

# National Testing Agency

<b>Question Paper Name :</b>	Environmental Sciences Eng 24th June 2023 Shift 1
<b>Subject Name :</b>	Environmental Sciences Eng
<b>Creation Date :</b>	2023-06-24 16:01:15
<b>Duration :</b>	120
<b>Total Marks :</b>	400
<b>Display Marks:</b>	Yes

## Environmental Sciences

<b>Group Number :</b>	1
<b>Group Id :</b>	920906219
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	400
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## Part A

<b>Section Id :</b>	920906437
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	21
<b>Number of Questions to be attempted :</b>	21
<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>	920906707
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Id : 92090622066 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (1 to 5)**

Question Label : Comprehension

Mobile phones in India are ubiquitous – over a billion subscribers. They serve as touch points for multiple needs. Consequently attempts to get people to part with their phone number, often through dubious means, are common. One such example is to get customers to share their phone number to bill retail purchases. It's often done by linking it to the billing system even when it serves no purpose in concluding a transaction. Times of India reported that this method of violating personal data privacy may soon end as the consumer affairs ministry is expected to issue an advisory to stop it.

It's a much-needed move. But it doesn't solve the core problem. Invasion of data privacy is not limited to consumer transactions. It's far wider in scope. The only way to check it is to legislate a comprehensive personal data protection law. Absent that, any solution is at best a piecemeal effort. India has lagged in this aspect. As a result, the explosion of digital activity has been accompanied by a surge in extracting personal data without consent.

Government of India began the ongoing process of enacting a personal data protection law in 2019. It's gone through many iterations. The bill needs to be introduced in the next parliament session. India's data protection framework should strongly emphasise two principles, data minimization and purpose limitation. The former is the first line of defence against abuse as data collection needs to be limited to just what's relevant to conclude a transaction. The principle of purpose limitation then seeks to ensure that data collected is used for only the stated purpose. While the intent of the consumer affairs ministry is positive, it alone can't ensure Indian's data privacy.

### Sub questions

**Question Number : 1 Question Id : 92090622067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out the meaning of the term 'ubiquitous' from the options given below:

- |                              |                      |
|------------------------------|----------------------|
| (1) Formal pledge or promise | (2) Spend too little |
| (3) Being the best           | (4) Found everywhere |

### Options :

92090687201. 1

92090687202. 2

92090687203. 3

92090687204. 4

**Question Number : 2 Question Id : 92090622068 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Antonym of the term 'Dubious':

- |              |                |
|--------------|----------------|
| (1) Doubtful | (2) Hesitating |
| (3) Reliable | (4) Valuable   |

**Options :**

- 92090687205. 1
- 92090687206. 2
- 92090687207. 3
- 92090687208. 4

**Question Number : 3 Question Id : 92090622069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Invasion of data privacy is not limited to consumer transactions.

Statement II : The only way to check it is to legislate a comprehensive personal data protection law.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is true but Statement II is incorrect
- (4) Statement I is false but Statement II is correct

**Options :**

- 92090687209. 1
- 92090687210. 2
- 92090687211. 3
- 92090687212. 4

**Question Number : 4 Question Id : 92090622070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The Times of India reported that this method of violating personal data privacy may soon end as the consumer affairs ministry is expected to issue an \_\_\_\_\_ to stop it.

- |              |               |
|--------------|---------------|
| (1) order    | (2) decision  |
| (3) advisory | (4) ordinance |

**Options :**

- 92090687213. 1
- 92090687214. 2
- 92090687215. 3
- 92090687216. 4

**Question Number : 5 Question Id : 92090622071 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

According to this paragraph, who can't alone ensure India's data privacy?

- (1) Ministry of Information and technology
- (2) Education Ministry
- (3) Consumer affairs ministry
- (4) Labour ministry

**Options :**

- 92090687217. 1
- 92090687218. 2
- 92090687219. 3
- 92090687220. 4

**Question Id : 92090622066 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (1 to 5)**

Question Label : Comprehension

Mobile phones in India are ubiquitous – over a billion subscribers. They serve as touch points for multiple needs. Consequently attempts to get people to part with their phone number, often through dubious means, are common. One such example is to get customers to share their phone number to bill retail purchases. It's often done by linking it to the billing system even when it serves no purpose in concluding a transaction. Times of India reported that this method of violating personal data privacy may soon end as the consumer affairs ministry is expected to issue an advisory to stop it.

It's a much-needed move. But it doesn't solve the core problem. Invasion of data privacy is not limited to consumer transactions. It's far wider in scope. The only way to check it is to legislate a comprehensive personal data protection law. Absent that, any solution is at best a piecemeal effort. India has lagged in this aspect. As a result, the explosion of digital activity has been accompanied by a surge in extracting personal data without consent.

Government of India began the ongoing process of enacting a personal data protection law in 2019. It's gone through many iterations. The bill needs to be introduced in the next parliament session. India's data protection framework should strongly emphasise two principles, data minimization and purpose limitation. The former is the first line of defence against abuse as data collection needs to be limited to just what's relevant to conclude a transaction. The principle of purpose limitation then seeks to ensure that data collected is used for only the stated purpose. While the intent of the consumer affairs ministry is positive, it alone can't ensure Indian's data privacy.

### Sub questions

**Question Number : 1 Question Id : 92090622067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out the meaning of the term 'ubiquitous' from the options given below:

- |                              |                      |
|------------------------------|----------------------|
| (1) Formal pledge or promise | (2) Spend too little |
| (3) Being the best           | (4) Found everywhere |

### Options :

- 92090687201. 1
- 92090687202. 2
- 92090687203. 3
- 92090687204. 4

**Question Number : 2 Question Id : 92090622068 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Antonym of the term 'Dubious':

- |              |                |
|--------------|----------------|
| (1) Doubtful | (2) Hesitating |
| (3) Reliable | (4) Valuable   |

**Options :**

- 92090687205. 1
- 92090687206. 2
- 92090687207. 3
- 92090687208. 4

**Question Number : 3 Question Id : 92090622069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Invasion of data privacy is not limited to consumer transactions.

Statement II : The only way to check it is to legislate a comprehensive personal data protection law.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is true but Statement II is incorrect
- (4) Statement I is false but Statement II is correct

**Options :**

- 92090687209. 1
- 92090687210. 2
- 92090687211. 3
- 92090687212. 4

**Question Number : 4 Question Id : 92090622070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The Times of India reported that this method of violating personal data privacy may soon end as the consumer affairs ministry is expected to issue an\_\_\_\_\_to stop it.

- (1) order (2) decision  
(3) advisory (4) ordinance

**Options :**

92090687213. 1  
92090687214. 2  
92090687215. 3  
92090687216. 4

**Question Number : 5 Question Id : 92090622071 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

According to this paragraph, who can't alone ensure India's data privacy?

- (1) Ministry of Information and technology  
(2) Education Ministry  
(3) Consumer affairs ministry  
(4) Labour ministry

**Options :**

92090687217. 1  
92090687218. 2  
92090687219. 3  
92090687220. 4

**Sub-Section Number :** 2  
**Sub-Section Id :** 920906708  
**Question Shuffling Allowed :** Yes  
**Is Section Default? :** null

**Question Number : 6 Question Id : 92090622072 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Identify the correct active voice for the sentence given below.

Our moving into the new flat had been completed before evening.

- (1) We had completed our moving into the new flat before evening.
- (2) We have completed our moving into the new flat before evening.
- (3) We completed our moving into the new flat before evening.
- (4) We completed our moving into the new flat before evening.

