

# TS SET

## Notations :

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

<b>Subject Name :</b>	CHEMICAL 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>	51714481
<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

<b>Section Id :</b>	517144161
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	42
<b>Number of Questions to be attempted :</b>	42
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	517144496
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

Question Number : 1 Question Id : 51714412176 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 learning style is associated with understanding information through patterns and relationships?

ఏ అభ్యాస శైలి నమూనాల భాంధవ్యాల ద్వారా సమాచారాన్ని అర్థం చేసుకొనుటతో అనుబంధించబడినది?

Options :

1. ✘ Visual  
దృశ్య
2. ✘ Auditory  
శ్రవణ
3. ✘ Kinesthetic  
కిన్‌స్టేటిక్
4. ✔ Logical  
తార్కిక

Question Number : 2 Question Id : 51714412177 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 traditional lecture-based classroom, who primarily controls the flow of information?

సాంప్రదాయక ఉపన్యాస ఆధార తరగతి గదిలో సమాచార ప్రవాహాన్ని నియంత్రించునది ఎవరు?

**Options :**

1. ✘ Students  
విద్యార్థులు

2. ✘ Peers  
తోటివారు

3. ✘ Educational technology  
విద్యావిషయ సాంకేతికత

4. ✔ Teacher  
బోధకుడు

**Question Number : 3 Question Id : 51714412178 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 do support materials contribute to effective teaching?

మద్దతు పదార్థాలు సమర్థ భోదనకు ఎలా సహకరిస్తాయి?

**Options :**

1. ✘ By replacing the need for teacher involvement.  
బోధకుని ప్రమేయపు అవసరంతో భర్తీ చేయుట ద్వారా

2. ✘ By providing a distraction-free environment.  
పరధ్యానంలేని వాతావరణం కలిగించుట ద్వారా

3. ✔ By facilitating varied learning experiences.  
వివిధ అభ్యాస అనుభవాలను సులభతరం చేయుట ద్వారా

By automating assessment and grading.

4. ✘ మదింపు, గ్రేడింగు స్వయం చాలకం చేయుట ద్వారా

Question Number : 4 Question Id : 51714412179 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 term "elective courses" in a choice-based education system refers to courses that:

ఎంపిక ఆధార విద్యాపద్ధతిలో ఎన్నుకొనే కోర్సులు అనగా ఈ దిగువ కోర్సులు

Options :

1. ✘ Are mandatory for all students  
అందరు విద్యార్థులకు తప్పనిసరి

2. ✘ Are chosen by teachers for students  
విద్యార్థుల కొరకు బోధకులను ఎంపిక చేస్తారు

3. ✔ Students can choose based on their preferences  
విద్యార్థులు వారి ప్రాధాన్యతల ద్వారా ఎంపిక చేస్తారు

4. ✘ Are only related to physical education and sports  
శారీరక విద్య, క్రీడలకు మాత్రమే సంబంధించినది

Question Number : 5 Question Id : 51714412180 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 ICT-based learning tool?

ఈ దిగువ వానిలో ఏది ICT-ఆధారిత అభ్యాస పరికరము

**Options :**

1. ✘ Whiteboard and marker  
తెల్లబోర్డు మరియు మార్కరు
2. ✘ Chalk and blackboard  
సుద్ద, నల్ల బోర్డు
3. ✘ Printed textbook  
మూద్రించిన పాఠ్యాంశ పుస్తకము
4. ✔ Educational software on a tablet  
టాబ్లెట్ పై విద్యా విషయ సాఫ్ట్‌వేర్

**Question Number : 6 Question Id : 51714412181 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 is "replicable" an important feature of research?

ప్రతిరూపమైన అనునది ఎందువలన పరిశోధనా ముఖ్యలక్ష్యము

**Options :**

1. ✘



It allows researchers to keep their methods secret.

అది పరిశోధకులు తమ పద్ధతులను రహస్యంగా ఉంచటానికి ఉపయోగపడుతుంది

2. ✘

It ensures that research findings are applicable only to specific cases.

కొన్ని ప్రత్యేక కేసులలో మాత్రమే పరిశోధనా కనుగొనుటలు వర్తించేటట్లు చూస్తుంది

3. ✔

It allows other researchers to repeat the study to verify the results.

అది ఇతర పరిశోధకులు ఆ ఫలితాలను సరిచూచుటకు అధ్యయనం తిరిగి

చేయుటకువీలు కల్పిస్తుంది

4. ✘

It prevents other researchers from using similar methodologies.

ఇతర పరిశోధకులు అటువంటి పద్ధతులను వాడకుండా నిరోధిస్తుంది

Question Number : 7 Question Id : 51714412182 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

Post-positivist researchers are more likely to:

పోస్ట్ పోజిటివిస్ట్ పరిశోధకులు ఎక్కువ సంభావ్యంగా

Options :

Completely disregard quantitative data

పూర్తిగా పరిణాత్మక దత్తాంశాన్ని నిర్లక్ష్యం చేస్తారు

1. ✘

Focus solely on subjective experiences

ఆత్మశయ అనుభవాలపై దృష్టి పెడతారు

2. ✘

3. ✓ Acknowledge their own biases and limitations in research  
పరిశోధనలో తమ స్వంత పక్షపాతాలను, పరిమితులను గౌరవిస్తారు

4. ✘ Reject the need for peer review and validation  
తోటివారి సమీక్ష, ధృవీకరణల అవసరాన్ని తిరస్కరిస్తారు

Question Number : 8 Question Id : 51714412183 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 APA referencing style is primarily used in which academic disciplines?  
APA రిఫరెన్సింగు శైలిని సాధారణంగా ఏ విద్యాసంబంధ శాస్త్రంలో ఉపయోగిస్తారు

Options :

1. ✓ Social sciences  
సాంఘిక శాస్త్రాలు

2. ✘ Natural sciences  
సహజ శాస్త్రాలు

3. ✘ Engineering  
ఇంజనీరింగు

4. ✘ Medicine  
మందు



Question Number : 9 Question Id : 51714412184 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 ICT assist in the literature review process during research?  
పరిశోధనలో గ్రంథ సమీక్షకు ICT ఎట్లు సహకరించ గలదు?

Options :

1. ✘  
By providing opportunities for plagiarism  
ఈ గ్రంథ చౌర్యమునకు అవకాశాలు కల్పిస్తు
2. ✘  
By allowing researchers to skip the literature review phase  
ఈ పరిశోధకులకు గ్రంథ సమీక్ష దశను దాటేటట్లు చేయుట ద్వారా
3. ✔  
By offering access to online databases and academic journals  
ఈ ఆన్‌లైన్ దత్తాంశ స్తావరాలు, విద్యాపత్రికలకు ప్రవేశం కల్పించుట ద్వారా
4. ✘  
By replacing the need for citations and references  
అనులేఖనాలు. ప్రస్తావనలు, అవసరాన్ని భర్తీచేయుట ద్వారా

Question Number : 10 Question Id : 51714412185 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 function of an "Appendix" section in a thesis?

పరిశోధనా వ్యాసములో " అపెండిక్స్ " విభాగపు విధి ఏమి

Options :

1. ✘ To introduce the main research question  
పరిశోధనా ముఖ్యప్రశ్నను పరిచయం చేయుట
2. ✔ To provide additional details that support the main text  
ముఖ్యపాఠ్యగ్రంథానికి మద్దతుగా అదనపు వివరాలను ఇచ్చుట
3. ✘ To summarize the research findings  
పరిశోధనా కనుగొనుటను సంగ్రహంగా చేయుట ద్వారా
4. ✘ To present the author's personal opinions  
రచయిత వ్యక్తిగత భావనలను ఇచ్చుట ద్వారా

Sub-Section Number :

2

Sub-Section Id :

517144497

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 51714412186 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 సమాధానాలను వ్రాయండి.

The Castle of Edinburgh is free (as appears to be the case with all garrisoned places in Great Britain) to the entrance of any peaceable person. So we went in, and found a large space enclosed within the walls, and dwellings for officers, and accommodation for soldiers, who were being drilled, or loitering about; and as the hill still ascends within the wall of the castle, we climbed to the summit, and there found an old soldier whom we engaged to be our guide. He showed us Mons Meg, a great old cannon, broken at the breech, but still aimed threateningly from the highest ramparts; and then he admitted us into an old chapel, said to have been built by a Queen of Scotland, the sister of Harold, King of England, and occupying the very highest part of the hill. It is the smallest place of worship I ever saw, but of venerable architecture, and of very solid construction.

ఇఎడిన్బర్గ్ కోటలోకి శాంతియుతంగా ఉండే ఏ వ్యక్తికైనా ప్రవేశం ఉచితం ( గ్రేట్ బ్రిటన్లోని అన్ని రక్షిత ప్రదేశాలలో ఉన్నట్లుగా ). కాబట్టి మేము లోపలికి వెళ్లి, గోడల లోపల ఒక పెద్ద స్థలాన్ని మరియు అధికారుల నివాసాలను, సైనికుల వసతిని చూసాము, డ్రిల్ చేస్తూ ఉన్న కొందరు సైనికుల్ని, అక్కడే తిరుగుతున్న మరికొందరి సైనికుల్ని చూసాము. కోట గోడ లోపల ఉన్న ఎత్తైన కొండ శిఖరం పైకి ఎక్కాము అక్కడ ఒక వృద్ధ సైనికుడిని మేము కలిసి అతనిని మా మర్గదర్శిగా నియమించుకున్నాము అతను మాకు మోన్స్ మెగ్, ఒక గొప్ప పాత ఫిరంగిని చూపించాడు. అది బ్రీచ్ వద్ద విరిగిపోయింది కాని ఇప్పటికీ ఎత్తైన ప్రాకారాల నుండి బెదిరించే లక్ష్యంతోనే ఉంది. ఆపై అతను మమ్మల్ని పాత ప్రార్థనా మందిరంలోకి తీసుకువెళ్లాడు. దీనిని ఇంగ్లండ్ రాజు హురార్డ్ సోదరి, స్కాట్లాండ్ రాణి నిర్మించిందని చెప్పాడు. ఈ కట్టడం కొండపై అత్యంత ఎత్తైన భాగాన నిర్మించబడింది. ఇది నేను చూసిన అతి చిన్న ప్రార్థనా స్థలం, కాని అది అద్భుతమైన వాస్తుశిల్పంతో కూడిన చాలా పటిష్టమైన నిర్మాణం.

