

# TS SET

## Notations :

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

<b>Subject Name :</b>	LIFE SCIENCES
<b>Duration :</b>	180
<b>Total Marks :</b>	300
<b>Display Marks:</b>	Yes
<b>Calculator :</b>	None
<b>Magnifying Glass Required? :</b>	No
<b>Ruler Required? :</b>	No
<b>Eraser Required? :</b>	No
<b>Scratch Pad Required? :</b>	No
<b>Rough Sketch/Notepad Required? :</b>	No
<b>Protractor Required? :</b>	No
<b>Show Watermark on Console? :</b>	Yes
<b>Highlighter :</b>	No
<b>Auto Save on Console?</b>	Yes
<b>Change Font Color :</b>	No
<b>Change Background Color :</b>	No
<b>Change Theme :</b>	No
<b>Help Button :</b>	No
<b>Show Reports :</b>	No
<b>Show Progress Bar :</b>	No

## Group 1

<b>Group Number :</b>	1
<b>Group Id :</b>	51714463
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	180
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	300
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## Paper I

Section Id :	517144125
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 :	517144385
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 1 Question Id : 5171449437 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 : No Correct Marks : 2 Wrong Marks : 0

What does "learning style" refer to in education?

విద్యకు సంబంధించి అభ్యాసశైలి అనగానేమి

Options :

The innate ability to acquire knowledge.

1. ✘ జ్ఞానార్జనకు సహజ సామర్థ్యము

The cognitive capacity for critical thinking.

2. ✘ విమర్శనా ఆలోచనకు అభిజ్ఞా సామర్థ్యము

The personal approach to learning and processing information.

3. ✔ అభ్యాసమునకు, సమాచారము ప్రొసేస్ చేయుటకు వ్యక్తిగత దృక్పథము

The teaching methods used by educators.

4. ✘ బోధించే వారు వాడు బోధనా పద్ధతులు

Question Number : 2 Question Id : 5171449438 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 : No Correct Marks : 2 Wrong Marks : 0

How can a positive learning environment enhance the learning process?

ధనాత్మక అభ్యాస వాతావరణము, అభ్యాస ప్రక్రియను ఎట్లు అధికం చేయును

**Options :**

1. ✘ By discouraging collaboration among students.  
విద్యార్థుల మధ్య సహకారాన్ని నిరుత్సాహపరచుట
2. ✘ By providing limited access to resources.  
వనరులకు పరిమిత ప్రవేశమును అందించుట
3. ✔ By fostering motivation, engagement, and creativity.  
ప్రేరణ, నిమగ్నత, సృజనాత్మకత పెంపొందించుట
4. ✘ By imposing strict rules and regulations.  
కఠినమైన నియమ నిబంధనలను విధించుట

**Question Number : 3 Question Id : 5171449439 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 : No Correct Marks : 2 Wrong Marks : 0**

What is a key principle of learner-centered methods?  
అభ్యసించువాని కేంద్రీకృత పద్ధతుల కీలక సూత్రమేది

**Options :**

1. ✘ Passive role of students in learning.  
అభ్యాసములో విద్యార్థుల నిష్క్రియాత్మక పాత్ర
2. ✘ Teacher's responsibility to memorize all content.  
మొత్తం పాఠ్యాంశము గుర్తించుకొనుటలో బోధకుని బాధ్యత
3. ✔ Focus on adapting to individual student needs.  
వ్యక్తిగత విద్యార్థి అవసరాలనుసరించి దృష్టి
4. ✘ Strict adherence to a standardized curriculum.  
ప్రామాణిక పాఠ్యాంశమునకు కఠినంగా కట్టుబడి ఉండుట

**Question Number : 4 Question Id : 5171449440 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 : No**

Correct Marks : 2 Wrong Marks : 0

What does SWAYAM stand for?

స్వయం అంటే ?

Options :

1. ✘ System for Web-based Assessment and Youth-oriented Monitoring
2. ✘ Study Webs of Active Youth for Advanced Learning Management
3. ✔ Study Webs of Active-Learning for Young Aspiring Minds
4. ✘ Sustainable Web-based Academic Yearly Assessment and Management

Question Number : 5 Question Id : 5171449441 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 : No

Correct Marks : 2 Wrong Marks : 0

What is the primary purpose of a Learning Management System (LMS)?

యాజమాన్య పద్ధతి నేర్చుకొనుటలో ముఖ్య ఉద్దేశ్యమేమి ?

Options :

1. ✘ To manage financial transactions for educational institutions  
విద్యాసంస్థలకు ఆర్థిక వ్యవహారాలు నిర్వహించుట
2. ✘ To facilitate communication between students, parents and teachers  
విద్యార్థుల తల్లి తండ్రులు, ఉపాధ్యాయుల మధ్య వార్తలు సులభం చేయుట
3. ✔ To create and deliver online courses, manage content, and track student progress  
అన్‌లైన్ కోర్సులను, సృష్టించి నడుపుట, పాఠ్యాంశము నిర్వహించుట, విద్యార్థి పురోగతిని గుర్తించుట
4. ✘ To replace traditional textbooks with digital resources  
సాంప్రదాయక పాఠ్యపుస్తకములను డిజిటలు వనరులతో భర్తీ చేయుట

Question Number : 6 Question Id : 5171449442 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 : No

Correct Marks : 2 Wrong Marks : 0

Which type of research aims to explore new theories and ideas to generate hypotheses?

పరికల్పనలను ఉత్పత్తి చేయుటకు ఏ పరిశోధనా పద్ధతులు,కొత్త సిద్ధాంతములను ఆలోచనలను అన్వేషించుటకు సహాయపడును.

Options :

1. ✘ Descriptive research  
వర్ణనాత్మక పరిశోధన

2. ✔ Exploratory research  
అన్వేషణాత్మక పరిశోధన

3. ✘ Experimental research  
ప్రయోగత్మక పరిశోధన

4. ✘ Quantitative research  
పరిమాణాత్మక పరిశోధన

Question Number : 7 Question Id : 5171449443 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 : No

Correct Marks : 2 Wrong Marks : 0

Positivism in research emphasizes:

పరిశోధనలో ధనాత్మక దేనిని ఉద్ఘాటించును

Options :

1. ✘ Subjective interpretation and personal beliefs  
ఆత్మాశ్రయమైన వివరణ, వ్యక్తిగత నమ్మకాలు

2. ✘ The importance of intuition and gut feelings  
అంతర్దృష్టి, ఆంత్రముల స్పందనా ప్రాముఖ్యత

3. ✔ The use of rigorous scientific methods to uncover objective truths  
నిష్పక్షపాత నిజాలను వెలికి తీయుటలో కఠినమైన శాస్త్రీయ పద్ధతుల ఉపయోగము

The rejection of empirical evidence in favor of abstract theories

వైరుప్య సిద్ధాంతం అనుకూలంగా, అనుభావిక సాక్ష్యాన్ని నిరాకరించుట

4. ✘

Question Number : 8 Question Id : 5171449444 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 : No Correct Marks : 2 Wrong Marks : 0

What is the first step in the research process?

పరిశోధనా ప్రక్రియలో మొదటి అడుగు ఏది

Options :

Data analysis

దత్తాంశ విశ్లేషణ

1. ✘

Writing the research report

పరిశోధన రిపోర్టు వ్రాయుట

2. ✘

Formulating research questions or hypotheses

పరిశోధన ప్రశ్నలను, పరికల్పనలను సూత్రీకరించుట

3. ✔

Conducting a literature review

గ్రంథ సమీక్ష చేయుట

4. ✘

Question Number : 9 Question Id : 5171449445 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 : No Correct Marks : 2 Wrong Marks : 0

The appendices section of a thesis includes:

ఒక పరిశోధన యొక్క అనుగ్రంథాల విభాగంలో యిది ఉండును

Options :

The acknowledgments and dedication pages

గౌరవించు, అంకితంచేయు పేజీలు

1. ✘

A list of all the tables and figures in the thesis

సిద్ధాంత వ్యాసములలో పట్టికల, అంకెల జాబితా

2. ✘

Extra information, such as data tables, survey forms, or supplementary materials

3. ✓ దత్తాంశ పట్టీలు, సర్వే ఫారాలు, అదనపు అంశాలు వంటి అధిక సమాచారము

A detailed description of the research methodology

4. ✘ పరిశోధన పద్ధతి విస్తృత వివరణ

Question Number : 10 Question Id : 5171449446 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 : No

Correct Marks : 2 Wrong Marks : 0

How does ICT impact research dissemination?

ICT పరిశోధనా వ్యాప్తి పై ఎటువంటి ప్రభావం చూపుతుంది

Options :

It limits research dissemination to local audiences only

1. ✘ పరిశోధనా వ్యాప్తిని స్థానిక శ్రోతలకే పరిమితం చేస్తుంది

It enhances research dissemination through online platforms, social media, and open-access journals

2. ✓ ఆన్లైన్ వేదికలు, సామాజిక మాధ్యమము, ప్రవేశము తెరచి ఉన్న పత్రికలు ద్వారా పరిశోధనా వ్యాప్తి పెరుగుతుంది

It replaces the need for written research reports

3. ✘ పరిశోధన వ్రాత రిపోర్టుల అవసరాన్ని భర్తి చేస్తుంది

It discourages researchers from sharing their findings with others

4. ✘ పరిశోధకులు తాము కనుగొన్నది ఇతరులకు అందించటంలో నిరుత్సాహ పరుస్తుంది

Sub-Section Number :

2

Sub-Section Id :

517144386

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 5171449447 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix 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 : No

Question Numbers : (11 to 15)

Question Label : Comprehension

Note: Answer the questions 11-15 by reading the following passage:

గమనిక: క్రింద ఇవ్వబడిన సమాచారం ఆధారంగా Q. 11 నుండి Q. 15 ప్రశ్నలకు సమాధానాలు వ్రాయండి.

The investigation of the geology of all the places visited was far more important, as reasoning here comes into play. On first examining a new district nothing can appear more hopeless than the chaos of rocks; but by recording the stratification and nature of the rocks and fossils at many points, always reasoning and predicting what will be found elsewhere, light soon begins to dawn on the district, and the structure of the whole becomes more or less intelligible. I had brought with me the first volume of Lyell's 'Principles of Geology,' which I studied attentively; and the book was of the highest service to me in many ways. The very first place which I examined, namely St. Jago in the Cape de Verde islands, showed me clearly the wonderful superiority of Lyell's manner of treating geology, compared with that of any other author, whose works I had with me or ever afterwards read.

సందర్శించిన అన్ని ప్రదేశాల భుగర్భ శాస్త్రం యొక్క పరిశోధన చాలా ముఖ్యమైనది, ఎందుకంటే ఇక్కడ తార్కికం అమలులోకి వస్తుంది. కొత్త ప్రాంతం మొదట పరిశీలించినప్పుడు రాళ్ల గందరగోళం తప్ప ఏమికనిపించదు. కానీ రాళ్ళు మరియు శిలాజాల యొక్క అనేక పాయింట్ల స్తరీకరణ మరియు స్వభావన్ని రికార్డ్ చేయడం ద్వారా, ఎల్లప్పుడూ తర్కించడం మరియు మరెక్కడ కనుగొనబడుతుందో అంచనా వేయడం ద్వారా, ఆ కొత్త ప్రాంతంపై పూర్తి వెలుగు ప్రసరిస్తుంది.

