

TS SET

Question Paper Name :	LIFE SCIENCES 5th July 2019 Shift 2 Set1
Subject Name :	LIFE SCIENCES
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Duration :	180
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Display Marks:	No

Teaching and Research Aptitude

Group Number :	1
Group Id :	552131163
Group Maximum Duration :	60
Group Minimum Duration :	60
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Teaching and Research Aptitude

Section Id :	552131163
Section Number :	1

Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	42
Number of Questions to be attempted :	42
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	5521311091
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 55213112373 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

When a normal student behaves in an erratic manner in the class, you would:

ఒక సాధారణ విద్యార్థి తరగతిలో అసాధారణ ప్రవర్తనను కనబరచినపుడు నీవు ఏం చేస్తావు?

Options :

Pull up the student then and there.

55213148601. తక్షణం విద్యార్థిని లేపి నిలబెడతాను

Talk to the student after the class.

55213148602. తరగతి తర్వాత విద్యార్థితో మాట్లాడుతాను

Ask the student to leave the class.

55213148603. ఆ విద్యార్థిని తరగతి విడిచ వెళ్ళమంటాను

Ignore the student.

ఆ విద్యార్థిని పట్టించుకోను

55213148604.

Question Number : 2 Question Id : 55213112374 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

A teacher's most important challenge is:

ఒక ఉపాధ్యాయుని ప్రధానమైన సవాలు

Options :

To make students do their home work

విద్యార్థులచే ఇంటిపని చేయించడం

55213148605.

To make teaching-learning process enjoyable

బోధనాభ్యసన ప్రక్రియను ఆహ్లాదకరం చేయడం

55213148606.

To maintain discipline in the class room

తరగతి గదిని క్రమశిక్షణలో ఉంచడం

55213148607.

To prepare the question paper

ప్రశ్నాపత్రాన్ని తయారుచేయడం

55213148608.

Question Number : 3 Question Id : 55213112375 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

**Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

A person can enjoy teaching as a profession when he
ఒక వ్యక్తి బోధనా వృత్తిని ఆస్వాదించేదెప్పుడంటే, అతనికి

Options :

has control over students.

విద్యార్థులపై నియంత్రణ ఉన్నప్పుడు

55213148609.

commands respect from students.

విద్యార్థుల నుండి గౌరవాన్ని పొందినపుడు

55213148610.

is more qualified than his colleagues.

సహోద్యోగుల కన్నా ఎక్కువ విద్యార్హతలు కలిగి ఉన్నపుడు

55213148611.

is very close to higher authorities.

అధికారులతో మంచి సాన్నిహిత్యం కలిగి ఉన్నపుడు

55213148612.

**Question Number : 4 Question Id : 55213112376 Question Type : MCQ Option Shuffling : Yes Is
Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Maximum participation of students is possible in teaching learning through:

బోధనాభ్యసన ప్రక్రియలో విద్యార్థుల భాగస్వామ్యాన్ని పెంపొందించే పద్ధతి

Options :

discussion method

చర్చ పద్ధతి

55213148613.

lecture method

ఉపన్యాస పద్ధతి

55213148614.

use of audio-visual aids

దృశ్య-శ్రవణ బోధనోపకరణాల వినియోగించడం

55213148615.

Activity based method

కృత్యాధార బోధనా పద్ధతి

55213148616.

Question Number : 5 Question Id : 55213112377 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Which of the following is not important aspect of the teacher's role in learning?

అభ్యసనలో ఉపాధ్యాయులు ప్రధాన పాత్ర పోషించని అంశం ఏది?

Options :

The development of insight into exam pattern and scoring

పరీక్ష పత్రం నమూనా మరియు అధిక మార్కులు సాధించే మార్గం సూచించడం

55213148617.

The development of insight into the pitfalls and dangers to be avoided

అభ్యసనలో గల ఇబ్బందులు మరియు ప్రమాదాలను అధిగమించే సూచనలివ్వడం

55213148618.

The provision of encouragement and moral support

ప్రోత్సాహం మరియు నైతిక మద్దతు ఇవ్వడం

55213148619.

The provision of diagnostic and remedial help

లోపనిర్ధారణ మరియు నివారణ సహకారం అందించడం

55213148620.

Question Number : 6 Question Id : 55213112378 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

What do you consider as the main aim of inter disciplinary research?

వివిధ శాఖల పరస్పరాధారిత పరిశోధన యొక్క ముఖ్య ఉద్దేశ్యం

Options :

To bring out holistic approach to research.

పరిశోధనలో సమగ్ర ధోరణిని పెంపొందించడం

55213148621.

To reduce the emphasis of single subject in research domain.

పరిశోధనలకు సంబంధించి ఒకే శాఖకు చెందిన అంశాలను పరిమితం చేయడం

55213148622.

To over simplify the problem of research.

పరిశోధనా సమస్యను సరళం చేయడం

55213148623.

To create a new trend in research methodology.

పరిశోధనా పద్ధతులందు నూతన ఒరవడి సృష్టించడం

55213148624.

Sub-Section Id :

5521311092

Question Shuffling Allowed :

Yes

Question Number : 7 Question Id : 55213112379 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Field-work in research is involved in:

క్షేత్రస్థాయి పని ఇమిడి ఉన్న పరిశోధనా రకం

Options :

Empirical

అనుభావిక

55213148625.

Historical

చారిత్రాత్మక

55213148626.

Experimental

ప్రయోగాత్మక

55213148627.

All the above

పైవన్నీ

55213148628.

Sub-Section Number :

3

Sub-Section Id :

5521311093

Question Shuffling Allowed :

Yes

Question Number : 8 Question Id : 55213112380 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

If a researcher conducts a research on finding out which administrative style contributes more to institutional effectiveness ? This will be an example of

ఏ పరిపాలనా విధానం సంస్థాగత నిర్వహణకు ఉపయోగకారిగా దోహదపడును: అనే అంశంపై ఒక పరిశోధకుడు నిర్వహించే పరిశోధన రకం

Options :

Basic Research

ప్రాథమిక పరిశోధన

55213148629.

Action Research

చర్యాత్మక పరిశోధన

55213148630.

Applied Research

అనువర్తిత పరిశోధన

55213148631.

None of the above

పైవేవి కావు

55213148632.

Question Number : 9 Question Id : 55213112381 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Which of the following statements is not correct?

క్రింది వానిలో సరికాని ప్రతిపాదన ఏది?

Options :

Objectives of research are stated normally in first chapter of the thesis

సాధారణంగా పరిశోధనా వ్యాసంలోని మొదటి అధ్యాయంలో పరిశోధనా లక్ష్యాలను పేర్కొంటారు.

55213148633.

Researcher must possess analytical ability

పరిశోధకుడు విశ్లేషణ సామర్థ్యాన్ని కల్గి ఉండాలి

55213148634.

Variability is the source of problem

చరశీల స్వభావం పరిశోధనా సమస్యలకు ఆధారం

55213148635.

A research must prove the stated hypotheses

ఒక పరిశోధనలో పేర్కొన్న ప్రకల్పనలను నిరూపించాలి.

55213148636.

Question Number : 10 Question Id : 55213112382 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

A null hypothesis states that

శూన్య ప్రకల్పన ప్రతిపాదన ఇలా ఉండును

Options :

There is no significant difference between the variables

చరాశులకు మధ్య గుర్తించదగిన సంబంధం లేదు

55213148637.

Same as research hypothesis

పరిశోధన ప్రకల్పనవలెనే ఉంటుంది

55213148638.

Research results are predictable

పరిశోధనా ఫలితాలు ముందుగానే ఊహించదగినదిగా ఉండును

55213148639.

There is a significant difference between the variables

చరాశుల మధ్య గుర్తింపదగిన సంబంధం కలదు

55213148640.

Sub-Section Number : 4
Sub-Section Id : 5521311094
Question Shuffling Allowed : No

Question Id : 55213112383 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Question Numbers : (11 to 15)

Question Label : Comprehension

Read the passage and answers the questions from 11 to 15:

The IITs are now under the scanner of the Supreme Court following an SLP for allegedly continuing irregularities and bungling in JEE for admissions. The apex court has issued notice to the Ministry of HRD. The SLP was filed by a CS Prof at IIT Kharagpur challenging the dismissal of his PIL by the Delhi High Court in June 2010 on the ground that he had no locus standi to challenge the validity of JEE. They are yet to disclose the complete data of JEE 2010. The evaluation scheme was changed after the examination and there were serious flaws in admission counselling based on JEE 2010 results.

The SLP also called for a single entrance examination, replacing all existing exams as IIT JEE, AIEEE and State exams. It further says that the RTI data on JEE was ridden with many discrepancies as adhocism in cut off determination, unattended errors in question settings/evaluation, tampering/shredding of ORS in undue haste, selecting IIT administrators' wards in some IITs, closed admission counselling resulting in irregularities in admissions and seats lying vacant, zero accountability for attending to apparent errors, poor ethics in JEE administration etc.

Proposals for corrective reforms have also been suggested in the SLP. A committee of independent experts to formulate single examination system rather than close-door committee of four IIT Directors too has been suggested. It has proposed seven reforms for JAB including release of model answers along with solutions immediately after the examination is over, releasing of marks at the time of results besides publishing status of vacant seats and filled-in seats on day to day basis during the admission counselling.

11 నుంచి 15 వరకు గల ప్రశ్నలకు సంబంధించిన పాఠ్యభాగము ఈ క్రింద ఇవ్వబడినది. దానితోపాటు 5 బహుళ బచ్చిక ప్రశ్నలు ఇవ్వబడినవి. సరైన జవాబును ఎంచుకొని రాయండి.

JEE నిర్వహించే ప్రవేశ పరీక్షల్లో అక్రమాలకు పాల్పడుతున్నట్లుగా వచ్చిన SLP తో ఇప్పుడు IIT లు సుప్రీంకోర్టు యొక్క సూక్ష్మ పరిశీలనలోకి వచ్చాయి. దేశంలోని అత్యున్నత న్యాయస్థానం మానవ వనరుల మంత్రిత్వశాఖకు నోటీసు జారీ చేసింది. JEE యొక్క విశ్వసనీయతను సవాలు చేసేందుకు ఏ విధమైన ఆధారాలు లేవని, ఖరగ్ పూర్ CS ప్రోఫెసర్ దాఖలా చేసిన SLP ని జూన్ 2010లో ఢిల్లీ హైకోర్టు కొట్టివేసింది. వారు JEE 2010 యొక్క పూర్తి వివరాలు ఇంకా వెల్లడించలేదు. పరీక్ష నిర్వహించిన తరువాత మూల్యాంక విధానాన్ని మార్చడము మరియు JEE 2010 ఫలితాల ఆధారంగా ప్రవేశాల కోసం జరిపిన కౌన్సిలింగ్ లో చాలా తీవ్రమైన లోపాలు ఉన్నాయి అనే వివాదం ఉంది.

ప్రస్తుతం అమల్లో ఉన్న అన్ని ప్రవేశ పరీక్షలైనటువంటి IIT JEE, AIEEE మరియు రాష్ట్రంలో జరిగే అన్ని పరీక్ష ల విధానాలకు బదులు ఒకే పరీక్ష నిర్వహణ కోసం SLP కూడా పిలుపునిచ్చింది.