### Sub questions

Question Number : 11 Question Id : 51714412187 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



There is a \_\_\_\_\_ inside the boundary wall of the castle

కోట ప్రహారీ గోడ లోపల ఒక \_\_\_\_\_ ఉంది.

Options :

1. ✘ low hill  
చిన్న కొండ
2. ✔ steep hill  
ఎత్తైన కొండ
3. ✘ boulder  
బండరాయి
4. ✘ rocky terrain  
రాతి భూభాగం

Question Number : 12 Question Id : 51714412188 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

There is a \_\_\_\_\_ intimidating from over the lofty bulwark.

ఎత్తైన ప్రాకారాల మీద నుండి ఒక \_\_\_\_\_ బెదురుస్తున్నట్టుగా ఉంది

Options :

1. ✔ cannon  
ఫిరంగి
2. ✘

platoon of soldiers'  
సైనికుల బృందం

3. ✘ group of officers'  
అధికారుల బృందం

4. ✘ group of guards'  
గార్డుల సమూహం

Question Number : 13 Question Id : 51714412189 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 old chapel is situated on the \_\_\_\_\_ of the hill.  
పాత ప్రార్థనా మందిరం కొండ \_\_\_\_\_ ఉంది

Options :

1. ✘ foot  
దిగువన

2. ✘ ridge  
అంచున

3. ✔ summit  
శిఖరం పైన

4. ✘ surroundings  
పరిసరాలలో

Question Number : 14 Question Id : 51714412190 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 appreciates the chapel's \_\_\_\_\_  
రచయిత ప్రార్థనా మందిరం యొక్క \_\_\_\_\_ని మెచ్చుకున్నారు

Options :

1. ✘ History  
చరిత్ర

2. ✘ location  
స్థలం

3. ✔ structural design  
నిర్మాణ రూపకల్పన

4. ✘ ambience  
వాతావరణం

Question Number : 15 Question Id : 51714412191 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 visited the castle, as a \_\_\_\_\_  
రచయిత, ఆ కోటను ఒక \_\_\_\_\_ సందర్శించారు

Options :

1. ✓ tourist  
పర్యాటకుడిగా
2. ✘ historian  
చరిత్రకారుడుగా
3. ✘ soldier  
సైనికుడుగా
4. ✘ archaeologist  
పురావస్తు శాస్త్రవేత్తగా

Sub-Section Number : 3  
Sub-Section Id : 517144498  
Question Shuffling Allowed : Yes  
Is Section Default? : null

Question Number : 16 Question Id : 51714412192 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 an \_\_\_\_\_ communicator helps in resolving conflicts and misunderstandings in communication.

\_\_\_\_\_ కమ్యూనికేటర్ గా ఉండటం వలన కమ్యూనికేషన్ లో విభేదాలు మరియు అపార్థాలను పరిష్కరించడంలో సహాయపడుతుంది.

Options :

1. ✓ empathetic  
సానుభూతిగల

2. ✗ inconsiderate  
అలోచించని

3. ✗ observant  
గమనించే

4. ✗ inconsistent  
అస్థిరమైన

Question Number : 17 Question Id : 51714412193 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

Providing clear instructions and guidance for activities in a classroom is a strategy for \_\_\_\_\_ communication

తరగతి గదిలో కార్యకలాపాలకు స్పష్టమైన సూచనలు మరియు మార్గదర్శకత్వం అందించడం అనేది \_\_\_\_\_ కమ్యూనికేషన్ లో ఒక పద్ధతి.

Options :

1. ✘ controlled  
నియంత్రించబడిన

2. ✔ procedural  
విధానపరమైన

3. ✘ unintended  
అనాలోచిత

4. ✘ content  
విషయ పరిజ్ఞాన

Question Number : 18 Question Id : 51714412194 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 \_\_\_\_\_ is a key to establish a genuine relationship with a  
person whose linguistic and cultural background is different

భాషా మరియు సాంస్కృతిక నేపథ్యం భిన్నంగా ఉన్న వ్యక్తితో చక్కటి సంబంధాన్ని  
ఏర్పరచుకోవడానికి \_\_\_\_\_ గల వారు కావడం కీలకం

Options :

1. ✘ close- minded  
సంకుచిత మనస్సు

2. ✔ open- minded  
విశాల మనస్తత్వం కలవారు

self- reflexive  
స్వీయ పరావర్తన

3. ✘

self- respectful  
స్వీయ గౌరవం

4. ✘

Question Number : 19 Question Id : 51714412195 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 order to have excellent decision making skills, a person needs to have  
\_\_\_\_\_ intelligence.

అద్భుతమైన నిర్ణయం తీసుకునే నైపుణ్యాలను కలిగి ఉండాలంటే, ఒక వ్యక్తికి  
\_\_\_\_\_ పరమైన తెలివితేటలు ఉండాలి.

Options :

social  
సామాజిక

1. ✘

psychological  
మానసిక

2. ✘

spiritual  
ఆధ్యాత్మిక

3. ✘

emotional  
భావోద్వేగ

4. ✔

Question Number : 20 Question Id : 51714412196 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

Radio and television are the examples of \_\_\_\_\_ media  
రేడియో మరియు టెలివిజన్ \_\_\_\_\_ మాధ్యమాలకు ఉదాహరణలు

Options :

1. ✓ electronic  
విద్యుత్కణ
2. ✗ print  
ముద్రణ
3. ✗ social  
సామజిక
4. ✗ traditional  
సంప్రదాయకమైన

Question Number : 21 Question Id : 51714412197 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

8, 4, 4, 6, 12, 30, \_\_\_\_\_

Options :

1. ✘ 75

2. ✘ 95

3. ✔ 90

4. ✘ 105

Question Number : 22 Question Id : 51714412198 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

EUILN, DWFPI, \_\_\_ CXEQH, GSKJP

Options :

1. ✔ FTJKO

2. ✘ FUILM

3. ✘ EULIM



4. ✘ ETJKO

Question Number : 23 Question Id : 51714412199 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 FRAME = 48 and HURDLE =74 then  
FIGMENT= ?  
ఒక నిర్దిష్ట కోడ్ భాషలో FRAME = 48 మరియు HURDLE =74 పదం అయితే  
FIGMENT= ?

Options :

1. ✘ 74

2. ✘ 89

3. ✘ 91

4. ✔ 81

Question Number : 24 Question Id : 51714412200 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**

Shiva starts a business with an investment of Rs. 1,00,000. Pradeep joins him after 3 months with an investment of Rs. 1,50,000. \_\_\_\_\_ is the Shiva's share in the total first year profit which was Rs. 51,000.

శివ రూ.1,00,000 పెట్టుబడితో వ్యాపారం ప్రారంభించాడు. ప్రదీప్ 3 నెలల తర్వాత రూ. 1,50,000 ల పెట్టుబడితో అతనితో చేరాడు. \_ మొదటి సంవత్సరం

మొత్తం లాభంలో శివ వాటా రూ. 51,000 ఐన అందులో శివ వాటా \_\_\_\_\_

**Options :**

1. ✘ 21,000

2. ✘ 20,000

3. ✘ 27,000

4. ✔ 24,000

**Question Number : 25 Question Id : 51714412201 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 trader loses 20% when he sells a TV set for Rs. 12,000. The percentage he will gain by selling it for Rs. 20,000 is \_\_\_\_\_

ఒక వ్యాపారి టీవీ సెట్‌ను రూ.12,000.కి అమ్మినప్పుడు 20% నష్టపోతాడు. రూ. 20,000 కి అమ్మడం ద్వారా అతను పొందే లాభ శాతం. \_

**Options :**

1. ✘ 15%

2. ✓ 33.33%

3. ✘ 16.66%

4. ✘ 25%

**Question Number : 26 Question Id : 51714412202 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:**

No village is a city.

All cities are states.

**ప్రకటనలు:**

ఏ పల్లెటూరు నగరం కాదు.

అన్ని నగరాలు రాష్ట్రాలే.

**Conclusions:**

I. Some villages are cities.

II. Some cities are states.

**తీర్మానాలు:**

I. కొన్ని గ్రామాలు నగరాలు.

II. కొన్ని నగరాలు రాష్ట్రాలు

**Options :**

1. ✘ I follow

2. ✓ II follows

3. ✖ Both I & II follows.

4. ✖ Neither I nor II follows

Question Number : 27 Question Id : 51714412203 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 90 students, 60 opted Maths, 50 opted Science and 20 opted both.  
How many students opted only Science?

90 మంది విద్యార్థులున్న తరగతిలో 60 మంది మ్యాథ్స్, 50 మంది సైన్స్, 20  
మంది రెండింటినీ ఎంచుకున్నారు. ఎంతమంది విద్యార్థులు సైన్స్ ను మాత్రమే  
ఎంచుకున్నారు?

Options :

1. ✖ 20

2. ✔ 30

3. ✖ 40

4. ✖ 50

Question Number : 28 Question Id : 51714412204 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 son's daughter's sibling's mother related to my wife's only son?

నా కొడుకు కూతురు తోబుట్టువు తల్లికి, నా భార్య ఒక్కగానొక్క కొడుక్కి  
బాంధవ్యం ఏమిటి?

Options :

1. ✘ Sister
2. ✘ Sister-in-law
3. ✔ Wife
4. ✘ Aunt

Question Number : 29 Question Id : 51714412205 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 is signified by Udaharana of Anumana (Inference) in  
Indian Logic?

ఈ క్రిందివాటిలో భారతీయ తర్కంలో అనుమాన (నిర్ధారణ) యొక్క ఉదాహరణ  
సూచించునది ఏది?

## Options :

1. ✘ Statement of reason  
కారణం యొక్క ప్రకటన

2. ✘ Proposition to be proved  
నిరూపించవలసిన ప్రతిపాదన

3. ✘ Conclusion proved  
ముగింపు నిరూపించబడింది

4. ✔ Universal proposition along with an instance  
ఉదాహరణతో పాటు సార్వత్రిక ప్రతిపాదన

Question Number : 30 Question Id : 51714412206 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 స్టేట్ మెంట్ లను పరిగణనలోకి తీసుకోండి మరియు సరైన ఆప్షన్ ఎంచుకోండి

a) Pratyaksha based on the perception of an object and Shruti based on hearing.

ఒక వస్తువు యొక్క గ్రహణం ఆధారంగా ప్రత్యక్ష, వినీకిడి ఆధారంగా శ్రుతి.

b) According to the Naiyayikas, inference is of two kinds, namely, Svārthanumana (Inference for one self) and Parārthanumana (Inference for the sake of others).