**Options :**

- 92090687221. 1
- 92090687222. 2
- 92090687223. 3
- 92090687224. 4

**Question Number : 6 Question Id : 92090622072 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Identify the correct active voice for the sentence given below.

Our moving into the new flat had been completed before evening.

- (1) We had completed our moving into the new flat before evening.
- (2) We have completed our moving into the new flat before evening.
- (3) We completed our moving into the new flat before evening.
- (4) We completed our moving into the new flat before evening.

**Options :**

- 92090687221. 1
- 92090687222. 2
- 92090687223. 3
- 92090687224. 4

**Question Number : 7 Question Id : 92090622073 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



Choose the correct order of PQRS set to complete the paragraph:

He asked her, "What are they?"

.....

.....

.....

.....

Still smiling, she answered, "Inside it." (Place Walk)

P: He asked, "Do you sleep on them?"

Q: She said with a smile, "No, they're just for decoration."

R: She replied, "Two small pillows."

S: He pointed at the bed and asked, "Where do you sleep?"

(1) PQSR

(2) QPRS

(3) RPQS

(4) SRPQ

**Options :**

92090687225. 1

92090687226. 2

92090687227. 3

92090687228. 4

**Question Number : 7 Question Id : 92090622073 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct order of PQRS set to complete the paragraph:

He asked her, "What are they?"

.....

.....

.....

.....

Still smiling, she answered, "Inside it." (Place Walk)

P: He asked, "Do you sleep on them?"

Q: She said with a smile, "No, they're just for decoration."

R: She replied, "Two small pillows."

S: He pointed at the bed and asked, "Where do you sleep?"

- |          |          |
|----------|----------|
| (1) PQSR | (2) QPRS |
| (3) RPQS | (4) SRPQ |

**Options :**

- 92090687225. 1
- 92090687226. 2
- 92090687227. 3
- 92090687228. 4

**Question Number : 8 Question Id : 92090622074 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct indirect speech form of the following sentence:

He said to me, "What is your name?"

- |                                    |                                         |
|------------------------------------|-----------------------------------------|
| (1) He ordered me to tell my name. | (2) He asked me what my name is.        |
| (3) He asked me what my name was.  | (4) I was asked to tell my name by him. |

**Options :**

- 92090687229. 1
- 92090687230. 2
- 92090687231. 3
- 92090687232. 4

**Question Number : 8 Question Id : 92090622074 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct indirect speech form of the following sentence:

He said to me, "What is your name?"

- (1) He ordered me to tell my name. (2) He asked me what my name is.  
(3) He asked me what my name was. (4) I was asked to tell my name by him.

**Options :**

92090687229. 1

92090687230. 2

92090687231. 3

92090687232. 4

**Question Number : 9 Question Id : 92090622075 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out which part of the following sentence has an error:

- (1) None of the students in the class (2) were able to  
(3) understand the problem (4) no error

**Options :**

92090687233. 1

92090687234. 2

92090687235. 3

92090687236. 4

**Question Number : 9 Question Id : 92090622075 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out which part of the following sentence has an error:

- (1) None of the students in the class (2) were able to  
(3) understand the problem (4) no error

**Options :**

92090687233. 1

92090687234. 2

92090687235. 3

92090687236. 4

**Question Number : 10 Question Id : 92090622076 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct sentence:

- (1) He shudders at the memory and wakes up dazed.
- (2) He shudders with the memory and wakes up dazed.
- (3) He shudders over the memory and wakes up dazed.
- (4) He shudders in the memory and wakes up dazed.

**Options :**

92090687237. 1

92090687238. 2

92090687239. 3

92090687240. 4

**Question Number : 10 Question Id : 92090622076 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct sentence:

- (1) He shudders at the memory and wakes up dazed.
- (2) He shudders with the memory and wakes up dazed.
- (3) He shudders over the memory and wakes up dazed.
- (4) He shudders in the memory and wakes up dazed.

**Options :**

92090687237. 1

92090687238. 2

92090687239. 3

92090687240. 4

**Question Number : 11 Question Id : 92090622077 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Where did Lord Buddha breathe his last?

- |               |                |
|---------------|----------------|
| (1) Bodh Gaya | (2) Sarnath    |
| (3) Varanasi  | (4) Kushinagar |

**Options :**

- 92090687241. 1
- 92090687242. 2
- 92090687243. 3
- 92090687244. 4

**Question Number : 11 Question Id : 92090622077 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Where did Lord Buddha breathe his last?

- |               |                |
|---------------|----------------|
| (1) Bodh Gaya | (2) Sarnath    |
| (3) Varanasi  | (4) Kushinagar |

**Options :**

- 92090687241. 1
- 92090687242. 2
- 92090687243. 3
- 92090687244. 4

**Question Number : 12 Question Id : 92090622078 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Who is supposed to be the custodian of the Indian constitution?

- |                            |                             |
|----------------------------|-----------------------------|
| (1) President of India     | (2) Law Minister            |
| (3) Chief Justice of India | (4) We, the people of India |

**Options :**

- 92090687245. 1
- 92090687246. 2
- 92090687247. 3
- 92090687248. 4

**Question Number : 12 Question Id : 92090622078 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**



Which of the following are essential qualifications for appointment as a Governor?

- (A) He must not be a member of either house of Parliament.
- (B) He should be a domicile of the state to which he is being appointed.
- (C) He should be a citizen of India.
- (D) He must have complete the age of 35 years.

Choose the correct answer from the options given below:

- (1) A, B and D only
- (2) A, C and D only
- (3) B, C and D only
- (4) A and C only

**Options :**

- 92090687249. 1
- 92090687250. 2
- 92090687251. 3
- 92090687252. 4

**Question Number : 14 Question Id : 92090622080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

For which of the following reasons is ozone layer important for living being.

- (1) It serves as a source of oxygen by decomposing air.
- (2) It maintains the nitrogen cycle on earth.
- (3) It provides protections from excessive ultra violet rays of the sun.
- (4) It maintains the temperature of the earth.

**Options :**

- 92090687253. 1
- 92090687254. 2
- 92090687255. 3
- 92090687256. 4

**Question Number : 14 Question Id : 92090622080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

For which of the following reasons is ozone layer important for living being.

- (1) It serves as a source of oxygen by decomposing air.
- (2) It maintains the nitrogen cycle on earth.
- (3) It provides protections from excessive ultra violet rays of the sun.
- (4) It maintains the temperature of the earth.

**Options :**

- 92090687253. 1
- 92090687254. 2
- 92090687255. 3
- 92090687256. 4

**Question Number : 15 Question Id : 92090622081 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In which Indian state India's first pure green hydrogrn plant has been commissioned?

- |             |                 |
|-------------|-----------------|
| (1) Gujarat | (2) Karnataka   |
| (3) Assam   | (4) Maharashtra |

**Options :**

- 92090687257. 1
- 92090687258. 2
- 92090687259. 3
- 92090687260. 4

**Question Number : 15 Question Id : 92090622081 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In which Indian state India's first pure green hydrogrn plant has been commissioned?

- |             |                 |
|-------------|-----------------|
| (1) Gujarat | (2) Karnataka   |
| (3) Assam   | (4) Maharashtra |

**Options :**

- 92090687257. 1
- 92090687258. 2
- 92090687259. 3



92090687260. 4

**Question Number : 16 Question Id : 92090622082 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If A % B means A is the wife of B ; A – B means A is the brother B; A + B means A is the father of B while A x B means A is the mother of B. Which of the following shows that M is the maternal grandmother of T?