వీటన్నిటిని సరిదిద్దే సంస్కరణల యొక్క ప్రతిపాదనలు కూడా SLP లో సూచించబడినాయి. కేవలం నాలుగు IIT ల డైరెక్టర్స్ తో కూడిన రహస్య కమిటీ కంటే ఒక స్వతంత్రమైనటువంటి సంబంధిత సబ్జెక్టులో నిపుణులుగా ఉండే విధంగా ఒక కమిటీ ఏర్పాటుకు కూడా సూచన ఇవ్వడమైనది. పరీక్ష పూర్తయిన వెంటనే ఫలితాలతో పాటు మోడల్ సమాధానాల విడుదలతో పాటు మరో ఏడు సంస్కరణలను కూడా SLP ప్రతిపాదించింది. ఫలితాలు వెల్లడించేటప్పుడు విడుదల చేసే మార్కులతో పాటు ఖాళీగా ఉన్న సీట్ల వివరాలు కూడా ప్రచురించే పద్ధతిని మరియు ప్రవేశ కౌన్సిలింగ్ లో రోజువారీగా భర్తీ అయిన సీట్లతోపాటు ఖాళీలను కూడా ప్రచురించే విధానాన్ని అనుసరించాలని నిర్ణయించింది.

Sub questions

Question Number : 11 Question Id : 55213112384 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

What is wrong with IITs now?

ఇప్పుడు IITలో జరిగే తప్పిదాలు ఏమిటి?

Options :

They have academic freedom.

వారికి విద్యావిధానంకు సంబంధించిన స్వేచ్ఛ ఉంది

55213148641.

The get enough funds.

తగినన్ని నిధులు పొందుతున్నారు

55213148642.

There is mismanagement of admissions.

సిట్ల కేటాయింపులలో అవకతవకలు

55213148643.

Education in IITs is very expensive.

IITలలో చదువు చాలా ఖరీదైనది.

55213148644.

Question Number : 12 Question Id : 55213112385 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

Why did the High Court dismiss SLP?

హైకోర్టు SLP ఎందుకు రద్దు చేసింది?

Options :

It has no truth in it

దానిలో వాస్తవం లేదు

55213148645.

It is expensive

ఇది చాలా ఖరీదైనది

55213148646.

Plaintiff does not belong to that area

ప్లేయిన్టీఫ్ ఆ ప్రాంతానికి చెందిన వాడు కాదు

55213148647.

The data was not correct

డాటా సరైనది కాదు

55213148648.

Question Number : 13 Question Id : 55213112386 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

Which are not discrepancies of JEEs?

JEE యొక్క లోపాలు కానివి ఏవి?

- i. Cut off determination
కట్ ఆఫ్ నిర్ణయం
- ii. Mistakes in question settings/evaluation
ప్రశ్నపత్రంపు సెట్టింగు మరియు మూల్యాంకనంలో తప్పులు
- iii. Tampering of ORS leisurely
ORS ని నెమ్మదిగా చేదించడం
- iv. Selecting IIT administrators' wards in some IITs
IIT నిర్వాహకులు వాళ్ళ వార్లను ఎంచుకోవడం
- v. Closed admission counseling with irregularities in admissions
ధరఖాస్తులలో, రహస్య ప్రవేశ ప్రక్రియలో అక్రమాలు
- vi. Total filled seats
పూర్తిగా నిండి సీట్ల వివరాలు
- vii. Non-accountability for errors
లోపాలకు జవాబుదారీతనం లేనిది
- viii. Bad ethics in JEE administration
JEE లలో అనైతిక విలువల ప్రాముఖ్యత

Options :

iii and vi

iii మరియు vi

55213148649.

ii and v

ii మరియు v

55213148650.

55213148651.

viii and i

viii మరియు i

iv and vii

iv మరియు vii

55213148652.

Question Number : 14 Question Id : 55213112387 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

What is the plan of the SLP?

SLP యొక్క ప్రణాళిక ఏమిటి?

Options :

To conduct a common entrance test

ఒక సాధారణ ప్రవేశ పరీక్ష నిర్వహించడానికి

55213148653.

To conduct tests at various levels

వివిధ స్థాయిలలో ప్రవేశ పరీక్షలు నిర్వహించడం

55213148654.

To invite foreign admissions

విదేశీ దరఖాస్తులను ఆహ్వానించడం

55213148655.

To invest further in education

విద్యలో మరింత పెట్టుబడి పెట్టడం

55213148656.

Question Number : 15 Question Id : 55213112388 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :
Yes

Correct Marks : 2 Wrong Marks : 0

How can the examination system be improved?

పరీక్షా వ్యవస్థ ఎలా మెరుగుపడుతుంది?

Options :

By going for online assessment

ఆన్‌లైన్ ఎసెస్‌మెంట్ కు వెళ్ళడం ద్వారా

55213148657.

By introducing CBTs

CBT లను పరిచయం చేయడం ద్వారా

55213148658.

By making the examination descriptive

వివరణాత్మక పరీక్ష ద్వారా

55213148659.

By implementing the reforms

సంస్కరణలను అమలు చేయడం ద్వారా

55213148660.

Sub-Section Number : 5

Sub-Section Id : 5521311095

Question Shuffling Allowed : Yes

Question Number : 16 Question Id : 55213112389 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

**Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Which of the following is called dyadic communication?

ఈ క్రింది వాటిలో ఏది డైడక్ కమ్యూనికేషన్ అని పిలువబడుతుంది?

Options :

Intrapersonal communication

బహుళ వ్యక్తుల కమ్యూనికేషన్

55213148661.

Interpersonal communication

ఇంటర్ పర్సనల్ కమ్యూనికేషన్

55213148662.

Group communication

సామూహిక కమ్యూనికేషన్

55213148663.

Mass communication

సార్వజనిక కమ్యూనికేషన్

55213148664.

**Question Number : 17 Question Id : 55213112390 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Some of the following lines are not related to oral communication. Find them out:

ఈ క్రింది పంక్తులలో కొన్ని మౌఖిక సమాచార ప్రసారంతో సంబంధం కలిగి లేవు. వాటిని కనుగొనండి.

- i. It is spontaneous and natural
ఇది సహజసిద్ధమైనది మరియు సహజమైనది
- ii. It is not natural
ఇది సహజమైనది కాదు
- iii. It is easy for others to understand
ఇతరులకు అర్థం చేసుకోవడం సులభం
- iv. It is somewhat difficult to understand
ఇది కొంత వరకు అర్థం చేసుకోవడం కష్టం
- v. It develops a good relationship between a speaker and a listener
ఇది వక్త మరియు వినేవారి మధ్య మంచి సంబంధాన్ని వృద్ధి చేస్తుంది
- vi. Choice of words is one of the major things
పదాల ఎంపిక అనేది ప్రధానమైన వాటిలో ఒకటి
- vii. It is supported by non-verbal communication
ఇది పదరహిత సమాచార ప్రసారం విధానాన్ని బలపరుస్తుంది
- viii. It is not co-related with non-verbal communication
ఇది పదరహిత సమాచారానికి సహసంబంధం కాదు

The right answer according to the code is

కోడ్ ప్రకారం సరైన సమాధానం

Options :

i, ii and iv

i, ii మరియు iv

55213148665.

v, vi and vii

v, vi మరియు vii

55213148666.

vii, viii and i

vii, viii మరియు i

55213148667.

ii, iv and viii

ii, iv మరియు viii

55213148668.

Question Number : 18 Question Id : 55213112391 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following :

ఈ క్రింది వాటిని జతపరచండి :

List-I

జాబితా-1

1. Physical Barriers
భౌతిక అడ్డంకులు
2. Psychological Barriers
మానసిక అడ్డంకులు
3. Linguistic and Cultural Barriers
భాష మరియు సాంస్కృతిక అటంకాలు
4. Mechanical Barriers
మెకానికల్ అడ్డంకులు

List-II

జాబితా -2

- a. Semantics
పద పరిణామము (సెమాంటిక్స్)
- b. Technology
సాంకేతికత (టెక్నాలజీ)
- c. Hall Temperature
హాల్ ఉష్ణోగ్రత
- d. Self-image
అత్మ చిత్రణ

Codes:

కోడ్స్:

Options :

55213148669. 1-c, 2-d, 3-a, 4-b

55213148670. 1-b, 2-d, 3-a, 4-c

55213148671. 1-a, 2-d, 3-c, 4-b

55213148672. 1-d, 2-c, 3-a, 4-b

**Question Number : 19 Question Id : 55213112392 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

_____ communication includes individual reflection, and contemplation.

_____ సంభాషణలో వ్యక్తిగత ప్రతిఫలనం మరియు మననం ఉన్నాయి.

Options :

Intra

పరస్పరం

55213148673.

Inter

అంతర్గత

55213148674.

Mass

సార్వజనిక

55213148675.

Oral

మౌఖిక

55213148676.

**Question Number : 20 Question Id : 55213112393 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum**

**Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

What is the most important quality of a good teacher?

మంచి గురువు యొక్క అతి ముఖ్యమైన లక్షణం ఏమిటి?

Options :

Written communication skill only

లికిత సమాచారానికి సంబంధించిన నైపుణ్యం మాత్రమే

55213148677.

Command of the subject

సబ్జెక్టుపై సరైన పట్టు కలిగి ఉండటం

55213148678.

Distance from the students

విద్యార్థుల నుండి దూరంగా ఉండుట

55213148679.

Compassion for students

శిష్యవాత్సల్యం కలిగి ఉండటం

55213148680.

Sub-Section Number :

6

Sub-Section Id :

5521311096

Question Shuffling Allowed :

Yes

**Question Number : 21 Question Id : 55213112394 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

A train of length 120 meters long travelling with a speed of 54 kmph can cross a bridge of length X in 30 seconds. The length of the bridge X (in meters) is

X మీటర్ల పొడవుగల వంతెనను 120 మీటర్ల పొడవుగల రైలు, గంటకు 54 కిలోమీటర్ల వేగముతో ప్రయాణిస్తూ 30 సెకనులలో దాటినది. ఆ వంతెన పొడవు (మీటర్లలో)

Options :

55213148681. 45

55213148682. 120

55213148683. 450

55213148684. 330

Question Number : 22 Question Id : 55213112395 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

The compound interest on the principal amount 'P' for two years with the rate of 8% p.a. is Rs. 2,496, if the interest is compounded annually. Then principal amount 'P' is (in Rs.)

మూలధనం 'P' పై సంవత్సరమునకు 8% వడ్డీ చొప్పున, రెండు సంవత్సరములకు అయిన చక్రవడ్డీ రూ. 2,496 (సంవత్సరమునకు తిరగగట్టు పద్ధతిన), అయిన మూలధనం (రూపాయలలో)

Options :

55213148685. 12,000

55213148686. 2496

55213148687. 15,000

55213148688. 20,000

**Question Number : 23 Question Id : 55213112396 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

'A' and 'B' invested an amount Rs 21,000 and 17,500 respectively in a business. At the end of the year, they make a profit of Rs. 26,400. Their individual shares in the profit is

ఒక వ్యాపారములో 'A' మరియు 'B' ల పెట్టుబడులు వరుసగా రూ. 21,000 మరియు రూ. 17,500 లు.
సంవత్సరాంతమున వారి లాభము రూ. 26,400. లాభము లో వారి వాటాలు (రూ. లలో)

Options :

55213148689. 1,440; 1,200

55213148690. 14,400; 12,000

55213148691. 12,000; 14,400

55213148692. 1,200; 1,440

**Question Number : 24 Question Id : 55213112397 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum**

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

If 'P' can produce 60 cakes in 9 days and 'Q' can produce 70 cakes in 21 days, The number of days required to produce 100 cakes together (in days) is

'P' అనువాడు 60 కేకులను 9 రోజులలో తయారుచేయగలడు. 'B' అనువాడు 70 కేకులను 21 రోజులలో తయారుచేయగలడు. వారిరువురు కలిసి 100 కేకులను ఎన్ని రోజులలో తయారుచేయగలరు ?