నయ్యాయికుల ప్రకారం, ఊహ రెండు రకాలు, అవి ఉ స్వార్థనుమన (ఒక ఆత్మకు ఊహ) మరియు పరార్థనుమన (ఇతరుల కోసం అంచనా).



**Options :**

1. ✘ Only (a)  
(a) మాత్రమే
2. ✘ Only (b)  
(b) మాత్రమే
3. ✔ Both (a) and (b)  
(a) మరియు (b) రెండూ
4. ✘ Neither (a) nor (b)  
(a) లేదా (b) రెండూ కాదు

<b>Sub-Section Number :</b>	4
<b>Sub-Section Id :</b>	517144499
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

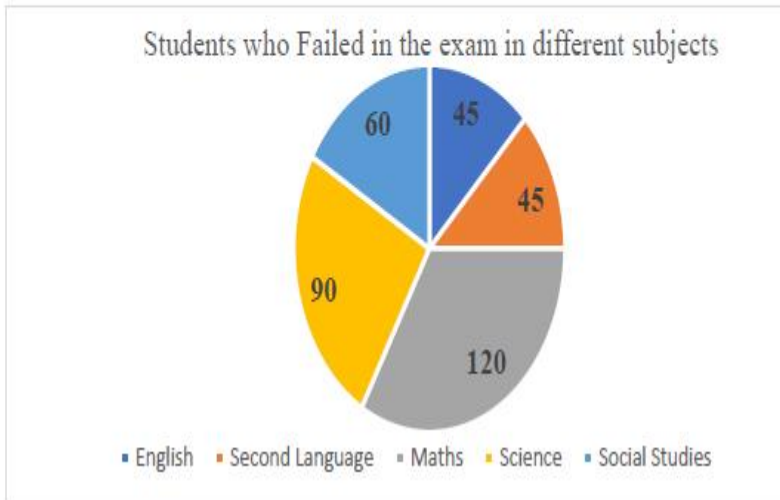
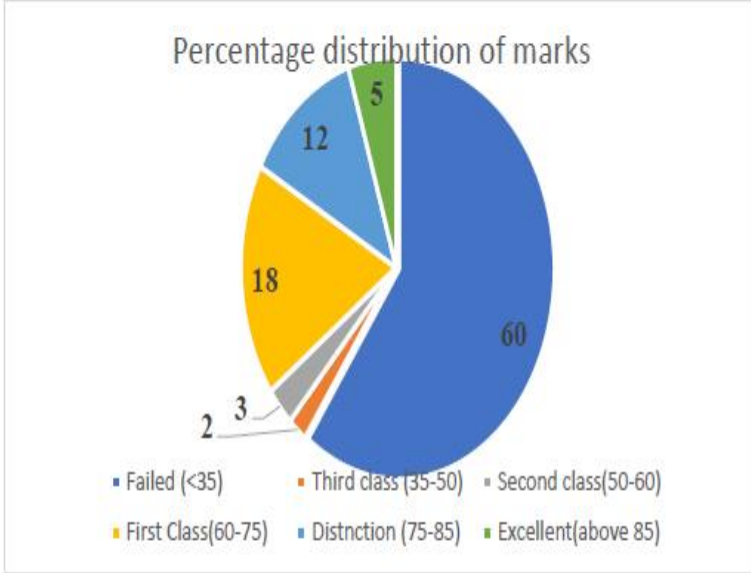
**Question Id : 51714412207 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play 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 following pie charts show the results of a board examination. Total number of students appeared for the exam is 77,000

క్రింది పై చార్టులు బోర్డు పరీక్ష ఫలితాలను చూపుతాయి. పరీక్షకు హాజరైన మొత్తం విద్యార్థుల సంఖ్య 77,000



### Sub questions

Question Number : 31 Question Id : 51714412208 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 many students failed in Mathematics in the board exam?

బోర్డు పరీక్షలో గణితంలో ఎంత మంది విద్యార్థులు ఫెయిల్ అయ్యారు?

Options :

1. ✘ 46200

2. ✔ 15400

3. ✘ 11550

4. ✘ 5775

Question Number : 32 Question Id : 51714412209 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 10% of the students who appeared, got 100% of the marks in Mathematics, then the number of students failed in Mathematics is how much percentage more than the number of students who got 100% of marks in the same subject?

హాజరైన విద్యార్థుల్లో 10% మంది గణితంలో 100% మార్కులు తెచ్చుకుంటే, అదే సబ్జెక్టులో 100% మార్కులు వచ్చిన విద్యార్థుల సంఖ్య కంటే గణితంలో ఫెయిల్ అయిన విద్యార్థుల సంఖ్య ఎంత శాతం ఎక్కువ?

Options :

1. ✘ 50%

2. ✔ 100%

3. ✘ 150%

4. ✘ 200%

Question Number : 33 Question Id : 51714412210 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 10% of the students who failed in science were made to pass by giving 5 grace marks, 40% of them secure more than 85% of the total marks in the five subjects as a result of these grace marks. The new number of students who got more than 85% of the marks is \_\_\_\_\_

సైన్స్ లో ఫెయిల్ అయిన వారిలో 10% మంది విద్యార్థులు 5 గ్రేస్ మార్కులు ఇచ్చి ఉత్తీర్ణులయ్యేలా చేస్తే, వారిలో 40% మంది ఈ గ్రేస్ మార్కుల ఫలితంగా ఐదు సబ్జెక్టుల్లో మొత్తం 85% కంటే ఎక్కువ మార్కులు సాధించారు. 85% కంటే ఎక్కువ మార్కులు పొందిన విద్యార్థుల కొత్త సంఖ్య \_\_\_\_\_

Options :

1. ✔ 4312

2. ✘ 3214

3. ✘ 1342

4. ✘ 2314

Question Number : 34 Question Id : 51714412211 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 the next year, the total number of students appearing for the exam increased by 10% and the number of students who failed in social studies is what percentage of the total students who appeared for the exam.

మరుసటి సంవత్సరంలో, పరీక్షకు హాజరయ్యే మొత్తం విద్యార్థుల సంఖ్య 10% పెరిగింది మరియు సోషల్ స్టడీస్ లో ఫెయిల్ అయిన విద్యార్థుల సంఖ్య పరీక్షకు హాజరైన మొత్తం విద్యార్థులలో ఎంత శాతం ఉంది.

Options :

1. ✘ 8 1/3 %

2. ✘ 9 1/11%

3. ✔ 10%

4. ✘ 11 1/9 %

Question Number : 35 Question Id : 51714412212 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 number of students who failed in Mathematics in terms of percentage is  
శాతం పరంగా గణితంలో ఫెయిల్ అయిన విద్యార్థుల సంఖ్య

Options :

1. ✘ 120

2. ✘ 100

3. ✘ 60

4. ✔ 20

Sub-Section Number :

5

Sub-Section Id :

517144500

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 36 Question Id : 51714412213 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 SSD?

ఎస్.ఎస్.డి పూర్తి నామము

Options :

1. ✘ Smart State Display

2.



✘ Smart State Drive

3. ✘ Solid State Display

4. ✔ Solid State Drive

Question Number : 37 Question Id : 51714412214 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 unsolicited email message sent to many recipients at once is .....

అయాచిత ఇ మెయిలు వార్తను చాలా మందికి ఒకేసారి పంపించుటను

Options :

1. ✘ Virus

2. ✘ Attack

3. ✔ Spam

4. ✘ Memes

Question Number : 38 Question Id : 51714412215 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 a digital initiative for Robotics Outreach Project.

రోబోటిక్సు ఔట్‌రీచ్ ప్రాజెక్టు ఈ దిగువది ఒక డిజిటల్ ఇనిషియేటివ్

Options :

1. ✘ e-Vidwan  
ఇ- విద్వాన్

2. ✔ e-Yantra  
ఇ- యంత్ర

3. ✘ e-Kalpa  
ఇ- కల్ప

4. ✘ None of the above  
పైవేవి కావు

Question Number : 39 Question Id : 51714412216 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

Firewalls are used to protect a communication network system against .....

ఒక వార్త నెట్‌వర్క్‌ను ఈ దిగువ నుండి రక్షించుటకు ఫైర్‌వాల్స్‌ను ఉపయోగింతురు

**Options :**

1. ✘ Virus attacks  
వైరస్ దాడులు
2. ✔ Unauthorized attacks  
అనధికార దాడులు
3. ✘ Data driven attacks  
డేటా ఆధారిత దాడులు
4. ✘ Fire-attacks  
ఫైర్ దాడులు

**Question Number : 40 Question Id : 51714412217 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**

URL stands for  
యూ.ఆర్.ఎల్ అనగా

**Options :**

1. ✘ Universal Resource Location
2. ✘ Universal Response Locator
- 3.

✘ ✘ Unified Response Location

4. ✔ Uniform Resource Locator

Question Number : 41 Question Id : 51714412218 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

Designing self-sustaining systems is a viable path towards long-term progress.  
దీర్ఘకాల ప్రగతికి, స్వయం నిలకడ గల పద్ధతులను డిజైను చేయుట

Options :

1. ✘ Irreversible and flexible  
అిప్పికొట్టలేనిది, అనువైనది

2. ✔ Reversible and flexible  
అిప్పికొట్టగలది, అనువైనది

3. ✘ Reversible and inflexible  
అిప్పికొట్టగలది, అనువైనది కాదు

4. ✘ Immutable and unchangeable  
మార్పులేనిది. మార్పుచేయలేనిది

Question Number : 42 Question Id : 51714412219 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 agents is responsible for turning the Taj Mahal yellow?

తాజ్‌మహలును పసుపు పచ్చగా మార్చు వస్తువు

Options :

1. ✘ Sulphur  
సల్ఫర్

2. ✘ Chlorine  
క్లోరిన్

3. ✔ Sulphur dioxide  
సల్ఫర్ డై ఆక్సైడ్

4. ✘ Nitrogen dioxide  
నైట్రోజన్ డై ఆక్సైడ్

Question Number : 43 Question Id : 51714412220 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 wind energy is considered a conventional source of energy?

గాలి శక్తిని ఎందువలన సంప్రదాయక శక్తి వనరుగా భావించేదరు?

Options :

1. ✘ as it can rotate a windmill  
అది గాలి యంత్రాన్ని తిప్పగలదు

2. ✘ as it can help in lifting water  
అది నీటిని పైకి పంపగలదు

3. ✔ as it is readily available and used for a long time  
అది వెంటనే దొరకును. దీర్ఘకాలం ఉపయోగించవచ్చును.