నేను శ్రద్ధగా అధ్యయనం చేసిన లియెల్ యొక్క 'ప్రిన్సిపుల్స్ ఆఫ్ జియాలజీ' యొక్క మొదటి సంపుటం ఈ పుస్తకం నాకు అనేక విధాలుగా గొప్ప సహాయం చేసింది. నేను పరిశీలించిన మొదటి ప్రదేశం, కేప్ డి వెర్డే దీవులలోని సెయింట్ జాగో. నా దగ్గర ఉన్న లేదా ఆ తర్వాత చదివిన ఇతర రచయితలతో పోలిస్తే, లియెల్ యొక్క అద్భుతమైన భుగర్భ శాస్త్రం నాకు స్పష్టంగా అర్థం అయ్యింది.

**Sub questions**

**Question Number : 11 Question Id : 5171449448 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

The author is interested in the study of \_\_\_\_\_

రచయిత \_\_\_\_\_ అధ్యయనంపై ఆసక్తి కలిగి ఉన్నారు.

**Options :**



## Environment

పర్యావరణం

1. ✘

rocks and fossils

శిలలు మరియు శిలాజాలు

2. ✔

nature

ప్రకృతి

3. ✘

minerals

ఖనిజాలు

4. ✘

Question Number : 12 Question Id : 5171449449 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 : No

Correct Marks : 2 Wrong Marks : 0

On his first investigation, he finds the rocks very \_\_\_\_\_

రచయిత కొత్త ప్రాంతం సందర్శించినప్పుడు \_\_\_\_\_ రాళ్ళ గుట్టలని చూస్తారు.

Options :

disorderly

అస్పృహ్యస్తంగా ఉన్న

1. ✔

disturbing

కలవరపెట్టే

2. ✘

welcoming

స్వాగతించని

3. ✘

inhospitable

ఆదరించని

4. ✘

Question Number : 13 Question Id : 5171449450 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 : No

Correct Marks : 2 Wrong Marks : 0

The phrase- 'light soon begins to dawn' means \_\_\_\_\_

'త్వరలో వెలుగు ప్రసరిస్తుంది' అంటే \_\_\_\_\_

Options :

1. ✘ day-breaks  
తెల్లవారుతుంది
2. ✘ Sun shines brightly  
సూర్యుడు ప్రకాశవంతంగా ప్రకాశిస్తాడు
3. ✔ clarity emerges about the situation  
పరిస్థితి పై స్పష్టత వస్తుంది
4. ✘ daylight begins  
పగటి వెలుగు ప్రారంభమవుతుంది

Question Number : 14 Question Id : 5171449451 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 : No

Correct Marks : 2 Wrong Marks : 0

The author finds the book, 'Principles of Geology' as most \_\_\_\_\_  
రచయిత భౌగోళిక శాస్త్ర సూత్రాలు పుస్తకాన్ని అత్యంత \_\_\_\_\_ దిగా పరిగణిస్తారు.

Options :

1. ✔ exemplary  
ఆదర్శప్రాయమైన
2. ✘ imperfect  
అసంపూర్ణమైన
3. ✘ mediocre  
సాధారణమైన
4. ✘ inferior  
నాసిరకమైన

Question Number : 15 Question Id : 5171449452 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 : No

Correct Marks : 2 Wrong Marks : 0

Mr. Lyell is an/ a \_\_\_\_\_  
మిస్టర్ లియెల్ ఒక \_\_\_\_\_

Options :

1. ✘ Geophysicist  
జియోఫిజిసిస్ట్
2. ✘ Author  
రచయిత
3. ✔ Geologist and author  
భూవిజ్ఞాన శాస్త్రవేత్త మరియు రచయిత
4. ✘ explorer  
అన్వేషకుడు

Sub-Section Number : 3  
Sub-Section Id : 517144387  
Question Shuffling Allowed : Yes  
Is Section Default? : null

Question Number : 16 Question Id : 5171449453 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 : No

Correct Marks : 2 Wrong Marks : 0

A \_\_\_\_\_ communication prevents misunderstandings and helps in establishing a constructive relationship.

\_\_\_\_\_ కమ్యూనికేషన్ అపార్థాలను నివారిస్తుంది మరియు నిర్మాణాత్మక సంబంధాన్ని ఏర్పరచడంలో సహాయపడుతుంది

Options :

1. ✔ positive  
సానుకుల
2. ✘ passive  
నిష్క్రియ

reflective

లోతైన ఆలోచనతో కూడిన

3. ✘

retentive

ధారణ శక్తి గల

4. ✘

Question Number : 17 Question Id : 5171449454 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 : No

Correct Marks : 2 Wrong Marks : 0

Being \_\_\_\_\_ in communication helps in establishing credibility as a professional

ప్రోఫెషనల్ కమ్యూనికేషన్లో \_\_\_\_\_ గా ఉండటం వల్ల విశ్వసనీయతను స్థాపించడంలో సహాయపడుతుంది

Options :

reserved

మితభాషి

1. ✘

confident

నమ్మకం

2. ✔

soft spoken

మృదుభాషి

3. ✘

indifferent

ఉదాసీనత

4. ✘

Question Number : 18 Question Id : 5171449455 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 : No

Correct Marks : 2 Wrong Marks : 0

Classroom communication is effective only if the teacher is \_\_\_\_\_

ఉపాధ్యాయుడు \_\_\_\_\_ తరగతి గది కమ్యూనికేషన్ ప్రభవవంతంగా ఉంటుంది

Options :

emphatic

నొక్కివక్కాణిస్తే

1. ✘

empathetic

2. ✓ సానుభూతి గల వారు అయితే

gentle

3. ✘ సౌమ్యుడు అయితే

loud

4. ✘ బిగ్గరగా చెబితే

Question Number : 19 Question Id : 5171449456 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 : No

Correct Marks : 2 Wrong Marks : 0

Usage of \_\_\_\_\_ can be avoided in inter cultural communication to steer clear of misunderstanding and ambiguity

అంతర సంస్కృతి సంభాషణలో, దీనిని వాడకపోవట వలన అపార్థం మరియు అస్పష్టతని నివారించవచ్చును.

Options :

translation

1. ✘ అనువాదం

non -verbal communication

2. ✘ అశాబ్దిక సంభాషణ

accent

3. ✘ యాస

jargon

4. ✓ పరిభాష

Question Number : 20 Question Id : 5171449457 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 : No

Correct Marks : 2 Wrong Marks : 0

One of the important forms of traditional media is \_\_\_\_\_

సాంప్రదాయ మాధ్యమం యొక్క ముఖ్యమైన రూపాలలో \_\_\_\_\_ ఒకటి

Options :

1. ✓ Theatre and drama  
రంగస్థలం మరియు నాటకం

2. ✘ Newspapers  
వార్తాపత్రికలు

3. ✘ Novels  
నవలలు

4. ✘ journals  
పత్రికలు

Question Number : 21 Question Id : 5171449458 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 : No Correct Marks : 2 Wrong Marks : 0

6, 8, 19, 61, 249, \_\_\_\_

Options :

1. ✘ 1249

2. ✘ 1261

3. ✓ 1251

4. ✘ 1256

Question Number : 22 Question Id : 5171449459 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 : No Correct Marks : 2 Wrong Marks : 0

ABFL, BDLX, CFRJ, DHXV, \_\_\_\_

Options :

1. ✘ EICH

2. ✘ EJDI

3. ✔ EJDH

4. ✘ FICH

**Question Number : 23 Question Id : 5171449460 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

In a certain code language if the word SOLUTIONS is coded as SNOITULOS,  
then the word ANSWER coded in that language is \_\_\_\_\_

ఒక నిర్దిష్ట కోడ్ భాషలో SOLUTIONS అనే పదం SNOITULOSగా కోడ్ చేయబడితే, ఆ భాషలో  
ANSWER కోడ్ చేయబడిన పదం \_\_\_\_\_

**Options :**

1. ✘ RENSWA

2. ✘ RENSAW

3. ✘ REASWN

4. ✔ REWSNA

**Question Number : 24 Question Id : 5171449461 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

The cost of 3 pens and 21 pencils equal to the cost of 5 pens and 7 pencils. The  
ratio of the cost of a pencil to that of a pen is \_\_\_\_\_

3 పెన్నులు మరియు 21 పెన్సిల్స్ ధర 5 పెన్నులు మరియు 7 పెన్సిల్స్ ధరకు సమానం.  
పెన్సిల్ ధర మరియు పెన్ను ధర నిష్పత్తి \_\_\_\_\_

**Options :**

1. ✘ 7:3

2. ✘ 5:3

3. ✘ 3:2

4. ✔ 1:7

**Question Number : 25 Question Id : 5171449462 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

An A.C. is purchased for Rs. 55,000 and sold it for Rs. 44,000. The loss percentage is \_\_

ఒక ఏసీని రూ. 55,000 కొని మరియు దానిని రూ. 44,000 అమ్మితే దాని నష్టం శాతం \_\_

**Options :**

1. ✘ 15%

2. ✘ 25%

3. ✔ 20%

4. ✘ 33%

**Question Number : 26 Question Id : 5171449463 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 : No**

**Correct Marks : 2 Wrong Marks : 0**



Statements:

Some gold are silver.

Some silver are bronze.

No bronze is iron.

ప్రకటనలు:

కొంత బంగారం వెండి.

కొన్ని రజతాలు కాంస్యం.

కంచు అంటే ఇనుము కాదు.

Conclusion:

I. Some bronze are gold.

II. Some iron being bronze is possibility.

III. Some iron being gold as well as silver is a possibility.

తీర్మానాలు:

I కొన్ని కాంస్యాలు బంగారం.

II కొంత ఇనుము కంచుగా ఉండే అవకాశం ఉంది.

III కొంత ఇనుము బంగారంతో పాటు వెండి కూడా ఉండే అవకాశం ఉంది.

Options :

I and III follow

1. ✘ I మరియు III అనుసరించును

III follows

2. ✔ III అనుసరించును

II and III follow

3. ✘ II మరియు III అనుసరించును

II follows

4. ✘ II అనుసరించును

Question Number : 27 Question Id : 5171449464 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 : No Correct Marks : 2 Wrong Marks : 0

In a class of 80 students 30 students like tea, 35 students like milk and 25 students like coffee. It is also known that 15 students like both tea and milk, 17 students like both milk and coffee and 14 students like both tea and coffee, 9 students like tea, coffee as well as milk. The total number of students who like neither tea nor coffee nor milk?