- |                   |                   |
|-------------------|-------------------|
| (1) M x N – S % T | (2) M x S – N % T |
| (3) M x N % S + T | (4) M x N x S % T |

**Options :**

- 92090687261. 1
- 92090687262. 2
- 92090687263. 3
- 92090687264. 4

**Question Number : 16 Question Id : 92090622082 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If A % B means A is the wife of B ; A – B means A is the brother B; A + B means A is the father of B while A x B means A is the mother of B. Which of the following shows that M is the maternal grandmother of T?

- |                   |                   |
|-------------------|-------------------|
| (1) M x N – S % T | (2) M x S – N % T |
| (3) M x N % S + T | (4) M x N x S % T |

**Options :**

- 92090687261. 1
- 92090687262. 2
- 92090687263. 3
- 92090687264. 4

**Question Number : 17 Question Id : 92090622083 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out the missing term from the following options:

?, 425, 600, 825, 1100, 1425

- |         |         |
|---------|---------|
| (1) 300 | (2) 225 |
| (3) 250 | (4) 245 |

**Options :**

- 92090687265. 1
- 92090687266. 2
- 92090687267. 3
- 92090687268. 4

**Question Number : 17 Question Id : 92090622083 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out the missing term from the following options:

?, 425, 600, 825, 1100, 1425

- |         |         |
|---------|---------|
| (1) 300 | (2) 225 |
| (3) 250 | (4) 245 |

**Options :**

- 92090687265. 1
- 92090687266. 2
- 92090687267. 3
- 92090687268. 4

**Question Number : 18 Question Id : 92090622084 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A is 30 km to the East of B. B moves 40 km South then 20 km West. It then moves 50 km North and then 50 km East. Now A is:

- |                      |                      |
|----------------------|----------------------|
| (1) 20 km East of B  | (2) 10 km North of B |
| (3) 10 km South of B | (4) 20 km North of B |

**Options :**

- 92090687269. 1
- 92090687270. 2
- 92090687271. 3
- 92090687272. 4

**Question Number : 18 Question Id : 92090622084 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A is 30 km to the East of B. B moves 40 km South then 20 km West. It then moves 50 km North and then 50 km East. Now A is:

- |                      |                      |
|----------------------|----------------------|
| (1) 20 km East of B  | (2) 10 km North of B |
| (3) 10 km South of B | (4) 20 km North of B |

**Options :**

92090687269. 1

92090687270. 2

92090687271. 3

92090687272. 4

**Question Number : 19 Question Id : 92090622085 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

DAZE is written as 41265 in a certain code. How will BOY be written in the same code?

- |           |           |
|-----------|-----------|
| (1) 21526 | (2) 21425 |
| (3) 21525 | (4) 22525 |

**Options :**

92090687273. 1

92090687274. 2

92090687275. 3

92090687276. 4

**Question Number : 19 Question Id : 92090622085 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

DAZE is written as 41265 in a certain code. How will BOY be written in the same code?

- |           |           |
|-----------|-----------|
| (1) 21526 | (2) 21425 |
| (3) 21525 | (4) 22525 |

**Options :**

- 92090687273. 1
- 92090687274. 2
- 92090687275. 3
- 92090687276. 4

**Question Number : 20 Question Id : 92090622086 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If 'No researchers are scholarship holders' and 'some students are scholarship holders. It implies:

A: Some students are not researchers.

B: No students are researchers.

- (1) A only
- (2) B only
- (3) Both A and B
- (4) Neither A and B

**Options :**

- 92090687277. 1
- 92090687278. 2
- 92090687279. 3
- 92090687280. 4

**Question Number : 20 Question Id : 92090622086 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If 'No researchers are scholarship holders' and 'some students are scholarship holders. It implies:

A: Some students are not researchers.

B: No students are researchers.

- (1) A only
- (2) B only
- (3) Both A and B
- (4) Neither A and B

**Options :**

- 92090687277. 1
- 92090687278. 2
- 92090687279. 3
- 92090687280. 4

**Question Number : 21 Question Id : 92090622087 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If radius of a cylinder is increased by 10%, while height remains unchanged. What will be the effect on its volume:

- |                  |                  |
|------------------|------------------|
| (1) 21% increase | (2) 21% decrease |
| (3) 11% increase | (4) 11% decrease |

**Options :**

- 92090687281. 1
- 92090687282. 2
- 92090687283. 3
- 92090687284. 4

**Question Number : 21 Question Id : 92090622087 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If radius of a cylinder is increased by 10%, while height remains unchanged. What will be the effect on its volume:

- |                  |                  |
|------------------|------------------|
| (1) 21% increase | (2) 21% decrease |
| (3) 11% increase | (4) 11% decrease |

**Options :**

- 92090687281. 1
- 92090687282. 2
- 92090687283. 3
- 92090687284. 4

**Question Number : 22 Question Id : 92090622088 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A train with certain speed passes a standing man in 6 seconds and 210 m long platform in 16 seconds. Then speed of the train is:

- |            |            |
|------------|------------|
| (1) 26 m/s | (2) 62 m/s |
| (3) 12 m/s | (4) 21 m/s |

**Options :**

- 92090687285. 1

92090687286. 2

92090687287. 3

92090687288. 4

**Question Number : 22 Question Id : 92090622088 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A train with certain speed passes a standing man in 6 seconds and 210 m long platform in 16 seconds. Then speed of the train is:

(1) 26 m/s

(2) 62 m/s

(3) 12 m/s

(4) 21 m/s

**Options :**

92090687285. 1

92090687286. 2

92090687287. 3

92090687288. 4

**Question Number : 23 Question Id : 92090622089 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A bag contains 1 red, 3 green, 2 blue and 4 yellow balls. If a single ball is chosen at random from the bag, then what is the probability that it is yellow or green?

(1)  $\frac{3}{10}$

(2)  $\frac{7}{10}$

(3)  $\frac{9}{10}$

(4)  $\frac{1}{10}$

**Options :**

92090687289. 1

92090687290. 2

92090687291. 3

92090687292. 4

**Question Number : 23 Question Id : 92090622089 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A bag contains 1 red, 3 green, 2 blue and 4 yellow balls. If a single ball is chosen at random from the bag, then what is the probability that it is yellow or green?

(1)  $\frac{3}{10}$

(2)  $\frac{7}{10}$

(3)  $\frac{9}{10}$

(4)  $\frac{1}{10}$

**Options :**

92090687289. 1

92090687290. 2

92090687291. 3

92090687292. 4

**Question Number : 24 Question Id : 92090622090 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A sum is to be distributed among 4 persons in the proportion of 3:3:2:5. If second person gets ₹500 more than the thired person them what is the share of the fourth person

(1) ₹500

(2) ₹1,500

(3) ₹2,500

(4) ₹3,500

**Options :**

92090687293. 1

92090687294. 2

92090687295. 3

92090687296. 4

**Question Number : 24 Question Id : 92090622090 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A sum is to be distributed among 4 persons in the proportion of 3:3:2:5. If second person gets ₹500 more than the thired person them what is the share of the fourth person

(1) ₹500

(2) ₹1,500

(3) ₹2,500

(4) ₹3,500

**Options :**

- 92090687293. 1
- 92090687294. 2
- 92090687295. 3
- 92090687296. 4

**Question Number : 25 Question Id : 92090622091 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two pipes A and B can fill a tank in 18h and 12h respectively. If both the pipes are opened simultaneously, then how much time will be taken to fill the tank

- (1)  $6 \frac{1}{5}$  h
- (2)  $8 \frac{1}{5}$  h
- (3)  $7 \frac{1}{4}$  h
- (4)  $7 \frac{1}{5}$  h