Options :

55213148693. 8

55213148694. 9

55213148695. 10

55213148696. 11

Question Number : 25 Question Id : 55213112398 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

The missing number in the following sequence is:

క్రీంది క్రమములో లోపించిన సంఖ్య:
4, 12, 84, 3612, _____

Options :

55213148697. 6526884

55213148698. 6523272

55213148699. 7224

55213148700. 14448

**Question Number : 26 Question Id : 55213112399 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The missing group of letters in the following sequence is:

క్రింది క్రమములో లోపించిన అక్షరాల సమూహం:

SAB, RBB, QCD, PDD, ____, NFF

Options :

55213148701. CBY

55213148702. RBR

55213148703. OEF

55213148704. YCD

Question Number : 27 Question Id : 55213112400 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0

'CGJN' is related to 'ACDF', in the same way 'DINQ' is related to
'CGJN' కి 'ACDF' తో సంబంధము కలదు. అదే విధముగా 'DINQ' కి సంబంధము

Options :

55213148705. BEHJ

55213148706. BEHI

55213148707. BEGI

55213148708. BEGJ

Question Number : 28 Question Id : 55213112401 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0

In a certain code language, if the word 'SPHERE' is coded as EREHPS, then how is the word
'EXHIBITION' coded in that language

ఒక నిర్దిష్ట కోడ్ భాషలో 'SPHERE' పదమును 'ERHPS' గా కోడికరించిన, ఆ కోడ్ భాషలో 'EXHIBITION' పదము
ఎలా కోడ్ అయినది

Options :

55213148709. NOTITBIHXE

55213148710. NOITIDIHXE

55213148711. NOITIBIHWE

55213148712. NOITIBIHXE

**Question Number : 29 Question Id : 55213112402 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

X+Y means X is the son of Y. X - Y means X is the daughter of Y. X × Y means X is the father of Y. X / Y means X is the mother of Y. If A × B / C - D / E, then A is related to E is
X+Y అనగా X, Y యొక్క కొడుకు. X - Y అనగా X, Y యొక్క కూతురు. X × Y అనగా X, Y యొక్క తండ్రి. X / Y అనగా X, Y యొక్క తల్లి. A × B / C - D / E, అయిన A నుంచి E కి గల సంబంధము

Options :

55213148713. Husband
భర్త

55213148714. Brother
నోదరుడు

55213148715. Uncle
బాబాయి / మామ

Brother in law
బావ / బావమరిది

55213148716.

Question Number : 30 Question Id : 55213112403 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0

In a class of students, 55 play cricket, 65 play football and 20 play both cricket and football. How many students play at least one game.

ఒక తరగతిలోని విద్యార్థులలో 55 మంది క్రికెట్ ఆడతారు, 65 మంది ఫుట్బాల్ ఆడతారు, మరియు 20 మంది రెండు ఆటలు (క్రికెట్ మరియు ఫుట్బాల్) ఆడతారు. కనీసం ఒక ఆట ఆడే విద్యార్థులు ఎందరు

Options :

55213148717. 100

55213148718. 120

55213148719. 80

55213148720. 20

Sub-Section Number : 7

Sub-Section Id : 5521311097

Question Shuffling Allowed : No

Question Id : 55213112404 Question Type : COMPREHENSION Sub Question Shuffling Allowed

: No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :
 None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression :
 Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In
 Seconds) : 0 Allow Volume Control : Yes

Question Numbers : (31 to 35)

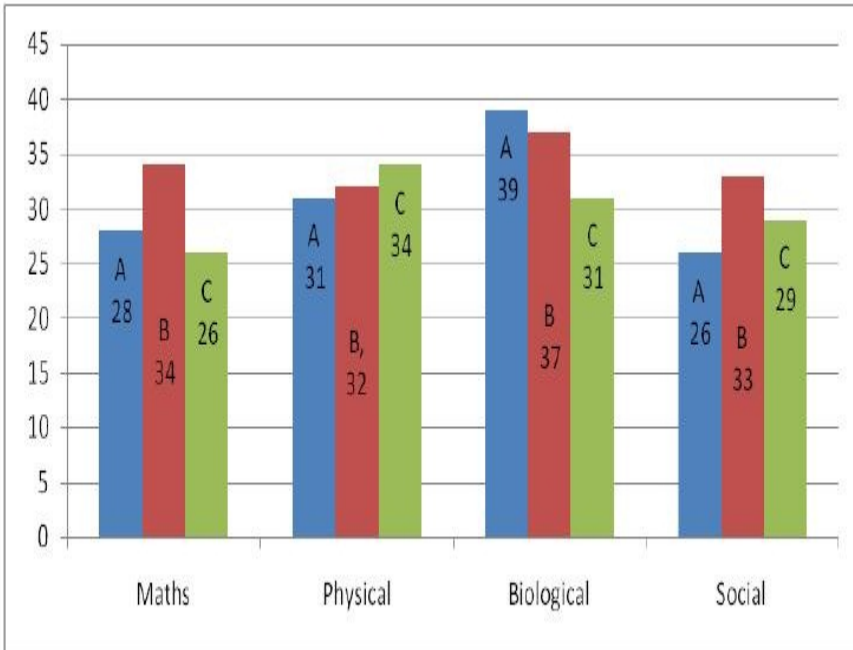
Question Label : Comprehension

Note: The questions Q. 31 to Q. 35 are based on the following information:

గమనిక: ప్రశ్నలు Q. 31 నుండి Q. 35 వరకు, కింది సమాచారం ఆధారంగా ఉన్నాయి.

The number of students passed in class X of a school, in the three sections A, B and C, in four subjects: Mathematics, Physical Sciences, Biological Sciences and Social science, is presented in the following multiple bar diagram. Assume the number of students in each section is 40.

ఒక పాఠశాలలోని, 10వ తరగతిలో, A, B మరియు C అనే మూడు విభాగాలలో, నాలుగు విషయాలలో: గణితము, భౌతిక శాస్త్రము, జీవ శాస్త్రము మరియు సాంఘిక శాస్త్రము లో ఉత్తీర్ణులైన విద్యార్థుల సంఖ్య, ఈ క్రింది బహుళ రేఖాచిత్రంలో ప్రదర్శించబడ్డాయి. ప్రతి విభాగంలోని విద్యార్థుల సంఖ్య 40 గా ఉంటుందని ఊహించుకోండి.



Sub questions

Question Number : 31 Question Id : 55213112405 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The maximum possible number of students in section A, who passed in all the four subjects is.

విభాగం 'A' లో ఉన్న విద్యార్థులలో, నాలుగు విషయాలలో, గరిష్ఠంగా ఉత్తీర్ణులైన విద్యార్థుల సంఖ్య.

Options :

55213148721. 28

55213148722. 31

55213148723. 39

55213148724. 26

Question Number : 32 Question Id : 55213112406 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Out of the number of students passed in Physical Sciences, the pass percentage of students in section

B is

భౌతిక శాస్త్రాలలో ఉత్తీర్ణులైన విద్యార్థుల సంఖ్యలో, సెక్షన్ B లోని ఉత్తీర్ణులైన విద్యార్థుల శాతం

Options :

55213148725. 29.54

55213148726. 31.95

55213148727. 32.98

55213148728. 35.05

**Question Number : 33 Question Id : 55213112407 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :
Yes**

Correct Marks : 2 Wrong Marks : 0

The number of students in section C who failed in biology is
జీవశాస్త్రంలో విఫలమైన, సెక్షన్ 'C' లోని విద్యార్థుల సంఖ్య

Options :

55213148729. 4

55213148730. 9

55213148731. 11

55213148732. 14

Question Number : 34 Question Id : 55213112408 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :
Yes

Correct Marks : 2 Wrong Marks : 0

On the three sections, the percentage of passing students in Mathematics is
మూడు విభాగాల మిళితంలో, గణితంలో ఉత్తీర్ణులైన విద్యార్థుల శాతం

Options :

55213148733. 40.3

55213148734. 68.4

55213148735. 73.3

55213148736. 80.8

Question Number : 35 Question Id : 55213112409 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :
Yes

Correct Marks : 2 Wrong Marks : 0

In which subject 89.166 percentage of students passed ?
ఏ విషయం లో 89.166 శాతం మంది ఉత్తీర్ణులు

Options :

55213148737.

Mathematics
గణితము

55213148738. Physical Sciences
భౌతిక శాస్త్రము

55213148739. Biological Sciences
జీవ శాస్త్రము

55213148740. Social Sciences
సాంఘిక శాస్త్రము

Sub-Section Number : 8
Sub-Section Id : 5521311098
Question Shuffling Allowed : Yes

Question Number : 36 Question Id : 55213112410 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0

MICR stands for

MICRఅనగా

Options :

55213148741. Magnetic Ink Character Reader
అయస్కాంత సిరా అక్షరాల్ని చదివేది

55213148742. Magnetic Ink Code Reader
అయస్కాంత సిరా కోడ్ చదివేది

Magnetic Ink Cases Reader

అయస్కాంత సిరా కేసులను చదివేది

55213148743.

Magnetic ink code recorder

అయస్కాంత సిరా కోడ్ రాసేది

55213148744.

**Question Number : 37 Question Id : 55213112411 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

What is embedded system?

ఎంబెడెడ్ వ్యవస్థ ఏమిటి?

Options :

The programme which arrives by being wrapped in box.

బాక్స్ లో వచ్చే ప్రోగ్రామ్

55213148745.

The programme which is the permanent part of the computer

కంప్యూటర్ శాశ్వత భాగంగా వుండే ప్రోగ్రామ్

55213148746.

The computer which is the part of a big computer

పెద్ద కంప్యూటర్ భాగంగా వుండే కంప్యూటర్

55213148747.

The computer and software system that control the machine

బాక్ యంత్రాన్ని నిరోధించే కంప్యూటర్ మరియు సాఫ్ట్వేర్

55213148748.

**Question Number : 38 Question Id : 55213112412 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

.....are used to identify a user who returns to a Website

ఒక వెబ్‌సైట్‌కి తిరిగి వచ్చే యూజర్‌ని గుర్తు పట్టడానికి వాడేది.....

Options :

Cookies

కూకీ

55213148749.

Plug-ins\

ప్లగ్-ఇన్

55213148750.

Scripts

స్క్రిప్టు

55213148751.

ASPs

55213148752.

**Question Number : 39 Question Id : 55213112413 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Protocol used by e-mail is

e- మెయిల్ వాడే ప్రోటో కాలే

Options :

55213148753. FTP

55213148754. TCP

55213148755. ID

55213148756. POP

**Question Number : 40 Question Id : 55213112414 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

As a part of Government to Business (G2B) initiative the Government of India has started the following portal

ప్రభుత్వం నుంచి వాణిజ్యం (G2B) లో భాగంగా భారత ప్రభుత్వం ప్రారంభించిన పోర్టల్

Options :

55213148757. GEM
పగడాలు

55213148758. Diamond
వజ్రం

Gold

బంగారం

55213148759.