80 మంది విద్యార్థులున్న క్లాసులో, 30 మంది విద్యార్థులు టీ, 35 మంది పాలు, 25 మంది కాఫీని ఇష్టపడతారు. 15 మంది విద్యార్థులు టీ, పాలు, 17 మంది విద్యార్థులు పాలు, కాఫీలు, 14 మంది విద్యార్థులు టీ, కాఫీలు, 9 మంది విద్యార్థులు టీ, కాఫీ, పాలు తాగుతున్నారు. టీ, కాఫీ, పాలు ఇష్టపడని విద్యార్థుల సంఖ్య ఎంత?

Options :

1. ✓ 27
2. ✗ 12
3. ✗ 10
4. ✗ 8

Question Number : 28 Question Id : 5171449465 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 : No

Correct Marks : 2 Wrong Marks : 0

How is my father's father's only daughter-in-law's brother related to me?

మా నాన్నగారి నాన్నగారి ఒక్కగానొక్క కోడలి తమ్ముడికి నాకు సంబంధం ఏమిటి?

Options :

1. ✗ Father
2. ✗ Paternal Uncle
3. ✓ Maternal Uncle
4. ✗ Cousin

Question Number : 29 Question Id : 5171449466 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 : No

Correct Marks : 2 Wrong Marks : 0

The distinction between Savikalpaka (determinate) and Nirvikalpaka (indeterminate) is made with respect to which of the following pramanas?

సవికాల్పక (నిర్ణయాత్మకం) మరియు నిర్వికల్పక (నిర్దిష్ట) మధ్య వ్యత్యాసం ఈ క్రింది

వాటిలో ఏ ప్రమాణానికి చేయబడింది

Options :

Anumana (inference)

1. ✘ అనుమాన (అంచనా)

Pratyaksa (perception)

2. ✔ ప్రత్యక్ష (అవగాహన)

Arthapatti (postulation)

3. ✘ అర్థపట్టి (పోస్టులేషన్)

Upamana (comparison)

4. ✘ ఉపమాన (పోలిక)

Question Number : 30 Question Id : 5171449467 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 : No

Correct Marks : 2 Wrong Marks : 0

Consider the following statements and choose the right option

దిగువ స్టేట్‌మెంట్‌లను పరిగణనలోకి తీసుకోండి మరియు సరైన ఆప్షన్ ఎంచుకోండి.

(a) Middle term should be distributed in atleast one premise

మధ్యకాలికాన్ని కనీసం ఒక ప్రమేయంలో పంపిణీ చేయాలి.

(b) Middle term should be present in the conclusion

ముగింపులో మధ్య పదం ఉండాలి.

(c) Both premises can be particular in a valid argument

చెల్లుబాటు అయ్యే వాదనలో రెండు ప్రమేయాలు నిర్దిష్టంగా ఉండవచ్చు.

(d) Both premises can be negative in a valid argument

చెల్లుబాటు అయ్యే వాదనలో రెండు ప్రమేయాలు ప్రతికూలంగా ఉండవచ్చు.

Options :

1. ✘ (c) and (d)

2. ✘ Only (c)

3. ✔ Only (a)

4. ✘ (b) and (c)

<b>Sub-Section Number :</b>	4
<b>Sub-Section Id :</b>	517144388
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Id : 5171449468 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix 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 : No**

**Question Numbers : (31 to 35)**

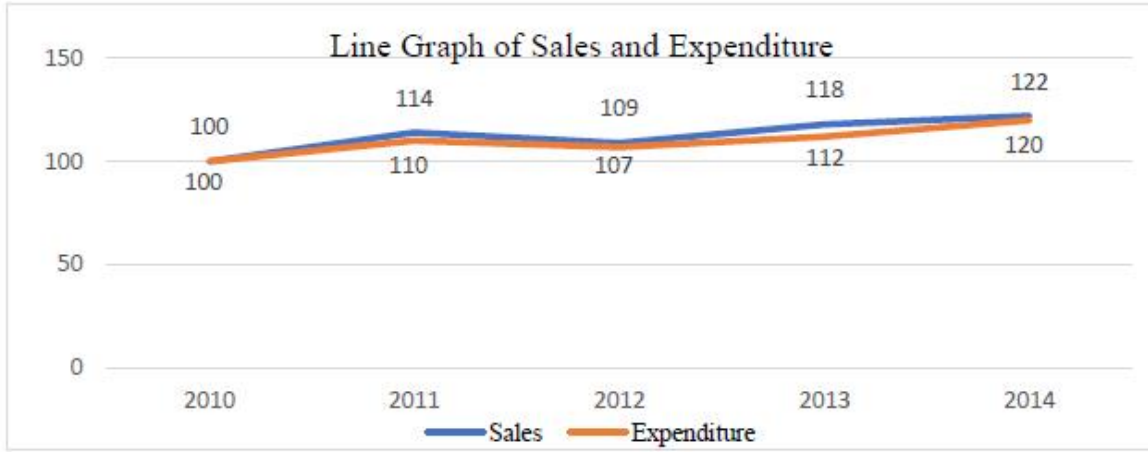
Question Label : Comprehension

Note: Answer the questions Q. 31 to Q. 35 on the basis of the information given below.

గమనిక: క్రింద ఇవ్వబడిన సమాచారం ఆధారంగా Q. 31 నుండి Q. 35 ప్రశ్నలకు సమాధానాలు వ్రాయండి.

The line graphs give the sales and expenditure of a company across five years, starting from 2010. The value of both sales and expenditure for the year 2010 is indexed to 100. It is known that the profit in 2012 was Rs. 1 cr.

2010 నుండి ప్రారంభమయ్యే ఐదేళ్ల లో కంపెనీ అమ్మకాలు మరియు వ్యయాలను క్రింది లైన్ గ్రాఫ్లు అందిస్తాయి. 2010 సంవత్సరానికి అమ్మకాలు మరియు వ్యయం రెండింటి విలువ 100కి సూచిక చేయబడింది. 2012లో లాభం రూ. ఒక కోటి .



### Sub questions

Question Number : 31 Question Id : 5171449469 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 : No

Correct Marks : 2 Wrong Marks : 0

In at least how many years did the company make a profit?

కనీసం, ఎన్ని సంవత్సరాలలో కంపెనీ లాభాలను ఆర్జించింది?

Options :

1. ✘ 2

2. ✔ 3

3. ✖ 4

4. ✖ 5

Question Number : 32 Question Id : 5171449470 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 : No

Correct Marks : 2 Wrong Marks : 0

In which year was the profit the least ?

ఏ సంవత్సరంలో అతి తక్కువ లాభం వచ్చింది ?

Options :

1. ✖ 2010

2. ✖ 2012

3. ✖ 2014

4. ✔ Can not be determined  
నిర్ణయించడం సాధ్యం కాదు

Question Number : 33 Question Id : 5171449471 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 : No

Correct Marks : 2 Wrong Marks : 0

In which year the percentage income in sales is highest?

ఏ సంవత్సరంలో అమ్మకాలలో అత్యధిక శాతం ఆదాయం ఉంది ?

Options :

1. ✔ 2011

2. ✖ 2012

3. ✖ 2013

4. ✖ 2014

Question Number : 34 Question Id : 5171449472 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 : No

Correct Marks : 2 Wrong Marks : 0

If the sales of the company in 2010 was Rs. 250 cr. Then what was the profit in 2013

2010లో కంపెనీ విక్రయాలు రూ. 250 కోట్లు అప్పుడు 2013లో లాభం ఎంత?

Options :

1. ✘ 8.6 Cr
2. ✔ 10.8 Cr
3. ✘ 11.4 Cr
4. ✘ 14.1 Cr

Question Number : 35 Question Id : 5171449473 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 : No

Correct Marks : 2 Wrong Marks : 0

What was the approximate percentage decrease in profit in 2012, when compared to 2011?

2011తో పోలిస్తే 2012లో లాభంలో సుమారు ఎంత శాతం తగ్గింది ?

Options :

1. ✘ 6
2. ✘ 8
3. ✘ 9

Can not be determined.

4. ✔ నిర్ణయించడం సాధ్యం కాదు

Sub-Section Number :

5

Sub-Section Id :

517144389

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 36 Question Id : 5171449474 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 : No

Correct Marks : 2 Wrong Marks : 0

What is the full form of 'GIF' ?

'GIF' పూర్తి నామమేమి ?

Options :

1. ✘ Global Internet Format
2. ✘ Global Interface Format
3. ✔ Graphics Interchange Format
4. ✘ Graphical Interface Format

Question Number : 37 Question Id : 5171449475 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 : No

Correct Marks : 2 Wrong Marks : 0

What is the primary function of an IP address?

IP చిరునామా ప్రాథమిక విధి ఏమి ?

Options :

1. ✔ To identify a device on a network  
నెట్‌వర్కులో ఓక పరికరాన్ని గుర్తించుట
2. ✘ To store WebPages  
వెబ్ పేజీలను స్టోరు చేయుట
3. ✘ To process email messages  
ఇమెయిలు వార్తలను పంపిచుట
4. ✘ To encode video content  
వీడియో విషయాన్ని ఎన్కోడు చేయుట

Question Number : 38 Question Id : 5171449476 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 : No

Correct Marks : 2 Wrong Marks : 0



SWAYAM PRABHA is a group of.....

స్వయంప్రభ వీటి యొక్క సమూహము

Options :

30 DTH channels

30 డిటిహెచ్ ఛానెళ్ళు

1. ✘

40 DTH channels

40 డిటిహెచ్ ఛానెళ్ళు

2. ✘

60 DTH channels

60 డిటిహెచ్ ఛానెళ్ళు

3. ✘

80 DTH channels

80 డిటిహెచ్ ఛానెళ్ళు

4. ✔

Question Number : 39 Question Id : 5171449477 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 : No

Correct Marks : 2 Wrong Marks : 0

Which of the following ICT initiatives of MHRD deals with E-governance for institutions / Universities?

యం. హెచ్. ఆర్. డి యొక్క ఈ దిగువ ఐసిటి చొరవలు సంస్థల విశ్వ విద్యాలయాలకు

సంబంధించినవి.

Options :

SWAYAM

1. ✘

SAMARTH

2. ✔

VIDWAN

3. ✘

IRINS

4. ✘

Question Number : 40 Question Id : 5171449478 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 : No

Correct Marks : 2 Wrong Marks : 0

What does the term "Wi-Fi" stand for?

"వైఫై" అనగా నేమి ?

Options :

Wide Frequency

1. ✘ వైడ్ ఫ్రీక్వెన్సీ

Wireless Function

2. ✘ వైర్లెస్ ఫంక్షను

Wireless Fidelity

3. ✔ వైర్లెస్ ఫిడిలిటీ

Wide Functionality

4. ✘ వైడ్ ఫంక్షనాలిటీ

Question Number : 41 Question Id : 5171449479 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 : No

Correct Marks : 2 Wrong Marks : 0

In which year was the United Nations Commission on Sustainable Development (CSD) started by the UN General Assembly?

అంతర్జాతీయ సాధారణ అసెంబ్లీ ఈ క్రింది సంవత్సరంలో స్థిరమైన అభివృద్ధిపై అంతర్జాతీయ కమీషనును ప్రారంభించింది.

