క్రింది అసాధారణ జీవక్రియల వలన కలిగే లోపాలలో, మెదడులో ఫినైల్ పైరువికామ్ల స్థాయి పెరగడం వలన కలిగేది

Options :

Albinism

1. ✖ ఆల్బునిజం

Alkaptonuria

2. ✖ అల్కాప్టోన్యూరియా

Mongoloid idiocy

3. ✖ మంగోలాయిడ్ ఇడియసి

Phenyl ketoneuria

ఫినైల్ కీటోన్యూరియా

4. ✓

Question Number : 198 Question Id : 35918114748 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Calcium is regulated by the hormone

కాల్షియంను నియంత్రించు హార్మోన్

Options :

Parathormone

1. ✓ పారాథార్మోన్

Oxytocin

2. ✗ ఆక్సిటోసిన్

Thyroxin

3. ✗ థైరాక్సిన్

Adrenalin

4. ✗ అడ్రినలిన్

Question Number : 199 Question Id : 35918114749 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Reptiles with proatlas and without clavicles are

పూర్వ శీర్షదరంను కలిగి ఉండి జత్రుకలు లోపించినటువంటి సరీసృపాలు

Options :

Chelonians

1. ✗ కీలోనియాలు

Lacertians

లెసర్టీలియాలు

2. ✖

Crocodileans

క్రొకడీలియన్లు

3. ✔

Ophidians

ఒఫిడియన్లు

4. ✖

Question Number : 200 Question Id : 35918114750 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Cleavage is spiral in

సర్పిల విదళనం ఉండేది

Options :

Synapta

సినాప్టా

1. ✖

Ctenophora

టీనోఫోరా

2. ✖

Snails

నత్తలు

3. ✔

Fishes

చేపలు

4. ✖

Question Number : 201 Question Id : 35918114751 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the heart beats are more than 100 beats per minute the condition is called

ఒక వేళ హృదయ స్పందన నిమిషానికి 100కు పైగా ఉన్న యెడల, అస్థితి

Options :

Tachycardia

టాకీకార్డియా

1. ✓

Bradycardia

బ్రాడీకార్డియా

2. ✗

Normal

సాధారణం

3. ✗

Myocardial infraction

మయోకార్డియల్ ఇన్ఫ్రాక్షన్

4. ✗

Question Number : 202 Question Id : 35918114752 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The brain develops from

దేని నుండి మెదడు అభివృద్ధి చెందును

Options :

Ectoderm

ఐహిస్తచం

1. ✓

Endoderm

అంతస్తచం

2. ✗

Mesoderm

మధ్యస్తచం

3. ✗

Ectoendoderm

బాహ్యంతస్తచం

4. ✗

Question Number : 203 Question Id : 35918114753 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Vaccines produced through genetic engineering are safe as

జన్యు సాంకేతికత ద్వారా తయారు కాబడిన వ్యాక్సిన్లు ఈ విధంగా సురక్షితమయినవి.

Options :

They contain antigen only from coat of pathogen

1. ✖ వ్యాధికారక కవచం నందు ఉండే ప్రతిజనకాన్ని కలిగి ఉండును

They are attenuated form of pathogen

2. ✔ వ్యాధి జనక తీవ్రతను తగ్గించిన వ్యాధికారకం

They are the least active form of virus

3. ✖ అతి తక్కువ తీవ్రత కల వైరస్లు

They are the most active form of virus

4. ✖ అతి ఎక్కువ తీవ్రత కల వైరస్లు

Question Number : 204 Question Id : 35918114754 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Darwin proposed the origin of species through

డార్విన్ దేని ద్వారా “జాతుల ఉత్పత్తిని” ప్రతిపాదించాడు.

Options :

Mutation

1. ✖ ఉత్పరివర్తనం

Hybridization

2. ✖ సంకరీకరణం

Natural selection

3. ✔ ప్రకృతివరణం

Acquired characters

అర్జిత గుణాలు

4. ✖

Question Number : 205 Question Id : 35918114755 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The recent ancestors of modern man were

అధునిక మానవుని ప్రస్తుత పూర్వీకులు

Options :

Java ape man and peking man

1. ✖

జావా కోతిమానవుడు మరియు పెకింగ్ మానవుడు

Peking man and Rhodesian man

2. ✖

పెకింగ్ మానవుడు మరియు రోడేసియన్ మానవుడు

Rhodesian man and Cro-magnan man

3. ✖

రోడేసియన్ మానవుడు మరియు క్రొ-మాగ్నన్ మానవుడు

Cro-magnan man and Neanderthal man

4. ✔

క్రొ-మాగ్నన్ మానవుడు మరియు నియాండర్తల్ మానవుడు

Question Number : 206 Question Id : 35918114756 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The primary consumers in pond ecosystem are

కొలను అవరణ వ్యవస్థలో గల ప్రాథమిక వినయోగదారులు

Options :

Phytoplankton

1. ✖

వృక్ష ప్లవకాలు

Zooplankton

2. ✔

జంతు ప్లవకాలు

Fish

3. ✖ చేపలు

Bacteria

4. ✖ బ్యాక్టీరియా

Question Number : 207 Question Id : 35918114757 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The realm which is most popular for birds

పక్షుల వలన అత్యంత ప్రాముఖ్యత పొందిన మండలము

Options :

Neotrophical

1. ✔ అధునిక ఉష్ణమండలము

Nearctic

2. ✖ అధునిక శీతల మండలం

Palaeartic

3. ✖ ప్రాచీన శీతల మండలం

Australian

4. ✖ ఆస్ట్రేలియన్ మండలం

Question Number : 208 Question Id : 35918114758 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Over grazing causes

గడ్డి అధికంగా మేయడం వలన కలిగేది

Options :

Negative pollution

1. ✖ ఋణాత్మక కాలుష్యం

Positive pollution

2. ✖ ధనాత్మక కాలుష్యం

Soil erosion

3. ✔ మృత్తికా క్షయం

Reduction in crop yield

4. ✖ పంటల ఉత్పత్తి తగ్గుదల

Question Number : 209 Question Id : 35918114759 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Oxygen dissociation curve of heamoglobin is

హీమోగ్లోబిన్ యొక్క అక్సిజన్ వియోజన రేఖ

Options :

Sigmoid

1. ✔ సిగ్మాయిడ్

Hyperbolic

2. ✖ అతిపరావలయం

Linear

3. ✖ సరళంగా

Hypobolic

4. ✖ అల్ప పరావలయం

Question Number : 210 Question Id : 35918114760 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which system controls reflex action

ప్రతిక్రియాచర్యను నియంత్రించు వ్యవస్థ

Options :

Central nervous system

1. ✓

కేంద్రీయ నాడీ వ్యవస్థ

Sympathetic nervous system

2. ✗

సహానుభూత నాడీ వ్యవస్థ

Para sympathetic nervous system

3. ✗

సహ సహానుభూత నాడీ వ్యవస్థ

Sensory nervous system

4. ✗

జ్ఞాన నాడీ వ్యవస్థ

Question Number : 211 Question Id : 35918114761 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Menstrual cycle is controlled by

ఋతుస్రావ చక్రాన్ని నియంత్రించునది

Options :

Estrogen and Progesterone of ovary

1. ✗

అండాశయం యొక్క ఈస్ట్రోజన్ మరియు ప్రొజెస్టిరాన్లు

FSH and LH of pituitary

2. ✓

పీయూషగ్రంథి యొక్క FSH & LH

LH of pituitary

3. ✗

పీయూష గ్రంథి యొక్క LH

FSH of pituitary

4. ✗

పీయూషగ్రంథి యొక్క FSH

Question Number : 212 Question Id : 35918114762 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Industrial melanism is well illustrated by

వేటితో పారిశ్రామిక మెలనీకరణను చక్కగా విశదీకరించవచ్చును.

Options :

1. ✓ Biston betularia
బిస్టన్ బిట్టులెరియా

2. ✗ Rats
ఎలుకలు

3. ✗ Drosophila
డ్రాసోఫిలా

4. ✗ Fouls
కోళ్ళు

Question Number : 213 Question Id : 35918114763 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Birds are able to recognize their home through

పక్షులు వాటి నివాసాన్ని ఎలా గుర్తిస్తాయి.

Options :

1. ✗ Smell
వాసన

2. ✗ Eyesight
దృష్టి

3. ✓ Memory
జ్ఞాపకం

4. ✗ Orientation of magnetic field
అయస్కాంత క్షేత్ర దిశ

Correct : 1 Wrong : 0

mRNA can be identified from the cell line culture by

కణ సంవర్ధనం నుండి mRNA ను ఎలా గుర్తిస్తారు.

Options :

Northern blot technique

నార్తర్న్ బ్లాట్ టెక్నిక్

1. ✓

Southern blot technique

సౌథర్న్ బ్లాట్ టెక్నిక్

2. ✗

Western blot technique

వెస్టర్న్ బ్లాట్ టెక్నిక్

3. ✗

Dot line analysis

డాట్ ఎనాలిసిస్

4. ✗

Question Number : 215 Question Id : 35918114765 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Waggle dance of honeybee indicates direction of

తేనెటీగల వాగిల్ నృత్యం దేని దిశను తెలుపును.