4. ✘ As it is produced due to uneven heating of the Earth  
భూమి అసమానంగా వేడేక్కుట వలన అది ఉత్పత్తి అగును

Question Number : 44 Question Id : 51714412221 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

International Day of Natural Disaster Reduction is celebrated on.....  
జాతీయ విపత్తు తగ్గింపు అంతర్జాతీయ దినము వేడుక చేసుకొను రోజు

Options :

1. ✘ June 15  
జూన్ 15

2. ✘ March 5  
మార్చి 5



3. ✓ October 13  
అక్టోబరు 13

4. ✘ September 13  
సెప్టెంబరు 13

Question Number : 45 Question Id : 51714412222 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 National Environment Protection Act was passed in India?  
ఇండియాలో జాతీయ వాతావరణ రక్షణ చట్టాన్ని అనుమతించిన సంవత్సరం?

Options :

1. ✘ 1974

2. ✘ 1981

3. ✓ 1986

4. ✘ 1995

Question Number : 46 Question Id : 51714412223 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 is the first Open University in India?

ఇండియాలో మొదటి సార్వత్రిక విశ్వవిద్యాలయము

Options :

1. ✓ Andhra Pradesh Open University  
ఆంధ్రప్రదేశ్ సార్వత్రిక విశ్వవిద్యాలయము

2. ✘ Yashwantrao Chavan Maharashtra Open University  
యశ్వంత రావు చవన్ మహారాష్ట్ర సార్వత్రిక విశ్వవిద్యాలయము

3. ✘ Indira Gandhi National Open University  
ఇందిరా గాంధీ జాతీయ సార్వత్రిక విశ్వవిద్యాలయము

4. ✘ Nalanda Open University  
నలందా సార్వత్రిక విశ్వవిద్యాలయము

Question Number : 47 Question Id : 51714412224 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 ABC as per the NEP 2020?

NEP 2020 ప్రకారము ABC అనగా

Options :

1.

✘ Academic Basic Certificate.

2. ✘ Annual Basic Certificate.

3. ✘ Annual Bank of Credits

4. ✔ Academic Bank of Credits

Question Number : 48 Question Id : 51714412225 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 purpose of value education is best served by focusing on...

ఈ క్రింది దానిపై దృష్టి పెడితే విలువ విద్య యొక్క ఉద్దేశము చక్కగా నేరవేరుతుంది

Options :

1. ✘ Cultural practices prevailing in the society.  
సమాజములో ఉన్న సాంస్కృతిక ఆచరణలు

2. ✘ Norms of conduct laid down by a social group  
ఒక సమాజ సమూహము పెట్టిన నడవడి నియమవళి

3. ✔ Concern for human values.  
మానవ విలువలకు ఆందోళన

## Religious,moral practices and instructions

మత, నీతి ఆచరణాలు, ఆదేశాలు

4. ✘

Question Number : 49 Question Id : 51714412226 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 best way for providing value education is through?

విలువ విద్య అందించుటకు సరియైన పద్ధతి

Options :

Discussions on scriptural texts

1. ✘ వ్రాత గ్రంథాలపై చర్చలు

Lectures/discourses on values

2. ✘ విలువలపై ఉపన్యాసాలు, ప్రసంగాలు

Seminars / symposia on values

3. ✘ విలువలపై సదస్సులు/ గోష్టిలు

Mentoring / reflective sessions on values

4. ✔ విలువలపై హితోప దేశ/ ప్రతిబింబ సమావేశాలు

Question Number : 50 Question Id : 51714412227 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 full form of SAMVAY is.....

SAMVAY పూర్తి రూపము

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

Options :

1. School Assessment Matrix for Vocational Analysis of Youth
2. Skill Assessment Matrix for Vocational Analysis of Youth
3. Skill Accreditation Matrix for Vocational Advancement of Youth
4. School Accreditation Matrix for Vocational Advancement of Youth

## Paper II

Section Id : 517144162  
Section Number : 2  
Section type : Online

<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	100
<b>Number of Questions to be attempted :</b>	100
<b>Section Marks :</b>	200
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	517144501
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

**Question Number : 51 Question Id : 51714412228 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 represents the order of electronegativity.

**Options :**

1. ✘  $F > Cl > N > O$

2. ✘  $F > O > Cl > N$

3. ✔  $F > O > N \approx Cl$

4. ✘  $F > Cl < N > O$



Question Number : 52 Question Id : 51714412229 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 statement is correct regarding the non-metallic nature in the periodic table.

Options :

1. ✘ Increases from Boron to Thallium
2. ✘ Increases from Caesium to Lithium
3. ✔ Increases from Boron to Fluorine
4. ✔ Decreases from Fluorine to Iodine

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

Question Number : 53 Question Id : 51714412230 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 nature of the bond formed between  $\text{BF}_3$  and  $\text{NH}_3$  molecules?

Options :

1. ✘ ionic
2. ✘ covalent
3. ✔ co-ordinate
4. ✘ hydrophobic

**Question Number : 54 Question Id : 51714412231 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 statement is not true concerning the lanthanide contraction?

**Options :**

1. ✘ Separation of lanthanides
2. ✘ Anomalous behaviour of post-lanthanide elements
3. ✘ High density of post-lanthanide elements
4. ✔ Lutecium complexes are less stable than other lanthanide complexes

Question Number : 55 Question Id : 51714412232 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

Compared to d-d absorption bands the f-f' absorption bands of lanthanides are very sharp due to ...

Options :

1. ✘ Strong interaction between f-orbital electrons and ligand field
2. ✘ Poor shielding of 4f electrons by the 5s and 5p orbitals
3. ✔ Weak interaction between f-orbital electrons and ligand field
4. ✘ Same number of f-orbital electrons

Question Number : 56 Question Id : 51714412233 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 donor atom of a soft ligand belongs to the following period.

Options :

1. ✘ 1<sup>st</sup>

2. ✘ 8<sup>th</sup>

3. ✘ 2<sup>nd</sup>

4. ✔ 3<sup>rd</sup>

**Question Number : 57 Question Id : 51714412234 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**

According to HSAB theory, which of the following acid dissociates easily?

**Options :**

1. ✘ HCl

2. ✔ HI

3. ✘ HBr

4. ✘ HF

Question Number : 58 Question Id : 51714412235 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

$TlCl_3$  is unstable but  $TlCl$  stable due to the following reason.

Options :

1. ✘ increased Lewis-acidity
2. ✔ Inert-pair effect
3. ✘ high-electropositivity of Tl
4. ✘ increased Lewis-basicity

Question Number : 59 Question Id : 51714412236 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 following molecule exhibits polymorphism.

Options :

1. ✘ C<sub>60</sub>

2. ✔ H<sub>2</sub>O

3. ✘ graphite

4. ✘ cellulose

**Question Number : 60 Question Id : 51714412237 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 following element is a main-group element.

**Options :**

1. ✘ Ta

2. ✘ W

3. ✘ Re

4. ✔ In



Question Number : 61 Question Id : 51714412238 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

Metal complexes of the following element are used as MRI agent

Options :

1. ✘ Pt

2. ✘ Ce

3. ✘ Rh

4. ✔ Gd

Question Number : 62 Question Id : 51714412239 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

Rare earth metal ions are separated by the following technique.

Options :

1. ✓ Ion exchange chromatography
2. ✗ TLC
3. ✗ HPLC
4. ✗ paper chromatography

**Question Number : 63 Question Id : 51714412240 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 spectroscopy technique used to distinguish the M-SCN and M-NCS bonding metal complexes.

**Options :**

1. ✗ NMR
2. ✓ IR
3. ✗ EPR
4. ✗

## Mass

Question Number : 64 Question Id : 51714412241 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 following combination of metals is considered as catalyst in Ziegler-Natta polymerization.

Options :

1. ✘ Pd, Cu

2. ✘ Fe, Mo

3. ✘ Pd, Zn

4. ✔ Al, Ti

Question Number : 65 Question Id : 51714412242 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 following element can be used for molecular hydrogen (H<sub>2</sub>) storing.

**Options :**

1. ✘ Ti

2. ✔ Pd

3. ✘ Ca

4. ✘ B

**Question Number : 66 Question Id : 51714412243 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**

Auranofin is considered as the following drug.

**Options :**

1. ✔ Antirheumatic

2. ✘ Anticancer

3. ✘ Antibacterial

4. ✘ Antimalarial

Question Number : 67 Question Id : 51714412244 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 Mollusca blood is blue due to the formation of following metal-ligand bond

Options :

1. ✔ Cu-O

2. ✘ Fe-O

3. ✘ Co-O

4. ✘ Zn-O

Question Number : 68 Question Id : 51714412245 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 rays has no charge?

**Options :**

1. ✘ Cathode rays
2. ✘ Alpha rays
3. ✘ Beta rays
4. ✔ Gamma rays

**Question Number : 69 Question Id : 51714412246 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 complex  $[\text{Co}(\text{NH}_3)_6]^{+3}$  exhibits the

**Options :**

1. ✔ Diamagnetism
2. ✘ Paramagnetism
3. ✘ Ferromagnetism
4. ✘ Antiferromagnetism



Question Number : 70 Question Id : 51714412247 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

According to molecular orbital theory, the number of anti-bonding electrons present  
in NO and CO are respectively.

Options :

1. ✓ 1, 0

2. ✘ 2, 2

3. ✘ 3, 2

4. ✘ 2, 3

Question Number : 71 Question Id : 51714412248 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 following is an acid catalyst.

Options :

1. ✘ CaO

2. ✔ zeolite

3. ✘ N-heterocyclic carbene

4. ✘ dimethyl aminopyridine

Question Number : 72 Question Id : 51714412249 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

Walker's process is used to produce the following organic compounds

Options :

1. ✘ Alcohols

2. ✘ Alkanes

3. ✘ Amides

4. ✓ Aldehydes

Question Number : 73 Question Id : 51714412250 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 following metal ions are found in Super oxide dismutase.

Options :

1. ✘ Zn(II) and Ni(II)

2. ✓ Cu(II) and Zn(II)

3. ✘ Ni(II) and Co(III)

4. ✘ Cu(II) and Fe(III)

Question Number : 74 Question Id : 51714412251 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 cluster  $[\text{Os}_3(\text{CO})_{12}]$  has the following type of structure.

Options :

1. ✘ closo
2. ✘ nido
3. ✔ arachno
4. ✘ hypo

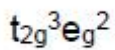
Question Number : 75 Question Id : 51714412252 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A  
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On  
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :  
No

Correct Marks : 2 Wrong Marks : 0

Which of the following d-electron configuration of a transition metal shows spin-orbit coupling?