**Options :**

- 92090687297. 1
- 92090687298. 2
- 92090687299. 3
- 92090687300. 4

**Question Number : 25 Question Id : 92090622091 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two pipes A and B can fill a tank in 18h and 12h respectively. If both the pipes are opened simultaneously, then how much time will be taken to fill the tank

- (1)  $6 \frac{1}{5}$  h
- (2)  $8 \frac{1}{5}$  h
- (3)  $7 \frac{1}{4}$  h
- (4)  $7 \frac{1}{5}$  h

**Options :**

- 92090687297. 1
- 92090687298. 2
- 92090687299. 3
- 92090687300. 4



## Part B: Environmental Sciences

Section Id :	920906438
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	75
Number of Questions to be attempted :	75
Section Marks :	300
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	920906709
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 26 Question Id : 92090622092 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1**

The book "The Ages of Gaia – A biography of our living Earth (1988)" was written by

- (1) E.S. Rowland
- (2) Mario Moling
- (3) James E. Lovelock
- (4) William Golding

**Options :**

92090687301. 1
92090687302. 2
92090687303. 3
92090687304. 4

**Question Number : 26 Question Id : 92090622092 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1**

'द एजेस ऑफ गैया – ए बायोग्राफी ऑफ आवर लिविंग अर्थ (1988)' नामक पुस्तक के लेखक कौन हैं?

- (1) ई.एस. रोलैण्ड
- (2) मारियो मोलिंग
- (3) जेम्स ई. लवलॉक
- (4) विलियम गोल्डिंग

**Options :**

- 92090687301. 1
- 92090687302. 2
- 92090687303. 3
- 92090687304. 4

**Question Number : 27 Question Id : 92090622093 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which among the following is biggest anthropogenic source of atmospheric methane?

- (1) Energy production/use
- (2) Animal wastes
- (3) Land fills
- (4) Domestic sewage

**Options :**

- 92090687305. 1
- 92090687306. 2
- 92090687307. 3
- 92090687308. 4

**Question Number : 27 Question Id : 92090622093 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नांकित में से कौन वायुमंडलीय मिथेन का मानव-जन्य स्रोत है?

- (1) ऊर्जा उत्पादन उपयोग
- (2) जन्तु अपवर्ज्य
- (3) भूमिभरण
- (4) घरेलू मलजल

**Options :**

- 92090687305. 1
- 92090687306. 2
- 92090687307. 3
- 92090687308. 4

**Question Number : 28 Question Id : 92090622094 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

What is the Si:O ratio of amphiboles?

- (1) 1:3 (2) 1:4  
(3) 4:11 (4) 2:5

**Options :**

92090687309. 1  
92090687310. 2  
92090687311. 3  
92090687312. 4

**Question Number : 28 Question Id : 92090622094 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

एम्फिबोल का Si:O अनुपात कितना होता है?

- (1) 1 : 3 (2) 1 : 4  
(3) 4 : 11 (4) 2 : 5

**Options :**

92090687309. 1  
92090687310. 2  
92090687311. 3  
92090687312. 4

**Question Number : 29 Question Id : 92090622095 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which among the following is the most recent epoch on the geological time scale?

- (1) Pliocene (2) Miocene  
(3) Oligocene (4) Eocene

**Options :**

92090687313. 1  
92090687314. 2  
92090687315. 3  
92090687316. 4

**Question Number : 29 Question Id : 92090622095 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से भूवैज्ञानिक समय मापक्रम संबंधी अधुनातन युग कौन सा है?

- |              |              |
|--------------|--------------|
| (1) अतिनूतन  | (2) मध्यनूतन |
| (3) अल्पनूतन | (4) आदिनूतन  |

**Options :**

92090687313. 1

92090687314. 2

92090687315. 3

92090687316. 4

**Question Number : 30 Question Id : 92090622096 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A depth below which the shells dissolve in the deep sea water is called—

- (A) Carbonate dissolution depth
- (B) Carbonate precipitation depth
- (C) Carbonate deposition depth
- (D) Carbonate compensation depth

**Options :**

92090687317. 1

92090687318. 2

92090687319. 3

92090687320. 4

**Question Number : 30 Question Id : 92090622096 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

वह गहराई जिसके नीचे कवच गहन समुद्र जल में विलीन हो जाता है, उसे क्या कहा जाता है?

- |                              |                                      |
|------------------------------|--------------------------------------|
| (1) कार्बोनेट विलयन गहराई    | (2) कार्बोनेट वर्षण (अवक्षेपण) गहराई |
| (3) कार्बोनेट निक्षेपण गहराई | (4) कार्बोनेट प्रतिपूरण गहराई        |

**Options :**

92090687317. 1  
92090687318. 2  
92090687319. 3  
92090687320. 4

**Question Number : 31 Question Id : 92090622097 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : The crustal thickness varies between ~7 km under oceans and ~70 km under high mountains.

Statement II : Felsic rocks are typical of the oceanic crust, whereas mafic rocks are typical of the continental crust.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but statement II is false
- (4) Statement I is false but statement II is true

**Options :**

92090687321. 1  
92090687322. 2  
92090687323. 3  
92090687324. 4

**Question Number : 31 Question Id : 92090622097 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : भूपर्पटी की स्थूलता में भिन्नता पायी जाती, यह समुद्र के नीचे ~7 कि.मी. और ऊँचे पहाड़ों के नीचे ~70 कि.मी. के बीच होता है।

कथन II : फेल्सिक शैल महासागरीय परत के अभिलाक्षणिक गुण हैं जब कि मैफिक शैल महाद्वीपीय परत के प्रारूपिक गुण हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

92090687321. 1
92090687322. 2
92090687323. 3
92090687324. 4

**Question Number : 32 Question Id : 92090622098 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) Ox-bow lake	(I) Wind
(B) Playa	(II) Glacier
(C) Cirque	(III) River
(D) Dunes	(IV) Lake

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
- (2) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

**Options :**

92090687325. 1

92090687326. 2

92090687327. 3

92090687328. 4

**Question Number : 32 Question Id : 92090622098 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची -II
(A) ऑक्सबो झील	(I) पवन
(B) प्लाय	(II) हिमनद
(C) सर्क	(III) नदी
(D) ड्यून्स (रेत का टीला)	(IV) झील

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
- (2) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

**Options :**

92090687325. 1

92090687326. 2

92090687327. 3

92090687328. 4

**Question Number : 33 Question Id : 92090622099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which among the following weather to provide  $Mg^{2+}$  ions to groundwater?

- (A) Amphibole
- (B) Biotite
- (C) Plagioclase
- (D) Dolomite
- (E) Calcite

Choose the correct answer from the options given below :

- (1) (A), (B), (C), (D) only
- (2) (A), (B), (C) only
- (3) (A), (B), (D), (E) only
- (4) (A), (B), (D) only

**Options :**

- 92090687329. 1
- 92090687330. 2
- 92090687331. 3
- 92090687332. 4

**Question Number : 33 Question Id : 92090622099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन अपरदन के बाद भौमजल को  $Mg^{2+}$  आयन प्रदान करता है?

- A. एम्फीबोल
- B. बायोटाइट
- C. प्लेजियोक्लेस
- D. डोलोमाइट
- E. कैल्साइट

नीचे दिए गए विकल्पों में से सही उत्तर का चुनिए :

- (1) केवल A, B, C, D
- (2) केवल A, B, C
- (3) केवल A, B, D, E
- (4) केवल A, B, D



**Options :**

- 92090687329. 1
- 92090687330. 2
- 92090687331. 3
- 92090687332. 4

**Question Number : 34 Question Id : 92090622100 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : The average composition of atmosphere near the surface of earth is given on dry basis and in terms of mixing ratio (weight percent basis).