Options :

Food source

ఆహారం

1. ✗

Enemy

శత్రువు

2. ✗

Mating call

సహచర్యం

3. ✓

Migration

4. ✖ వలస

Question Number : 216 Question Id : 35918114766 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Miocene

మయోసీన్ యందు

Options :

Mammals reached its peak of diversity

1. ✔ క్షీరదాలు అత్యున్నత వైవిధ్యానికి చేరినవి

Reptiles reached its peak of diversity

2. ✖ సరీసృపాలు అత్యున్నత వైవిధ్యానికి చేరినవి

Amphibians reached its peak of diversity

3. ✖ ఉభయచరాలు అత్యున్నత వైవిధ్యానికి చేరినవి

Amphibians reached its peak of diversity

4. ✖ ఉభయచరాలు అత్యున్నత వైవిధ్యానికి చేరినవి

Question Number : 217 Question Id : 35918114767 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Sex chromosomes in a normal female are

సాధారణ స్త్రీలో లైంగిక క్రోమోజోమ్లు

Options :

1. ✔ XX

2. ✖ XO

3. ✔ XX

4. ✖ XXX

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 218 Question Id : 35918114768 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Catabolic enzymes occur abundantly in
క్రియాత్మక ఎంజైములను సమృద్ధిగా కలిగినవి.

Options :

1. ✔ Lysosomes
లైసోజోమ్లు

2. ✖ Endoplasmic reticulum
అంతర్జీవ ద్రవ్యజాలకం

3. ✖ Golgi bodies
గాల్జీదేహాలు

4. ✖ Mitochondria
మైటోకాండ్రీయా

Question Number : 219 Question Id : 35918114769 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Oxyntic cells in stomach secrets
జీర్ణాశయంలో గల ఆక్సెంటిక్ కణాలు దేనిని స్రవించును.

Options :

1. ✖ Proteins
మాంసకృత్తులు

2. ✖ Mucus
శ్లేష్మం

3. ✔ HCL

Renin

రెనిన్

4. ✖

Question Number : 220 Question Id : 35918114770 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The group which exhibit polymorphism in its peak form

బాగా అభివృద్ధి చెందిన దశలో ఏ సమూహము బహురూపకతను ప్రదర్శించును

Options :

Siphnophora

సైఫనోఫోరా

1. ✔

Anthozoa

అంథోజువు

2. ✖

Hydroidea

హైడ్రాయిడియా

3. ✖

Scyphozoa

స్కైఫోజువా

4. ✖

BIOCHEMISTRY

Section Id :	359181311
Section Number :	4
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181331
Question Shuffling Allowed :	No

Correct : 1 Wrong : 0

Which of the following two organelles look most alike structurally?

Options :

1. ✖ Nucleus and vesicle
2. ✔ Golgi apparatus and smooth endoplasmic reticulum
3. ✖ Vacuole and cytoskeleton
4. ✖ Lysosome and chloroplast

Correct : 1 Wrong : 0

Lysosomes can be expected to be present in large numbers in cells which

Options :

1. ✖ Secrete peptide hormones
2. ✖ Are migrating
3. ✖ Are actively dividing
4. ✔ Carry out phagocytosis

Correct : 1 Wrong : 0

A certain cell organelle which is made of a double phospholipid bilayer that has many large pores in it, is most likely

Options :

1. ✔ The nuclear envelope
2. ✖ The plasma membrane
3. ✖ The mitochondrion

4. ✖ The cytoskeleton

Question Number : 224 Question Id : 35918114774 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following macromolecules are found in the plasma membrane?

Options :

1. ✖ Lipids and proteins only
2. ✔ Lipids, proteins and carbohydrates
3. ✖ Proteins and carbohydrates only
4. ✖ Proteins only

Question Number : 225 Question Id : 35918114775 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The two amino acids having R groups with a negative net charge at pH 7.0 are

Options :

1. ✔ Aspartate and glutamate
2. ✖ Arginine and histidine
3. ✖ Cysteine and methionine
4. ✖ Proline and valine

Question Number : 226 Question Id : 35918114776 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The factor which does not affect pK_a value of an amino acid is

Options :

1. ✖ The loss of charge in the α -carboxyl and α -amino groups

2. ✖ The interactions with other peptide R groups

3. ✖ Other environmental factors

4. ✔ Molecular weight

Question Number : 227 Question Id : 35918114777 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following information is responsible to specify the three-dimensional shape of a protein?

Options :

1. ✖ The protein's peptide bond

2. ✔ The protein's amino acid sequence

3. ✖ The protein's interaction with other polypeptides

4. ✖ The protein's interaction with molecular chaperons

Question Number : 228 Question Id : 35918114778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is a Sanger's reagent?

Options :

1. ✔ 1-fluoro-2, 4-dinitrobenzene

2. ✖ 1-fluoro-2, 3-dinitrobenzene

3. ✖ 1-fluoro-2, 4-trinitrobenzene

4. ✖ 1-fluoro-2, 3-trinitrobenzene

Correct : 1 Wrong : 0

Which of the following are an example of epimers?

Options :

1. ☒ Glucose & Galactose
2. ☐ Glucose & Ribose
3. ☐ Mannose & Glucose
4. ☐ a & c

Correct : 1 Wrong : 0

Which ratio is constant for DNA?

Options :

1. ☒ $A + G / T + C$
2. ☐ $A + T / G + C$
3. ☐ $A + C / U + G$
4. ☐ $A + U / G + C$

Correct : 1 Wrong : 0

Which of the following statements is true about competitive inhibitors?

Options :

1. ☐ It is a common type of irreversible inhibition
2. ☒

In the presence of a competitive inhibitor, the Michaelis-Menten equation becomes

3. ✖

The $V_0 = \frac{V_{\max}[S]}{\alpha K_m + [S]}$ apparent K_m decreases in the presence of inhibitor by a factor α

4. ✖

The maximum velocity for the reaction decreases in the presence of a competitive inhibitor

Question Number : 232 Question Id : 35918114782 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is not a feature of the nephrotic syndrome?

Options :

1. ✖ Proteinuria greater than 5 g/ day

2. ✖ Hypercholesterolaemia

3. ✔ Microscopic haematuria

4. ✖ Peripheral oedema

Question Number : 233 Question Id : 35918114783 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which serum enzyme elevation is most diagnostic in obstructive jaundice?

Options :

1. ✖ ALT (Alanine amino transferase)

2. ✖ AST (Aspartate amino transferase)

3. ✖ LDH (Lactate dehydrogenase)

4. ✔ ALP (Alkaline phosphatase)

Question Number : 234 Question Id : 35918114784 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a person on hunger strike from the past three days which of the following urinary tests would give a positive reaction?

Options :

1. ✖ Benedict
2. ✖ Barfoed's
3. ✔ Rotheras
4. ✖ Biuret

Question Number : 235 Question Id : 35918114785 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

ADP transport in to the mitochondrial matrix

Options :

1. ✖ Is an active transport process
2. ✖ Is directly inhibited by valinomycin
3. ✖ Is carried out through a shuttle present in outer mitochondrial membrane
4. ✔ Is accompanied by ATP export from the mitochondrial matrix

Question Number : 236 Question Id : 35918114786 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As a result of the photosynthetic process, which product is formed?

Options :

1. ✔ Oxygen
2. ✖ Water
3. ✖ Carbon dioxide

Both a and b

4. ✖

Question Number : 237 Question Id : 35918114787 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is the coenzyme form of Thiamine

Options :

1. ✔ TPP (Thiamine pyrophosphate)

2. ✖ TMP (Thiamine mono phosphate)

3. ✖ TTP (Thiamine tri phosphate)

4. ✖ Free thiamine

Question Number : 238 Question Id : 35918114788 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following TCA cycle enzymes require FAD as a co-factor?

Options :

1. ✖ Isocitrate dehydrogenase

2. ✔ Succinate dehydrogenase

3. ✖ Malate dehydrogenase

4. ✖ Succinate thiokinase

Question Number : 239 Question Id : 35918114789 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is not a clinical outcome of niacin deficiency?

Options :

1. ✖ Diarrhea

2. ✓ Night blindness

3. ✗ Dermatitis

4. ✗ Dementia

Question Number : 240 Question Id : 35918114790 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Iodine is a part of thyroid hormone and is essential for the prevention of

Options :

1. ✓ Goiter

2. ✗ Osteoporosis

3. ✗ Muscle weakness

4. ✗ Diarrhea

Question Number : 241 Question Id : 35918114791 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Selenium deficiency leads to

Options :

1. ✓ Liver necrosis

2. ✗ Diarrhea

3. ✗ Multiple sclerosis

4. ✗ Crohn's disease

Question Number : 242 Question Id : 35918114792 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Normal glucose metabolism requires

Options :

1.  Chromium
2.  Manganese
3.  Magnesium
4.  Calcium

Question Number : 243 Question Id : 35918114793 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is the most common underlying cause of asthma?

Options :

1.  Beta blocker sensitivity
2.  Aspirin sensitivity
3.  Inhalant allergies
4.  Bronchitis

Question Number : 244 Question Id : 35918114794 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Megakaryocytes are minimally immunoresponsive. What type of cell do megakaryocytes give rise to?

Options :

1.  RBC
2.  Platelets
3.  Monocytes
4.  Leukocytes

Question Number : 245 Question Id : 35918114795 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What host cell membrane structures enable the attachment of a virus like human immunodeficiency virus (HIV)?

Options :

1.  Receptors
2.  Ion channels
3.  Ribosomes
4.  Nuclear pores

Question Number : 246 Question Id : 35918114796 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of these body systems causes allergic reactions?

Options :

1.  Lymph
2.  Nervous
3.  Autonomic
4.  Immune system

Question Number : 247 Question Id : 35918114797 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What does the body release to combat allergens?