Options :

1. ✘  $t_{2g}^0 e_g^0$
2. ✘  $t_{2g}^6 e_g^0$
3. ✘



Question Number : 76 Question Id : 51714412253 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 order of the reaction in  $SN^1CB$  mechanism?

Options :

1. ✗ Zero

2. ✗ third

3. ✗ first

4. ✓ second

Question Number : 77 Question Id : 51714412254 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  $[\text{Co}(\text{H}_2\text{O})_6]^{+2}$  is stable than  $[\text{Co}(\text{H}_2\text{O})_6]^{+3}$  ?

Options :

1. ✘ lower CFSE
2. ✘ lower lattice energy
3. ✔ higher CFSE
4. ✘ higher heat of hydration

Question Number : 78 Question Id : 51714412255 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 effect of the ligands which are not able to form metal-ligand  $\pi(\text{pi})$ -bonds increases with the increase of their ...

Options :

1. ✘ Bond angle



2. ✓ polarizability

3. ✗ nucleophilicity

4. ✗ electrophilicity

Question Number : 79 Question Id : 51714412256 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 test is used to distinguish the *cis* and *trans*-isomers of  $[\text{PtA}_2\text{X}_2]$  (A =  $\text{NH}_3$ , X = halogen or pseudohalide)?

Options :

1. ✗ Lassaigne's test

2. ✓ Kurnakov test

3. ✗ Kelling's test

4. ✗ Flame test

Question Number : 80 Question Id : 51714412257 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 example of  $\sigma$  &  $\pi$ - bonded organometallic compounds.

Options :

1. ✘ R-Mg-X

2. ✘  $(C_5H_5)_2Fe$

3. ✔  $Cr(CO)_6$

4. ✘  $(C_5H_5)Na^+$

Question Number : 81 Question Id : 51714412258 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

Among the amperometric titrations, the titration between chloride anion and silver  
cation is called...

Options :

1. ✘ Reducible ions vs non-reducible
2. ✘ Reducible ions vs reducible ions
3. ✔ Non-reducible ions vs reducible ions
4. ✘ Redox titrations

**Question Number : 82 Question Id : 51714412259 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**

Dimethyl glyoxime reacts with  $\text{Ni}^{+2}$  ions and forms the bright red-colour precipitate in the following medium.

**Options :**

1. ✔ Ammonical
2. ✘ acidic
3. ✘ alkaline
4. ✘

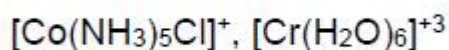
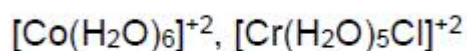
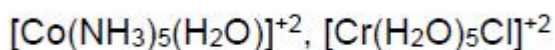
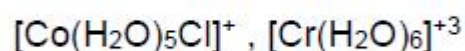
pure aqueous

Question Number : 83 Question Id : 51714412260 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 products A and B for the given reaction  
 $[\text{Co}(\text{NH}_3)_5\text{Cl}]^+ + [\text{Cr}(\text{H}_2\text{O})_6]^{+2} + 5\text{H}_3\text{O}^+ \rightarrow \text{A} + \text{B}$  are respectively.

Options :



Question Number : 84 Question Id : 51714412261 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 acceptor molecular orbital (MOs) on CO molecule?

Options :

1. ✓  $\pi^*$

2. ✗  $\sigma^*$

3. ✗  $\sigma^b$

4. ✗  $\pi^b$

Question Number : 85 Question Id : 51714412262 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

Clausius inequality indicates

Options :

1. ✓  $ds \geq \frac{dq}{T}$

2. ✗

$$\int \frac{dq_{\text{rev}}}{T} \neq 0$$

3. ✘  $dq \neq dw$

4. ✘  $dG = 0$

**Question Number : 86 Question Id : 51714412263 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 rate constant is tripled by a 10 °C rise from 295 K to 305 K. The activation energy ( in  $\text{kJ mol}^{-1}$ ) of the reaction is ( $R = 8.314 \text{ J mol}^{-1} \text{ K}^{-1}$ ;  $\log 3 = 0.477$ )

**Options :**

1. ✘ 32.18

2. ✘ 100.2

3. ✔ 82.18

4. ✘ 38.12



Question Number : 87 Question Id : 51714412264 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

$\Delta G = \Delta H - T\Delta S$  and  $\left[ d\left(\frac{\Delta G}{dT}\right)_p = -\Delta S$ . The enthalpy of cell reaction,  $\Delta H$  is then given  
by

Options :

1. ✘  $T \left[ \frac{dE_{cell}}{dT} \right] - E_{cell}$

2. ✘  $nF \left[ E_{cell} - T \left( \frac{dE_{cell}}{dT} \right)_p \right]$

3. ✔  $nF \left[ T \left( \frac{dE_{cell}}{dT} \right)_p - E_{cell} \right]$

4. ✘  $nFT \left( \frac{dE_{cell}}{dT} \right)_p$

Question Number : 88 Question Id : 51714412265 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 point group symmetry of the staggered form of ethane molecule is

Options :

1. ✘  $C_{3v}$

2. ✔  $D_{3d}$

3. ✘  $D_{3h}$

4. ✘  $D_3$

Question Number : 89 Question Id : 51714412266 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 will be theoretical number of vibrational degrees of freedom in benzene, carbondioxide and sulphurdioxide respectively?

Options :

1. ✘ 12, 4, 3

2. ✘ 3, 4, 12

3. ✘ 30, 3, 3

4. ✔ 30, 4, 3

**Question Number : 90 Question Id : 51714412267 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 set of diatomic molecules/ions, the bond order is 2.5?

**Options :**

1. ✘ NO, CN, CN<sup>-</sup>

2. ✔ N<sub>2</sub><sup>+</sup>, NO, CN

3. ✘ O<sub>2</sub><sup>+</sup>, N<sub>2</sub><sup>+</sup>, CN<sup>+</sup>

4. ✘ O<sub>2</sub><sup>-</sup>, NO<sup>-</sup>, CN<sup>-</sup>

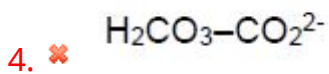
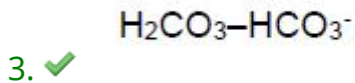
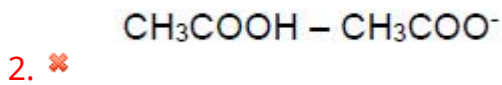
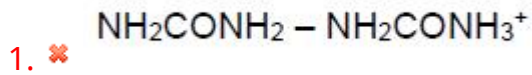
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Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The main buffer system of the human blood is

Options :



Question Number : 92 Question Id : 51714412269 Question Type : MCQ Option Shuffling : No

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

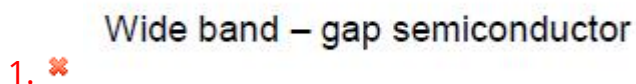
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

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

Correct Marks : 2 Wrong Marks : 0

Graphene is a

Options :



2.

zero-gap semiconductor



insulator

3. ✘

A narrow band – gap semiconductor

4. ✘

**Question Number : 93 Question Id : 51714412270 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**

For centrosymmetric molecules, any vibration which is IR active is Raman inactive vice – versa represents

**Options :**

Frank – Condon principle

1. ✘

Doppler effect

2. ✘

Stark effect

3. ✘

Mutual exclusion principle

4. ✔

Question Number : 94 Question Id : 51714412271 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 coagulation of 10 ml of colloidal solution of gold is completely prevented by addition of 0.025 g of substance 'X' to it before addition of 1 ml of 10% NaCl solution. The gold number of 'X' is

Options :

1. ✓ 25

2. ✘ 0.25

3. ✘ 250

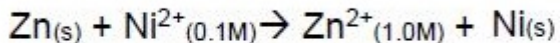
4. ✘ 2.5

Question Number : 95 Question Id : 51714412272 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 emf of the cell in which the following reaction,



occurs, is found to 0.5105 V at 298 K.

The standard emf of the cell is

Options :

1. ✓ 0.5400 V
2. ✗ 0.4810 V
3. ✗ 0.5696 V
4. ✗ -0.5105 V

Question Number : 96 Question Id : 51714412273 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 molar conductances of NaCl, HCl and CH<sub>3</sub>COONa at infinite dilution are 126.45, 426.16 and 91 ohm<sup>-1</sup> cm<sup>2</sup> mol<sup>-1</sup> respectively. The molar conductance (in ohm<sup>-1</sup> cm<sup>2</sup> mol<sup>-1</sup>) of CH<sub>3</sub>COOH at infinite dilution is

Options :

1. ✗ 201.28
2. ✓ 390.71

3. ✘ 698.28

4. ✘ 540.48

**Question Number : 97 Question Id : 51714412274 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 ground state atomic term symbol for  $d^9$  configuration is

**Options :**

1. ✘  ${}^2D_{3/2}$

2. ✘  ${}^4F_{9/2}$

3. ✔  ${}^2D_{5/2}$

4. ✘  ${}^1S_0$

**Question Number : 98 Question Id : 51714412275 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

Polydispersity Index (PDI) of polymer gives an idea of homogeneity of the polymer. The PDI is estimated as

Options :

1. ✓  $\frac{M_w}{M_n}$

2. ✗  $M_w.M_n$

3. ✗  $\frac{M_n}{M_w}$

4. ✗  $M_w - M_n$

Question Number : 99 Question Id : 51714412276 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 Fermi level for an extrinsic 'n' type semiconductor

Options :

1. ✗ Lies mid-way between the valence band and conduction band

2. ✘ Does not exist
3. ✘ Lies towards the valence band
4. ✔ Lies towards the conduction band

**Question Number : 100 Question Id : 51714412277 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 closeness of data to other data that have been obtained in exactly the same was is

**Options :**

1. ✘ Accuracy
2. ✘ Absolute error
3. ✘ Relative error
4. ✔ Precision

Question Number : 101 Question Id : 51714412278 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 terms with correct sentences

List – I

1. Outlier

2. Bias

3. Systematic error or Determinate error

4. Personal errors

List-II

a) Measures the systematic error associated with an analysis

b) Affects the accuracy of results

c) Colour blind analyst doing volumetric analysis

d) An occasional result in replicate measurements that obviously differs significantly from the rest of the results

Options :

1- (a)    2- (b)    3- (c)    4- (d)

1. ✘

1- (b)    2- (c)    3- (a)    4- (d)

2. ✘

1- (d)    2- (a)    3- (b)    4- (c)