Chanakya

చాణక్య

55213148760.

Sub-Section Number :

9

Sub-Section Id :

5521311099

Question Shuffling Allowed :

Yes

**Question Number : 41 Question Id : 55213112415 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Chipko movement is a public agitation that occurred in

'చిప్కో' ఉద్యమం ఇక్కడ జరిగింది.

Options :

Mansbal area of kashmir

కశ్మీర్‌లోని మానస్‌బల్ ప్రాంతం

55213148761.

Silent valley of Kerala

కేరళలోని సైలెంట్‌వాలీ

55213148762.

Sunderbans area of Bengal

బెంగాల్ సుందర బన్స్

55213148763.

55213148764.

Theri Garhwal area of Uttar Pradesh

ఉత్తరప్రదేశ్ లోని తేహ్రి గరేవాల ప్రాంతం

**Question Number : 42 Question Id : 55213112416 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Higher amount of sulphur -dio-oxide (SO_2) is emitted in the atmosphere by –

వాతావరణంలో అధికంగా సల్ఫర్ డైఆక్సైడ్ (SO_2) ను విడుదల చేసేది

Options :

Sugar Industry

చక్కెర పరిశ్రమ

55213148765.

Thermal Power plants

థర్మల్ విద్యుత్ కేంద్రాలు

55213148766.

Food processing industry

అహార ప్రాసెసింగ్ పరిశ్రమ

55213148767.

Bulk drug manufacturing Industry

బెషధాన్ని అధిక మొత్తంలో తయారుచేయు పరిశ్రమ

55213148768.

**Question Number : 43 Question Id : 55213112417 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Who said that the forest should be saved not because they are beautiful or because they shelter wild creatures of the wilderness, but to only provide homes are jobs to people.

అందం కోసమో లేక వన్య జీవుల మృగత్వానికి నీడనివ్వటానికో కాక ప్రజలకు ఉపాధిని, నీడ నివ్వటానికి అడవులను కాపాడితీరాలని చెప్పింది ఎవరు?

Options :

Aido Leopold and Rachel Carson

ఐడో లియోపాల్డ్, రేచల్ కార్సన్

55213148769.

Theodore Rosuest and pinchot

థియోడోర్ రూజ్వెల్ట్, పింఛోట్

55213148770.

John muir and wangel Maathai

జాన్ మూయిర్, వంగల్ మాతాయ్

55213148771.

David Brower and Barry Commoner

డేవిడ్ బ్రౌవర్, బారి కామనర్

55213148772.

Question Number : 44 Question Id : 55213112418 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Developing Nations were committed to drawing up their own plans for the emission reduction for the first time in

అభివృద్ధి చెందుతున్న దేశాలు ఉద్గారాల తగ్గింపుకు తమ స్వంత ప్రణాళికల ఏర్పాటుకు ఈ సమావేశంలో నిర్ణయించారు.

Options :

Cop-20 Lima Climate Conference

సిఓపి-20 లీమా పర్యావరణ సమావేశం

55213148773.

Cop-19 Warsaw Climate conference

సిఓపి-19 వారా పర్యావరణ సమావేశం

55213148774.

Cop-18 Doha Climate Conference

సిఓపి-18 దోహా పర్యావరణ సమావేశం

55213148775.

Cop-11 Hyderabad climate conference

సిఓపి-11 హైదరాబాద్ పర్యావరణ సమావేశం

55213148776.

Question Number : 45 Question Id : 55213112419 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The 2018 meeting of the G-7 Countries + k place in La Malbaie, Quebec, Canada and Donald Trump administration officials even declined to use the phrase 'climate change' and instead talk about

2018లో లా మాల్బాయ్, క్వబెక్, కెనడాలో జరిగిన జి-7 దేశాల సమావేశంలో డోనాల్డ్ ట్రంప్ అధికార ప్రతినిధులు 'పర్యావరణ మార్పు' అనే పదాన్ని వాడటానికి తిరస్కరించి, ఇండుకు బదులుగా ఈ విషయాన్ని మాట్లాడారు.

Options :

Environmental resilience

పర్యావరణ రిసైలెన్స్

55213148777.

Sustainable Development

సమగ్రాభివృద్ధి

55213148778.

Ecological Economy

ఆర్థిక పర్యావరణం

55213148779.

Environmental Audit

పర్యావరణపరంగా సరిచూడటం

55213148780.

Sub-Section Number :

10

Sub-Section Id :

5521311100

Question Shuffling Allowed :

Yes

Question Number : 46 Question Id : 55213112420 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Today's Education system at higher education level is :

నేటి విద్యా విధానము - ఉన్నత విద్యా స్థాయిలో ఈ విధంగా ఉన్నది.

Options :

Supports traditional nature of teaching

సాంప్రదాయ బోధనా పద్ధతిని ప్రోత్సహిస్తుంది

55213148781.

It is complex in reaching people

ప్రజల అందుబాటుకు సంక్లిష్టతగలది

55213148782.

Imparts education according to social stratification

సాంఘిక వర్గీకరణ ప్రకారం విద్యనందిస్తుంది

55213148783.

Imparts same education to all strata of society

సమాజంలోని అన్నివర్గాల వారికి ఒకే రకమైన విద్యనందిస్తుంది

55213148784.

Question Number : 47 Question Id : 55213112421 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Autonomy in higher education doesn't include freedom for the institutions in:

ఉన్నత విద్యాసంస్థల స్వీయపాలన స్వేచ్ఛలో ఇది అంతర్భాగం కాదు

Options :

Administration

పరిపాలనాంశాలు

55213148785.

Policy-making

పథకాలను రూపొందించడం

55213148786.

Finance

అర్థికాంశాలు

55213148787.

Curriculum development

పాఠ్యాంశాల వికాసం

55213148788.

Question Number : 48 Question Id : 55213112422 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Environmental education is important for the students of higher education because

ఉన్నత విద్యనభ్యసించే విద్యార్థులకు పర్యావరణ విద్య ప్రాముఖ్యం ఎందుకనగా?

Options :

to give them expert knowledge

విషయ నైపుణ్య పరిజ్ఞానాన్ని అందజేయడానికి

55213148789.

to develop their awareness

అవగాహనను పెంపొందించడానికి

55213148790.

to make them responsible for taking care of environment

పర్యావరణ పరిరక్షణకు బాధ్యత వహించడానికి

55213148791.

to leave them with their own choice towards future environmental consequences

భవిష్యత్ పర్యావరణ పరిణామాలకు సంబంధించి వారి స్వీయ ఆలోచనకు వదిలివేయడానికి

55213148792.

Question Number : 49 Question Id : 55213112423 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

NAAC is an autonomous institution under the aegis of:

స్వయం ప్రతిపత్తిగల సంస్థ NAAC ఎవరి ఆధీనంలో పనిచేయును?

Options :

ICSSR

ఐ.సి.ఎస్.ఎస్.ఆర్

55213148793.

CSIR

సి.ఎస్.ఐ.ఆర్

55213148794.

AICTE

ఎ.ఐ.సి.టి.ఐ

55213148795.

UGC

యు.జి.సి

55213148796.

**Question Number : 50 Question Id : 55213112424 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Ancient Gurukulas differ from modern residential schools in providing except th following :

పురాతన కాలంలోని గురుకులాలు ఆధునిక ఆశ్రమ పాఠశాలలలోని క్రింద పేర్కొన్న ఒకటి తప్ప సదుపాయాలు
కల్పించేవి

Options :

Accommodation

నివాసవసతి

55213148797.

Knowledge

విషయ పరిజ్ఞానం

55213148798.

55213148799.

Vocational skills

వృత్తి నైపుణ్యాలు

Universal Access

సార్వత్రిక అందుబాటు

55213148800.

LIFE SCIENCES

Group Number :	2
Group Id :	552131164
Group Maximum Duration :	120
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	200
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

LIFE SCIENCES

Section Id :	552131164
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	96

Number of Questions to be attempted :	96
Section Marks :	200
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	5521311101
Question Shuffling Allowed :	Yes

Question Number : 51 Question Id : 55213112425 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Identify the correct Statement

- i. The energetic effect of the electrochemical H^+ gradient across the membrane is known as proton motive force (PMF)
- ii. Proton motive force facilitates the transport of substances across the membrane against their concentration gradient
- iii. Movement of solutes down their free energy gradient across the membrane is known as active transport
- iv. In primary active transport the energy of ATP hydrolysis is directly coupled to transport of substances by a carrier protein

The correct statements are:

Options :

55213148801. i, iii and iv

55213148802. ii, iii and iv

55213148803. i, ii and iii

55213148804. i, ii and iv

**Question Number : 52 Question Id : 55213112426 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Cormorant and shag are aquatic closely related bird species. They are found together during breeding season and shag feeds on clupeoid fish, sand eel whereas cormorant feeds on flat fish, shrimps and prawns. It indicates

- i. Niche of both species is different
- ii. Both closely related species have same energy requirement
- iii. They stay together because of inter breeding
- iv. They are not in direct competition

The correct statements are:

Options :

55213148805. i and ii

55213148806. ii and iii

55213148807. iii and iv

55213148808. i and iv

**Question Number : 53 Question Id : 55213112427 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Cell Cycle regulation associated Cdc25 phosphatase play a key role in transition of one of the following cell cycle phases

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

Options :

55213148809. G₂/M

55213148810. G₁/S

55213148811. G₀/S

55213148812. G₀/G₁

Question Number : 54 Question Id : 55213112428 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Estuary
2. Zoo plankton in ocean region
3. Shallow water of Estuary zone
4. Phagotrophs

The correct match is:

List-II

- a. Herbivores, predators, parasites etc.
- b. Respiration exceeds primary productivity
- c. Biological productivity rate is high
- d. Holoplankton

Options :

55213148813. 1-c, 2-a, 3-b, 4-d

55213148814. 1-d, 2-a, 3-b, 4-c

55213148815. 1-d, 2-c, 3-a, 4-b

55213148816. 1-c, 2-d, 3-b, 4-a

**Question Number : 55 Question Id : 55213112429 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Acetylcholine belongs to the family of signal molecules known as

Options :

55213148817. Second messenger

55213148818. Oncoproteins

55213148819. Photoreceptors

55213148820. Neurotransmitters

**Question Number : 56 Question Id : 55213112430 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Calculate the pH of bicarbonate buffer that is composed of 0.5 m sodium carbonate and
0.05 M carbonic acid solution. The pK is 6.1

Options :

55213148821. 7.1

55213148822. 8.0

55213148823. 7.4

55213148824. 9.0

**Question Number : 57 Question Id : 55213112431 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Identify the correct Statement

- i. Symport is a type of secondary active transport in which two substances are moved in the same direction across the membrane
- ii. Continuous systems of cell walls, intercellular spaces and xylem vessels in a plant is referred to as symplast
- iii. Aquaporins are integral membrane proteins that form water – selective channels across the membrane

Options :

55213148825. i and ii

55213148826. ii and iii

55213148827. i and iii

55213148828. iii only

**Question Number : 58 Question Id : 55213112432 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Assertion (A): Social parasites do not feed on the tissues of their hosts.