Options :

1.  Plasma

- 2. ✓ Histamine
- 3. ✗ Cortisone
- 4. ✗ Epinephrine

Question Number : 248 Question Id : 35918114798 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

What product of the immune system attaches to bacteria, making them easier to eat by white blood cells?

Options :

- 1. ✗ Hemoglobin
- 2. ✓ Antibody
- 3. ✗ Antigen
- 4. ✗ Both B and C

Question Number : 249 Question Id : 35918114799 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Northern blotting is a technique that can be used to detect?

Options :

- 1. ✗ Antibodies
- 2. ✗ DNA
- 3. ✓ RNA
- 4. ✗ Proteins

Question Number : 250 Question Id : 35918114800 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Transcription RNA (tRNA) has three bases specific for a particular amino acid with which it binds to messenger RNA (mRNA). This specific are of tRNA is called the

Options :

1.  Anticodon
2.  Codon
3.  Exon
4.  Intron

Question Number : 251 Question Id : 35918114801 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Restriction enzymes are used

Options :

1.  To cut DNA
2.  Join two pieces of DNA together
3.  Synthesize DNA
4.  Involved in cell cycle arrest

Question Number : 252 Question Id : 35918114802 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The process of copying a gene's DNA sequence into a sequence of RNA is called

Options :

1.  Replication
2.  Transcription

3. ✖ Translation

4. ✖ PCR

Question Number : 253 Question Id : 35918114803 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The transcribing enzyme is

Options :

1. ✖ Ligase

2. ✖ DNA polymerase

3. ✔ RNA polymerase

4. ✖ Amino-acyl transferase

Question Number : 254 Question Id : 35918114804 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Catalytic antibodies are called

Options :

1. ✖ Ribozymes

2. ✔ Abzymes

3. ✖ Zymogens

4. ✖ Isozymes

Question Number : 255 Question Id : 35918114805 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The effort to decipher the genetic code was led by ----- who was awarded a Nobel Prize for his work.

Options :

1. ☒ Nirenberg
2. ☐ Lederberg
3. ☐ Watson
4. ☐ Crick

Question Number : 256 Question Id : 35918114806 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Autoclaving is carried out at

Options :

1. ☐ Dry heat
2. ☐ Atmospheric pressure
3. ☒ 120°C
4. ☐ All

Question Number : 257 Question Id : 35918114807 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Algae are rich in

Options :

1. ☐ Carbohydrates
2. ☐ Proteins
3. ☐ Vitamins

4.  All

Question Number : 258 Question Id : 35918114808 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Bacterial cell wall is made up of

Options :

1.  Chitin

2.  Cellulose

3.  Dextran

4.  Peptidoglycan

Question Number : 259 Question Id : 35918114809 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The iodine used in Gram staining serves as a

Options :

1.  Chelator

2.  Catalyst

3.  Mordant

4.  Cofactor

Question Number : 260 Question Id : 35918114810 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which type of DNA is found in bacteria

Options :

1. ☒ Circular free DNA
2. ☐ Straight DNA
3. ☐ Helical DNA
4. ☐ Membrane bound DNA

Question Number : 261 Question Id : 35918114811 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Virulence of a microorganism can be best described as

Options :

1. ☐ The ability to penetrate into the host tissue
2. ☐ The ability to colonize in the host
3. ☒ The ability to produce a pathological symptom
4. ☐ The ability to utilize the machinery of the host

Question Number : 262 Question Id : 35918114812 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Ring worm is a disease caused by

Options :

1. ☒ Fungus
2. ☐ Bacteria
3. ☐ Tape worm
4. ☐ Round worm

Question Number : 263 Question Id : 35918114813 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following enzyme is used to synthesize DNA using an mRNA template

Options :

1. ✖ Taq polymerase
2. ✖ Alkaline phosphatase
3. ✔ Reverse transcriptase
4. ✖ Nuclease

Question Number : 264 Question Id : 35918114814 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Klenow enzyme is the product of enzymatic breakdown of

Options :

1. ✔ DNA polymerase I
2. ✖ DNA polymerase II
3. ✖ DNA polymerase III
4. ✖ RNA polymerase

Question Number : 265 Question Id : 35918114815 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Restriction maps

Options :

1. ✔ Allows comparison between DNA molecules without the need to determine nucleotide sequence

- Allows comparison between DNA molecules but requires to determine nucleotide sequence
2. ✖
- Does not allow comparison between DNA molecules
3. ✖
- None
4. ✖

Question Number : 266 Question Id : 35918114816 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

PCR amplifies millions of copies of

Options :

1. ✔ A short fragment of DNA
2. ✖ The entire genome (all the DNA in a sample)
3. ✖ A short fragment of DNA and The entire genome (all the DNA in a sample)
4. ✖ Short chain of RNA

Question Number : 267 Question Id : 35918114817 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Restriction length polymorphism are simply variations in the length of the

Options :

1. ✖ RNA fragments
2. ✔ DNA fragments
3. ✖ RNA fragments and DNA fragments
4. ✖ Mitochondria and ribosomes

Question Number : 268 Question Id : 35918114818 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Beer's law states that

Options :

1. 

Absorbance is proportional to both the path length and concentration of the absorbing species

2. 

Absorbance is proportional to the log of the concentration of the absorbing species

3. 

Absorbance is equal to P_0/P

4. 

None

Question Number : 269 Question Id : 35918114819 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

HPLC methods include

Options :

1. 

Liquid/liquid (partition) chromatography

2. 

Liquid/solid (adsorption) chromatography

3. 

Ion exchange and size exclusion chromatography

4. 

All

Question Number : 270 Question Id : 35918114820 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following are not used as stationary phases in gas chromatography column?

Options :

Polysiloxanes

1. ✖

Silica

2. ✔

Cyclodextrins

3. ✖

None are used as stationary phases

4. ✖

Question Number : 271 Question Id : 35918114821 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Proteins are separated in an SDS-PAGE experiment on the basis of their

Options :

Positively charged side chains

1. ✖

Molecular weight

2. ✔

Negatively charged side chains

3. ✖

Different isoelectric points

4. ✖

Question Number : 272 Question Id : 35918114822 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is approximately the half-life of ^{32}P -phosphorous?

Options :

14 days

1. ✔

28 days

2. ✖

42 days

3. ✖

30 days

4. ✖

Question Number : 273 Question Id : 35918114823 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The following are features of DNA replication?

Options :

1. ✖ Semi-conservative
2. ✖ Semi-discontinuous
3. ✔ Unidirectional
4. ✖ Chain growth in the 5'-3' direction

Question Number : 274 Question Id : 35918114824 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

DNA synthesis can be specifically measured by estimating the incorporation of radio labelled

Options :

1. ✖ Uracil
2. ✔ Thymine
3. ✖ Adenine
4. ✖ Deoxy ribose

Question Number : 275 Question Id : 35918114825 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The enzyme involved in amino acid activation is

Options :

1. ✖ ATP synthetase

2.  Amino acyl tRNA synthetase

3.  Amino acyl mRNA synthetase

4.  Amino acyl rRNA synthetase

Question Number : 276 Question Id : 35918114826 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

An enzyme promotes a chemical reaction by

Options :

1.  Lowering the energy of activation

2.  Increasing the energy of activation

3.  Changing the free energy

4.  None

Question Number : 277 Question Id : 35918114827 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following statement is incorrect

Options :

1.  Cytosine and thymine are the only pyrimidines

2.  Pyrimidines are one ringed structures

3.  Purines are two ringed structures

4.  Cytosine, thymine and uracil are pyrimidines

Question Number : 278 Question Id : 35918114828 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Restriction endonucleases were discovered by

Options :

1. ✖ Arber and Smith
2. ✖ Collins and Venter
3. ✔ Berg and Boyer
4. ✖ Sanger and Southern

Question Number : 279 Question Id : 35918114829 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The initiator AUG in prokaryotes codes for

Options :

1. ✖ Valine
2. ✖ Methionine
3. ✖ Phenyl alanine
4. ✔ Formyl methionine

Question Number : 280 Question Id : 35918114830 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Introns are removed by a process of

Options :

1. ✖ Transcription
2. ✖ Translation
3. ✖ Transition
4. ✔ Splicing

BIOTECHNOLOGY

Section Id :	359181312
Section Number :	5
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181332
Question Shuffling Allowed :	No

Question Number : 281 Question Id : 35918114831 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

During which phase of cell cycle is DNA replicated ?