Reasons (R) : Water content in atmosphere near the surface of the earth is variable with respect to location, time and the concentration of gases in volumetric units (moles/litre) varies with temperature and pressure conditions.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

- 92090687333. 1
- 92090687334. 2
- 92090687335. 3
- 92090687336. 4

**Question Number : 34 Question Id : 92090622100 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये हैं:

अभिकथन A : पृथ्वी के तल के समीप वायुमंडल की औसत संरचना, शुष्कता और मिश्रण अनुपात (भार आधार) के आधार पर दी जाती है।

कारण R : वायुमंडल में पृथ्वी के पृष्ठ के समीप जल की मात्रा स्थान, काल के अनुसार परिवर्तित होती है और आयतनिक इकाईयों (मोल/लीटर) में गैस का सान्द्रण तापक्रम और दाब की दशा के अनुसार भिन्न-भिन्न होती है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही है, किन्तु R गलत है
- (4) A गलत है, किन्तु R सही है

**Options :**

92090687333. 1  
92090687334. 2  
92090687335. 3  
92090687336. 4

**Question Number : 35 Question Id : 92090622101 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

El Nino and La Nina phenomena are observed in—

- |                       |                    |
|-----------------------|--------------------|
| (1) Pacific Ocean     | (2) Indian Ocean   |
| (3) Mediterranean Sea | (4) Atlantic Ocean |

**Options :**

92090687337. 1  
92090687338. 2  
92090687339. 3  
92090687340. 4

**Question Number : 35 Question Id : 92090622101 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

एल निनो और ला निना परिघटनाएँ निम्नलिखित में से किसमें प्रेक्षित की जाती हैं?

- |                       |                      |
|-----------------------|----------------------|
| (1) प्रशान्त महासागर  | (2) हिन्द महासागर    |
| (3) भूमध्यसागरीय सागर | (4) अटलांटिक महासागर |

**Options :**

92090687337. 1  
92090687338. 2  
92090687339. 3  
92090687340. 4

**Question Number : 36 Question Id : 92090622102 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Scaling may lead to corrosion and damage of boilers or water cooling systems. Which of the following compound is insoluble and forms scale?

- |                     |                      |
|---------------------|----------------------|
| (1) Barium Sulfate  | (2) Calcium Chloride |
| (3) Sodium Chloride | (4) Sodium Nitrate   |

**Options :**

92090687341. 1  
92090687342. 2  
92090687343. 3  
92090687344. 4

**Question Number : 36 Question Id : 92090622102 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

शल्कन के परिणाम स्वरूप कथकों या जल प्रशीतन प्रणाली में निष्कर्षण या क्षति हो सकती है, निम्न में से कौन सा यौगिक अविलेय है और इससे शल्क का निर्माण होता है?

- |                     |                       |
|---------------------|-----------------------|
| (1) बेरियम सल्फेट   | (2) कैल्शियम क्लोराइड |
| (3) सोडियम क्लोराइड | (4) सोडियम नाइट्रेट   |

**Options :**

92090687341. 1  
92090687342. 2  
92090687343. 3  
92090687344. 4

**Question Number : 37 Question Id : 92090622103 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Nuclear fission occurs rapidly in atomic bomb explosion and occur relatively slowly in a nuclear reactor.

Reasons (R) : Nuclear reaction of splitting a massive nucleus into less stable and less massive nuclei with release of energy is nuclear fission.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

92090687345. 1

92090687346. 2

92090687347. 3

92090687348. 4

**Question Number : 37 Question Id : 92090622103 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये हैं:

अभिकथन A : परमाण्विक बम विस्फोट में नाभिकीय विखंडन तेजी से होता है और नाभिकीय अभिक्रिया में यह विखंडन अपेक्षाकृत मंद गति से होता है।

कारण R : किसी स्थूलकाय केन्द्रक को कम स्थाई और अपेक्षाकृत न्यून स्थूलकाय केन्द्रिका में ऊर्जा साव सहित विखंडन, नाभिकीय विखंडन होता है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही हैं, किन्तु R गलत है
- (4) A गलत हैं, किन्तु R सही है

**Options :**

92090687345. 1

92090687346. 2

92090687347. 3

92090687348. 4

**Question Number : 38 Question Id : 92090622104 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Type B metal ions form more stable complexes compared to Type A metal ions.

Reasons (R) : High electro-negativity (in relative terms) of metal and low electro-negativity of the legand donor atom would be consistent with stability of a complex with Type B metal ion.

In the light of the above Statements, choose the most appropriate answer from the options given below:

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

**Options :**

92090687349. 1  
92090687350. 2  
92090687351. 3  
92090687352. 4

**Question Number : 38 Question Id : 92090622104 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये है:

अभिकथन A : प्रारूप A धात्विक आयनों की तुलना में B प्रारूप धात्विक आयन अधिक स्थाई सम्मिश्र का निर्माण करते हैं।

कारण R : धातुओं की उच्च वैद्युत ऋणात्मकता (सापेक्षिक रूप में) और संलग्नक दाता परमाणु की न्यून विद्युत ऋणात्मकता प्रारूप B धात्विक आयन के सम्मिश्र के स्थायित्व के अनुरूप होगी।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही हैं, किन्तु R गलत है
- (4) A गलत हैं, किन्तु R सही है

**Options :**

92090687349. 1  
92090687350. 2  
92090687351. 3  
92090687352. 4

**Question Number : 39 Question Id : 92090622105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following species is NOT a proton acceptor in natural waters?

- |                        |                            |
|------------------------|----------------------------|
| (1) $\text{OH}^-$      | (2) $\text{HCO}_3^-$       |
| (3) $\text{CO}_3^{2-}$ | (4) $\text{H}_3\text{O}^+$ |

**Options :**

92090687353. 1  
92090687354. 2  
92090687355. 3  
92090687356. 4

**Question Number : 39 Question Id : 92090622105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन सी जाति प्राकृतिक जल में प्रोटॉन ग्राहि नहीं होती है?

- (1)  $\text{OH}^-$  (2)  $\text{HCO}_3^-$   
(3)  $\text{CO}_3^{2-}$  (4)  $\text{H}_3\text{O}^+$

**Options :**

92090687353. 1  
92090687354. 2  
92090687355. 3  
92090687356. 4

**Question Number : 40 Question Id : 92090622106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

What will be the concentration of nitrogen (N) in a 31 ppm solution of nitrate?

- (1) 31 ppm (2) 7 ppm  
(3) 14 ppm (4) 28 ppm

**Options :**

92090687357. 1  
92090687358. 2  
92090687359. 3  
92090687360. 4

**Question Number : 40 Question Id : 92090622106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

31 ppm नाइट्रेट के विलयन में नाइट्रोजन (N) की सान्द्रता कितनी होगी?

- (1) 31 ppm (2) 7 ppm  
(3) 14 ppm (4) 28 ppm

**Options :**

92090687357. 1  
92090687358. 2  
92090687359. 3  
92090687360. 4

**Question Number : 41 Question Id : 92090622107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Most important buffering species in the pH range of 4 to 8 in natural water is

- (1)  $\text{CO}_3^{2-}$  (2)  $\text{H}_2\text{CO}_3$   
(3)  $\text{H}_3\text{O}^+$  (4)  $\text{HCO}_3^-$

**Options :**

92090687361. 1  
92090687362. 2  
92090687363. 3  
92090687364. 4

**Question Number : 41 Question Id : 92090622107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्राकृतिक जल में 4 से 8 की pH रेंज में सर्वाधिक महत्वपूर्ण मोद्यक (उभय प्रतिरोधन) जाति कौन सी है?