Reason (R): Alderflies lay their eggs in the honey bee comb to get food and protection.

Options :

55213148829. Both (A) and (R) are true and (R) is the correct explanation of (A)

55213148830. Both (A) and (R) are true but (R) is not the correct explanation of (A)

55213148831. (A) is true, but (R) is false

55213148832. (A) is false, but (R) is true

Question Number : 59 Question Id : 55213112433 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

During the development of a dorsiventral leaf, the following layers are present. Arrange them in the correct sequence from adaxial side to abaxial side.

- i. Inner layers of spongy parenchyma
- ii. Outer layers of palisade parenchyma
- iii. Outer layers of spongy parenchyma
- iv. Inner layers of palisade parenchyma
- v. Vascular bundle

Options :

55213148833. iv, ii, v, i and iii

55213148834. ii, iv, v, i and iii

55213148835. ii, iv, v, iii and i

55213148836. iv, ii, v, iii and i

**Question Number : 60 Question Id : 55213112434 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. CD Spectrometer
2. Nano-drop Spectrophotometer
3. FACS
4. ICP-MS

List-II

- a. Metal analysis
- b. Determination of nucleic acids and protein content
- c. Sorting a heterogeneous mixture of cells into different individual populations
- d. Amplification of small segments of DNA
- e. Secondary structures of polypeptides

The correct match is: _____

Options :

55213148837. 1-e, 2-b, 3-c, 4-a

55213148838. 1-b, 2-a, 3-c, 4-d

55213148839. 1-a, 2-d, 3-b, 4-e

55213148840. 1-e, 2-b, 3-d, 4-c

Question Number : 61 Question Id : 55213112435 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Artificial parthenogenesis can be induced in

Options :

55213148841. *Opisthorchis sinensis*

55213148842. *Philodina roseola*

55213148843. *Sitotroga cerealelle*

55213148844. *Xenopus laevis*

Question Number : 62 Question Id : 55213112436 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the gel filtration matrix with its protein fractionation range (in daltons):

List-I (Gel matrix)	List-II (Fractionation range)
1. Sephadex G-15	a. 0-1500
2. Sephadex G-50	b. 1000-5000
3. Sephaces G-100	c. 3000-80000
4. Sephadex G-75	d. 4000-150000
	e. 1500-30000

The correct match is:

Options :

55213148845. 1-b, 2-a, 3-e, 4-d

55213148846. 1-a, 2-e, 3-d, 4-c

55213148847. 1-e, 2-c, 3-b, 4-a

55213148848. 1-a, 2-d, 3-e, 4-b

**Question Number : 63 Question Id : 55213112437 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The following foetal membranes consist of ecto and endoderm

- i. Yolk sac
- ii. Amnion
- iii. Chorion
- iv. Allantois

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

Options :

55213148849. i and ii are correct

55213148850. ii and iii are correct

55213148851. iii and iv are correct

55213148852. i and iv are correct

**Question Number : 64 Question Id : 55213112438 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

A certain double stranded DNA molecule is 200 kb long. The number of phosphorous atoms present in this molecule is

Options :

55213148853. 2×10^5

55213148854. 4×10^5

55213148855. 6×10^5

55213148856. 8×10^5

**Question Number : 65 Question Id : 55213112439 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Sperm whales are having spermaceti oil in the head cavities. It helps in

Options :

55213148857. Nourishment

55213148858. Buoyancy

55213148859. Vision

55213148860. Neurotransmitter

**Question Number : 66 Question Id : 55213112440 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. Comparative genomics
2. Metabolomics
3. Knock-out gene method
4. Physical mapping

List-II

- a. Involves deletion of a gene and study its effects
- b. Use of genome sequence analysis to determine the capability of a tissue to synthesize small molecules
- c. Helps to identify different loci and formulate rational breeding programmes
- d. Better understanding of stages of evolution and phylogeny

The correct match is:

Options :

55213148861. 1-c, 2-d, 3-a, 4-b

55213148862. 1-b, 2 -a, 3-c, 4-d

55213148863. 1-d, 2-b, 3-a, 4-c

55213148864. 1-b, 2-c, 3-d, 4-a

**Question Number : 67 Question Id : 55213112441 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. N-Methyl - D- aspartate receptor
2. Engram
3. Invertebrate learning
4. Sensitization

List-II

- a. Reduction of K^+ efflux
- b. Insensitization and depolarization are prolonged
- c. Memory trace
- d. Influx of Ca^{2+} ions

The correct match is:

Options :

55213148865. 1-b, 2-c, 3-d, 4-a

55213148866. 1-b, 2-a, 3-d, 4-c

55213148867. 1-d, 2-a, 3-b, 4-c

55213148868. 1-d, 2-c, 3-b, 4-a

Question Number : 68 Question Id : 55213112442 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Consider the chromosomal features of the following organisms:

- i. *Caenorhabditis*
- ii. *Luzula*
- iii. *Schizosaccharomyces*
- iv. *Drosophila*

Which of the above have chromosomes with diffuse centromeres?

Options :

55213148869. i and ii

55213148870. ii and iii

55213148871. iii and iv

55213148872. iv and i

**Question Number : 69 Question Id : 55213112443 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The branched DNA structure formed by the first-strand exchange during crossingover is called

Options :

55213148873. Chiasma

55213148874. Holliday junction

55213148875. Zinc finger

55213148876. Kink

**Question Number : 70 Question Id : 55213112444 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The chemical name of one of the following amino acid is 2-Aminoethane-1-sulfonic acid.
Identify the amino acid

Options :

55213148877. Methionine

55213148878. Cysteine

55213148879. Taurine

55213148880. Homocysteine

**Question Number : 71 Question Id : 55213112445 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Cancer cells can divide indefinitely in culture.

Reason (R): The telomerase activity is very low in cancer cells.

Options :

55213148881. Both (A) and (R) are true and (R) is the correct explanation of (A)

55213148882. Both (A) and (R) are true but (R) is not the correct explanation of (A)

55213148883. (A) is true, but (R) is false

55213148884. (A) is false, but (R) is true

**Question Number : 72 Question Id : 55213112446 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Hygromycin phosphotransferase
2. Phosphinothricin acetyltransferase
3. Green Fluorescent protein
4. Betaine aldehyde dehydrogenase

List-II

- a. Herbicide resistance
- b. Visual screening
- c. Detoxification
- d. Antibiotic resistance

The correct match is:

Options :

55213148885. 1-b,2-d, 3-a, 4-c

55213148886. 1-a, 2-c, 3-d, 4-b

55213148887. 1-d, 2-b, 3-c, 4-a

55213148888. 1-d, 2-a, 3-b, 4-c

Question Number : 73 Question Id : 55213112447 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

A chemotactic molecule isolated from the egg jelly of sea urchin that acts as a sperm activating peptide

Options :

55213148889. Bindin

55213148890. Resact

55213148891. Dyenin

55213148892. Fertilin

**Question Number : 74 Question Id : 55213112448 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-II Organism	List-II Oxygen carrying capacity of blood (Vol%)
1. Man	a. 16
2. Sparrow	b. 10
3. Frog	c. 5
4. Dog fish	d. 20

The correct match is:

Options :

55213148893. 1-b, 2-d, 3-a, 4-c

55213148894. 1-d, 2-a, 3-b, 4-c

55213148895. 1-d, 2-c, 3-b, 4-a

55213148896. 1-b, 2-d, 3-c, 4-a

**Question Number : 75 Question Id : 55213112449 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes**

Correct Marks : 2 Wrong Marks : 0

The stimuli / signals that activate signal transduction pathways are termed as

Options :

55213148897. Antagonists

55213148898. Second messengers

55213148899. Agonists

55213148900. Interferons

Question Number : 76 Question Id : 55213112450 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The total genetic variance of a character is 250 lb^2 . The variance due to dominance effects, epistatic effects and environmental effects are respectively 50 lb^2 , 20 lb^2 and 350 lb^2 . The narrow sense heritability for this character is

Options :

55213148901. 0.2

55213148902. 0.3

55213148903. 0.6

55213148904. 0.8

Question Number : 77 Question Id : 55213112451 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match of following:

List-I

1. Genes on the non –homologous segment of the X-chromosome
2. Expression of dominance or recessiveness of a character is reversed in males and females
3. Genes on the homologous segments of the sex chromosomes
4. Autosomal genes whose penetrance in one sex is zero

List-II

- a. Sex-influenced traits
- b. Completely sex-linked traits
- c. Sex-linked traits
- d. Incompletely sex-linked traits

The correct match is:

Options :

55213148905. 1-b, 2-a, 3-d, 4-c

55213148906. 1-a, 2-c, 3-b, 4-d

55213148907. 1-c, 2-d, 3-a, 4-b

55213148908. 1-d, 2-b, 3-c, 4-a

Question Number : 78 Question Id : 55213112452 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Cyclic AMP receptor belongs to which class of G-Protein Coupled Receptors?

Options :

55213148909. Class A

55213148910. Class E

55213148911. Class B

55213148912. Class C

**Question Number : 79 Question Id : 55213112453 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The egg of the following group contains the nucleus of Pander

Options :

55213148913. Mammal

55213148914. Hen

55213148915. Frog

55213148916. Reptile

**Question Number : 80 Question Id : 55213112454 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

An important tool of *ex situ* conservation of plants, where collection of trees, shrubs, herbs, climbers and other living plants from different parts of the globe are scientifically planted.

Options :

55213148917. Biosphere reserve

55213148918. National Parks

55213148919. Sanctuary

55213148920. Botanical Garden

**Question Number : 81 Question Id : 55213112455 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Study the following statements in relation to Hardy-Weinberg equation:

- i. The population should be large and panmictic
- ii. No selection should be operating
- iii. Immigration and emigration of individuals into and from the population is allowed
- iv. There should be no mutations from one allelic form to another

Identify the statements needed to attain genetic equilibrium.

Options :

55213148921. i, ii and iii

55213148922. i, iii and iv

55213148923. i, ii and iv

55213148924. ii, iii and iv

**Question Number : 82 Question Id : 55213112456 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. Diagenic type
2. Diandric type
3. Hologenic type
4. Holandric type

List-II

- a. Mother→Son→Grand daughter
- b. Father→Son→Grand son
- c. Father→Daughter→Grand son
- d. Mother→Daughter→Grand daughter

The correct match is:

Options :

55213148925. 1-c, 2-a, 3-d, 4-b

55213148926. 1-b, 2-a, 3-d, 4-c

55213148927. 1-c, 2-d, 3-b, 4-a

55213148928. 1-b, 2-c, 3-d, 4-a

**Question Number : 83 Question Id : 55213112457 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Study the following characters

- i. Petite mutants in yeast
- ii. Coiling pattern of shells in *Limnaea*
- iii. Kappa particles in *Paramecium*
- iv. Variegated mutants in *Mirabilis*

Identify the characters not associated with mitochondrial factors

Options :

55213148929. i, ii and iii

55213148930. i, ii and iv

55213148931. i, iii and iv

55213148932. ii, iii and iv

Question Number : 84 Question Id : 55213112458 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Sugary endosperm of corn is recessive (s) to starchy (S) on chromosome IV. Assuming $n+1$ pollen grains are non-functional, the phenotypic ratios of these characters expected in the progeny when a diploid plant of 'ss' genotype is pollinated by a trisomic IV of genotype 'SSs'.