Options :

1. ✘ G1 Phase
2. ✔ S Phase
3. ✘ G2 Phase
4. ✘ M Phase

Question Number : 282 Question Id : 35918114832 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is a regulatory RNA

Options :

1. ✘ snRNA
2. ✘ rRNA
3. ✔ miRNA
4. ✘ tRNA

Question Number : 283 Question Id : 35918114833 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The enzyme used in the synthesis of cDNA from mRNA is

Options :

1. ✘ DNA polymerase
2. ✘ RNA polymerase
3. ✘ Topoisomerase
4. ✔ Reverse transcriptase

Question Number : 284 Question Id : 35918114834 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

How many reading frames are there in DNA

Options :

1. ✘ Three
2. ✘ Two
3. ✔ Six
4. ✘ One

Question Number : 285 Question Id : 35918114835 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Wobble hypothesis is proposed by

Options :

1. ✘ Nirenberg
2. ✘ Watson
3. ✔ Crick
4. ✘ Holley

Question Number : 286 Question Id : 35918114836 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The process of removal of introns from pre-mRNA is called

Options :

1. ✖ Transcription
2. ✖ Translation
3. ✔ Splicing
4. ✖ RNA editing

Question Number : 287 Question Id : 35918114837 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which amino acid can form disulphide bonds

Options :

1. ✔ Cystine
2. ✖ Glycine
3. ✖ Glutamate
4. ✖ Proline

Question Number : 288 Question Id : 35918114838 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The secondary structures present in protein includes

Options :

1. ✖ Coil
2. ✖ β - sheet
3. ✖ α -helix
4. ✔ All

Question Number : 289 Question Id : 35918114839 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which type of restriction endonucleases are used in gene cloning

Options :

1. ✖ Type-I

2. ✔ Type-II

3. ✖ Type-III

4. ✖ All

Question Number : 290 Question Id : 35918114840 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which enzyme removes the supercoiling in replicating DNA ahead of the replication fork

Options :

1. ✖ DNA polemerase

2. ✖ Helicase

3. ✖ Primase

4. ✔ Topoisomerase

Question Number : 291 Question Id : 35918114841 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following technique is associated with RNA

Options :

1. ✖ Southern Blotting

2. ✔ Northern Blotting

3. ✖ Western Blotting

4. ✖ All

Question Number : 292 Question Id : 35918114842 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Inheritance of skin colour in human is an example of

Options :

1. ✖ Monogenic inheritance
2. ✔ Polygeneic inheritance
3. ✖ Mendelian inheritance
4. ✖ Complementary genes

Question Number : 293 Question Id : 35918114843 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An allele

Options :

1. ✖ Is another name for a gene
2. ✖ Refers to a dominant gene
3. ✖ Refers to a recessive gene
4. ✔ one of the several possible forms of a gene

Question Number : 294 Question Id : 35918114844 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Linked genes are

Options :

1. ✔ Located in the same chromosome
2. ✖ Located in different chromosome
3. ✖ Can be located in the same or different chromosomes
4. ✖ All

Question Number : 295 Question Id : 35918114845 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Genes located in Y chromosome are called

Options :

1. ✖ Autosomal
2. ✖ Sex-influential genes
3. ✔ Holandric genes
4. ✖ None

Question Number : 296 Question Id : 35918114846 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Heterosis refers to

Options :

1. ✖ Heterozygous condition
2. ✖ Inbreeding
3. ✖ Inbreeding depression
4. ✔ Hybrid vigour

Question Number : 297 Question Id : 35918114847 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Crossing over occurs during

Options :

1. ✔ Pachytene
2. ✖ zygotene
3. ✖ Diplotene
4. ✖ Diakinesis

Question Number : 298 Question Id : 35918114848 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

T Cells are responsible for

Options :

1. ✖ Cellular immunity
2. ✖ Humoral immunity
3. ✔ Both cellular and humoral immunity
4. ✖ None

Question Number : 299 Question Id : 35918114849 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Vaccination was invented by

Options :

1. ✖ Pasteur
2. ✖ Koch
3. ✖ Salk
4. ✔ Jenner

Question Number : 300 Question Id : 35918114850 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An alteration in a nucleotide sequence that changes a triplet coding for an aminoacid into a termination codon is

Options :

1. ✖ A missense mutation
2. ✔ A nonsense mutation
3. ✖ An indel
4. ✖ All

Question Number : 301 Question Id : 35918114851 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The point mutation that replaces either a purine with another purine or a pyrimidine with another pyrimidine is called

Options :

1. ☒ Transition
2. ☐ Transversion
3. ☐ Nonsense mutation
4. ☐ Silent mutation

Question Number : 302 Question Id : 35918114852 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The enzyme encoded by transposons which catalyse insertion is called

Options :

1. ☐ Invertase
2. ☐ Integrase
3. ☐ Endonuclease
4. ☒ Transposase

Question Number : 303 Question Id : 35918114853 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The bacterium used for genetic engineering of plants is

Options :

1. ☐ Rhizobium
2. ☒ Agrobacterium
3. ☐ Azospirillum
4. ☐ Azatobacter

Question Number : 304 Question Id : 35918114854 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Double strand breaks in DNA are repaired by

Options :

1. ✖ Homologous recombination
2. ✖ Excision Repair
3. ✖ Non-homologous end joining
4. ✔ Both homologous recombination and non-homologous end joining

Question Number : 305 Question Id : 35918114855 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

DNA is the only information storage molecule because

Options :

1. ✖ It can replicate and make a copy of itself
2. ✖ Errors in DNA are repaired
3. ✖ Because it is replicated and transferred from one cell to another cell
4. ✔ All

Question Number : 306 Question Id : 35918114856 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is used in Gram staining of bacteria

Options :

1. ✖ Ethidium bromide
2. ✖ Haematoxylin
3. ✔ Crystal Violet
4. ✖ Methylene blue

Question Number : 307 Question Id : 35918114857 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Beer-Lambert law refers to

Options :

1. ✓ The linear relationship between absorbance and concentration
2. ✗ Number of living cells in a bacterial culture
3. ✗ Number of viable cells in animal cell culture
4. ✗ All

Question Number : 308 Question Id : 35918114858 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The method used for determining protein structure is

Options :

1. ✗ Spectroscopy
2. ✓ X-ray crystallography
3. ✗ Proteolysis
4. ✗ All

Question Number : 309 Question Id : 35918114859 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is used for cell disruption

Options :

1. ✗ Sonicator
2. ✗ Mortar and Pestle
3. ✗ French press
4. ✓ All

Question Number : 310 Question Id : 35918114860 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is a isopycnic density gradient centrifugation

Options :

1. ✖ Sucrose density gradient centrifugation
2. ✔ Caesium chloride density gradient centrifugation
3. ✖ Both sucrose and Caesium chloride density gradient centrifugation
4. ✖ None

Question Number : 311 Question Id : 35918114861 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In agarose gel electrophoresis DNA moves from

Options :

1. ✖ Anode to cathode
2. ✔ Cathode to anode
3. ✖ Both anode to cathode and cathode to anode
4. ✖ None

Question Number : 312 Question Id : 35918114862 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Isoelectric point is the PH at which

Options :

1. ✖ A protein has net Positive electrical charge
2. ✖ A protein has net negative electrical charge
3. ✔ A protein has no net electrical charge
4. ✖ None

Question Number : 313 Question Id : 35918114863 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The correct sequence of flow of electrons in the light reaction is

Options :

1. ✓ PSII, plastoquinone, cytochromes, PSI, ferredoxin
2. ✗ PSI, plastoquinone, cytochromes, PSII, ferredoxin
3. ✗ PSI, ferredoxin, PSII,
4. ✗ PSI, plastoquinone, cytochromes, PSII, ferredoxin

Question Number : 314 Question Id : 35918114864 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Pasteur effect is

Options :

1. ✓ Inhibitory effect of oxygen on the fermentation process
2. ✗ Production of ethanol in aerobic conditions
3. ✗ Aerobic glycolysis
4. ✗ None

Question Number : 315 Question Id : 35918114865 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Identify the correct sequence during the industrial production of substances

Options :

1. ✗ Inoculation, screening, fermentation, downstream processing, removal of waste
2. ✓ Screening, Inoculation, fermentation, downstream processing, removal of waste
3. ✗ Fermentation, screening, inoculation, removal of waste, downstream processing
4. ✗ Fermentation, inoculation, inoculation, removal of waste, downstream processing

Question Number : 316 Question Id : 35918114866 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gases such as oxygen and carbon dioxide cross the plasma membrane by

Options :

1. ✖ Secondary active transport
2. ✔ Passive diffusion through the lipid bilayer
3. ✖ Specific gas transport proteins
4. ✖ Primary active transport

Question Number : 317 Question Id : 35918114867 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A nucleoside consists of

Options :

1. ✖ Sugar, phosphate group(s) and a nitrogenous base
2. ✔ Sugar and a nitrogenous base only
3. ✖ Sugar and phosphate group(s) only
4. ✖ Phosphate group(s) and a nitrogenous base only

Question Number : 318 Question Id : 35918114868 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The term metabolism

Options :

1. ✖ Refers to synthesis of complex molecules from simpler molecules
2. ✖ Refers to breakdown of complex molecules into simpler molecules
3. ✔ Refers to both catabolism and anabolism
4. ✖ All

Question Number : 319 Question Id : 35918114869 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The site where most of the ATP is generated in a cell is the

Options :

1. ✓ Mitochondria
2. ✗ Golgi Apparatus
3. ✗ Endoplasmic reticulum
4. ✗ Plasma membrane

Question Number : 320 Question Id : 35918114870 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The Michaelis-Menton equation relates the rate of an enzyme-catalysed reaction to which of the following?