- (1)  $\text{CO}_3^{2-}$  (2)  $\text{H}_2\text{CO}_3$   
(3)  $\text{H}_3\text{O}^+$  (4)  $\text{HCO}_3^-$

**Options :**

92090687361. 1  
92090687362. 2  
92090687363. 3  
92090687364. 4



**Question Number : 42 Question Id : 92090622108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following are soil forming factors?

- (A) Time
- (B) Topography
- (C) Climate
- (D) Organisms
- (E) Parent material

Choose the correct answer from the options given below :

- (1) (A), (C) and (D) only
- (2) (A), (B), (D) and (E) only
- (3) (B), (C), (D) and (E) only
- (4) (A), (B), (C), (D) and (E) only

**Options :**

- 92090687365. 1
- 92090687366. 2
- 92090687367. 3
- 92090687368. 4

**Question Number : 42 Question Id : 92090622108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मृदारचक कारक निम्नलिखित में से कौन से हैं?

- A. समय
- B. स्थलाकृति
- C. जलवायु
- D. जीव
- E. जनक सामग्री

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) केवल A, C और D
- (2) केवल A, B, D और E
- (3) केवल B, C, D और E
- (4) केवल A, B, C, D और E

**Options :**

92090687365. 1  
92090687366. 2  
92090687367. 3  
92090687368. 4

**Question Number : 43 Question Id : 92090622109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A planet having 300 K average surface temperature will emit maximum radiation in

- (1) Ultra violet region  
(2) Visible region  
(3) Infrared region  
(4) Microwave region

**Options :**

92090687369. 1  
92090687370. 2  
92090687371. 3  
92090687372. 4

**Question Number : 43 Question Id : 92090622109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

औसत 300 K पृष्ठ तापमान वाले ग्रह से, निम्न में से किसका अधिकतम विकिरण उत्सर्जित होगा?

- (1) पराबैंगनी क्षेत्र (2) दृश्यमान क्षेत्र  
(3) इन्फ्रारेड (अवरक्त) क्षेत्र (4) सूक्ष्मतरंग क्षेत्र

**Options :**

92090687369. 1  
92090687370. 2  
92090687371. 3  
92090687372. 4

**Question Number : 44 Question Id : 92090622110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

When the scattering particles in the atmosphere are small compared with the wavelength ( $\lambda$ ) of light being scattered, the scattered intensity will be proportional to

- (1)  $\lambda^2$  (2)  $\lambda^4$   
(3)  $\lambda^{-2}$  (4)  $\lambda^{-4}$

**Options :**

92090687373. 1  
92090687374. 2  
92090687375. 3  
92090687376. 4

**Question Number : 44 Question Id : 92090622110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जब वायुमंडल में प्रकीर्णित कण प्रकीर्णित हो रहे प्रकाश की तरंगदैर्घ्य ( $\lambda$ ) की तुलना में लघु होते हैं, तो प्रकीर्णित तीव्रता निम्न से किस से समानुपातिक होगा?

- (1)  $\lambda^2$  (2)  $\lambda^4$   
(3)  $\lambda^{-2}$  (4)  $\lambda^{-4}$

**Options :**

92090687373. 1  
92090687374. 2  
92090687375. 3  
92090687376. 4

**Question Number : 45 Question Id : 92090622111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The prophase of first meiotic division is divided into phases list below. Arrange the phases in the order, as they occur one after the other.

- (A) Diplotene
- (B) Zygotene
- (C) Siakineses
- (D) Leototene
- (E). Pachytene

Choose the correct answer from the options given below :

- (1) (A), (C), (B), (E), (D)
- (2) (D), (B), (E), (A), (C)
- (3) (E), (A), (D), (B), (C)
- (4) (E), (B), (A), (C), (D)

**Options :**

- 92090687377. 1
- 92090687378. 2
- 92090687379. 3
- 92090687380. 4

**Question Number : 45 Question Id : 92090622111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्रथम अर्धसूत्री विभाजन की प्रावस्था निम्नलिखित अवस्थाओं में विभक्त होती है। उन्हें एक के बाद एक घटित होने के क्रम में व्यवस्थित कीजिए:

- A. डिप्लोटीन
- B. जाइगोटीन
- C. सिआकाइनेज
- D. लेप्टोटीन
- E. पैचीटीन

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) A, C, B, E, D
- (2) D, B, E, A, C
- (3) E, A, D, B, C
- (4) E, B, A, C, D

**Options :**

92090687377. 1  
92090687378. 2  
92090687379. 3  
92090687380. 4

**Question Number : 46 Question Id : 92090622112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : While studying the pattern of inheritance in pea plants, Mendel proposed the principles of inheritance, now known as 'Mendel's Law of Inheritance'.

Statement II : Mendel's law of independent assortment does not hold true for the 'linked genes'.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but statement II is false
- (4) Statement I is false but statement II is true

**Options :**

92090687381. 1  
92090687382. 2  
92090687383. 3  
92090687384. 4

**Question Number : 46 Question Id : 92090622112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : मटर के पादपों में वंशानुक्रम के प्रतिरूप के आध्ययन के समय, मेंडल ने आनुवंशिक सिद्धांत प्रतिपादित किया, जो अब 'मेंडल के आनुवंशिक नियम' के रूप में जाना जाता है।

कथन II : मेंडल का स्वतंत्र अपव्यूहन नियम 'मोजित (लिंक) जीन' के लिए सत्य नहीं है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

92090687381. 1  
92090687382. 2  
92090687383. 3  
92090687384. 4

**Question Number : 47 Question Id : 92090622113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In the double-helix structure of DNA two hydrogen bonds are formed between which two bases of the opposite strands?

- (1) Adenine with Guanine
- (2) Adenine with Thymine
- (3) Guanine with Cytosine
- (4) Guanine with Thymine

**Options :**

92090687385. 1  
92090687386. 2  
92090687387. 3  
92090687388. 4

**Question Number : 47 Question Id : 92090622113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से किन दो विपरीत तंतुओं के आधार के मध्य डी एन ए की द्विकुंडलिनी संरचना में दो हाइड्रोजन बंध का निर्माण होता है?

- |                        |                      |
|------------------------|----------------------|
| (1) एडिनिन और गुआनिन   | (2) एडिनिन और थाइमिन |
| (3) गुआनिन और साइटोसिन | (4) गुआनिन और थाइमिन |

**Options :**

- 92090687385. 1
- 92090687386. 2
- 92090687387. 3
- 92090687388. 4

**Question Number : 48 Question Id : 92090622114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following are genetic elements?

- (A) Plasmid
- (B) Chromosome
- (C) DNA polymerase
- (D) Transposable element
- (E) Genome

Choose the correct answer from the options given below :

- |                             |                             |
|-----------------------------|-----------------------------|
| (1) (B), (C), (D), (E) only | (2) (A), (B), (D), (E) only |
| (3) (A), (B), (C), (E) only | (4) (A), (C), (D), (E) only |

**Options :**

- 92090687389. 1
- 92090687390. 2
- 92090687391. 3
- 92090687392. 4

**Question Number : 48 Question Id : 92090622114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से आनुवंशिक तत्व कौन से हैं?