Options :

1. ✔ 1992

2. ✘ 1993

3. ✘ 1994

4. ✘ 1995

Question Number : 42 Question Id : 5171449480 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 : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is not a negative impact of urbanization on the environment?

వాతావరణంలో, ఈ దిగువ అంశము పట్టణీకరణపై ఋణాత్మక ప్రభావం చూపదు

Options :

1. ✘ Deforestation  
అటవీ నిర్మూలన

2. ✘ Pollution  
కాలుష్యం

3. ✔ Waste recycling  
వ్యర్థాల రిసైక్లింగు

4. ✘ Loss of biodiversity  
జీవవైవిధ్య నష్టాలు

Question Number : 43 Question Id : 5171449481 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 : No

Correct Marks : 2 Wrong Marks : 0

Which of the following gas is more in percentage in the air?

గాలిలో ఎక్కువ శాతంలో ఉన్న వాయువు పేరేమి?

Options :

1. ✘ Oxygen Gas  
ఆక్సిజను

2. ✔ Nitrogen Gas  
నైట్రోజను

3. ✘ Water Vapour  
నీటి ఆవిరి

4. ✘ Carbon Dioxide Gas  
బొగ్గు పులుసు వాయువు

Question Number : 44 Question Id : 5171449482 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 : No Correct Marks : 2 Wrong Marks : 0

Why biogas is considered a 'good' source of energy?  
బయోగాస్‌ను ఒక మంచిశక్తి వనరుగా ఎందువలన పరిగణిస్తారు

Options :

1. ✘ as it produces ashes  
అది బూడిదను ఉత్పత్తి చేస్తుంది
2. ✘ as it produces methane  
అది మిథేన్‌ని ఉత్పత్తి చేస్తుంది
3. ✔ as it burns without releasing smoke  
అది పొగ లేకుండా మండుతుంది
4. ✘ as it decomposes in the absence of oxygen  
అక్సిజన్ లేక శిథిలమై పోతుంది

Question Number : 45 Question Id : 5171449483 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 : No Correct Marks : 2 Wrong Marks : 0

What is objective of the Paris Agreement/Accord?  
పారిస్ ఒడంబడిక/ సమ్మతి యొక్క లక్ష్యము

Options :

1. ✔ Decrease Global Warming below 2 degrees Celsius  
ప్రపంచ వేడేక్కుటను 2 డిగ్రీల సేల్‌సియస్ దిగువకు తగ్గించుట
2. ✘ Decrease Global Warming below 3 degrees Celsius  
ప్రపంచ వేడేక్కుటను 3 డిగ్రీల సేల్‌సియస్ దిగువకు తగ్గించుట
3. ✘ Decrease Global Warming below 1.5 degree Celsius  
ప్రపంచ వేడేక్కుటను 1.5 డిగ్రీల సేల్‌సియస్ దిగువకు తగ్గించుట

Decrease Global Warming below 1 degree Celsius

ప్రపంచ వేడేక్కుటను 1 డిగ్రీల సేల్సియస్ దిగువకు తగ్గించుట

4. ✘

Question Number : 46 Question Id : 5171449484 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 : No

Correct Marks : 2 Wrong Marks : 0

Under whom, Nalanda was greatly ransacked by the army of Mamluk dynastic of Delhi Sultanat?

ఢిల్లీ సుల్తానాత్ యొక్క మామ్లక్ డైనాస్టిక్ సైన్యము ఎవరి పరిపాలనలో నలండా ఎక్కువగా కొల్లగొట్టబడింది.

Options :

1. ✘ Chandragupt Maurya

2. ✘ Aurang jeb

3. ✔ Bakhtiyar Khiliji

4. ✘ Allaudin Khiliji

Question Number : 47 Question Id : 5171449485 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 : No

Correct Marks : 2 Wrong Marks : 0

The main governing body at the tertiary level of education in India is....

ఇండియా విద్యారంగ తృతీయ స్థాయిలో ముఖ్య పరిపాలన సంస్థ

Options :

1. ✘ NCERT

2. ✘ CBSE

3. ✘ AICTE

4. ✔ UGC

Question Number : 48 Question Id : 5171449486 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 : No Correct Marks : 2 Wrong Marks : 0

Which of the following is an example of conventional learning programme in India?

ఈ దిగువ వానిలో ఏది ఇండియాలో సాంప్రదాయక అభ్యాసానికి ఉదాహరణ

Options :

1. ✘ Yoga  
యోగ
2. ✘ Fine Arts  
లలిత కళలు
3. ✔ Agriculture  
వ్యవసాయము
4. ✘ Fashion Designing  
సొగపైన రూపకల్పన

Question Number : 49 Question Id : 5171449487 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 : No Correct Marks : 2 Wrong Marks : 0

One among is not a Core Critical Thinking Skills

ఇందులో ఒకటి ముఖ్య కీలక ఆలోచనా నైపుణ్యము కాదు

Options :

1. ✘ Interpretation  
వివరణ
2. ✘ Analysis  
విశ్లేషణ
3. ✘ Self-regulation  
స్వీయ నియంత్రణ
4. ✔ Self esteem  
ఆత్మ గౌరవం

Question Number : 50 Question Id : 5171449488 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 : No

Correct Marks : 2 Wrong Marks : 0

The main objective of teaching at Higher Education Level is.....

ఉన్నత విద్యాస్థాయిలో బోధన యొక్క ముఖ్య లక్ష్యము

Options :

1. ✘ To prepare students to pass examination  
విద్యార్థులను పరీక్షలో ఉత్తీర్ణులగుటకు తయారుచేయుట
2. ✔ To develop the capacity to take decisions  
నిర్ణయం తీసుకునే శక్తిని వృద్ధి చేయుట
3. ✘ To give new information  
కొత్త సమాచారం ఇచ్చుట
4. ✘ To motivate students to ask questions during lecture  
బోధనా సమయంలో విద్యార్థులను ప్రశ్నలు వేయుటకు ప్రేరేపించుట

## Paper II

Section Id :	517144126
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100
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 :	517144390
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 51 Question Id : 5171449489 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 : No

Correct Marks : 2 Wrong Marks : 0

*Trans* and *cis* configurations of peptide bonds involve one of the following amino acids

Options :

1. ✘ Glutamic acid
2. ✘ Hydroxyproline
3. ✘ Phenylalanine
4. ✔ Proline

Question Number : 52 Question Id : 5171449490 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 : No Correct Marks : 2 Wrong Marks : 0

The structure of globular proteins depends on a combination of interactions. Find out the correct combination.

- i. Ion pairs can form in the hydrophobic interiors of globular proteins
- ii. Denaturing agents cannot unfold globular proteins
- iii. Hydrophobic effect cannot drive globular protein folding
- iv. Protein folding is not spontaneous
- v. Protein folding is not a sequential process
- vi. Hydrogen bonds cannot stabilize globular proteins
- vii. Ion pairs cannot form in the hydrophobic interior of globular proteins
- viii. Hydrogen bonds stabilize globular proteins

Options :

1. ✘ II and V
2. ✘ III and IV
3. ✔ I and VIII



4. ✘ III and VI

**Question Number : 53 Question Id : 5171449491 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 : No Correct Marks : 2 Wrong Marks : 0**

The function of fatty acids in the body is to generate energy. The enzymes responsible for oxidation of fatty acids are located in the

Options :

1. ✘ Cytoplasm
2. ✘ Endoplasmic reticulum
3. ✔ Mitochondrial matrix
4. ✘ Nuclear membrane

**Question Number : 54 Question Id : 5171449492 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 : No Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Entropies are additive.

Reason (R): Because the entropy change for a process depends only on the initial and final states of the system and is independent of the pathway by which the change in state is brought about.

Options :

1. ✘ Both A and R are true but R is not the correct explanation of the A
2. ✔ Both A and R are true but R is the correct explanation of the A

A is true but R is false

3. ✘

A is false but R is true

4. ✘

Question Number : 55 Question Id : 5171449493 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 : No

Correct Marks : 2 Wrong Marks : 0

Match the following:

Column – I		Column – II	
Protein complex of the respiratory electron transport chain		Number of subunits present	
I	Cytochrome C oxidase	1	4
II	Ubiquinone-cytochrome C reductase	2	16 – 25
III	NADH-ubiquinone reductase	3	8
IV	Succinate-ubiquinone reductase	4	7

Options :

1. ✔ I-4, II-3, III-2, IV-1

2. ✘ II-1, I-3, IV-4, III-2

3. ✘ I-3, III-2, II-1, IV-4

4. ✘ II-2, I-3, III-4, IV-1

Question Number : 56 Question Id : 5171449494 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 : No

Correct Marks : 2 Wrong Marks : 0

When the enzyme concentration is expressed in terms of moles of active sites per litre (the molar concentration of enzyme times the number of catalytic sites per enzyme molecule), the first-order rate constant ( $K_{cat}$ ) is called as:

Options :

1. ✘ First order reaction

2. ✔ Turnover number

3. ✘ Zero order reaction

4. ✘ Second order reaction

Question Number : 57 Question Id : 5171449495 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 : No

Correct Marks : 2 Wrong Marks : 0

Match the following:

Column – I		Column – II	
I	Peptide bond	1	Common structural motif in many proteins
II	$\alpha$ -Helix	2	Polypeptide chains are almost completely extended
III	$\beta$ -Pleated sheet	3	Can assume only a restricted number of conformations
IV	Peptide chain	4	Resonance-stabilized, polar and planar

Options :

1. ✔ I-4 II-1 III-2 IV-3

2. ✘ I-1 II-3 III-4 IV-2

3. ✘ I-3 II-2 III-1 IV-4

4. ✘ I-4 II-2 III-3 IV-1

Question Number : 58 Question Id : 5171449496 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 : No

Correct Marks : 2 Wrong Marks : 0

Adjacent nucleotides in each DNA chain are rotated by -----relative to each other.

Hence, the double helix completes one full turn approximately every ----- base pairs

Options :

1. ✘ 29.6° and 9.4

2. ✘ 28.6° and 8.4

3. ✘ 30.6° and 11.4

4. ✔ 34.6° and 10.4

Question Number : 59 Question Id : 5171449497 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 : No

Correct Marks : 2 Wrong Marks : 0

Assertion (A): The first pyrimidine nucleotide is formed by displacement of the pyrophosphate group of PRPP by N-1 of orotate to yield orotidine 5'-monophosphate in a reaction catalysed by orotatephosphoribosyltransferase.

Reason (B): But hydrolysis of the pyrophosphate released in this reaction cannot drive the formation of the *N*-glycosidic bond between C-1' of the sugar and N-1 of orotate.