Options :

1. ✓ Substrate concentration
2. ✗ Product concentration
3. ✗ Activation energy
4. ✗ Inhibitor concentration

Question Number : 321 Question Id : 35918114871 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The lock and Key theory of enzyme activity was proposed by

Options :

1. ✓ Emil Fischer
2. ✗ Marian Koshland
3. ✗ Wilhelm Kühne
4. ✗ None

Question Number : 322 Question Id : 35918114872 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Ribozymes are

Options :

1. ✖ Enzymes associated with ribosome
2. ✖ Proteins functioning as enzymes
3. ✔ RNAs with catalytic activity
4. ✖ None

Question Number : 323 Question Id : 35918114873 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The polyA tail in mRNA is

Options :

1. ✖ Transcribed from DNA
2. ✔ Added post transcriptionally
3. ✖ Transcribed from DNA and Added post transcriptionally are correct
4. ✖ Transcribed from DNA and Added post transcriptionally are wrong

Question Number : 324 Question Id : 35918114874 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The transfer of plasmid from one bacterial cell to another by cell to cell contact is called

Options :

1. ✖ Transformation
2. ✔ Conjugation
3. ✖ Transduction
4. ✖ None

Question Number : 325 Question Id : 35918114875 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The enzyme used for joining DNA fragments in recombinant DNA technology is

Options :

1. ✖ Endonuclease
2. ✖ Integrase
3. ✔ Ligase
4. ✖ Phosphatase

Question Number : 326 Question Id : 35918114876 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Plants are engineered for insect tolerance using the toxin gene isolated from

Options :

1. ✖ Agrobacterium tumefaciens
2. ✖ Bacillus subtilis
3. ✔ Bacillus thuringiensis
4. ✖ Bacillus amyloliquefaciens

Question Number : 327 Question Id : 35918114877 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Interferons are

Options :

1. ✔ Antiviral proteins
2. ✖ Antibacterial proteins
3. ✖ Antifungal proteins
4. ✖ All

Question Number : 328 Question Id : 35918114878 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A cosmid is

Options :

1. ✖ A bacteriophage vector
2. ✖ A Plasmid vector
3. ✔ A plasmid vector with “cos” site of bacteriophage
4. ✖ An artificial chromosome

Question Number : 329 Question Id : 35918114879 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is a post translational modification

Options :

1. ✔ Phosphorylation
2. ✖ Splicing
3. ✖ RNA editing
4. ✖ All

Question Number : 330 Question Id : 35918114880 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Proteins function at

Options :

1. ✖ Primary structural level
2. ✖ Secondary structural level
3. ✔ Tertiary structural level
4. ✖ All

Question Number : 331 Question Id : 35918114881 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The organelle associated with photorespiration is

Options :

1. ✖ Lysosome

2.  Peroxisome

3.  Glyoxysome

4.  Mesosome

Question Number : 332 Question Id : 35918114882 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Glycolysis takes place in

Options :

1.  Cytoplasm

2.  Chloroplast

3.  Mitochondria

4.  Ribosome

Question Number : 333 Question Id : 35918114883 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

ADP contains

Options :

1.  1 high energy bond

2.  2 high energy bonds

3.  3 high energy bonds

4.  4 high energy bonds

Question Number : 334 Question Id : 35918114884 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The organism used for industrial production of ethanol is

Options :

1.  Escherichia coli

2. ✖ Bacillus subtilis
3. ✔ Saccharomyces cerevisiae
4. ✖ Aspergillus flavus

Question Number : 335 Question Id : 35918114885 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Transgenic goats have been used to produce which of the following that is used for dissolving blood clots

Options :

1. ✖ Amyloid precursor protein
2. ✖ a1-antigen
3. ✖ Casein
4. ✔ Variant Human tissue type plasminogen activator

Question Number : 336 Question Id : 35918114886 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Transfection refers to

Options :

1. ✖ Transfer of viral genome to animal cells
2. ✔ Introduction of foreign genes into animal cells
3. ✖ Infection of animal cells by pathogens
4. ✖ None

Question Number : 337 Question Id : 35918114887 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The use of living organisms for degradation of environmental pollutants is called

Options :

1. ☒ Bioremediation
2. ☐ Microremidiation
3. ☐ Chemoremediation
4. ☐ All

Question Number : 338 Question Id : 35918114888 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following sentences is not associated with prokaryotes

Options :

1. ☐ Genes are grouped into operons and regulated together
2. ☐ Genes do not possess introns
3. ☒ The genome is packed inside double layered nuclear membrane
4. ☐ coupling of transcription and translation is seen

Question Number : 339 Question Id : 35918114889 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following is used as a biofertilizer

Options :

1. ☐ Agrobacterium
2. ☒ Rhizobium
3. ☐ Bacillus subtilis
4. ☐ Aspergillus flavus

Question Number : 340 Question Id : 35918114890 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Golden rice is a genetically modified crop plant where the incorporated genes are meant for biosynthesis of

Options :

1. ✖ Vitamin A
2. ✖ Vitamin C
3. ✖ Vitamin B
4. ✔ Beta-carotene

GENETICS

Section Id :	359181313
Section Number :	6
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	359181333
Question Shuffling Allowed :	No

Question Number : 341 Question Id : 35918114891 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Mendel crossed tall pea plants with dwarf ones. The F_1 plants were selfed to produce F_2 generation, he got a 3:1 tall to dwarf ratio in the offspring. What is the probability that out of three plants (of F_2 generation) picked up at random, two would be dwarf and one would be tall?

Options :

1. ✖ $\frac{3}{4}$
2. ✖ $\frac{3}{8}$
3. ✔ $\frac{9}{64}$
4. ✖ $\frac{9}{32}$

Question Number : 342 Question Id : 35918114892 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In eukaryotic replication, helicase loading occurs at all replicators during

Options :

1. ✗ G0 phase
2. ✓ G1 phase
3. ✗ S phase
4. ✗ G2 phase

Question Number : 343 Question Id : 35918114893 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the cyclins have essential functions in S-phase of cell cycle?

Options :

1. ✓ A-type
2. ✗ B-type
3. ✗ D-type
4. ✗ CDK

Question Number : 344 Question Id : 35918114894 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Mendelian cross between pea plants that are heterozygotes for flower color (Rr), what is the probability of the offspring being a heterozygote?

Options :

1. ✓ $1/2$
2. ✗ $1/4$
3. ✗ $1/6$
4. ✗ $1/16$

Question Number : 345 Question Id : 35918114895 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

According to genic balance theory of sex determination in drosophila what is the sex of an individual with X/A ratio = 1

Options :

1. ✓ Male
2. ✗ Female
3. ✗ Intersex
4. ✗ Metamale

Question Number : 346 Question Id : 35918114896 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The bead like unit of chromatin structure is the

Options :

1. ✗ Chromatid
2. ✓ Nucleosome
3. ✗ Solenoid
4. ✗ Scaffold

Question Number : 347 Question Id : 35918114897 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sex determination in grasshopper is by XO method. The somatic cells of a grasshopper are analysed and found to contain 23 chromosomes. What is the diploid number of female individual?

Options :

1. ✗ 23

2. ✓ 24

3. ✗ 25

4. ✗ 26

Question Number : 348 Question Id : 35918114898 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

A fertile hybrid generated by crossing a cabbage and a radish is called as

Options :

1. ✓ Allopolyploid

2. ✗ Monosomic

3. ✗ Autotetraploid

4. ✗ Trisomic

Question Number : 349 Question Id : 35918114899 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following is a monosomic condition in humans?

Options :

1. ✗ Down syndrome

2. ✗ Williams syndrome

3. ✗ cridu chat syndrome

4. ✓ Turners syndrome

Question Number : 350 Question Id : 35918114900 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Lamp brush chromosomes are found in

Options :

1. ✓ Diplotene stage of meiosis I
2. ✗ Leptotene stage of meiosis I
3. ✗ Zygotene stage of meiosis II
4. ✗ Diplotene stage of meiosis II

Question Number : 351 Question Id : 35918114901 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The DNA sequence of representative telomeric repeats in Tetrahymena

Options :

1. ✗ 5' TTTAGG 3'
2. ✗ 5' TTTGGG 3'
3. ✗ 5' TTAGGG 3'
4. ✓ 5' TTGGGG 3'

Question Number : 352 Question Id : 35918114902 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Absorbance at 280 nm exhibited by protein is due to

Options :

1. ✗ aliphatic aminoacids
2. ✗ all aminoacids
3. ✓ aromatic aminoacids
4. ✗ non-polar aminoacids

Question Number : 353 Question Id : 35918114903 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The wobble hypothesis refers to the less stringent base pairing specificity of the

Options :

1. ✖ 5' end base of the codon
2. ✖ 3' end base of the anticodon
3. ✖ middle base of the anticodon
4. ✔ 5' end base of the anticodon

Question Number : 354 Question Id : 35918114904 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is not a component of YAC?

Options :

1. ✖ centromere
2. ✖ telomere
3. ✖ origin of replication
4. ✔ *cos* site

Question Number : 355 Question Id : 35918114905 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The C-value denotes the total number of DNA in a

Options :

1. ✔ Haploid
2. ✖ Diploid
3. ✖ Polyploid
4. ✖ Aneuploid

Question Number : 356 Question Id : 35918114906 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Aminoacyl tRNAs are escorted to the ribosome by the elongation factor

Options :

1. ✖ EF-Ts
2. ✖ EFG
3. ✔ EF-Tu
4. ✖ eEF-2

Question Number : 357 Question Id : 35918114907 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following are NOT transcribed by RNA polymerase II?

Options :

1. ✖ miRNA and some snRNA
2. ✖ miRNA and snoRNA
3. ✔ mRNA and snoRNA
4. ✖ tRNA and 5S rRNA

Question Number : 358 Question Id : 35918114908 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

α -Amanitin is a fungal toxin which inhibits eukaryotic RNA polymerases. The three eukaryotic RNA polymerases show differential sensitivity to this toxin. Which one of the following order (higher to lower) is correct in respect of sensitivity towards α -amanitin?

Options :

1. ✖ RNA POL III > RNA POL II > RNA POL I
2. ✖ RNA POL II > RNA POL III > RNA POL I
3. ✖ RNA POL I > RNA POL III > RNA POL II
4. ✔ RNA POL II > RNA POL I > RNA POL III

Question Number : 359 Question Id : 35918114909 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following mutagens is most likely to result in a single amino acid change in a gene product?