Options :

55213148933. 1 starchy : 1 sugary

55213148934. 2 starchy : 1 sugary

55213148935. 3 starchy : 1 sugary

55213148936. 5 starchy : 1 sugary

**Question Number : 85 Question Id : 55213112459 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

- List-I**
1. Fruit ripener
 2. Osmolyte
 3. Phytoalexin
 4. Insecticide

- List-II**
- a. Phaseolin
 - b. Ethephon
 - c. Pyrethrin
 - d. Glycine betaine

The correct match is:

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

Options :

55213148937. 1-d, 2-c, 3-b, 4-a

55213148938. 1-c, 2-d, 3-a, 4-b

55213148939. 1-b, 2-a, 3-d, 4-c

55213148940. 1-c, 2-a, 3-d, 4-b

Question Number : 86 Question Id : 55213112460 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Avena abyssinica is assumed to be a tetraploid with 28 chromosomes. *Avena sativa* appears to be a hexploid in this series. The somatic chromosome number in *A. sativa* is

Options :

55213148941. 21

55213148942. 42

55213148943. 56

55213148944. 84

Question Number : 87 Question Id : 55213112461 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Extra chromosome is a normal chromosome
2. Extra chromosome is an isochromosome
3. Extra chromosome has translocated segments
4. Extra chromosome is homologous to an arm of the normal pair of chromosomes

List-II

- a. Telo trisomic
- b. Tertiary trisomic
- c. Primary trisomic
- d. Secondary trisomic

The correct match is:

Options :

55213148945. 1-d, 2-c, 3-b, 4-a

55213148946. 1-c, 2-a, 3-d, 4-b

55213148947. 1-c, 2-b, 3-a, 4-d

55213148948. 1-d, 2-c, 3-a, 4-b

**Question Number : 88 Question Id : 55213112462 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

A wheat variety with colored seeds is crossed to a colorless strain producing an all colored F₁. One plant out of 64 F₂ progeny had colorless seeds. The number of genes or allelic pairs controlling seed color in this variety is

Options :

55213148949. 1

55213148950. 2

55213148951. 3

55213148952. 4

**Question Number : 89 Question Id : 55213112463 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Maternal fetal incompatibility is between Rh positive fetus and Rh negative mother but it is not seen among ABO blood groups, i.e., no compatibility is observed if mother is of blood group B and fetus is of blood group A. Which of the following is correct explanation for this?

Options :

55213148953. Antibody produced against Rh antigen is IgM

55213148954. Antibodies produced against ABO blood groups are IgG

55213148955. Antibody produced against Rh antigen is IgG

55213148956. Antibody against opposite blood groups is absent in maternal blood in case of ABO blood groups

Question Number : 90 Question Id : 55213112464 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

One cell can express as many as 20 different MHC class II gene products because of

Options :

55213148957. Replication

55213148958. Tandem duplication

55213148959. Transposition

55213148960. Block duplication

Question Number : 91 Question Id : 55213112465 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following:

- | List-I | List-II |
|---------------|-----------------|
| 1. Pig | a. Cotyledonary |
| 2. Monkey | b. Diffuse |
| 3. Dog | c. Bidiscoidal |
| 4. Cattle | d. Zonary |

The correct match is:

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

Options :

55213148961. 1-c, 2-a, 3-d, 4-b

55213148962. 1-d, 2-a, 3-b, 4-c

55213148963. 1-c, 2-d, 3-b, 4-a

55213148964. 1-d, 2-c, 3-a, 4-b

Question Number : 92 Question Id : 55213112466 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Identify the correct statements with reference to C₄ plants

- i. Bicarbonate (HCO₃⁻) is the carbon source for primary carboxylation reaction
- ii. The site for PEP carboxylation is the chloroplast of mesophyll cell
- iii. Require more ATP molecules for Glucose formation as compared to C₃ plants
- iv. Grana are absent in the chloroplasts of bundle sheath cells

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

Options :

55213148965. i, ii and iv

55213148966. ii, iii and iv

55213148967. i, iii and iv

55213148968. i, ii and iii

**Question Number : 93 Question Id : 55213112467 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I	List-II
1. Position effect	a. The percentage of individuals with a particular gene combination which exhibits the corresponding character to any degree
2. Penetrance	b. The degree of effect produced by a penetrant genotype
3. Plasmagene	c. Production of altered phenotype due to relocation of chromosomal material without altering its quantity
4. Expressivity	d. The smallest heritable extrachromosomal unit

The correct match is:

Options :

55213148969. 1-b, 2-d, 3-a, 4-c

55213148970. 1-c, 2-b, 3-d, 4-a

55213148971. 1-d, 2-b, 3-a, 4-c

55213148972. 1-b, 2-c, 3-a, 4-d

Question Number : 94 Question Id : 55213112468 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Evaluation of two different species, both of which are unpalatable and have poisonous stingers or some other defense mechanisms to resemble each other is called as

Options :

55213148973. Gunderson's mimicry

55213148974. Muellierian mimicry

55213148975. Kotkinnian mimicry

55213148976. Rabinovitch's mimicry

**Question Number : 95 Question Id : 55213112469 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Induced ovulation occurs in

- i. Frog
- ii. Rabbit
- iii. Pigeon
- iv. Rat

The correct combination is

Options :

55213148977. i and ii

55213148978. ii and iii

55213148979. iii and iv

55213148980. i and iv

**Question Number : 96 Question Id : 55213112470 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The correct sequence of appearance of the following during development of central nervous system of vertebrate

- I. Neural plate
- II. Neural groove
- III. Neural tube

Options :

55213148981. III→II→I

55213148982. II→I→III

55213148983. I→II→III

55213148984. II→III→I

Question Number : 97 Question Id : 55213112471 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Study the following features concerning the aminoacyl-t RNA synthetases:

- i. The acceptor stem is in a regular helical conformation
- ii. They have pockets for the acceptor stem
- iii. They approach the t RNAs from the D-loop and acceptor stem minor groove side
- iv. They approach the t RNAs from the variable arm and major groove of the acceptor arm

Which of the above are the characters of class II synthetases?

Options :

55213148985. i, ii and iii

55213148986. i, ii and iv

55213148987. i, iii and iv

55213148988. ii, iii and iv

**Question Number : 98 Question Id : 55213112472 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Peptidoglycan, hydrophilic 'O' antigen, hydrophobic lipid A and core polysaccharides constitute the typical cell wall structure of gram negative bacteria. Which of the following order of their arrangement from cytoplasmic membrane to outermost surface of the cell is correct?

Options :

55213148989. Peptidoglycan, core polysaccharide, Lipid A and 'O' antigen

55213148990. Peptidoglycan, Lipid A, core polysaccharide, and 'O' antigen

55213148991. Lipid A, 'O' antigen, core polysaccharide and Peptidoglycan

55213148992. Core polysaccharide, Peptidoglycan, 'O' antigen and Lipid A

**Question Number : 99 Question Id : 55213112473 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

During transcription, what ensures the bacterial RNA polymerase for binding in a stable manner to DNA only at promoter regions

Options :

55213148993. The core enzyme ($\alpha_2\beta\beta'$) of the holoenzyme

55213148994. The complete enzyme

55213148995. The Sigma factor

55213148996. The elongation factor

**Question Number : 100 Question Id : 55213112474 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. Inhibitor of mitochondrial ETC
2. Gravity sensor
3. Stress responsive protein
4. Inhibitor of Non-cyclic electron transport

List-II

- a. DCMU
- b. Rotenone
- c. Statolith
- d. Osmotin

The correct match is:

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

Options :

55213148997. 1-d, 2-a, 3-b, 4-c

55213148998. 1-c, 2-d, 3-a, 4-b

55213148999. 1-c, 2-a, 3-d, 4-b

55213149000. 1-b, 2-d, 3-c, 4-a

**Question Number : 101 Question Id : 55213112475 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Animal cell lysosome maintains the pH by one of the following transporters

Options :

55213149001. GPCR's

55213149002. H^+ -ATPase

55213149003. Na^+/K^+ pump

55213149004. SNARE

**Question Number : 102 Question Id : 55213112476 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The interstitial tissue is very well developed and aggregates of Leydig cells are present in

- i. Man
- ii. Bull
- iii. Boar
- iv. Rat

Options :

55213149005. i and ii are correct

55213149006. ii and iii are correct

55213149007. iii and iv are correct

55213149008. i and iv are correct

**Question Number : 103 Question Id : 55213112477 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following phenotypic ratio with the type of gene interaction

List-I	List-II
1. Duplicate interaction	a. 15:1
2. Duplicate dominant epistasis	b. 9:3:4
3. Duplicate recessive epistasis	c. 9:6:1
4. Recessive epistasis	d. 9:7

The correct match is:

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

Options :

55213149009. 1-b, 2-c, 3-d, 4-a

55213149010. 1-d, 2-a, 3-b, 4-c

55213149011. 1-c, 2-b, 3-a, 4-d

55213149012. 1-b, 2-d, 3-a, 4-c

**Question Number : 104 Question Id : 55213112478 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Which of the following families contain tricarpeal, superior ovary with axile placentation?

- i. Euphorbiaceae
- ii. Cucurbitaceae
- iii. Orchidaceae
- iv. Liliaceae

The correct combination of families is:

Options :

55213149013. i and ii

55213149014. i and iii

55213149015. ii and iii

55213149016. i and iv

**Question Number : 105 Question Id : 55213112479 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The Donora smog of 1948 incident is a classic example of industrial pollution. That industrial smog was formed due to

Options :

55213149017. Burning of petroleum products as energy source of cars for commuting

55213149018. Use of coal as the primary energy source

55213149019. Combustion of inorganic wastes for generating heat

55213149020. Excess use of methane for industrial development

Question Number : 106 Question Id : 55213112480 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Find out the correct statements

- i. Litmus dye is obtained from a Lichen
- ii. The psychedelic drug LSD is extracted from certain mushrooms
- iii. The wood employed for lead pencil making comes from a conifer
- iv. Quinoa is not a Poacean member

Options :

55213149021. i, iii and iv

55213149022. ii, iii and iv

55213149023. ii and iii

55213149024. iii and iv

Question Number : 107 Question Id : 55213112481 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Consider DNA replication in the following:

- i. Phage ϕ_{x174}
- ii. Phage λ
- iii. *E. coli*
- iv. *Bacillus subtilis*

Which of the above show 'Theta' mode of replication?

Options :

55213149025. i and ii

55213149026. i and iii

55213149027. ii and iii

55213149028. iii and iv

Question Number : 108 Question Id : 55213112482 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

The absorbance of 1% (w/v) solution of an enzyme horse radish peroxidase in a 100 path length cuvette, at 280nm is 24.9. What is the concentration of the enzyme solution that has an A_{280nm} value of 0.25?