Options :

1. ✘ Both A and R are true but R is not the correct explanation of the A

2. ✘ Both A and R are true but R is the correct explanation of the A

3. ✘ A is false but R is true

A is true but R is false

4. ✓

Question Number : 60 Question Id : 5171449498 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 : No  
Correct Marks : 2 Wrong Marks : 0

$\text{Na}^+$  voltage gated channels are ----- in resting neurons

Options :

1. ✓ Closed

2. ✗ Open

3. ✗ Partially open

4. ✗ Partially closed

Question Number : 61 Question Id : 5171449499 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 : No  
Correct Marks : 2 Wrong Marks : 0

Spectrin is a ----- consisting of ----- and ----- chains

Options :

1. ✗ Hexamer, 3 $\alpha$ , 3 $\beta$

2. ✗ Dimer, 1 $\alpha$ , 1 $\beta$

3. ✓ Tetramer, 2 $\alpha$ , 2 $\beta$

4. ✗ Decamer, 5 $\alpha$ , 5 $\beta$

Question Number : 62 Question Id : 5171449500 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 : No Correct Marks : 2 Wrong Marks : 0

Photosynthesis is essentially ----- reaction.

Options :

1. ✘ Oxidative
2. ✔ Reductive
3. ✘ Aromatic
4. ✘ Linear

Question Number : 63 Question Id : 5171449501 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 : No Correct Marks : 2 Wrong Marks : 0

Cytoplasmic ----- helps to position the Golgi apparatus.

Options :

1. ✘ Kinesin
2. ✘ Caesin
3. ✘ Lysin
4. ✔ Dynein

Question Number : 64 Question Id : 5171449502 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 : No

Correct Marks : 2 Wrong Marks : 0

Aspirin inhibits the synthesis of ----- and reduces the inflammation.

Options :

1. ✘ Prostacyclins
2. ✔ Prostaglandins
3. ✘ Thromboxanes
4. ✘ Leukotrienes

Question Number : 65 Question Id : 5171449503 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 : No

Correct Marks : 2 Wrong Marks : 0

Assertion (A): During protein synthesis, ribosomes form polysomes.

Reason (R): Different ribosomes of a polysome utilize a single strand of mRNA.

Options :

1. ✔ Both A and R are true and R is the correct explanation of A
2. ✘ Both A and R are true but R is not the correct explanation of A
3. ✘ A is true but R is false
4. ✘ A is false and R is true

Question Number : 66 Question Id : 5171449504 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 : No

Correct Marks : 2 Wrong Marks : 0

Match the corresponding disease and cell organelle

Column – I		Column – II	
Disease		Cell Organelle	
I	Leder's hereditary optic neuropathy	1	Mitochondria
II	Treacher-Collins syndrome	2	Golgi body
III	Pompe disease	3	Lysosomes
IV	I-Cell disease	4	Ribosomes

Options :

1. ✘ I-1, II-4, III- 2, IV-3

2. ✘ I-3, II- 2, III-1, IV- 4

3. ✔ I-1, II- 4, III-3, IV-2

4. ✘ I- 4, II-1, III-3, IV- 2

Question Number : 67 Question Id : 5171449505 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 : No

Correct Marks : 2 Wrong Marks : 0

Select the two correct statements below about lac operon.

- I. Glucose or galactose may bind with the repressor and inactivate it
  - II. In the absence of lactose the repressor binds with the operator region
  - III. The z-gene codes for permease
  - IV This was elucidated by Francois Jacob and Jacque Monod
- The correct statements are

Options :

1. ✘ I and II

2. ✘ II and III

3. ✔ II and IV



I and III

4. ✘

Question Number : 68 Question Id : 5171449506 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 : No

Correct Marks : 2 Wrong Marks : 0

Match the following functional homology of prokaryotic and eukaryotic translation factors

Column – I		Column – II	
Prokaryotic translation factor		Eukaryotic translation factor	
I	IF-1	1	eIF4
II	EF-Tu	2	eEF1 $\alpha$
III	EF-Ts	3	eEF1 $\beta$
IV	EF-G	4	eEF2

Options :

I-1, II-2, III- 3, IV-4

1. ✔

I-3, II- 2, III-1, IV- 4

2. ✘

I-3, II- 4, III-1, IV-2

3. ✘

I- 2, II-4, III-1, IV- 3

4. ✘

Question Number : 69 Question Id : 5171449507 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 : No

Correct Marks : 2 Wrong Marks : 0

The sequence of events mentioned below is symbolized by alphabets. Choose the correct answer where the alphabets are matching with the processes.

RNA —(A)—> DNA —(B)—> DNA —(C)—> mRNA —(D)—> Polypeptide

Options :

A-Reverse transcription, B-Replication, C-Transcription,  
D-Translation

1. ✓

A- I-Replication, B-Transformation, C-Transcription,  
D-Translation

2. ✘

A-Reverse transcription, B-Translation, C- Transcription,  
D- Replication

3. ✘

A-Replication, B-Transcription, C-Translation, D-Transduction

4. ✘

**Question Number : 70 Question Id : 5171449508 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Transcription and translation are spatial and temporal in eukaryotes.

Reason (R): mRNA is transferred from the nucleus into the cytoplasm where ribosomes and amino acids are available for protein synthesis.

**Options :**

Both A and R are true and the R is the correct explanation of the A

1. ✓

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

2. ✘

A is true but R is false

3. ✘

A is false and R is true

4. ✘

**Question Number : 71 Question Id : 5171449509 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Find out the correct sequence in which the segmentation genes act.

Options :

1. ✘ Segment polarity genes → Gap genes → Pair-rule genes
2. ✔ Gap genes → Pair-rule genes → Segment-polarity genes
3. ✘ Segment polarity genes → Pair-rule genes → Gap genes
4. ✘ Gap genes → Segment polarity genes → Pair-rule genes

Question Number : 72 Question Id : 5171449510 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 : No Correct Marks : 2 Wrong Marks : 0

Which one of the following statements is correct about the homeobox?

Options :

1. ✘ It is a part of promoter in eukaryotic genes that code for proteins involved in segmentation
2. ✘ It is a conserved protein structure found in glycolytic pathway enzymes
3. ✔ It is a conserved DNA sequence found in genes that code for proteins that regulate development
4. ✘ It is a conserved protein structure found in t-RNA-binding proteins

Question Number : 73 Question Id : 5171449511 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 : No Correct Marks : 2 Wrong Marks : 0

Enzymes that can acetylate lysine residues in protein are called as -----  
When these enzymes target lysines in non-histones, they are known as -----

Options :

1. ✓ Histone acetyl transferase and lysine acetyl transferase
2. ✗ Histone methyl transferase and lysine acetyl transferase
3. ✗ Nonhistone acetyl transferase and lysine acetyl transferase
4. ✗ Nonhistone methyl transferase and lysine acetyl transferase

Question Number : 74 Question Id : 5171449512 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 : No  
Correct Marks : 2 Wrong Marks : 0

Identify the false statement below for histone modifications

S. No.	Histone	Site	Modification	Function
I	H3	K-4	Methylation	Transcription activation
II	H3	K-9	Methylation	Chromatin condensation
III	H4	R-3	Methylation	Telomeric assembly
IV	H4	K-16	Acetylation	Nucleosome assembly

Options :

1. ✗ I
2. ✗ II
3. ✓ III
4. ✗ IV

**Question Number : 75 Question Id : 5171449513 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 : No Correct Marks : 2 Wrong Marks : 0**

The form of intercellular signaling that is mediated by the hormones is

Options :

1. ✘ Synaptic signaling
2. ✘ Paracrine signaling
3. ✔ Endocrine signaling
4. ✘ Contact-dependent signaling

**Question Number : 76 Question Id : 5171449514 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 : No Correct Marks : 2 Wrong Marks : 0**

Which one of the following plasma membrane receptors activate signaling pathways by dimerization and autophosphorylation?

Options :

1. ✘ Steroid hormone receptors
2. ✔ Insulin growth factor receptor
3. ✘ Ligand gated ion channels
4. ✘ G-Protein coupled receptors

Question Number : 77 Question Id : 5171449515 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 : No  
 Correct Marks : 2 Wrong Marks : 0

Match column I and column II and choose the appropriate options

Column – I		Column – II	
I	Hedge-Hog signaling	1	Beta-Catenin
II	Notch signaling	2	Phospholipase C
III	GPCR signaling	3	Ci protein
IV	Wnt signaling	4	Delta

Options :

1. ✘ I-4, II-1, III- 2, IV-3
2. ✘ I-1, II- 3, III-4, IV- 2
3. ✘ I-2, II- 4, III-3, IV-1
4. ✔ I- 2, II-4, III-2, IV- 1

Question Number : 78 Question Id : 5171449516 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 : No  
 Correct Marks : 2 Wrong Marks : 0

Consider the following statements and chose the appropriate answer:

- I. Ligand-gated ion channels lead to changes in sodium and calcium concentrations in cells.
- II. GTP-activating proteins inactivate monomeric GTPase while GEFs inactivate them.

Options :

1. ✔ Both I and II are true
2. ✘ I is true and II is false

3. ✘ I is false and II is true

4. ✘ Both I and II are false

**Question Number : 79 Question Id : 5171449517 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 : No Correct Marks : 2 Wrong Marks : 0**

Transcription of ethylene target genes by ethylene signaling pathway in plants involves.

**Options :**

1. ✘ Active CTR1 that cause ubiquitinylation and destruction of EIN3 protein

2. ✘ Inactive CTR1 that cause ubiquitinylation and destruction of EIN3 protein

3. ✘ Active CTR1 that enables transcriptional activation by free EIN3 protein

4. ✔ Inactive CTR1 that enables transcriptional activation by free EIN3 protein

**Question Number : 80 Question Id : 5171449518 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 : No Correct Marks : 2 Wrong Marks : 0**

Arrange the correct series of steps involved in the activation of JAK-STAT pathway.

- I. Binding of cytokines to JAK receptors
- II. Cross-phosphorylation of tyrosine residues on JAK receptors
- III. Docking and phosphorylation of STATs
- IV. Dissociation of STATs followed by dimerization
- V. Activation of gene transcription by phosphorylated STAT dimmers

**Options :**

I - II - III - IV - V

1. ✓

II - III - I - IV - V

2. ✘

I - III - IV - II - V

3. ✘

I - II - IV - III - V

4. ✘

**Question Number : 81 Question Id : 5171449519 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 : No Correct Marks : 2 Wrong Marks : 0**

The type of metamorphosis seen in the grasshopper is

Options :

Ametabolous

1. ✘

Hemimetabolous

2. ✓

Holometabolous

3. ✘

Heterometabolous

4. ✘

**Question Number : 82 Question Id : 5171449520 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 : No Correct Marks : 2 Wrong Marks : 0**

In plant embryogenesis, the large basal cell derived from the lower portion of the zygote will divide and form a highly specialized, terminally differentiated embryonic organ called



Options :

1. ✓ The suspensor
2. ✘ The cotyledons
3. ✘ The shoot meristem
4. ✘ The hypocotyl

Question Number : 83 Question Id : 5171449521 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 : No Correct Marks : 2 Wrong Marks : 0

Assertion (A): In frog metamorphosis, organ-specific response to thyroid hormones is demonstrated by transplanting a tail tip to the trunk region or by placing an eye cup in the tail. The tail tip placed in the trunk is not protected from degeneration, but the eye retains its integrity despite the fact that it lies within the degenerating tail.