3. ✔

1- (d)    2- (b)    3- (a)    4- (c)

4. ✘

Question Number : 102 Question Id : 51714412279 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 operator  $-\hbar^2 \frac{\partial^2}{\partial x^2}$  operates on the wave function  $e^{-ikx}$ , the result is

Options :

1. ✓  $k^2 \hbar^2 e^{-ikx}$

2. ✗  $ik^2 \hbar^2 e^{-ikx}$

3. ✗  $i\hbar^2 e^{-ikx}$

4. ✗  $\hbar^2 e^{-ikx}$

Question Number : 103 Question Id : 51714412280 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

Orbital having 3 angular nodes and 3 total nodes is

Options :

1. ✓ 4f

2. ✘ 6d

3. ✘ 5p

4. ✘ 3d

**Question Number : 104 Question Id : 51714412281 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**

Given a trial wave function  $\Psi_t = C_1\phi_1 + C_2\phi_2$  and the Hamiltonian matrix elements,  $\int \phi_1^* H \phi_1 dv = 0$ ,  $\int \phi_1^* H \phi_2 dv = 2.5$ ,  $\int \phi_2^* H \phi_2 dv = 12$  the variationally determined ground state energy is

**Options :**

1. ✘ -0.52

2. ✔ -0.50

3. ✘ 12.50

4. ✘ 12.52



Question Number : 105 Question Id : 51714412282 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 number of microstates corresponding to the atomic term symbol  ${}^4F$  is

Options :

1. ✘ 7

2. ✘ 12

3. ✔ 28

4. ✘ 42

Question Number : 106 Question Id : 51714412283 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 ion having the highest bond order is

Options :

1. ✓ NO<sup>+</sup>

2. ✘ O<sub>2</sub><sup>+</sup>

3. ✘ N<sub>2</sub><sup>+</sup>

4. ✘ C<sub>2</sub><sup>+</sup>

Question Number : 107 Question Id : 51714412284 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 point group symmetry of the molecule cis – ML<sub>4</sub>X<sub>2</sub> is

Options :

1. ✘ C<sub>4v</sub>

2. ✘ D<sub>4h</sub>

3. ✘ C<sub>2h</sub>

4.

✓ C<sub>2v</sub>

**Question Number : 108 Question Id : 51714412285 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 component of the orbital angular momentum along the molecular axis of a heteronuclear molecule is non zero, the rotational -vibrational spectrum will show

**Options :**

1. ✘ P and R branches only
2. ✘ P and Q branches only
3. ✘ Q and R branches only
4. ✓ All the P, Q and R branches

**Question Number : 109 Question Id : 51714412286 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 molecule that will not absorb in the microwave region, but will absorb in the infrared is

Options :

1. ✘  $N_2$

2. ✔  $C_2H_2$

3. ✘ HCl

4. ✘  $H_2O$

Question Number : 110 Question Id : 51714412287 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 thermodynamics, which of the following statements is true?

- I. Work is a path independent function
- II. Work is a path dependent function
- III. Work is the area under the curve in a PV diagram
- IV. Work and heat energy are completely interchangeable

Options :

1. ✘ I & IV

2. ✘

I & II

3. ✘ II, III & IV

4. ✔ II & III

Question Number : 111 Question Id : 51714412288 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

Joule-Thomson coefficient ( $\mu_{JT}$ ) of ideal gas is

Options :

1. ✔  $\mu_{JT} = 0$

2. ✘  $\mu_{JT} = 1.0$

3. ✘  $\mu_{JT} = -1.0$

4. ✘  $\mu_{JT} = \infty$  (infinity)

Question Number : 112 Question Id : 51714412289 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 partition function corresponds to a one-dimensional simple harmonic oscillator having equispaced energy levels with energy spacing equal to  $3k_B T$  and  $E_0=0$  will be

Options :

1. ✘  $\frac{3e^3}{e^3-3}$

2. ✘  $\frac{3e}{e^3-1}$

3. ✘  $\frac{e^3}{3e-1}$

4. ✔  $\frac{e^3}{e^3-1}$

Question Number : 113 Question Id : 51714412290 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 ionic strength (i) for a 0.1M  $\text{AlCl}_3$  will be

Options :

1. ✘ 0.2

2. ✘ 0.3

3. ✔ 0.6

4. ✘ 0.9

Question Number : 114 Question Id : 51714412291 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 true about Michaelis – Menten kinetics?

Options :

1. ✘  $K_m$ , the Michaelis constant, is defined as that concentration of substrate at which enzyme is working at maximum velocity.

2. ✔  $K_m$  is defined as the concentration of substrate at which enzyme is working at half of maximum velocity



3. ✘  $K_m$  is defined as the dissociation constant of the enzyme – substrate complex

4. ✘ It assumes covalent binding occurs between enzyme and substrate

Question Number : 115 Question Id : 51714412292 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 overall rate of a reaction is determined by

Options :

1. ✘ Rate of the fastest intermediate step

2. ✘ Sum total of the rates of intermediate steps

3. ✘ Average of the rates of all the intermediate steps

4. ✔ Rate of the slowest intermediate step

Question Number : 116 Question Id : 51714412293 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 unit cell of a certain type of crystal is defined as three vectors  $a$ ,  $b$  and  $c$ . The vectors are mutually perpendicular, but  $a \neq b \neq c$ . the crystal structure is

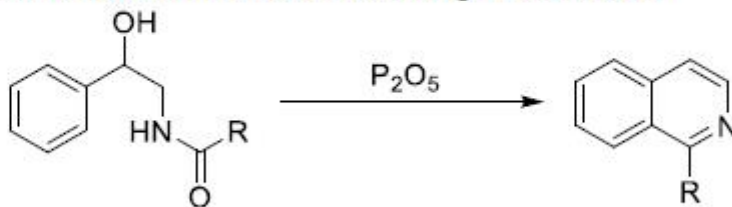
Options :

1. ✘ Triclinic
2. ✘ Tetragonal
3. ✔ Orthorhombic
4. ✘ Monoclinic

Question Number : 117 Question Id : 51714412294 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 name reaction involved in the following conversion



Options :

1. ✘ Schilittle-Muller Isoquinoline
2. ✘ Pomeranz-Fritsch Isoquinoline synthesis
3. ✔ Pictet-Gams Isoquinoline synthesis
4. ✘ Pfitzinger Isoquinoline synthesis

Question Number : 118 Question Id : 51714412295 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 Friedel-Crafts reaction of an arene with succinic anhydride is followed by reduction and an additional intramolecular Friedel-crafts reaction to give tetralone. Such entire process is called

Options :

1. ✔ Haworth reaction

Herz reaction

2. ✖

Hetero aryl Heck reaction

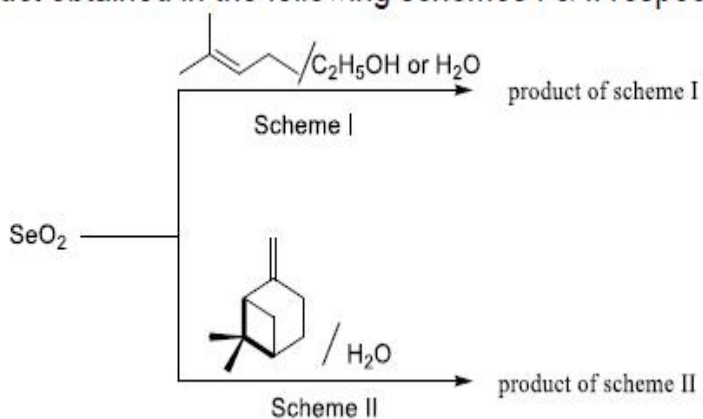
3. ✖

Hiyama cross coupling reaction

4. ✖

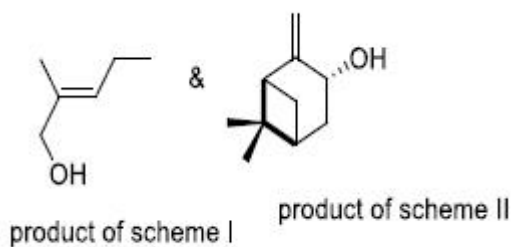
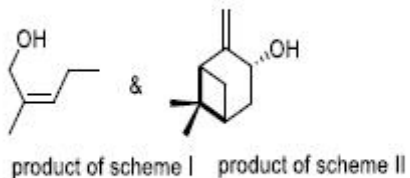
Question Number : 119 Question Id : 51714412296 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A  
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On  
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :  
No  
Correct Marks : 2 Wrong Marks : 0

The major product obtained in the following schemes I & II respectively

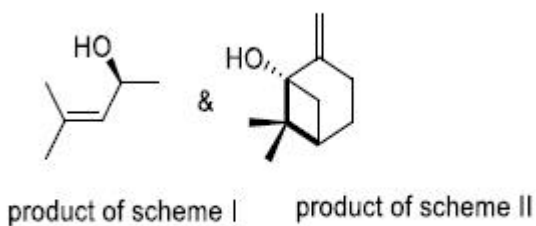


Options :

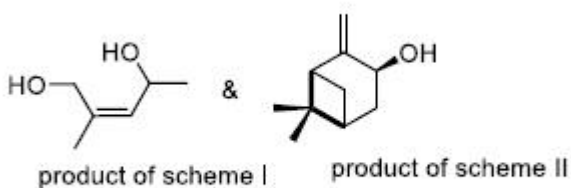
1. ✖



2. ✓



3. ✘

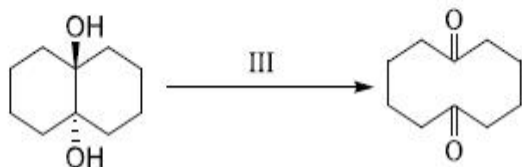
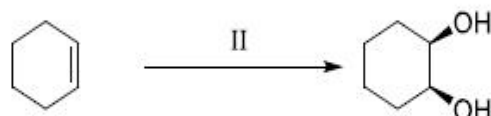
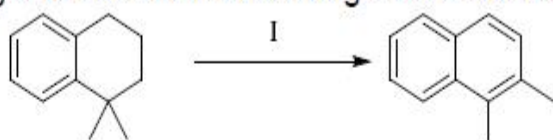


4. ✘

Question Number : 120 Question Id : 51714412297 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 suitable reagents used in the following conversions respectively



Options :

(I) DDQ, C<sub>6</sub>H<sub>6</sub> (II) OsO<sub>4</sub>, Py, THF (III) Pb(OAc)<sub>4</sub>