- A. प्लाज्मिड
- B. गुणसूत्र
- C. डीएनए पोलिमरेज
- D. परिवर्तशील तत्व
- E. जीनोम

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) केवल B, C, D, E
- (2) केवल A, B, D, E
- (3) केवल A, B, C, E
- (4) केवल A, C, D, E

**Options :**

- 92090687389. 1
- 92090687390. 2
- 92090687391. 3
- 92090687392. 4

**Question Number : 49 Question Id : 92090622115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

To enhance the existing populations of biodegrading micro-organisms, specific microbes are added to soil. This process is called –

- (1) Bioaccumulation
- (2) Bioaugmentation
- (3) Bioconservation
- (4) Bioengineering

**Options :**

- 92090687393. 1
- 92090687394. 2
- 92090687395. 3
- 92090687396. 4

**Question Number : 49 Question Id : 92090622115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



जैव अवक्रम्य सूक्ष्म जीव की विद्यमान जनसंख्या बढ़ाने के लिए मृदा में विशिष्ट सूक्ष्म जीवों को योजित किया जाता है, यह प्रक्रम कहलाता है:

- |                |                     |
|----------------|---------------------|
| (1) जैवसंचयन   | (2) जैववर्धन        |
| (3) जैवसंरक्षण | (4) जैवअभियांत्रिकी |

**Options :**

- 92090687393. 1
- 92090687394. 2
- 92090687395. 3
- 92090687396. 4

**Question Number : 50 Question Id : 92090622116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

At the surface of the sea (air-water interface), is the microbial habitat referred to as the

- |             |              |
|-------------|--------------|
| (1) Neuston | (2) Pleuston |
| (3) Benthos | (4) Episton  |

**Options :**

- 92090687397. 1
- 92090687398. 2
- 92090687399. 3
- 92090687400. 4

**Question Number : 50 Question Id : 92090622116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

समुद्र की सतह (वायु-जल-अंतःसतह) पर, सूक्ष्म जीव का आवह है किस नाम से जाना जाता है?

- |              |                |
|--------------|----------------|
| (1) न्यूस्टन | (2) प्ल्यूस्टन |
| (3) बेंथोस   | (4) एपिस्टन    |

**Options :**

- 92090687397. 1
- 92090687398. 2
- 92090687399. 3
- 92090687400. 4

**Question Number : 51 Question Id : 92090622117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Method of phylogenetic analysis of bacteria based on DNA fragments encoding their 16S rRNA is called as

- |                                 |                         |
|---------------------------------|-------------------------|
| (1) Multi Locus Sequence Typing | (2) Fatty Acid Analysis |
| (3) Ribotyping                  | (4) rep-PCR             |

**Options :**

- 92090687401. 1
- 92090687402. 2
- 92090687403. 3
- 92090687404. 4

**Question Number : 51 Question Id : 92090622117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

डि एन ए विखंडन के आधार पर जीवाणुओं के शरीर क्रियात्मक विश्लेषण की विधि, जिसमें 16S आर एन ए का कूट बद्धन होता है, यह क्या कहलाती है?

- |                             |                            |
|-----------------------------|----------------------------|
| (1) बहु केन्द्र शृंखला बंधन | (2) वसा अम्ल विश्लेषण      |
| (3) राइबोटाइपिंग            | (4) रिप्रजेंटेटिव – पीसीआर |

**Options :**

- 92090687401. 1
- 92090687402. 2
- 92090687403. 3
- 92090687404. 4

**Question Number : 52 Question Id : 92090622118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Pore spaces in surface soils is an important factor in deciding microbial density and distribution.

Reasons (R) : Small pore necks protect resident bacteria from protozoal predation.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

92090687405. 1  
92090687406. 2  
92090687407. 3  
92090687408. 4

**Question Number : 52 Question Id : 92090622118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये है:

अभिकथन A : पृष्ठ मृदा में रंध्राकार, सूक्ष्म जीवी घनत्व और वितरण के निर्धारण का महत्वपूर्ण कारक हैं।

कारण R : लघु रंध्रयुक्त ग्रीवा निवासी जीवाणु को प्रोटोजोआ के पर-भक्षण से संरक्षित करते हैं।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही है, किन्तु R गलत है
- (4) A गलत है, किन्तु R सही है

**Options :**

92090687405. 1  
92090687406. 2  
92090687407. 3  
92090687408. 4

**Question Number : 53 Question Id : 92090622119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following features distinguish Bacteria from Eukarya?

- (A) Membrane lipids
- (B) Poly (A) tailing of mRNA
- (C) Cell structure
- (D) Plasmids
- (E) Ribosomes

Choose the correct answer from the options given below :

- (1) (A), (B), (D), (E) only
- (2) (A), (C), (D), (E) only
- (3) (B), (C), (D), (E) only
- (4) (A), (B), (C), (E) only

**Options :**

- 92090687409. 1
- 92090687410. 2
- 92090687411. 3
- 92090687412. 4

**Question Number : 53 Question Id : 92090622119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन सी विशेषताएँ यूकेरिया से बैक्टीरिया को विभेद करती हैं?

- A. झिल्ली लिपिड
- B. mRNA का बहु (A) पृच्छ
- C. कोशिका संरचना
- D. प्लाज्मिड्स
- E. राइबोसोम

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) केवल A, B, D, E
- (2) केवल A, C, D, E
- (3) केवल B, C, D, E
- (4) केवल A, B, C, E

**Options :**

- 92090687409. 1
- 92090687410. 2
- 92090687411. 3
- 92090687412. 4

**Question Number : 54 Question Id : 92090622120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II:

List I (Microbe)	List II (Natural habitat)
(A) Streptomyces	(I) Aquatic habitat
(B) Influenza virus	(II) Terrestrial Environment
(C) Spirulina	(III) Sewage treatment
(D) Giardia	(IV) Airborne pathogen

Choose the correct answer from the options given below:

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

92090687413. 1  
92090687414. 2  
92090687415. 3  
92090687416. 4

**Question Number : 54 Question Id : 92090622120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को सूची II के साथ सुमेलित कीजिए:

सूची-I (जीवाणु)	सूची -II (प्राकृतिक आवास)
(A) स्ट्रेप्टोमाइस	(I) जलीय अधिवास
(B) इंप्लुएंजा	(II) भौमिक पर्यावरण
(C) स्पीरुलिना	(III) मलजल शोधन
(D) जिआर्डिया	(IV) वायुजनित रोगवाहक

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)  
(2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)  
(3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)  
(4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

92090687413. 1  
92090687414. 2  
92090687415. 3  
92090687416. 4

**Question Number : 55 Question Id : 92090622121 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In Ferns, the vascular stands of a dictyostele are called as

- (1) Telomes
- (2) Meristoteles
- (3) Pith
- (4) Trabeculae

**Options :**

- 92090687417. 1
- 92090687418. 2
- 92090687419. 3
- 92090687420. 4

**Question Number : 55 Question Id : 92090622121 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

फर्न में डिक्टियोस्टिल के संवहन संपूल क्या कहलाते हैं?

- (1) टीलोम्स
- (2) मेरिस्टेल्स
- (3) पिथ
- (4) ट्रेबेक्युली

**Options :**

- 92090687417. 1
- 92090687418. 2
- 92090687419. 3
- 92090687420. 4

**Question Number : 56 Question Id : 92090622122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Nematodontous peristomes are found in

- (1) Funaria
- (2) Bryum
- (3) Marchantia
- (4) Polytrichism

**Options :**

- 92090687421. 1
- 92090687422. 2
- 92090687423. 3
- 92090687424. 4

**Question Number : 56 Question Id : 92090622122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निमैटोडोन्टस पेरिस्टोम्स कहाँ पाये जाते हैं?