Reason (R): Only specific tissues die when a signal is given. Programmed cell deaths are important in molding the body.

Options :

1. ✓ Both A and R are true and R is the correct explanation of A
2. ✘ Both A and R are true but R is NOT the correct explanation of A
3. ✘ A is true but R is false
4. ✘ A is false but R is true

Question Number : 84 Question Id : 5171449522 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 : No

Correct Marks : 2 Wrong Marks : 0

Assertion (A): The sum of growth and differentiation is known as development.

Reason (R): Development in plants is under the control of extrinsic factors only.

Options :

1. ✘ Both A and R are true and R is the correct explanation of A
2. ✘ Both A and R are true but R is NOT the correct explanation of A
3. ✔ A is true but R is false
4. ✘ A is false but R is true

Question Number : 85 Question Id : 5171449523 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 : No

Correct Marks : 2 Wrong Marks : 0

The process of spermiogenesis is divided into stages in the order

Options :

1. ✔ Golgi phase → Cap/acrosome phase → Formation of tail → Maturation phase → Spermiation
2. ✘ Spermiation → Golgi phase → Cap/acrosome phase → Formation of tail → Maturation phase
3. ✘ Spermiation → Cap/acrosome phase → Golgi phase → Formation of tail → maturation phase

Spermiation → Cap/acrosome phase → Formation of tail →  
Golgi phase → maturation phase

4. ✘

Question Number : 86 Question Id : 5171449524 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 : No  
Correct Marks : 2 Wrong Marks : 0

Match the patterns of cleavage from Column I with Column II.

Column I	Column II
I. Isolecithal, Radial	1. Fish, Reptiles, Birds
II. Isolecithal, Rotational	2. Amphibians
III. Mesolecithal, Radial	3. Mammals, Nematodes
IV. Meroblastic, Telolecithal, Discoidal	4. Echinoderms

Options :

1. ✘ I-2, II-4, III- 1, IV-3

2. ✘ I-3, II- 1, III-4, IV- 2

3. ✘ I-1, II- 2, III-3, IV-4

4. ✔ I- 4, II-3, III-2, IV- 1

Question Number : 87 Question Id : 5171449525 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 : No  
Correct Marks : 2 Wrong Marks : 0

The manganese stabilizing protein in photosystem II is associated with the following:

Options :

1. ✘ D1-D2 proteins and CP43-CP47 complex - All at acceptor side

2. ✘ D1 protein and chlorophyll – protein complex CP43 - All at donor Side
3. ✘ D2 protein and chlorophyll protein complex CP47 - All at acceptor side
4. ✔ D1-D2 proteins and CP43-CP47 complex - All at donor side

Question Number : 88 Question Id : 5171449526 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 : No Correct Marks : 2 Wrong Marks : 0

Match the following:

Column – I		Column – II	
Conversion of metabolite from		Conversion of metabolite to	
I	2-Phosphoglycolate	1	Glycerate
II	Glyoxylate	2	Glycolate
III	Glycerate	3	Glycine
IV	Hydroxypyruvate	4	3-Phosphoglycerate

Options :

1. ✘ I-4, II-3, III- 1, IV-2
2. ✘ I-3, II- 2, III-4, IV- 1
3. ✔ I-2, II- 3, III-4, IV-1
4. ✘ I- 1, II-4, III-2, IV-3

Question Number : 89 Question Id : 5171449527 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 : No Correct Marks : 2 Wrong Marks : 0

$\Delta^1$ -Pyrroline 5-carboxylate (P5C) is converted by the enzyme  $\Delta^1$ -Pyrroline 5-carboxylate reductase (P5CR) to

Options :

1. ✓ Proline
2. ✗ Glutamate
3. ✗ Arginine
4. ✗ Lysine

**Question Number : 90 Question Id : 5171449528 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 : No Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Asymmetric growth observed in various plant organs is under the influence of definite stimuli, which results in tropistic curvatures.

Reason (R): Plant tropistic curvatures are caused by equal distribution of growth hormones.

Options :

1. ✗ Both A and R are true but R is not the correct explanation of the A
2. ✗ Both A and R are true and R is the correct explanation of the A
3. ✓ A is true but R is false
4. ✗ A is false but R is true

**Question Number : 91 Question Id : 5171449529 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 : No**

Correct Marks : 2 Wrong Marks : 0

Arrange the following in proper sequence in the biosynthetic pathway.

- I. Geranyl pyrophosphate is converted to farnesyl pyrophosphate
- II. Geranylgeranyl pyrophosphate is converted to copalyl pyrophosphate
- III. Mevalonic acid is converted to mevalonic acid pyrophosphate
- IV. Dimethylallyl pyrophosphate is converted to geranyl pyrophosphate
- VI. Isopentenyl pyrophosphate is converted to dimethylallyl pyrophosphate

Options :

1. ✘ I, IV, III, V, II
2. ✘ III, I, II, V, IV
3. ✘ IV I V, III, II
4. ✔ III, V, IV, I, II

Question Number : 92 Question Id : 5171449530 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 : No

Correct Marks : 2 Wrong Marks : 0

Assertion (A) : When seedlings receive light, they do not lose most of their type I phytochrome.

Reason (R): The seedlings upon receiving light, stop making more mRNA needed to synthesize that phytochrome.

Options :

1. ✔ A is false, and R is true.
2. ✘ A is true but R is false.
3. ✘ Both A and R are true and R is not the correct explanation of the A

Both A and R are true and R is the correct explanation of the A

4. ✘

Question Number : 93 Question Id : 5171449531 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 : No

Correct Marks : 2 Wrong Marks : 0

Soluble products of photosynthesis formed in the photosynthetic tissue, enter the sieve tubes through:

Options :

1. ✘ Facilitated diffusion

2. ✘ Passive diffusion

3. ✘ Passive transport

4. ✔ Active transport

Question Number : 94 Question Id : 5171449532 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 : No

Correct Marks : 2 Wrong Marks : 0

Plants manage to grow in areas where high salt concentrations exist. Succulent plants may dilute the intracellular salt as in the case of *Salicornia* species. Other plants take up and maintain higher internal concentrations of ions to maintain turgor as in the case of halophytes. Some glycophytes on the other hand, manage to grow in saline conditions by the

Options :

1. ✘ Accumulation of  $\text{Na}^+$  and  $\text{Cl}^-$  in the cytosol and reduction of leaf area

2. ✔ Internalization of  $\text{Na}^+$  ions at the tonoplast level and developing salt glands in the leaves

Accumulation of sugars, compatible organic solutes, coupled with exclusion of toxic ions at the plasma membrane or compartmentalization of toxic ions into vacuoles

3. ✘

Exclusion of  $\text{Na}^+$  ions at the membrane level through salt overly sensitive (SOS) pathway coupled with water storage hairs and aerenchyma

4. ✘

**Question Number : 95 Question Id : 5171449533 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Terpenoid biosynthesis occurs through the following pathways:

Options :

Cytosolic MEP & plastidial MVA pathways respectively

1. ✘

MEP pathway in cytosol only

2. ✘

Cytosolic MVA & plastidial MEP pathways respectively

3. ✔

MVA pathway in plastids only

4. ✘

**Question Number : 96 Question Id : 5171449534 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Consider the following statements and choose the correct option:

- I. Nephridia and malphigian tubules convert ammonia to urea for water conservation in invertebrates.
- II. Flame cells in certain invertebrates are responsible for excretion and maintaining osmotic balance.

Options :



1. ✘ Only statement I is true
2. ✔ Both statements I and II are true
3. ✘ Statement II is true
4. ✘ Both statements I and II are false

**Question Number : 97 Question Id : 5171449535 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 : No Correct Marks : 2 Wrong Marks : 0**

Which of the following mechanisms involve active transport?

**Options :**

1. ✔ Sodium – potassium pump during nerve conduction
2. ✘ Entry of glucose into cells by facilitate diffusion
3. ✘ Diffusion by osmosis through semipermeable membrane
4. ✘ Nitric oxide exchange at the membrane

**Question Number : 98 Question Id : 5171449536 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 : No Correct Marks : 2 Wrong Marks : 0**

Hamburger's phenomenon refers to

**Options :**

1. ✘ Entry and exit of sodium ions in RBC
2. ✘ Entry and exit of potassium ions in RBC
3. ✔ Entry and exit of chloride ions in RBC
4. ✘ Entry and exit of glucose in RBC

**Question Number : 99 Question Id : 5171449537 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 : No Correct Marks : 2 Wrong Marks : 0**

Arrange the following steps of coagulation cascade in an ascending order.

- I. Conversion of Factor VII to VIIa followed by conversion of Factor X to Xa
- II. Release of Factor III from damaged cells
- III. Conversion of prothrombin to thrombin followed by fibrin formation
- IV. Activation of Factor XIIa

**Options :**

1. ✘ IV, III, II, I
2. ✔ II, I, IV, III
3. ✘ II, IV, I, III
4. ✘ IV, I, II, III

**Question Number : 100 Question Id : 5171449538 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 : No Correct Marks : 2 Wrong Marks : 0**

Which of the following statements are TRUE.

- I. During prolonged fasting, large amounts of amino acids from tissue protein
- II. Breakdowns are released and to be converted to glucose in the liver by gluconeogenesis
- III. The thyroid gland produces the hormones thyroxine but not calcitonin
- IV. The hypothalamus is involved in heat regulation

The correct combinations are:

Options :

I and II

1. ✘

I and III

2. ✘

II and III

3. ✔

I, II and III

4. ✘

**Question Number : 101 Question Id : 5171449539 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 : No Correct Marks : 2 Wrong Marks : 0**

Which one of the following combinations is NOT correct?

Options :

Cushing syndrome: Hyper secretion of cortisol

1. ✘

Cholecystokinin (CCK): Produced in the brain

2. ✔

Vitamin E:  $\alpha$ -tocopherol

3. ✘

## Leydig cells: Spermatogenesis

4. ✘

Question Number : 102 Question Id : 5171449540 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 : No Correct Marks : 2 Wrong Marks : 0

Match the following organism with the type of sex determination found in them

Column – I		Column – II	
I	ZW-ZZ type	1	Grasshopper
II	ZO-ZZ	2	Drosophila
III	XX-XO	3	Hen
IV	XX-XY	4	Butterfly

Options :

I-1, II-4, III- 3, IV-2

1. ✘

I -3, II- 2, III-1, IV- 4

2. ✘

I-3, II- 4, III-1, IV-2

3. ✔

I- 2, II-4, III-1, IV-3

4. ✘

Question Number : 103 Question Id : 5171449541 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 : No Correct Marks : 2 Wrong Marks : 0

Read the following paragraph and answer the question.

A new-born infant is noted to have microcephaly after birth. His mother is 38-years old. She also has a 5-year-old son who is mentally retarded and she had one previous second-trimester miscarriage. In addition, she has a genetic disease that required a special diet, but she discontinued the diet many years ago. On physical examination, the infant's weight and length are both below the 10th percentile for his gestational age. He is also noted to have a grade III systolic ejection murmur best heard at the lower left sternal border. Which one of the following conditions, the mother is most likely to have?