1. ✓

(I) Pb(OAc)<sub>4</sub> (II) OsO<sub>4</sub>, Py, THF (III) DDQ, C<sub>6</sub>H<sub>6</sub>

2. ✗

(I) TIOAc, I<sub>2</sub>, AcOH/H<sub>2</sub>O, NaOH, H<sub>2</sub>O, EtOH (II) Pb(OAc)<sub>4</sub> (III) DDQ, C<sub>6</sub>H<sub>6</sub>

3. ✗

(I) TIOAc, I<sub>2</sub>, AcOH/H<sub>2</sub>O, NaOH, H<sub>2</sub>O, EtOH (II) DDQ, C<sub>6</sub>H<sub>6</sub> (III) Pb(OAc)<sub>4</sub>

4. ✗

Question Number : 121 Question Id : 51714412298 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 statement is correct

Options :

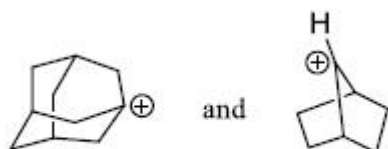
1. ✓  
Triaryl methyl cations are propeller – shaped, it can be investigated by  $^{13}\text{C}$  NMR spectroscopy
2. ✗  
Triaryl methyl cations, in which the benzene rings can be all in the same plane and can be investigated by PMR spectroscopy
3. ✗  
Triaryl methyl cations are pyramidal, it can be investigated by PMR spectroscopy
4. ✗  
Triaryl methyl cations, in which the benzene rings can be all in the same plane and can be investigated by  $^{13}\text{C}$  NMR spectroscopy

Question Number : 122 Question Id : 51714412299 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

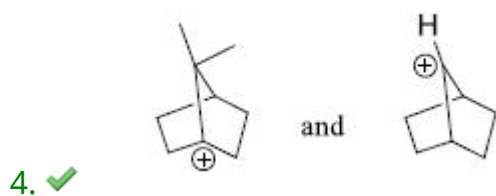
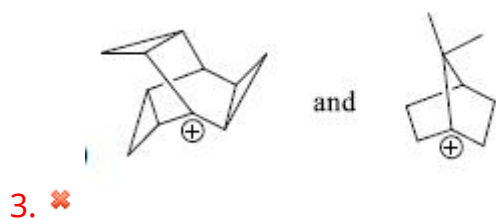
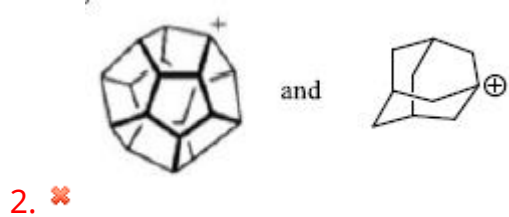
Which of the following pair of carbocations cannot exist

Options :



1. ✗

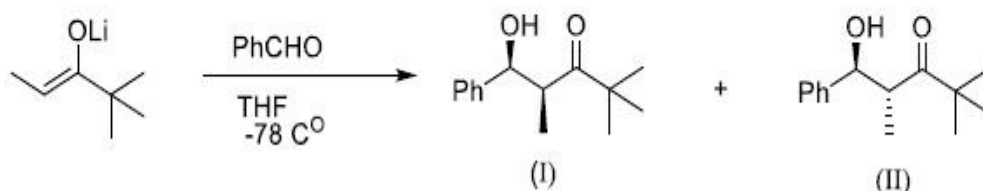




Question Number : 123 Question Id : 51714412300 Question Type : MCQ Option Shuffling : No  
 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A  
 Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On  
 Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :  
 No

Correct Marks : 2 Wrong Marks : 0

The major and minor product obtained in the following conversion and their relationship



Options :

1. ✘ Products are enantiomeric, (I) is major and (II) is minor

2. ✘ Products are enantiomeric, (I) is minor and (II) is major

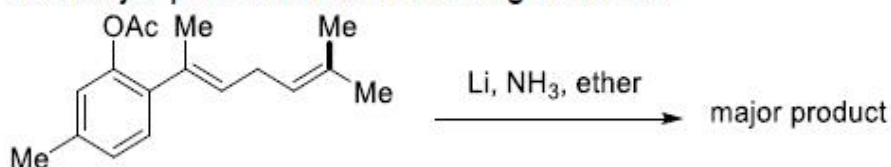
3. ✔ Products are diastereomeric, (I) is major and (II) is minor

4. ✘ Products are diastereomeric, (I) is minor and (II) is major

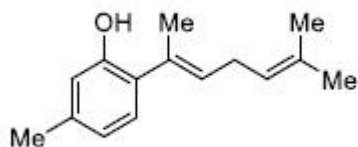
Question Number : 124 Question Id : 51714412301 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A  
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On  
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :  
No

Correct Marks : 2 Wrong Marks : 0

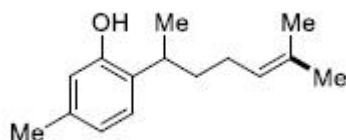
The major product of the following reaction.



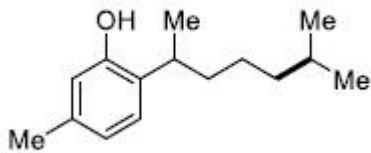
Options :



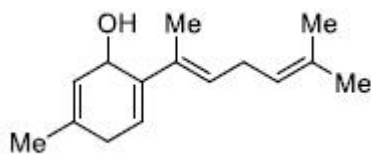
1. ✘



2. ✔



3. ✘

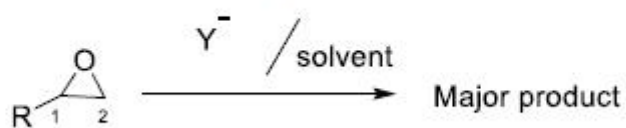


4. ✘

Question Number : 125 Question Id : 51714412302 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 correct statement(s) for following conversion



Options :

1. ✔ If the solvent is neutral/basic, the  $Y^-$  attacks at  $C_2$  to produce its major product

2. ✘ If the solvent is neutral/basic, the  $Y^-$  attack at  $C_1$  to produce its major product

3. ✘

If the solvent is acidic, the attack of  $Y^-$  takes place at only  $C_1$  with retention of configuration

If the solvent is basic the attack of  $Y^-$  takes place at only  $C_1$  with retention of configuration

4. ✘

Question Number : 126 Question Id : 51714412303 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

Only one signal is appeared in the  $^1H$  NMR spectra of

Options :

Ethanol, 2,3-Dimethylbutane

1. ✘

2,2- Dimethylpropane, 2-Butyne

2. ✔

2-Butene, Ethoxyethane

3. ✘

1-Butyne, Methoxymethane

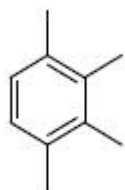
4. ✘

Question Number : 127 Question Id : 51714412304 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

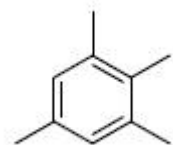
Correct Marks : 2 Wrong Marks : 0

An organic compound having molecular formula  $C_{10}H_{14}$  exhibited two signals in  $^1H$  NMR spectrum and three signals in  $^{13}C$  NMR spectrum. The structure of compound is

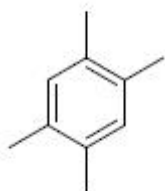
Options :



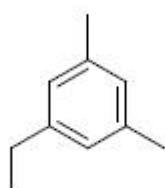
1. ✘



2. ✘



3. ✔



4. ✘

**Question Number : 128 Question Id : 51714412305 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**

Among the following, which of the series contains all aromatic compounds?

**Options :**

1. ✓ Pyrene, acenaphthalene and fluoranthene

2. ✘ Acepentalene and dibenzopentalene

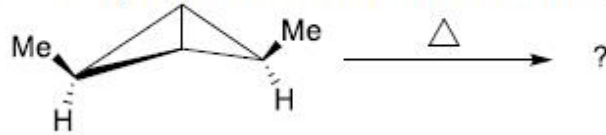
3. ✘ Acenaphthalene, anthracene and acepentalene

4. ✘ Fluoranthene, dibenzopentalene and Dewar benzene

**Question Number : 129 Question Id : 51714412306 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**

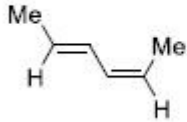
**Correct Marks : 2 Wrong Marks : 0**

The type of reaction and product obtained in the following reaction



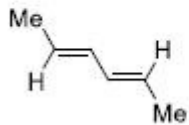
Options :

Concerted reaction , product is



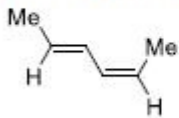
1. ✓

Concerted reaction , product is



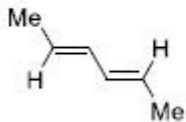
2. ✗

Non concerted reaction , product is



3. ✗

Non concerted reaction , product is



4. ✗

Question Number : 130 Question Id : 51714412307 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 reaction conditions and mode of reaction in the conversion of butadiene into corresponding bicyclobutane

Options :

1. ✘  $h\nu/\pi^2_s + \pi^2_a$

2. ✘  $\Delta/\pi^2_s + \pi^2_s$

3. ✔  $h\nu/\pi^2_s + \pi^2_s$

4. ✘  $\Delta/\pi^2_s + \pi^2_a$

Question Number : 131 Question Id : 51714412308 Question Type : MCQ Option Shuffling : No

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

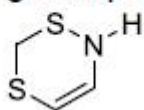
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

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

No

Correct Marks : 2 Wrong Marks : 0

The IUPAC name for the following compound



Options :

1. ✘ 2H, 4H-1,5,2-dithiazine

2H, 6H-1,5,2-dithiazine

2. ✓

1,3-dithio-4-aza cyclohexa 4 -ene

3. ✘

1,3-dithio-6-aza cyclohexa 4 -ene

4. ✘

**Question Number : 132 Question Id : 51714412309 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 name for ethylene was

**Options :**

1. ✘ Ethene

2. ✘ Formine

3. ✓ Olefin

4. ✘ Gazolefiant

Question Number : 133 Question Id : 51714412310 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 either Anthracene or Phenanthrene is allowed to react with a reagent such as Ozone or Bromine, the reactant loses the 9&10 bond by attack of the reagent, the reason is

Options :

1. ✘ Both are planar molecules
2. ✘ Both are aromatic molecules
3. ✔ Two complete benzene rings remain after the reaction
4. ✘ 9 and 10 bond(s) weak

Question Number : 134 Question Id : 51714412311 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 order is correct towards reactivity for formation of Diels Alder Product?