Options :

1. ☒ Acridine orange
2. ☐ X-rays
3. ☐ Ethylmethanesulphonate (EMS)
4. ☐ Ethidium bromide

Question Number : 360 Question Id : 35918114910 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

DNA glycosylases function in which DNA repair system?

Options :

1. ☒ Base excision repair
2. ☐ Mismatch repair
3. ☐ Double strand break repair
4. ☐ Nucleotide excision repair

Question Number : 361 Question Id : 35918114911 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A mutation that causes a lysine to be replaced with an arginine is called

Options :

1. ☐ nonsense mutation
2. ☒ missense mutation
3. ☐ transition mutation
4. ☐ transversion mutation

Question Number : 362 Question Id : 35918114912 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is true of histones?

Options :

1. ✖ Histones are acidic proteins
2. ✖ Histones are found in animal chromatin but in not in plant cells
3. ✔ The amino acid sequences of histone proteins are very similar in different organisms

4. ✖ All histones form part of the nucleosome core particles in chromatin

Question Number : 363 Question Id : 35918114913 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following best describes an Ac transposable element?

Options :

1. ✖ A non-autonomous retrotransposon in corn.
2. ✖ An autonomous retrotransposon in Drosophila.
3. ✔ An autonomous transposon in corn.
4. ✖ A non-autonomous transposon in corn.

Question Number : 364 Question Id : 35918114914 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The most commonly used molecular tool for phylogenetic analysis involves sequencing of

Options :

1. ✖ Mitochondrial DNA
2. ✖ Mitochondrial RNA

3. ✓ Ribosomal RNA

4. ✗ Nuclear DNA

Question Number : 365 Question Id : 35918114915 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A locus is best defined as

Options :

1. ✗ an alternate for of a gene

2. ✓ the position of a gene on a chromosome

3. ✗ the position where spindle fibres attach

4. ✗ structure composed of glycoproteins

Question Number : 366 Question Id : 35918114916 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Assume the genotype AB/AB is test crossed and produces an F_2 consisting of 37 A_B_, 11 A_bb, 12 aaB_, 4 aabb. Estimate the percentage recombination

Options :

1. ✗ 25

2. ✗ 75

3. ✓ 50

4. ✗ 80

Question Number : 367 Question Id : 35918114917 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A phenomenon where in a single gene has more than one phenotypic effect is

Options :

1. ✗ Epistasis

- 2. ✖ Hypostatic
- 3. ✖ Syndrome
- 4. ✔ Pleiotropism

Question Number : 368 Question Id : 35918114918 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The minimum progeny population size allowing for random union of all kinds of gametes from AaBbCc parents is

Options :

- 1. ✖ 9
- 2. ✔ 64
- 3. ✖ 13
- 4. ✖ 84

Question Number : 369 Question Id : 35918114919 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The ineffectiveness of many antibiotics today is most closely associated with

Options :

- 1. ✖ F plasmid
- 2. ✔ R plasmid
- 3. ✖ Catabolite repression
- 4. ✖ Bacteriophages

Question Number : 370 Question Id : 35918114920 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Pseudodominance may be observed in heterozygote for

Options :

- 1. ✔ Deletion

2. ✖ Duplication
3. ✖ Paracentric inversion
4. ✖ Reciprocal translocation

Question Number : 371 Question Id : 35918114921 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If an individual of genotype AaBbCc are intercrossed, how many different genotypes occur in their progeny?

Options :

1. ✖ 6
2. ✖ 8
3. ✖ 16
4. ✔ 27

Question Number : 372 Question Id : 35918114922 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A prophage is involved in

Options :

1. ✖ Lytic cycle
2. ✖ Oncogenesis
3. ✖ Transposition
4. ✔ Lysogeny

Question Number : 373 Question Id : 35918114923 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the chiasmata forms between the loci of gene A & B in 20% of the tetrads of an individual of genotype Ab/ab; the percentage of gametes expected to be Ab is

Options :

1. ✖ 1

2. ✖ 3

3. ✔ 5

4. ✖ 7

Question Number : 374 Question Id : 35918114924 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Mitochondrial diseases are received from

Options :

1. ✔ mother

2. ✖ father

3. ✖ In laws

4. ✖ Environment

Question Number : 375 Question Id : 35918114925 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The superior phenotypic quality of heterozygote relative to that of homozygotes is called as

Options :

1. ✔ hybrid vigor

2. ✖ continuous variation

3. ✖ overdominance

4. ✖ heritability

Question Number : 376 Question Id : 35918114926 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is the expected phenotypic ratio in progeny from dihybrid parents with duplicate dominant interaction is

Options :

1. ✖ 9:7
2. ✖ 13:3
3. ✔ 15:1
4. ✖ 12:3:1

Question Number : 377 Question Id : 35918114927 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The mating of individual that are more closely related than the average of the population to which they belong is

Options :

1. ✖ outbreeding
2. ✔ inbreeding
3. ✖ heterosis
4. ✖ cross breeding

Question Number : 378 Question Id : 35918114928 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following enzyme is used to form phosphodiester bond in a nick between a 3' end of one DNA and a 5' end of another is

Options :

1. ✖ DNA polymerase
2. ✖ S1 nuclease
3. ✖ Phosphodiesterase
4. ✔ DNA gyrase

Question Number : 379 Question Id : 35918114929 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following cells generally does not secrete IFN- γ ?

Options :

1. ✖ CD8⁺ T cells
2. ✖ TH1 cells
3. ✖ NK cells
4. ✔ TH2 cells

Question Number : 380 Question Id : 35918114930 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The secondary antibodies routinely used for the detection of primary antibodies in western blotting experiment are

Options :

1. ✖ anti-allotypic
2. ✔ anti-idiotypic
3. ✖ anti-isotypic
4. ✖ anti-paratypic

Question Number : 381 Question Id : 35918114931 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

One of the following class of MHC genes encode glycoproteins expressed on the surface of nearly all nucleated cells

Options :

1. ✔ Class I
2. ✖ Class II
3. ✖ Class III
4. ✖ Class IV

Correct : 1 Wrong : 0

Application of gene therapy in clinical trials did NOT succeed due to

Options :

1. ✖ poor integration of a gene in the host genome
2. ✖ lack of expression of integrated gene in cells
3. ✖ degradation of gene inside the cell
4. ✔ activation of oncogenes consequent to integration of the gene

Correct : 1 Wrong : 0

PCR based DNA amplification is an essential feature of which of the following combination of molecular markers?

Options :

1. ✖ RELP, AFLP and SSR
2. ✔ AFLP, SSR and RAPD
3. ✖ RFLP, RAPD and SSR
4. ✖ RAPD, RFLP and SSR

Correct : 1 Wrong : 0

Which of the following methods of plant transformation can be used to introduce a gene into chloroplast genome?

Options :

1. ✖ Agrobacterium-mediated transformation
2. ✔ particle delivery system
3. ✖ permeabilization

4. ✖ electroporation

Question Number : 385 Question Id : 35918114935 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Graft rejection does not involve

Options :

1. ✔ erythrocytes

2. ✖ T-cells

3. ✖ macrophages

4. ✖ polymorphonuclear leukocytes

Question Number : 386 Question Id : 35918114936 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Hardy-Weinberg principle comes from considering what happens when Mendelian genes act in a population. The model predicts that there will be no change in allele frequencies when

Options :

1. ✖ migration into the population occurs at a steady rate

2. ✖ the population suffers a bottleneck

3. ✖ a rare new mutation is associated with a sharp increase in fitness

4. ✔ no evolutionary process is at work

Question Number : 387 Question Id : 35918114937 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following is a non-invasive method

Options :

1. ✖ Amniocentesis

2. ✖ Chorionic villus sampling

3. ✖ Cordocentesis

4. ✔ Ultrasounography

Question Number : 388 Question Id : 35918114938 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Generally high auxin:cytokinin ratios stimulates

Options :

1. ✔ Root development

2. ✖ Shoot development

3. ✖ Callus development

4. ✖ Senescence

Question Number : 389 Question Id : 35918114939 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following statements about transgenic plants is true?

Options :

1. ✖ The Ti plasmid only inserts at one place in the plant chromosomal DNA

2. ✖ All transgenic plants have crown galls.

3. ✔

T-DNA is transferred to plant cells upon infection with *Agrobacterium tumefaciens*.

4. ✖ Transgenic plants require nopaline for their survival.

Question Number : 390 Question Id : 35918114940 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is an example of a genetic selection?

Options :

1. ✖ Isolating genes having a particular expression pattern.
2. ✖ Isolating mutants that affect eye development.
3. ✔ Isolating mutants that are resistant to insecticide.
4. ✖ Isolating mutants that have sleep abnormalities.

Question Number : 391 Question Id : 35918114941 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is helpful in distinguishing DNA of one individual from another?

Options :

1. ✖ PCR
2. ✖ Reverse transcriptase
3. ✖ cDNA
4. ✔ RFLP

Question Number : 392 Question Id : 35918114942 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following bacterial operon is not controlled by attenuation?

Options :

1. ✔ Arabinose
2. ✖ Tryptophan
3. ✖ Leucine
4. ✖ Histidine

Question Number : 393 Question Id : 35918114943 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following statements about lac operon in *E. coli* is true?