Options :

Fragile X syndrome

1. ✘

Galactosemia

2. ✘

Hypothyroidism

3. ✘

Phenylketonuria

4. ✔

Question Number : 104 Question Id : 5171449542 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 : No Correct Marks : 2 Wrong Marks : 0

Kearns-Sayre syndrome is caused due to mutation in

Options :

Nucleus

1. ✘

Mitochondria

2. ✔

Chloroplast

3. ✘

## Peroxisome

4. ✘

**Question Number : 105 Question Id : 5171449543 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

You are carrying out an ANOVA analysis. You have a mean square of 759.39, 2df, and an error term of 15.67. What would be the F value?

**Options :**

1. ✔ 24.23

2. ✘ 31.34

3. ✘ 37.97

4. ✘ 48.46

**Question Number : 106 Question Id : 5171449544 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

An early notion of heredity, which proposed that offspring are a mixture of parental traits.

**Options :**

1. ✔ Blending inheritance

2. ✘ Germ-plasm theory

3. ✘ Pangenesis

## Preformationism

4. ✖

Question Number : 107 Question Id : 5171449545 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 : No

Correct Marks : 2 Wrong Marks : 0

Haemophilia is a recessive x-linked trait in humans. If a heterozygous woman has children with a normal man, what are the odds of the following combinations of children?

- |   |  |
|---|--|
| I. An affected child                            | 1. $\frac{1}{4}$   |
| II. Four unaffected children in a row           | 2. $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4} = 81/256$ |
| III. Two out of five children that are affected | 3. 26.3%   |

Options :

1. ✖ I-2 II-1 III-3

2. ✔ I-1 II-2 III-3

3. ✖ I-3 II-2 III-1

4. ✖ I-2 II-3 III-1

Question Number : 108 Question Id : 5171449546 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 : No

Correct Marks : 2 Wrong Marks : 0

An abnormal male child is born to normal parents. This child shows a short neck, stubby hands, slanting eyes, permanently open mouth with projecting upper lip and short stature. This abnormality can be attributed to

Options :

1. ✖ An extra Y chromosome

An extra X chromosome

2. ✘

An extra chromosome in the 21st pair of autosomes

3. ✔

Absence of X chromosome leading to a total of 45 chromosomes instead of the normal 46

4. ✘

**Question Number : 109 Question Id : 5171449547 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 : No Correct Marks : 2 Wrong Marks : 0**

An Rh-negative woman married to a heterozygous Rh-positive man has three children. The probability that all three of their children are Rh-positive is?

Options :

1. ✘ 1:2

2. ✘ 1:4

3. ✔ 1:8

4. ✘ 0 (Zero)

**Question Number : 110 Question Id : 5171449548 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 : No Correct Marks : 2 Wrong Marks : 0**

A plant of genotype AaBb is test crossed to aabb. If the two loci are 10 map units apart what proportion of progeny will be AB/ab?

Options :

1. ✘ 50%



2. ✓ 45%

3. ✘ 10%

4. ✘ 5%

**Question Number : 111 Question Id : 5171449549 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 : No Correct Marks : 2 Wrong Marks : 0**

The hierarchy of nested categories is known as ----- and ----- classification scheme better explains, requirement for biodiversity investigation

**Options :**

1. ✘ Taxonomic hierarchy and folk classification

2. ✓ Linnaean hierarchy and biological classification

3. ✘ Organismal hierarchy and natural classification

4. ✘ Hierarchy of life and artificial classification

**Question Number : 112 Question Id : 5171449550 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 : No Correct Marks : 2 Wrong Marks : 0**

Under Darwin's hypothesis, evolution has two major features cladogenesis and ----- Classification dealing with characters of organisms that actually have in nature is called as -----

**Options :**

1. ✘ Morphogenesis and phylogenetic classification

Genesis and artificial classification

2. ✘

Androgenesis and biological classification

3. ✘

Anagenesis and natural classification

4. ✔

**Question Number : 113 Question Id : 5171449551 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 : No Correct Marks : 2 Wrong Marks : 0**

Advarks are----- and Ruderal habitat occurs in-----

Options :

1. ✔ Tubulidentata and village complex

2. ✘ Edentata and wetland

3. ✘ Hyracoidea and Island

4. ✘ Lagomorpha and grassland

**Question Number : 114 Question Id : 5171449552 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 : No Correct Marks : 2 Wrong Marks : 0**

The most common Holocephali is -----and Rhyncocephalians inhabit in -----

Options :

1. ✘ Ray fish and North America

2. ✘ Cat fish and India

Chimera and New Zealand

3. ✓

Sting Ray and Russia

4. ✘

Question Number : 115 Question Id : 5171449553 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 : No Correct Marks : 2 Wrong Marks : 0

The cell organelle involved in the protection from molecular oxygen is

Options :

Lysosomes

1. ✘

Mitochondria

2. ✘

Peroxisomes

3. ✓

Endoplasmic reticulum

4. ✘

Question Number : 116 Question Id : 5171449554 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 : No Correct Marks : 2 Wrong Marks : 0

Match the following

Column – I		Column – II	
I	Tropical wet evergreen forest	1	Chhota Nagpur
II	Subtropical pine forest	2	Nilgiri hills
III	Tropical dry deciduous forest	3	Kumaon hills
IV	Tropical thorn forest	4	Coimbatore

Options :

1. ✓ I-2, II-3, III-1, IV-4

2. ✗ I-1, II-3, III-2, IV-4

3. ✗ I-4, II-1, III-2, IV-3

4. ✗ I-3, II-4, III-2, IV-4

**Question Number : 117 Question Id : 5171449555 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Bandipur wild life sanctuary established in 1941 which has an area of 874 square kilometres. The sanctuary has animals like elephants, panther, barking deer, leopard and sloth bear. The sanctuary is located in one of the following states

**Options :**

1. ✗ Rajasthan

2. ✗ Tamil Nadu

3. ✗ Uttar Pradesh

4. ✓ Karnataka

**Question Number : 118 Question Id : 5171449556 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

In India, the concept of sacred groves originated

Options :

1. ✘ During medieval period
2. ✘ During stone age
3. ✔ During the time of pre-agrarian hunter-gathering period
4. ✘ During British period

**Question Number : 119 Question Id : 5171449557 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 : No Correct Marks : 2 Wrong Marks : 0**

Which country started Ramsar Convention?

Options :

1. ✘ India
2. ✔ Iran
3. ✘ Ireland
4. ✘ Turkey

**Question Number : 120 Question Id : 5171449558 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 : No Correct Marks : 2 Wrong Marks : 0**

Match the following

Column – I		Column – II	
I	Vertebrate faeces	a	Change the flowrate of water
II	Coral reefs	b	Alter the topography of any given area
III	Beavers	c	Home for dung beetles
IV	Termite mounds	d	Alter hydrology of water bodies

Options :

1. ✘ I-b, II-c,III- a,IV-d

2. ✘ I-a, II- c,III-b,IV- d

3. ✔ I-c, II- a,III-d,IV-b

4. ✘ I- c, II-a,III-a,IV-d

Question Number : 121 Question Id : 5171449559 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 : No Correct Marks : 2 Wrong Marks : 0

The type of association found between honey bee and entomophilous flower is

Options :

1. ✘ Mutualism

2. ✔ Co-evolution

3. ✘ Cooperation

4. ✘ Commensalism

Question Number : 122 Question Id : 5171449560 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 : No  
Correct Marks : 2 Wrong Marks : 0

Invasive species

- I. can outcompete native species
  - II. can increase biodiversity
  - III. are fast growing
  - IV produce allelopathic compounds
- Identify the correct statement(s)

Options :

- 1. ✘ I
- 2. ✘ I and II
- 3. ✘ I, II, and III
- 4. ✔ I, III, and IV

Question Number : 123 Question Id : 5171449561 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 : No  
Correct Marks : 2 Wrong Marks : 0

Assertion (A):Ecosystem produce are consumed by decomposers and detritivores.

Reason (R): Energy does not flow in a cyclic fashion in an ecosystem.

Options :

- 1. ✘ Both A and R are true and R is the correct explanation of A
- 2. ✔ Both A and R are true but R is NOT the correct explanation of A

A is true but R is false

3. ✘

A is false but R is true

4. ✘

**Question Number : 124 Question Id : 5171449562 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 : No Correct Marks : 2 Wrong Marks : 0**

Assertion (A): Saprophytes play a vital role in the ecosystem.  
Reason (R): Saprophytes are accorded highest level in food web or food chain.

**Options :**

Both A and R are true and R is the correct explanation of A

1. ✘

Both A and R are true but R is NOT the correct explanation of A

2. ✘

A is true but R is false

3. ✔

A is false but R is true

4. ✘

**Question Number : 125 Question Id : 5171449563 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 : No Correct Marks : 2 Wrong Marks : 0**

Primary succession in water takes place in the following order

**Options :**

Phytoplanktons (pioneers) → Rooted-submerged plants → Rooted floating angiosperms → Free-floating plants → Reeds swamp → Marsh-meadow → Trees → Forests (climax)

1. ✔



Phytoplanktons (pioneers) → Rooted floating angiosperms → Rooted-submerged plants → Free-floating plants → Reeds swamp → Marsh-meadow → Trees → Forests (climax)

2. ✘

Phytoplanktons (pioneers) → Free-floating plants → Rooted-submerged Plants → Rooted floating angiosperms → Reeds swamp → Marsh-meadow → Trees → Forests (climax)

3. ✘

Phytoplanktons (pioneers) → Rooted-submerged plants → Free-floating plants → Rooted floating angiosperms → Reeds swamp → Marsh-meadow → Trees → Forests (climax)

4. ✘

**Question Number : 126 Question Id : 5171449564 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Identify the correct sequence of steps in the nitrogen cycle

Options :

Atmospheric nitrogen → Lightening → Rain wash → Assimilation → Nitrification → Ammonification → Denitrification

1. ✘

Atmospheric nitrogen → Lightening → Rain wash → Ammonification → Assimilation → Nitrification → Denitrification

2. ✘

Atmospheric nitrogen → Lightening → Rain wash → Nitrification → Assimilation → Ammonification → Denitrification

3. ✔

Atmospheric nitrogen → Lightening → Rain wash → Denitrification → Ammonification → Assimilation → Nitrification

4. ✘

**Question Number : 127 Question Id : 5171449565 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Changes in water temperature have a significant influence on coral species' ability to construct interconnected reefs. Coral polyps are fed by photosynthetic zooxanthellae, an algal member that inhabits the endodermis of the polyp. At seawater temperatures below 18°C, zooxanthellae cannot thrive. Coral bleaching results from zooxanthellae leaving coral tissue when water temperatures rise (over 35 °C). According to Shelford's Law of Tolerance, the organism's wide environmental factor tolerance limits show:

Options :

Wide distribution with high population size

1. ✘

Narrow distribution with low population size

2. ✔

Wide distribution with low population size

3. ✘

Narrow distribution with high population size

4. ✘

Question Number : 128 Question Id : 5171449566 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 : No Correct Marks : 2 Wrong Marks : 0

Which scientist proposed that "ontogeny recapitulates phylogeny" in his theory of recapitulation?