**Options :**

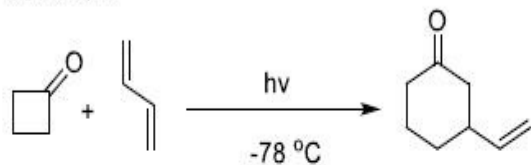
1. ✘ Furan > thiophene > pyrrole > benzene
2. ✘ Pyrrole > thiophene > furan > benzene
3. ✘ Benzene > furan > thiophene > pyrrole
4. ✔ Furan > pyrrole > thiophene > benzene

**Question Number : 135 Question Id : 51714412312 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**

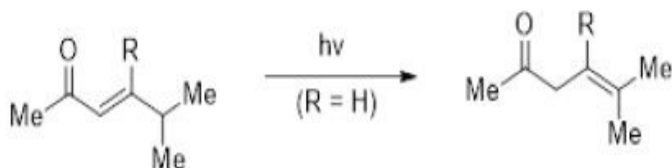
**Correct Marks : 2 Wrong Marks : 0**

Choose the correct statement which related to reaction feasibility of following schemes - I & II.

scheme-I



scheme -II



Options :

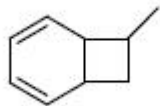
1. ✘ Scheme-I is not possible but scheme-II is possible.
2. ✘ Both Schemes are not possible
3. ✔ Both Schemes are possible
4. ✘ Scheme-I is possible but scheme-II is not possible

Question Number : 136 Question Id : 51714412313 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

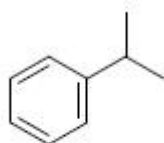
Correct Marks : 2 Wrong Marks : 0

When benzene is allowed to react with propene in the presence of strong acids like HF, the resulted major product is

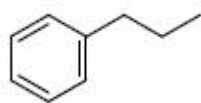
Options :



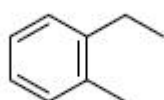
1. ✘



2. ✔



3. ✘



4. ✘

Question Number : 137 Question Id : 51714412314 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

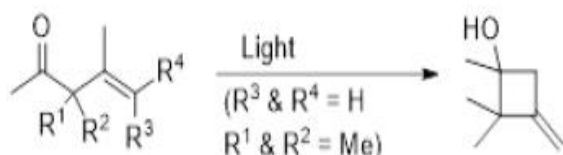
Correct Marks : 2 Wrong Marks : 0

Choose the correct option(s) in the following statement(s) -I,II& III.

**Statement- I:** - The quantum yield for formation of any specific product may or may not be as same as the quantum yield for the decomposition of starting material.

**Statement –II:-** In the excitation energy transfer , the resonance energy transfer can occur when the absorption spectrum of the acceptor overlaps the emission spectrum of the donor.

**Statement-III:-**In the following reaction, no products of Norrish Type – II photo elimination are observed.



**Options :**

Only statement I,II are true

1. ✘

Only statement II&III are true

2. ✘

Only statement I&III are true

3. ✘

All the statements I, II&III are true

4. ✔

Question Number : 138 Question Id : 51714412315 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 molecular shape is more stable with [R],[R ]configuration at respective chiral centres

Options :



1. ✘



2. ✔



3. ✘



4. ✘

Question Number : 139 Question Id : 51714412316 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

As per the IUPAC the position of the nitrogen hetero atom in Isoquinoline

Options :

1. ✓ 2<sup>nd</sup> position

2. ✗ 3<sup>rd</sup> position

3. ✗ 1<sup>st</sup> position

4. ✗ 7<sup>th</sup> position

Question Number : 140 Question Id : 51714412317 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

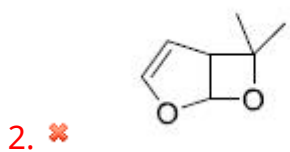
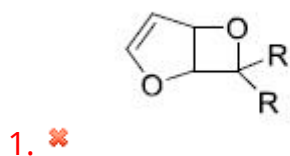
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

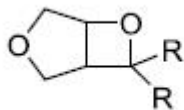
Furan on reaction with ketone in the presence of acids and perchlorates, produced major product . Identify this major product

Options :



3. ✓

## Cyclic tetramer

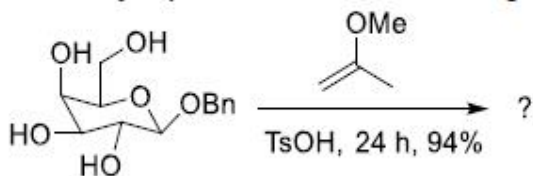


4. ✘

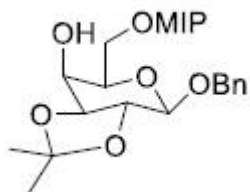
Question Number : 141 Question Id : 51714412318 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A  
Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On  
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :  
No

Correct Marks : 2 Wrong Marks : 0

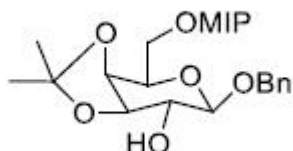
The major product of the following reaction [MIP= Methoxy isopropyl]



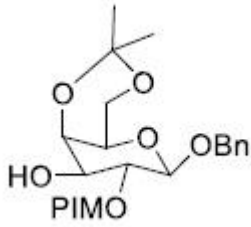
Options :



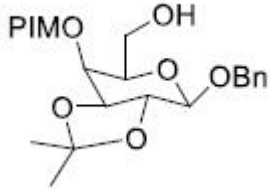
1. ✘



2. ✔



3. ✘

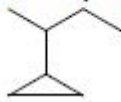


4. ✘

Question Number : 142 Question Id : 51714412319 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 IUPAC name of the following compound is



Options :

3-cyclopropylbutane

1. ✘

3-Isobutyl cyclopropane

2. ✘

2-Ethyl,2-cyclo propylethane

3. ✘

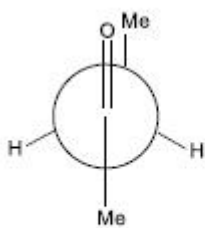
4. ✓ 2-cyclopropylbutane

Question Number : 143 Question Id : 51714412320 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

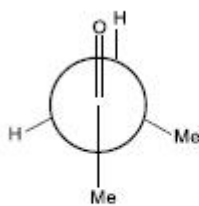
The most populated and stable confirmation of butanone molecule.

Options :



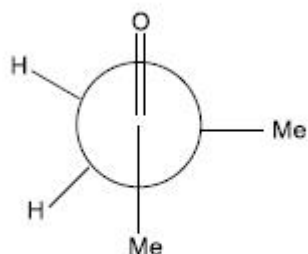
torsion angle of 0

1. ✓ )



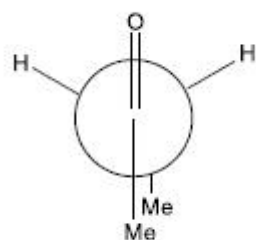
torsion angle of 120°

2. ✘



torsion angle of  $90^\circ$

3. ✘



torsion angle of  $180^\circ$

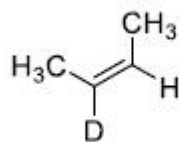
4. ✘

Question Number : 144 Question Id : 51714412321 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 the following reaction the major product

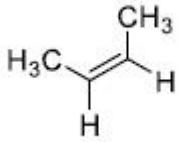


Options :

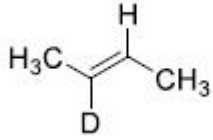


1. ✘

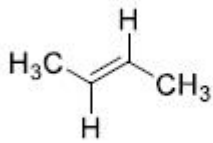
2. ✘



3. ✔



4. ✘



Question Number : 145 Question Id : 51714412322 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 maximum number of cyclic dipeptides produced when two amino acids are allowed to react.

Options :

1. ✔ Three

2. ✘ Two

3. ✔ One only



4. ✘ Four

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

**Question Number : 146 Question Id : 51714412323 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 number of chiral centres present in cholesterol molecule.

**Options :**

1. ✘ Seven

2. ✘ Six

3. ✘ five

4. ✔ Eight

**Question Number : 147 Question Id : 51714412324 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 drugs with their medical activity

List- I	List- II
i) Oxamniquine	(a) ACE Inhibitor
ii) Enalaprilate	(b) Solbutamol
iii) Anti asthamatic	(c) Anti ulcer
iv) Cimetidine	(d) Schistosomiasis

Options :

1. ✘ (a)-ii (b)-iv (c)-iii (d)-i
2. ✘ (a)-i (b)-ii (c)-iii (d)-iv
3. ✘ (a)-ii (b)-iii (c)-i (d)-iv
4. ✔ (a)-ii (b)-iii (c)-iv (d)-i

Question Number : 148 Question Id : 51714412325 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

Choose the correct statement from the following

Options :

1. ✔ Furfuraldehyde can exist in transoid form in liquid state but changes to cisoid form in gaseous state

The  $^1\text{H-NMR}$  Spectrum of M-gauche and P-gauche conformations of 2,2,3,3-tetrachloro butane are different

2. ✘

The two methyl groups attached to nitrogen in N,N-Dimethylacetamide are identical for PMR spectrum at room temperature

3. ✘

Anti-conformation of 1,1,2,2- tetrabromoethane is more stable than gauche at room temperature

4. ✘

Question Number : 149 Question Id : 51714412326 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

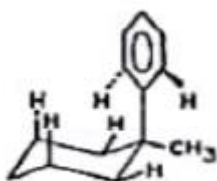
Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

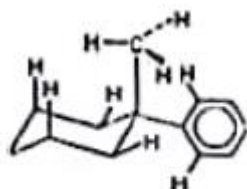
Correct Marks : 2 Wrong Marks : 0

In 1-methyl 1-phenyl cyclohexane, the preferable conformation is

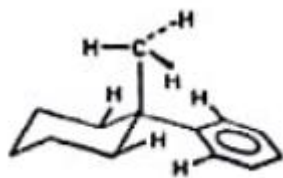
Options :



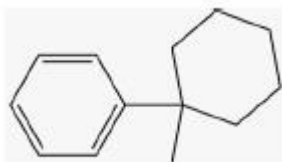
1. ✔



2. ✘



3. ✘



4. ✘

Question Number : 150 Question Id : 51714412327 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 percentage of atom economy will be greater in the following type of reaction

Options :

Substitutions and eliminations

1. ✘

Additions and intramolecular rearrangements

2. ✔

Substitutions and additions

3. ✘

Eliminations and intermolecular rearrangements

4. ✘