Options :

55213149029. 0.1 g/dL

55213149030. 0.001 g/dL

55213149031. 0.01 g/dL

55213149032. 1 g/dL

**Question Number : 109 Question Id : 55213112483 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The correct sequence of gastrulation in frog

- I. Involution
- II. Epiboly
- III. Invagination

Options :

55213149033. II→III→I

55213149034. III→I→II

55213149035. I→III→II

55213149036. II→I→III

**Question Number : 110 Question Id : 55213112484 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Identify the correct combination of extracellular pathogens among the following

- i. *Vibrio cholera*
- ii. *Bordetella pertussis*
- iii. Influenza virus
- iv. Polio virus

Options :

55213149037. i and iii

55213149038. ii and iii

55213149039. iii and iv

55213149040. i and ii

**Question Number : 111 Question Id : 55213112485 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes**

Correct Marks : 2 Wrong Marks : 0

Red flower is dependent upon allele 'R' and white color upon its allele 'r'. Suppose that a sample of 900 plants showed 891 plants with red colored and 9 plants with white colored flowers then the allelic frequencies of R and r respectively are

Options :

55213149041. 0.891, 0.001

55213149042. 0.89, 0.01

55213149043. 0.9, 0.1

55213149044. 9, 1

**Question Number : 112 Question Id : 55213112486 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Which one will decide chiefly the occurrence of aggressive behaviour?

Options :

55213149045. During aggression testosterone is inactivated

55213149046. Contraction of zygomatic muscle

55213149047. Medial hypothalamus

55213149048. Primary motor cortex

Question Number : 113 Question Id : 55213112487 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

If cells isolated from an animal become senescent after a limited number of division in culture, how are the cell lines used in experimental cell biology able to proliferate indefinitely in culture ?

Options :

55213149049. They are continually given fresh supply of growth factor

55213149050. They have undergone mutations that abolish cell senescence

55213149051. They have undergone mutations that inactivate the genes involved in programmed cell death

55213149052. They have become differentiated

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 : 114 Question Id : 55213112488 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Identify the correct statements with reference to cyanide resistant respiration

- i. Alternate oxidase (AOX) enzyme is homodimer
- ii. AOX mediates the transfer of electrons from cytochrome 'c' reductase to molecular oxygen
- iii. Substantial amount of glucose energy is released as heat
- iv. SHAM is inhibitor of AOX activity

Options :

55213149053. i, iii and iv

55213149054. ii, iii and iv

55213149055. i, ii and iii

55213149056. i, ii and iv

Question Number : 115 Question Id : 55213112489 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Match the following:

List-1

1. Remembering spatial information
2. Ammonia
3. Motor memories
4. Pair of conditioned stimulus and unconditioned stimulus

List-II

- a. Hippocampus
- b. Cerebellum
- c. Classical conditioning
- d. Limbic system

The correct match is:

Options :

55213149057. 1-a, 2-d, 3-b 4-c

55213149058. 1-a, 2-c, 3-d, 4-b

55213149059. 1-b, 2-c, 3-d, 4-a

55213149060. 1-b, 2-d, 3-a, 4-c

Question Number : 116 Question Id : 55213112490 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

If a test cross progeny of $p^+p b^+b \times ppbb$ produces, 10 $pp b^+b$, 10 $p^+p bb$, 40 $pp bb$ and 40 $p^+p b^+b$, then, the genes in the $p^+p b^+b$ parent are in coupling stage because

Options :

55213149061. Linked genes on a chromosome do not affect the results of test cross

55213149062. Non-linked genes on a chromosome affect the results of test cross

55213149063. Each chromosome contains one wild type and one mutant allele

55213149064. Wild types are found on one chromosome and mutants on another chromosome

**Question Number : 117 Question Id : 55213112491 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. J. Hutchinson (1973)
2. A. L. Takhtajan (1980)
3. A. Cronquist (1981)
4. V. H. Heywood (1985)

List-II

- a. An Integrated System of Classification of Angiosperms
- b. Flowering Plants of the World
- c. The Families of Flowering Plants
- d. Outline classification of Flowering Plants (Magnoliophyta)

The correct match is:

Options :

55213149065. 1-d, 2-c, 3-a, 4-b

55213149066. 1-d, 2-c, 3-b, 4-a

55213149067. 1-c, 2-d, 3-a, 4-b

55213149068. 1-c, 2-d, 3-b, 4-a

**Question Number : 118 Question Id : 55213112492 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Organisms that generally exhibit r-selected traits

- i. Insects
- ii. Cephalopods
- iii. Proboscids
- iv. Cetaceans

Options :

55213149069. i and ii are correct

55213149070. ii and iii are correct

55213149071. iii and iv are correct

55213149072. i and iv are correct

Question Number : 119 Question Id : 55213112493 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Propolis
2. Pearl
3. Musky Scent
4. Lithographic inks

List-II

- a. *Lucifera lacca*
- b. *Apis mellifera*
- c. *Civettictis civetta*
- d. *Pinctada vulgaris*

The correct match is:

Options :

55213149073. 1-d, 2-b, 3-a, 4-c

55213149074.

1-d, 2-a, 3-c, 4-b

55213149075. 1-c, 2-d, 3-b, 4-a

55213149076. 1-b, 2-d, 3-c, 4-a

**Question Number : 120 Question Id : 55213112494 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

A fermentation industry produces ethanol as its main product using glucose as feed stock material and *Saccharomyces cerevisiae* as its production strain. In a batch fermentation, 100 kg glucose is completely utilized and 40 kg ethanol is produced. What is the fermentation efficiency percentage of production strain?

Options :

55213149077. 51

55213149078. 40

55213149079. 78

55213149080. 98

**Question Number : 121 Question Id : 55213112495 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Bacterial asexual reproduction is different in different organisms. The following are some bacteria and types of reproduction.

List-I (Types of reproduction)	List-II (Organism)
1. Fragmentation	a. <i>Escherichia coli</i>
2. Budding	b. <i>Nocardia</i> sp.
3. Sporulation	c. <i>Rhodospseudomonas acidophila</i>
4. Transverse binary fission	d. <i>Streptomyces</i> sp.

The correct match is:

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

Options :

55213149081. 1-c, 2-b, 3-d, 4-a

55213149082. 1-b, 2-a, 3-d, 4-c

55213149083. 1-d, 2-a, 3-b, 4-c

55213149084. 1-d, 2-b, 3-a, 4-c

**Question Number : 122 Question Id : 55213112496 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

The diploid number of chromosomes in onion is 16 the maximum possible numbers of different primary trisomics and different double trisomics are, respectively

Options :

55213149085. 8, 8

55213149086. 8, 28

55213149087. 16, 24

55213149088. 16, 32

Question Number : 123 Question Id : 55213112497 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The F₂ progeny resulting from a cross of AB/AB X ab/ab parental genotypes produces 16 percent double recessives. The map distance between 'a' and 'b' is.

Options :

55213149089. 4 map Units

55213149090. 8 map Units

55213149091. 20 map Units

55213149092. 40 map Units

Question Number : 124 Question Id : 55213112498 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Regional heterothermy is seen in the following insects

- i. Honey bees
- ii. Termites
- iii. Bumble bees
- iv. Moths

The correct combination is

Options :

55213149093. i and ii

55213149094. ii and iii

55213149095. iii and iv

55213149096. i and iv

Question Number : 125 Question Id : 55213112499 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

When the author collects a number of specimens in a locality bearing the same field number, one is designated as holotype and the others are termed as:

Options :

55213149097. Paratype

55213149098. Syntype

55213149099. Isotype

**Question Number : 126 Question Id : 55213112500 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following:

List-I

1. Urkaryote
2. Eugenote
3. Progenote
4. Stromatolites

List-II

- a. The single ancestral life form devoid of a genome from which all cells are presumed to have evolved
- b. The hypothetical earliest eukaryote devoid of mitochondria and chloroplasts
- c. Mat-like layers of Cyanobacteria and sediments thought to form some of the oldest fossils
- d. A hypothetical primitive type of cell containing an RNA genome

The correct match is:

Options :

55213149101. 1-b, 2-a, 3-d, 4-c

55213149102. 1-c, 2-b, 3-a, 4-d

55213149103. 1-b, 2-d, 3-c, 4-a

55213149104. 1-c, 2-a, 3-d, 4-b

**Question Number : 127 Question Id : 55213112501 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No**

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

High density polyethylene (HDPE; code 2) and polyethylene terephthalate (PETE; code1) are the best examples for

Options :

55213149105. Recyclable plastics

55213149106. Highly resistant plastics

55213149107. Plastics whose half life period is less

55213149108. Toxic/dangerous plastics

Question Number : 128 Question Id : 55213112502 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Match the following

List-I
(Animal group)

1. Nemertinea
2. Ectoprocta
3. Porifera
4. Arthropoda

List-II
(Name of the larva)

- a. Cyphonants
- b. Pilidium
- c. Cypris
- d. Parenchymula

The correct match is:

Options :

55213149109. 1-c, 2-a, 3-d, 4-b

55213149110. 1-b, 2-a, 3-d, 4-c

55213149111. 1-c, 2-d, 3-b, 4-a

55213149112. 1-b, 2-c, 3-d, 4-a

**Question Number : 129 Question Id : 55213112503 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Consider the following statements in relation to RNA interference (RNAi).

- i. Double stranded RNA rather than single stranded antisense RNA is the interfering agent.
- ii. RNAi is highly specific
- iii. Only a few double stranded RNA molecules per cell are required for effective interference.
- iv. The interfering activity is effective only in the cells and tissues adjacent to the site of introduction or expression.

Choose from the above the correct combination of features of RNA interference

Options :

55213149113. i, ii and iii

55213149114. i, ii and iv

55213149115. i, iii and iv

55213149116. ii, iii and iv

**Question Number : 130 Question Id : 55213112504 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum**

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

In the stigmatic papillae of dry stigma, the following layers are present. Arrange them in a sequence from outer to inner.

- i. Pectocellulosic wall
- ii. Pellicle
- iii. Plasmalemma
- iv. Cuticle

The correct combination is:

Options :

55213149117. ii, iv, i and iii

55213149118. ii, iii , iv and i

55213149119. iv, i, ii and iii

55213149120. iv, iii, ii and i

Question Number : 131 Question Id : 55213112505 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Protein signal
2. Photoreceptor
3. Nonpeptide neurotransmitter
4. Steroid signal

List-II

- a. Rhodopsin
- b. Epidermal growth factor
- c. Dopamine
- d. Thyroxine

The correct match is:

Options :

55213149121. 1-b, 2-a, 3-c, 4-d

55213149122. 1-c, 2-b, 3-a, 4-d

55213149123. 1-d, 2-c, 3-b, 4-a

55213149124. 1-c, 2-a, 3-d, 4-b

**Question Number : 132 Question Id : 55213112506 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Consider the following with reference to protein molecules

- i. Peptide bonds
- ii. α -helix
- iii. β -pleated sheet
- iv. Turns of polypeptide chains

Identify the combination of common forms of secondary structure from the above:

Options :

55213149125. i, ii and iii

55213149126. i, ii and iv

55213149127. i, iii and iv

55213149128. ii, iii and iv

Question Number : 133 Question Id : 55213112507 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

The proper sequence of appearance of the following during meiotic cell division is

- i. Meiotic spindle
- ii. Recombination nodule
- iii. Synoptonemal complex
- iv. Chiasmata

Options :

55213149129. iii, ii, iv and i

55213149130. ii, iii, i and iv

55213149131. iv, iii, ii and i

55213149132. ii, iv, i and iii

Question Number : 134 Question Id : 55213112508 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Identify the correct sequence of steps involved in the G-protein coupled receptor signalling

Options :