Options :

S.L. Miller

1. ✘

Louis Pasteur

2. ✘

Charles Darwin

3. ✘

Ernst Haeckel

4. ✔

Question Number : 129 Question Id : 5171449567 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 : No  
Correct Marks : 2 Wrong Marks : 0

In his experimental study, Miller successfully synthesized simple amino acid from ---

Options :

1. ✓ Hydrogen, methane, ammonia, water vapour
2. ✗ Methane, ammonia, oxygen, nitrogen
3. ✗ Ammonia, methane, carbon dioxide, oxygen
4. ✗ Hydrogen, water vapor, oxygen, helium

Question Number : 130 Question Id : 5171449568 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 : No  
Correct Marks : 2 Wrong Marks : 0

The lack of oxygen on Earth has resulted in a diminishing atmosphere. However, it subsequently underwent a transformation into an oxidizing entity as a result of the emergence of -----.

Options :

1. ✗ Angiosperms
2. ✗ Gymnosperms

Cyanobacteria

3. ✓

Eukaryotic algae

4. ✘

**Question Number : 131 Question Id : 5171449569 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Balancing selection is specifically pertaining with successful reproduction of

Options :

Homozygous individuals

1. ✘

Heterozygous recessives

2. ✘

Heterozygous individuals

3. ✓

Azygous individuals

4. ✘

**Question Number : 132 Question Id : 5171449570 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Match the following:

Column – I		Column – II	
I	Darwin	1	Use and Disuse of organs
II	Lamarck	2	Origin of Life
III	Mendel	3	Natural Selection
IV	Oparin	4	Laws of Heredity

Options :

I-3, II-1, III-4, IV-2

1. ✓

I-1, II-3, III-2, IV-4

2. ✘

I-1, II-2, III-3, IV-4

3. ✘

I-4, II-3, III-2, IV-1

4. ✘

**Question Number : 133 Question Id : 5171449571 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 : No Correct Marks : 2 Wrong Marks : 0**

Assertion (A): The Hardy-Weinberg principle states that allele frequencies within a population remain stable and constant across successive generations.

Reason (R): Evolution would be thought to have resulted from a disturbance in Hardy-Weinberg equilibrium or genetic equilibrium.

**Options :**

Both A and R are true and the R is the correct explanation of the A

1. ✘

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

2. ✓

A is true but R is false.

3. ✘

A is false and R is true.

4. ✘

Question Number : 134 Question Id : 5171449572 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 : No  
Correct Marks : 2 Wrong Marks : 0

Which of the following statements regarding the prediction of the neutral theory of molecular evolution is supported by evidence?

Options :

1. ✓  
Human and Chimps differ more in DNA sequences in pseudogenes than in functional genes
2. ✗  
Human and Chimps differ more in DNA sequences in coding region of functional genes than in pseudogenes
3. ✗  
The rate of evolution of most DNA sequences is observed to be higher in humans compared to chimpanzees.
4. ✗  
Species that are more advanced possess a larger number of functional genes.

Question Number : 135 Question Id : 5171449573 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 : No  
Correct Marks : 2 Wrong Marks : 0

X-ray crystallography provides information about the ----- of DNA but is limited because ----- of the DNA. The technique is based on the pattern of ----- of the atoms in the molecule.

Options :

1. ✗  
Structure, difficulty of purification, light absorption
2. ✓  
Dimensions, molecular weight, diffraction

Molecular weight, shape, diffraction

3. ✘

Dimensions, linearity, light absorption

4. ✘

**Question Number : 136 Question Id : 5171449574 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Match the following

Column I

I. Klenow

II. T4 DNA pol

III. T3 RNA pol

IV. RNase H

Column II

1. DNA-dependent RNA polymerase

2. Lacks 5' to 3' exonuclease activity

3. Used in second strand cDNA synthesis

4. DNA pol I lacks 5' to 3' exonuclease activity

Options :

I- 1    II-2    III-3    IV-4

1. ✘

I-3    II- 2    III-1    IV-4

2. ✘

I-4    II-2    III-1    IV-3

3. ✔

I- 2    II-4    III-1    IV-3

4. ✘

**Question Number : 137 Question Id : 5171449575 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 : No**

**Correct Marks : 2 Wrong Marks : 0**

Match the following:

Column I

- I. Restriction endonucleases
- II. DNA finger printing
- III. Polymerase chain reaction
- IV. Monoclonal antibodies

Column II

- 1. Kary Mullis
- 2. Kohler and Milstein
- 3. Alec Jaffreys
- 4. Werner Arber

Options :

I-4    II-3    III-1    IV-2

1. ✓

I-4    II-3    III-2    IV-1

2. ✗

I-2    II-3    III-1    IV-4

3. ✗

I-4    II-1    III-2    IV-3

4. ✗

Question Number : 138 Question Id : 5171449576 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 : No Correct Marks : 2 Wrong Marks : 0

The light source for the visible and UV part of the spectrophotometer is ----- and also -----

- I. Tungsten filament bulb
- II. Neon bulb
- III. Deuterium bulb
- IV. Helium bulb

Options :

I and III

1. ✓

II and IV

2. ✗



II and III

3. ✘

IV and I

4. ✘

**Question Number : 139 Question Id : 5171449577 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 : No Correct Marks : 2 Wrong Marks : 0**

The major cause of Genetic drift is

Options :

Mutations in large population

1. ✘

Bottle neck effect

2. ✘

Non-random mating

3. ✘

Change in allele frequency

4. ✔

**Question Number : 140 Question Id : 5171449578 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 : No Correct Marks : 2 Wrong Marks : 0**

Corn is immersed in the boiling water. If it is cooled; then the solution becomes sweet. What is it due to?

Options :

Inactivation of enzymes in the boiling water

1. ✘

2. ✓ Conversion of disaccharides to monosaccharides

3. ✘ Conversion of monosaccharides to disaccharides

Conversion of monosaccharides to polysaccharides

4. ✘

**Question Number : 141 Question Id : 5171449579 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 : No Correct Marks : 2 Wrong Marks : 0**

. The cells isolated from an animal become senescent after a limited number of divisions in culture, but the cell lines used in experimental cell biology are able to proliferate indefinitely in culture. This is due to the fact that:

**Options :**

1. ✘ They are being continually given fresh supply of growth factor

2. ✓ They undergo mutations that abolish cell senescence

3. ✘ They undergo mutations that inactivate the genes involved in programmed cell death

4. ✘ They remain undifferentiated

**Question Number : 142 Question Id : 5171449580 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 : No Correct Marks : 2 Wrong Marks : 0**

The physical significance of specific growth rate constant is

**Options :**

Rate at which the organism is growing

1. ✘

Fraction per unit growth of microorganism per unit time

2. ✘

Grams of cell formed per grams cell mass per unit time

3. ✔

Gram of cells formed per unit time

4. ✘

**Question Number : 143 Question Id : 5171449581 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 : No Correct Marks : 2 Wrong Marks : 0**

The process of phytoremediation where complexation and immobilization of toxin takes place within the soil is called as

**Options :**

Phytoextraction

1. ✘

Phytodegradation

2. ✔

Phytovolatilization

3. ✘

Phytostabilization

4. ✘

**Question Number : 144 Question Id : 5171449582 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 : No Correct Marks : 2 Wrong Marks : 0**

Activation-induced deaminase (AID) enzymes catalyzes the conversion of -----  
- in both class switch recombination and somatic hypermutation.

Options :

1. ✓ Cytosine to Uracil in the variable regions and switch regions of immunoglobulin genes
2. ✗ Adenine to Guanine in the variable regions and switch regions of immunoglobulin genes
3. ✗ Cytosine to Uracil in only variable regions of immunoglobulin genes
4. ✗ Adenine to Guanine in only switch regions of immunoglobulin genes

**Question Number : 145 Question Id : 5171449583 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 : No Correct Marks : 2 Wrong Marks : 0**

Assertion (A): The optimal recognition site is a single site that is sensitive to commonly used restriction enzymes.

Reason (R): In pBR322, foreign DNA is ligated in close proximity of the Bam-HI site of the tetracycline resistance gene.

Options :

1. ✗ Both A and R are true and R is the correct explanation of the A.
2. ✓ Both A and R are true but R is not the correct explanation of the A.
3. ✗ A is true but R is false.
4. ✗ A is false, and R is true.

Question Number : 146 Question Id : 5171449584 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 : No  
Correct Marks : 2 Wrong Marks : 0

Assertion (A): T cells actively engage in the type IV hypersensitivity reaction.

Reason(R): Type IV hypersensitivity reactions are characterized by a cell-mediated immune response.

Options :

1. ✘ Both A and R are true and R is the correct explanation of the A.
2. ✔ Both A and R are true but R is not the correct explanation of the A.
3. ✘ A is true but R is false.
4. ✘ A is false, and R is true.

Question Number : 147 Question Id : 5171449585 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 : No  
Correct Marks : 2 Wrong Marks : 0

Identify the correct match of the ion channel with affected gene and associated disease

Column I

I.  $\text{Ca}^{2+}$

II.  $\text{Na}^+$

III. Acetylcholine receptor

IV.  $\text{Cl}^-$

Column II

1. SCN4A gene, paramyotonia congenita

2. PKD1, polycystic kidney disease

3. ABCC7 gene, cystic fibrosis

4. CHRNA1 gene, congenital myasthenic Syndrome

Options :

1. ✘ III-1 I-2 IV-3 II-4

2. ✘ I-1 III-2 II-3 IV-4

3. ✔ I-2 II-1 III-4 IV-3

4. ✘ IV-1 III-2 II-3 I-4

**Question Number : 148 Question Id : 5171449586 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 : No Correct Marks : 2 Wrong Marks : 0**

Volume of sample loaded on the microarray chips is -----?

**Options :**

1. ✔ Picolitre

2. ✘ Microlitre

3. ✘ Nanolitre

4. ✘ Femtolitre

**Question Number : 149 Question Id : 5171449587 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 : No Correct Marks : 2 Wrong Marks : 0**

Mitochondria are pelleted if you centrifuge the liquid at:

**Options :**

1. ✘ 10, 000 g for 10 minutes

- 2. ✘ 20, 000 g for 10 minutes
- 3. ✔ 20, 000 g for 20 minutes
- 4. ✘ 20, 000 g for 30 minutes

**Question Number : 150 Question Id : 5171449588 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 : No Correct Marks : 2 Wrong Marks : 0**

----- generate a characteristic signature resonance when stimulated with an alternating current?

**Options :**

- 1. ✔ Piezoelectric crystals
- 2. ✘ Fibre optic sensors
- 3. ✘ Biosensors
- 4. ✘ Transductions