Options :

1. ✖ Promoter is the binding site for the lac repressor

2. ✖

Operon is only switched on in the absence of lactose in the growth medium

3. ✖

β -galactosidase is only produced in large quantities when the lac repressor is bound to the operator

4. ✔

Lac operon mRNA is a polycistronic mRNA

Question Number : 394 Question Id : 35918114944 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Blood disease which is caused by occurrence of mutations in haemoglobin genes is

Options :

1. ✖ leukemia

2. ✖ bleeding disorders

3. ✔ thalassemia

4. ✖ hepatitis

Question Number : 395 Question Id : 35918114945 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A mouse which is genetically modified by scientists by replacing its existing gene with artificial piece of DNA is called

Options :

1. ✖ Modified mouse

2. ✔ Knock-out mouse

3. ✖ Altered mouse

4. ✖ Mutated gene

Correct : 1 Wrong : 0

Vector that has properties of both bacteriophage as well as plasmid is called

Options :

1. ✖ Viruses
2. ✔ Cosmid
3. ✖ Phasmid
4. ✖ Probe

Correct : 1 Wrong : 0

Which of the following is most controversial approach of genetherapy

Options :

1. ✔ Germ line therapy
2. ✖ Somatic therapy
3. ✖ *Ex vivo* therapy
4. ✖ Anti sense therapy

Correct : 1 Wrong : 0

Which one of the following is a live attenuated vaccine

Options :

1. ✔ Hepatitis B vaccine
2. ✖ chicken pox vaccine
3. ✖ smallpox vaccine

4. ✖ MMR vaccine

Question Number : 399 Question Id : 35918114949 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is the effect of outcrossing on a population?

Options :

1. ✖ Allelic frequencies change

2. ✔

There will be more heterozygotes than predicted by the Hardy-Weinberg law

3. ✖

There will be less heterozygotes than predicted by the Hardy-Weinberg law

4. ✖

Genotypic frequencies will equal those predicted by the Hardy-Weinberg law

Question Number : 400 Question Id : 35918114950 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The branch of science dealing with the improvement of human race is called

Options :

1. ✖ Genealogy

2. ✖ Cloning

3. ✔ Eugenics

4. ✖ Euphenics

MICROBIOLOGY

Section Id :	359181314
Section Number :	7
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	60
Number of Questions to be attempted:	60
Section Marks:	60
Display Number Panel:	Yes

Sub-Section Number:

1

Sub-Section Id:

359181334

Question Shuffling Allowed :

No

Question Number : 401 Question Id : 35918114951 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Who discovered the importance of agar in culture medium:

Options :

1. ✖ Petri
2. ✔ Hess
3. ✖ Ehrlich
4. ✖ Finley

Question Number : 402 Question Id : 35918114952 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

***Vibrio cholera* was discovered by**

Options :

1. ✖ Koch
2. ✖ John Snow
3. ✔ Metchnikoff
4. ✖ Pasteur

Question Number : 403 Question Id : 35918114953 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Freeze-etch particles used during preparation of cells for electron microscopy are located in

Options :

1. ✖ Cytoplasm

- 2. ✖ Cell wall
- 3. ✔ Cell membrane
- 4. ✖ Nucleus

Question Number : 404 Question Id : 35918114954 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Differential staining of bacterial spore is related to

Options :

- 1. ✖ Albert's staining
- 2. ✖ Lugol's staining
- 3. ✖ Indian ink preparation
- 4. ✔ Moller's staining

Question Number : 405 Question Id : 35918114955 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Mycoplasmas are different from the other prokaryotes by

Options :

- 1. ✖ presence of chitin in cell wall
- 2. ✖ presence of murrain in cell wall
- 3. ✖ presence of proteins in cell wall
- 4. ✔ absence of cell wall itself

Question Number : 406 Question Id : 35918114956 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following microbial products can be used to control food spoilage?

Options :

1. ✖ Antibiotics
2. ✖ Perforins
3. ✔ Bacteriocins
4. ✖ T4 lysozyme

Question Number : 407 Question Id : 35918114957 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is true about structure of Gram negative cell wall

Options :

1. ✖ thick peptidoglycan layer
2. ✖ periplasmic space is absent
3. ✔ include outer membrane
4. ✖ all

Question Number : 408 Question Id : 35918114958 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Pili/fimbriae are thin short appendages extruding from the cytoplasmic membrane of certain bacteria and involved in

Options :

1. ✖ movement
2. ✖ attachment
3. ✖ DNA transfer
4. ✔ both b and c

Question Number : 409 Question Id : 35918114959 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

***Streptococcus pyogenes* classification is based on**

Options :

1. ✓ Protein M
2. ✗ Protein T
3. ✗ Protein R
4. ✗ Polysaccharide C

Question Number : 410 Question Id : 35918114960 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

_____ is a diagram usually placed on its side with the X-axis graduated in units of similarity

Options :

1. ✗ similarity matrix
2. ✗ simple matching coefficient
3. ✓ dendrogram
4. ✗ matrix transformation

Question Number : 411 Question Id : 35918114961 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Defective viruses are

Options :

1. ✓
Virus, genetically deficient and so incapable of producing infections in daughter virions
cancer in humans.
2. ✗ Infective agents with protein free, with low molecular weight RNA
3. ✗ Protein infections particles, lack detectable nucleic acid
4. ✗ Extra-chromosomal genetic elements

Question Number : 412 Question Id : 35918114962 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The most common infection in AIDS is

Options :

1. ✖ LGV
2. ✖ CMV
3. ✔ Pnemocystis carinii
4. ✖ Syphilis

Question Number : 413 Question Id : 35918114963 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Photolyase enzyme involved in the photo reactivation can remove_____

Options :

1. ✖ UV induced double strand breaks
2. ✔ UV induced thymine dimmers
3. ✖ Mismatches in DNA
4. ✖ Single strand breaks in DNA

Question Number : 414 Question Id : 35918114964 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is an example of RNA virus?

Options :

1. ✖ SV 40
2. ✖ T4 phage
3. ✔ Tobacco mosaic virus
4. ✖ Adeno virus

Question Number : 415 Question Id : 35918114965 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

It has been observed that at high population density, bacteria often secrete molecules to check the population size. This phenomenon is known as

Options :

1. ✖ Population control
2. ✖ Allelopathy
3. ✖ Intra specific competition
4. ✔ Quorum sensing

Question Number : 416 Question Id : 35918114966 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The phospholipids present in cytoplasm membrane of archaea bacteria is

Options :

1. ✖ phosphoglycerides
2. ✖ polyisoprenoid
3. ✔ polyisoprenoid branched chain lipids
4. ✖ none

Question Number : 417 Question Id : 35918114967 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Match the following viral vaccines with their source materials A to E

- | | |
|-----------------|---|
| 1. Influenza | A. Fluid from cultures of human diploid cells |
| 2. Rabies | B. Dermal scraping from infected animals |
| 3. Smallpox | C. Allantoic fluid from fertile hen's eggs |
| 4. Yellow fever | D. Fluid from cultures of rabbit kidney |
| | E. Aqueous homogenate of chick embryo |

Options :

1. ✖ 1B, 2E, 3C, 4D
2. ✔ 1C, 2A, 3B, 4E
3. ✖ 1E, 2C, 3D, 4A

1D, 2C, 3A, 4B

4. ✖

Question Number : 418 Question Id : 35918114968 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Microbiologists investigate problems by designing and carrying out experiments. What is true about the scientific method?

Options :

1. ✖

A hypothesis is the definitive explanation to account for the observation and therefore does not need to be tested.

2. ✖

A prediction is the factor that can change but is prevented from changing during the duration of the experiment.

3. ✔

A good hypothesis is one that offers the simplest most reasonable explanation and can be tested.

4. ✖

The goal of an experiment is to prove that scientists are always correct in their predictions.

Question Number : 419 Question Id : 35918114969 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Amoxycillin is combined with clavulanic acid to inhibit

Options :

1. ✖ DNA gyrase

2. ✖ Cell synthesis

3. ✖ Protein synthesis

4. ✔ β -lactamase enzymes

Question Number : 420 Question Id : 35918114970 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

***E. coli* produce which type of toxins?**

Options :

1. ✖ Exotoxins
2. ✖ Endotoxins
3. ✖ Leucocidin
4. ✔ Both a and b

Question Number : 421 Question Id : 35918114971 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Passive immunization is done for

Options :

1. ✖ tuberculosis
2. ✔ diphtheria
3. ✖ enteric fever
4. ✖ all

Question Number : 422 Question Id : 35918114972 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is the strength of the bond between antigen and antibody?

Options :

1. ✖ Affinity
2. ✔ Avidity
3. ✖ Covalent
4. ✖ None

Question Number : 423 Question Id : 35918114973 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Hanging drop method for motility study was first introduced by

Options :

1. ✖ Robert Koch
2. ✖ Louis Pasteur
3. ✖ Jenner
4. ✔ Leeuwenhock

Question Number : 424 Question Id : 35918114974 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In an oxygenic photosynthesis, the green and the purple bacteria do not use which of the following one as an electron source

Options :

1. ✔ H_2O
2. ✖ H_2
3. ✖ H_2S
4. ✖ S

Question Number : 425 Question Id : 35918114975 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

During recombination, the strain that donates genetic material frequently with high rate

Options :

1. ✔ Hfr-Strain
2. ✖ F+-Strain
3. ✖ F-Strain
4. ✖ both a and c

Question Number : 426 Question Id : 35918114976 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Malate dehydrogenase enzyme is a

Options :

1. ✖ Transferase
2. ✖ Hydrolase
3. ✖ Isomerase
4. ✔ Oxido-reductase

Question Number : 427 Question Id : 35918114977 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Endotoxins are heat stable lipopolysaccharide-protein complexes which form the structural components of the cell wall of bacteria. Which of the following statement regarding endotoxin is correct?