55213149133. GTP hydrolysis, α -exchanges GDP with GTP, Trimetric G-protein, Receptor occupied by agonist, Binding α -protein with target protein

55213149134. α -exchanges GDP with GTP, GTP hydrolysis, Trimetric G-protein, Receptor occupied by agonist, Binding α -protein with target protein

55213149135. Trimetric G-protein, Receptor occupied by agonist, α -exchanges GDP with GTP, Binding α -protein with target protein, GTP hydrolysis

55213149136. Binding α -protein with target protein, GTP hydrolysis, α -exchanges GDP with GTP, Trimetric G-protein, Receptor occupied by agonist

Question Number : 135 Question Id : 55213112509 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Transcription initiation in prokaryotes involves the following steps

- i. Polymerizing the first few nucleotides
- ii. Promoter clearance
- iii. Formation of open promoter complex
- iv. Formation of closed promoter complex

The correct sequence of the above steps is

Options :

55213149137. i, ii, iii and iv

55213149138. ii, iv, i and iii

55213149139. iv, iii, i and ii

55213149140. iii, i, iv and ii

Question Number : 136 Question Id : 55213112510 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The transcription factors necessary for eye lens induction

- i. SOX 9
- ii. SOX 2
- iii. PAX 6
- iv. DAX 1

The correct combination is

Options :

55213149141. ii and iii

55213149142. i and ii

55213149143. iii and iv

55213149144. i and iv

Question Number : 137 Question Id : 55213112511 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

The correct chronological sequence of theories that were propounded in developmental biology

- I. Theory of epigenesis
- II. Theory of germplasm
- III. Theory of preformation
- IV. Biogenetic law

The correct sequence is:

Options :

55213149145. III→I→II→IV

55213149146. II→III→IV→I

55213149147. IV→II→I→III

55213149148. I→III→II→IV

**Question Number : 138 Question Id : 55213112512 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Identify the correct combination of statements

- i. Mango is a non-climacteric fruit
- ii. Lettuce seeds are positively photoblastic
- iii. Wheat is an obligate short day plant
- iv. *Gunnera* fixes atmospheric nitrogen in symbiotic association with *Nostoc*.

Options :

55213149149. ii and iv

55213149150. i and iii

55213149151. iii and iv

55213149152. i and ii

**Question Number : 139 Question Id : 55213112513 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Natural habitats becoming fragmented as a result of human activity. This is considered as islands by conservation biologists.

Reason (R): MacArthur and Wilson theory explains about island formation.

Options :

55213149153. Both (A) and (R) are true and (R) is the correct explanation of (A)

55213149154. Both (A) and (R) are true, but (R) is not the correct explanation of (A).

55213149155. A is true but (R) is false

55213149156. A is false, but (R) is true

Question Number : 140 Question Id : 55213112514 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

In the internal ear, perilymph is present in:

- i. Scala media
- ii. Scala vestibule
- iii. Scala tympani
- iv. Cochlear duct

The correct combination is:

Options :

55213149157. i and ii

55213149158. ii and iii

55213149159. iii and iv

55213149160. i and iv

Question Number : 141 Question Id : 55213112515 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Founder effect
2. Allopatry
3. Sympatry
4. Genetic drift

List-II

- a. Speciation due to physical barriers
- b. Speciation due to biological barriers
- c. Change in the gene pool of a small population due to chance
- d. Breaking off of a small group of individuals from a larger population but keeping the allelic frequencies nearly the same as in the original population

The correct match is:

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

Options :

55213149161. 1-d, 2-a, 3-c, 4-b

55213149162. 1-b, 2-c, 3-d, 4-a

55213149163. 1-c, 2-b, 3-a, 4-d

55213149164. 1-b, 2-d, 3-c, 4-a

**Question Number : 142 Question Id : 55213112516 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Which two of the following vaccines are products of genetic engineering?

- i. Diphtheria vaccine
- ii. Hepatitis B vaccine
- iii. Foot and mouth disease vaccine
- iv. Influenza vaccine
- v. Tetanus vaccine

The correct combination is:

Options :

55213149165. i and v

55213149166. i and iv

55213149167. ii and iii

55213149168. iv and v

**Question Number : 143 Question Id : 55213112517 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Identify the correct pair of statements

- i. The antibody produced by a hybridoma cell is IgM, because heavy –chain switching does not occur
- ii. The spleen cell component does not provide the ability to form antibody
- iii. The myeloma cell component provides the ability to grow indefinitely
- iv. The antibody produced by a hybridoma cell is homogenous *i.e.* it is directed against a single epitope

Options :

i and ii

55213149169.

ii and iii

55213149170.

iii and iv

55213149171.

i and iv

55213149172.

Question Number : 144 Question Id : 55213112518 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum

Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No

Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

When interspecific competition is intense with reference to habitat distribution of the birds, what will happen to a species?

Options :

Birds's distribution is multidirectional

55213149173.

Competition eliminates the species

55213149174.

The species spreads to next habitats

55213149175.

55213149176. **Animals restricted to narrow habitat range and optimum condition**

**Question Number : 145 Question Id : 55213112519 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : 0 Minimum
Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No
Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes
Correct Marks : 2 Wrong Marks : 0**

Match the following

List-II (Proposed by)	List-I (Theories of sex determination)
1. Riddle	a. Theory of alternate dominance
2. Castle	b. Theory of metabolic difference
3. Correns	c. Quantitative theory
4. Goldschmidt	d. Theory of heterozygosity

The correct match is:

Options :

55213149177. **1-b, 2-a, 3-d, 4-c**

55213149178. **1-b, 2-d, 3-a, 4-c**

55213149179. **1-c, 2-a, 3-d, 4-b**

55213149180. **1-c, 2-d, 3-b, 4-a**

Sub-Section Number : 2

Sub-Section Id : 5521311102

Question Shuffling Allowed : No

**Question Id : 55213112520 Question Type : COMPREHENSION Sub Question Shuffling Allowed
: No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator :**

**None Response Time : N.A Think Time : 0 Minimum Instruction Time : 0 Allowed Progression :
Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In
Seconds) : 0 Allow Volume Control : Yes**

Question Numbers : (146 to 150)

Question Label : Comprehension

Read the passage and answer the question given below (96-100)

In nature, gene transfers are rather imprecise, and their range, in terms of species involved, is remarkably limited. The above problems are circumvented by the recombinant DNA technology. A recombinant DNA molecule is produced by joining together two or more DNA segments usually originating from different organisms. More specifically, a recombinant DNA molecule is a vector into which the desired DNA fragment has been inserted to enable its cloning in an appropriate host. This is achieved by using specific enzymes for cutting the DNA (restriction enzymes) into suitable fragments and then for joining together the appropriate fragments (ligase). In this manner, a gene may be produced, which contains the coding region from one organism joined to regulatory sequences from another organism; such a gene is called chimeric gene. Clearly, the capability to produce recombinant DNA molecules has given man the power and opportunity to create novel gene functions to suit specific needs.

Recombinant DNA molecules are produced with one of the following three objectives: (1) to obtain a large number of copies of specific DNA fragments, (2) to recover large quantities of the protein produced by the concerned gene, or (3) to integrate the gene in question into the chromosome of a target organism where it expresses itself. Even for the latter two objectives, it is essential to first obtain a large number of copies of the concerned genes. To achieve this, the DNA segments are integrated into an autonomously replicating DNA molecule called vector; most commonly used vectors are either bacterial plasmids or DNA viruses. All these steps concerned with piecing together DNA segments of diverse origin and placing them into a suitable vector together constitute recombinant DNA technology.

The DNA segment to be cloned is called DNA insert. Recombinant DNAs are introduced into a suitable organism, usually a bacterium; this organism is called host, while the process is called transformation. The transformed host cells are selected and cloned. The recombinant DNA present in such clones would replicate either in synchrony with or independent of the host cell; the gene present in the vector may or may not express itself, *i.e.*, direct the synthesis of concerned polypeptide. The step concerned with transformation of a suitable host with recombinant DNA, and cloning of the transformed cells is called DNA cloning or gene cloning. However, often DNA or gene cloning is taken to include both the development of recombinant DNAs as well as their cloning in suitable host. Similarly, often the term recombinant DNA technology is used as a synonym for DNA or gene cloning used in the broader sense. A rather popular term for these activities is genetic engineering.

A clone consists of asexual progeny of a single individual or cell, while the process/technique of producing a clone is called cloning. As a result, all the individuals of a clone have the same genotype, which is also identical with that of the individual from which the clone was derived. Therefore, the genomes present in members of a single clone are also identical; this applies to the recombinant DNA as well. Therefore, gene or DNA cloning produces large numbers of copies of the gene/DNA being cloned.

Sub questions

Question Number : 146 Question Id : 55213112521 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Which of the following is a pre-requisite for realising the objectives of genetic engineering?

Options :

55213149181. Integration of the gene in question into the chromosome of a target organism.
55213149182. Recovery of large quantities of the protein produced by the concerned gene.
55213149183. Obtaining a large number of copies of specific DNA fragments.
55213149184. Production of asexual progeny containing chimeric gene.

Question Number : 147 Question Id : 55213112522 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : Yes

Correct Marks : 2 Wrong Marks : 0

Assertion (A): Natural gene transfers are imprecise and their range in terms of species involved is remarkably limited.

Reason (R): Gene transfers through genetic engineering are precise and are not limited by species involved.

Options :

55213149185. Both (A) and (R) are true and (R) is the correct explanation of (A)
55213149186. Both (A) and (R) are true but (R) is not the correct explanation of (A).

55213149187. (A) is true but (R) is false.

55213149188. (A) is false, but (R) is true.

Question Number : 148 Question Id : 55213112523 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

Consider the following statements about vectors used for genetic engineering:

- i. A vector is a recombinant DNA molecule.
- ii. A vector is an autonomously replicating DNA molecule.
- iii. Commonly used vectors include bacteria.
- iv. DNA viruses are one of the commonly used vectors.

Choose the correct combination of statements about vectors.

Options :

55213149189. i, ii and iii

55213149190. i, ii and iv

55213149191. i, iii and iv

55213149192. ii, iii and iv

Question Number : 149 Question Id : 55213112524 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

Match the following:

List-I

1. Recombinant DNA molecule
2. Individuals having the same genotype
3. DNA segment to be cloned
4. Changing genetic constitution of an organism by introducing chimeric gene.

List-II

- a. Clone
- b. Insert
- c. Transformation
- d. Vector

The correct match is:

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

Options :

55213149193. 1-c, 2-a, 3-d, 4-b

55213149194. 1-d, 2-b, 3-c, 4-a

55213149195. 1-c, 2-b, 3-a, 4-d

55213149196. 1-b, 2-c, 3-d, 4-a

Question Number : 150 Question Id : 55213112525 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

Yes

Correct Marks : 2 Wrong Marks : 0

Consider the following events/steps in genetic engineering

- i. A recombinant DNA molecule is used as a vector
- ii. Cutting and joining of DNA segments
- iii. Obtaining large number of copies of specific DNA fragments
- iv. To recover large quantities of the protein produced by the concerned gene in the new host
- v. To integrate the gene in question into the chromosome of a target organism

The correct sequence of the above steps is

Options :

55213149197. **ii, i, iii, iv and v**

55213149198. **iii, ii, i, v and iv**

55213149199. **i, v, ii, iii and iv**

55213149200. **iii, i, v, ii and iv**