Options :

1. ✔ all have the same effect regardless of bacterial source
2. ✖ are found in both gram positive and gram negative bacterial cell wall
3. ✖ are part of the cell wall of gram positive bacteria only
4. ✖ none of the above statement is correct

Question Number : 428 Question Id : 35918114978 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Ethanol is one of the most commonly used disinfectants. Which concentration of ethanol is most effective for this purpose?

Options :

1. ✖ 100%
2. ✔ 70%
3. ✖ 50%

4. ✖ 30%

Question Number : 429 Question Id : 35918114979 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following elements, when non-functional, would lead to a reduction in total amount of functional lacZ produced by a bacterial cell

Options :

1. ✖ The operator
2. ✖ The lacI gene
3. ✔ The CAP site
4. ✖ The lac A gene

Question Number : 430 Question Id : 35918114980 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Inactive protein form of enzyme is

Options :

1. ✔ apoenzyme
2. ✖ enzyme
3. ✖ haloenzyme
4. ✖ cofactor

Question Number : 431 Question Id : 35918114981 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the bacteria doubles itself in 5 min, what would be the number of bacteria at the end of 20 min if you start with 4 bacteria

Options :

1. ✔ 64
2. ✖ 32

3. ✖ 48

4. ✖ 16

Question Number : 432 Question Id : 35918114982 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The main difference between a plasmid and an episome is

Options :

1. ✖ Plasmid is circular, episome is linear
2. ✖ Episome is circular, plasmid is linear
3. ✖ Plasmid can be insert into host genome, episomes are not
4. ✔ Episomes can be inserted into the host genome

Question Number : 433 Question Id : 35918114983 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Regarding the relationship between viruses and cancer, which statement is most accurate?

Options :

1. ✖ viruses cause some cancers in animals, but viruses are not associated with cancer in humans.
2. ✖ most human cancers are known to be caused by viruses.
3. ✖ viruses are not associated with cancer in animals or humans
4. ✔ some human cancers are closely associated with viral infection and some cancers can possibly be prevented by vaccination against virus.

Question Number : 434 Question Id : 35918114984 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Which of the following methods of regulation is not present in prokaryotes?

Options :

1. ✖ DNA-binding proteins
2. ✖ attenuation
3. ✖ repressor proteins
4. ✔ chromatin remodelling

Question Number : 435 Question Id : 35918114985 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Spraying of DDT produced pollution of

Options :

1. ✖ air
2. ✖ air and water
3. ✖ air and soil
4. ✔ air, water and soil

Question Number : 436 Question Id : 35918114986 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In alcoholic fermentation, CO₂ is evolved during

Options :

1. ✖ Decarboxylation of pyruvic acid
2. ✖ Formation of acetaldehyde
3. ✖ Oxidation of acetaldehyde
4. ✔ Both a and b

Question Number : 437 Question Id : 35918114987 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Spirulina is a

Options :

1. ✖ edible fungus
2. ✖ biofertilizer
3. ✖ biopesticide
4. ✔ single cell protein

Question Number : 438 Question Id : 35918114988 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Non-cyclic photophosphorylation is also known as

Options :

1. ✖ Oxygenic photosynthesis
2. ✔ Photosynthesis
3. ✖ Anoxygenic photosynthesis
4. ✖ Photophosphorylation

Question Number : 439 Question Id : 35918114989 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

***Clostridium acetobutylicum* is used for the production of**

Options :

1. ✖ Aminoacids
2. ✔ Ethanol
3. ✖ Vitamin-B12
4. ✖ None

Question Number : 440 Question Id : 35918114990 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Salt and sugar preserve foods because they

Options :

1. ✖ Make them acid
2. ✖ Produce a hypotonic environment
3. ✖ Deplete nutrients
4. ✔ Produce a hypertonic environment

Question Number : 441 Question Id : 35918114991 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gastroenteritis is caused by

Options :

1. ✖ *Shigella*
2. ✖ *V.cholerae*
3. ✔ *V.cholera parahaemolyticus*
4. ✖ *S.typhi*

Question Number : 442 Question Id : 35918114992 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

DNA replicates during ____phase

Options :

1. ✖ G1 – phase
2. ✔ S – phase
3. ✖ G2 – phase
4. ✖ M – phase

Question Number : 443 Question Id : 35918114993 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Different methods of strain improvement are

Options :

1. ✖ Protoplast fusion
2. ✖ Recombinant DNA technique
3. ✖ Genetic recombination
4. ✔ All

Question Number : 444 Question Id : 35918114994 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For thorough mixing of medium and inoculums, which part of fermentor is used

Options :

1. ✖ Shaft
2. ✖ Headspace
3. ✔ Impeller
4. ✖ Sparger

Question Number : 445 Question Id : 35918114995 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following amoeba does not live in large intestine ?

Options :

1. ✖ *Entamoeba coli*
2. ✖ *Entamoeda histolytica*
3. ✖ *Endolimax nana*
4. ✔ *Entamoeba gingivalis*

Question Number : 446 Question Id : 35918114996 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The cogulase test is used to differentiate

Options :

1. ✖ *Staphylococcus epidermidis* from *Neisseria meningitidis*
2. ✔ *Staphylococcus aureus* from *Staphylococcus epidermidis*
3. ✖ *Streptococcus pyogenes* from *Staphylococcus aureus*
4. ✖ *Streptococcus pyogenes* from *Enterococcus faecalis*

Question Number : 447 Question Id : 35918114997 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Each of the following organisms is an important cause of urinary tract infections except

Options :

1. ✖ *Klebsiella pneumoniae*
2. ✖ *Escherichia coli*
3. ✔ *Bacteriodes fragilis*
4. ✖ *Proteus mirabilis*

Question Number : 448 Question Id : 35918114998 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What types of foods are associated with the diarrheal form of bacillus food poisoning ?

Options :

1. ✖ starchy
2. ✔ meat
3. ✖ veggies
4. ✖ candy

Question Number : 449 Question Id : 35918114999 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The sulphonamide drugs interfere with bacterial metabolism by

Options :

1. ✖ Blocking cell wall synthesis
2. ✔ Disrupting folic acid metabolism
3. ✖ Reacting with bacterial cell membranes
4. ✖ Inhibiting DNA replication

Question Number : 450 Question Id : 35918115000 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The suitable assay method for antibiotics is

Options :

1. ✖ Enzymatic assay
2. ✖ Turbidometric assay
3. ✔ End point determination assay
4. ✖ Metabolic assay

Question Number : 451 Question Id : 35918115001 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

“Toxic shock syndrome” is caused by the toxin of

Options :

1. ✔ *Staphylococcus aureus*
2. ✖ *Streptococcus pyogens*
3. ✖ *Vibrio cholerae*
4. ✖ *Candida spp*

Question Number : 452 Question Id : 35918115002 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which is not an antigen presenting cell

Options :

1. ✖ B cell
2. ✔ polymorphonuclear leukocyte or (PMN)
3. ✖ Dendritic cell
4. ✖ all

Question Number : 453 Question Id : 35918115003 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The concept of using microorganisms to clean up environment is called

Options :

1. ✖ pasteurization
2. ✔ bioremediation
3. ✖ fermentation
4. ✖ biolistics

Question Number : 454 Question Id : 35918115004 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

_____ is where microorganisms grow on the aerial surface of the plant system

Options :

1. ✖ rhizosphere
2. ✖ microfilm
3. ✖ desert crust
4. ✔ phyllosphere

Correct : 1 Wrong : 0

Which of the following genera synthesized 'Nod' factors in order to activate a plant to allow development of an infection thread?

Options :

1. ✖ Agrobacterium
2. ✖ Pseudomonas
3. ✖ Frankia
4. ✔ Rhizobium

Correct : 1 Wrong : 0

During bio-geo-chemical cycle some amount of elemental carbon was utilized by the microorganisms. The phenomenon is called as

Options :

1. ✖ Dissimilation
2. ✔ Immobilization
3. ✖ Decomposition
4. ✖ Neutralization

Correct : 1 Wrong : 0

The biotin level in obtaining L-glutamic acid by fermentation using *Micrococcus glutamicus* is critical because

Options :

1. ✖ too low level prevents growth, hence L-glutamic acid production
2. ✖ too high level prevents L-glutamic acid production
3. ✔ both (a) and (b)

4. ✖ none

Question Number : 458 Question Id : 35918115008 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Microorganism used for citric acid production is

Options :

1. ✖ *Penicillium notatum*

2. ✖ *Rhizopus nigrificins*

3. ✔ *Aspergillus niger*

4. ✖ *Lactobacillus delbrueckii*

Question Number : 459 Question Id : 35918115009 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Submerged bacterial fermentation to produce vitamin B₁₂ used the following bacterial strain

Options :

1. ✔ *Propionibacterium*

2. ✖ *Rhizobium*

3. ✖ *Acetobacter*

4. ✖ *Escherichia*

Question Number : 460 Question Id : 35918115010 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Match the following immunoglobulins with their respective occurrence from A to E:

1. IgM

2. IgG

3. IgA

4. IgE

A. In the seromucous secretions

B. After the primary antigenic stimulus

C. Synthesized during secondary response

D. Plasma

E. Serum

Options :

1. ✓ 1B, 2C, 3A, 4E

2. ✗ 1C, 2B, 3A, 4D

3. ✗ 1E, 2A, 3D, 4C

4. ✗ 1E, 2D, 3C, 4A