- |                |                |
|----------------|----------------|
| (1) फ्यूनेरिया | (2) ब्रायम     |
| (3) मर्चेंटिया | (4) पोलीट्रिचम |

**Options :**

92090687421. 1

92090687422. 2

92090687423. 3

92090687424. 4

**Question Number : 57 Question Id : 92090622123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

According to telome theory, which one of the following processes accounted for the shifting of sporangia to ventral surface of leaf in ferns?

- |                 |                 |
|-----------------|-----------------|
| (1) Overtopping | (2) Planation   |
| (3) Syngensis   | (4) Incurvation |

**Options :**

92090687425. 1

92090687426. 2

92090687427. 3

92090687428. 4

**Question Number : 57 Question Id : 92090622123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

टीलोम सिद्धांत के अनुसार निम्नलिखित में से कौन सी प्रक्रिया पर्णांगों में स्पौरैन्जिया का पत्ती के उदरतल की ओर स्थानान्तरण के लिए उत्तरदायी होती है?

- |                              |                         |
|------------------------------|-------------------------|
| (1) उच्चातिक्रमी (ओवरटॉपिंग) | (2) प्लेनेशन            |
| (3) सिनजेनेसिस (सशजनन)       | (4) इनकर्वेशन (अतर्वकण) |



**Options :**

- 92090687425. 1
- 92090687426. 2
- 92090687427. 3
- 92090687428. 4

**Question Number : 58 Question Id : 92090622124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the taxonomic categories of wheat in descending order :

- (A) Monocotyledonae
- (B) Angiospermae
- (C) Poaceae
- (D) Poales
- (E) Triticum

Choose the correct answer from the options given below :

- |                             |                             |
|-----------------------------|-----------------------------|
| (1) (E), (D), (C), (B), (A) | (2) (A), (B), (C), (D), (E) |
| (3) (B), (A), (D), (C), (E) | (4) (A), (C), (D), (B), (E) |

**Options :**

- 92090687429. 1
- 92090687430. 2
- 92090687431. 3
- 92090687432. 4

**Question Number : 58 Question Id : 92090622124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

गेहूँ की वर्गिकीय श्रेणियों को अवरोही क्रम में व्यवस्थित कीजिए:

- A. मोनोकोटिलेडोनी
- B. एंजियोस्पर्मि
- C. पोएसी
- D. पोएल्स
- E. ट्रिटिकम

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- |                   |                   |
|-------------------|-------------------|
| (1) E, D, C, B, A | (2) A, B, C, D, E |
| (3) B, A, D, C, E | (4) A, C, D, B, E |

**Options :**

- 92090687429. 1
- 92090687430. 2
- 92090687431. 3
- 92090687432. 4

**Question Number : 59 Question Id : 92090622125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R) :

**Assertion (A) :** The gymnosperms are plants in which the ovules are not enclosed by any ovary wall and remain exposed, both before and after fertilisation.

**Reasons (R) :** Common examples gymnosperms are Psilotum and Lycopodium.

In the light of the above Statements, choose the correct answer from the options given below:

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

92090687433. 1  
92090687434. 2  
92090687435. 3  
92090687436. 4

**Question Number : 59 Question Id : 92090622125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये है:

अभिकथन A : अनावृत बीजी पादप ऐसे पादप होते हैं जिनमें अण्डाणु किसी अण्डाशय भिन्न से संवृत नहीं होते और निषेचन पूर्व और पश्चात दोनों स्थितियों में उद्भासित होते हैं।

कारण R : अनावृत बीजी के पादप सामान्य उदाहरण में सिलोटम और लाइकोपोडियम शामिल हैं।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही हैं, किन्तु R गलत है
- (4) A गलत हैं, किन्तु R सही है

**Options :**

92090687433. 1  
92090687434. 2  
92090687435. 3  
92090687436. 4

**Question Number : 60 Question Id : 92090622126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : IAA is transported from cell to cell and the transport is unidirectional (polar).

Statement II : Auxins induce the adventitious roots on cuttings and inhibit the leaf and fruit abscission.

In the light of the above Statements, choose the most appropriate answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but statement II is incorrect
- (4) Statement I is incorrect but statement II is correct

**Options :**

92090687437. 1  
92090687438. 2  
92090687439. 3  
92090687440. 4

**Question Number : 60 Question Id : 92090622126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : आई ए ए का परिवहन एक कोशिका से दूसरी कोशिका में होता है और यह परिवहन एक दिशीय (ध्रुवीय) होता है।

कथन II : ऑक्सीन अपस्थानिक मूल को कटाई वाले स्थान पर प्रेरित करते हैं और पत्री और फलों के अपच्छेदन का परिरोध करते हैं।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

92090687437. 1

92090687438. 2

92090687439. 3

92090687440. 4

**Question Number : 61 Question Id : 92090622127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following statements are correct?

- (A) In CAM plants the fixation of  $\text{CO}_2$  to phosphoenolpyruvate to form oxaloacetate occurs at night.
- (B) In photosystem I the special chlorophyll, the molecules of reaction centre are known as  $\text{P}_{680}$ .
- (C) During photosynthesis manganese is an essential co-factor for oxygen evolving mechanism.
- (D) The leaves of  $\text{C}_4$  plants are characterized by Kranz anatomy.
- (E)  $\text{C}_3$  plants are more efficient utilizers of  $\text{CO}_2$  than  $\text{C}_4$  plants.

Choose the correct answer from the options given below:

- (1) (B) and (E) only
- (2) (A), (B) and (C) only
- (3) (A), (C), and (D) only
- (4) (D) and (E) only

**Options :**

92090687441. 1

92090687442. 2

92090687443. 3

92090687444. 4

**Question Number : 61 Question Id : 92090622127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन से कथन सही हैं?

- A. CAM पादप में फॉस्फोएनोलपाइरूवेट में  $\text{CO}_2$  का स्थैरीकरण होता है जिनके फलस्वरूप रात में ऑक्ज़ैलोएसीटेट का निर्माण होता है।
- B. प्रकाश तंत्र - I में विशेष हरितलवक, प्रतिक्रिया केन्द्र के अणुओं को  $\text{P}_{680}$  कहा जाता है।
- C. प्रकाशसंश्लेषण के दौरान ऑक्सीजन उद्विकास क्रियाविधि (तंत्र) के लिए मैंगनीज एक अनिवार्य सह-कारक है
- D. पादप ( $\text{C}_4$  प्लांट) की पत्रियों, क्रांज एनाटॉमी से चरित्रचित्रण (कैरेक्टराइज) की जाती है।
- E.  $\text{C}_4$  पादप की अपेक्षाकृत  $\text{C}_3$  पादप,  $\text{CO}_2$  को अधिक दक्षता (कुशलता) से उपयोग करते हैं।

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) केवल B और E
- (2) केवल A, B और C
- (3) केवल A, C, और D
- (4) केवल D और E

**Options :**

- 92090687441. 1
- 92090687442. 2
- 92090687443. 3
- 92090687444. 4

**Question Number : 62 Question Id : 92090622128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Bacteria)	List II (Shape)
(A) Coccus	(I) Rod-shaped
(B) Bacillus	(II) Comma-shaped
(C) Vibrium	(III) Spherical
(D) Spirillum	(IV) Spiral

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

**Options :**

92090687445. 1  
92090687446. 2  
92090687447. 3  
92090687448. 4

**Question Number : 62 Question Id : 92090622128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को साथ सूची II के साथ सुमेलित कीजिए:

सूची-I (जीवाणु)	सूची-II (आकार)
(A) कोकस	(I) रॉड के आकार का
(B) बैसिलस	(II) कॉमा के आकार का
(C) विब्रियम	(III) गोलाकार
(D) स्पिरिलम	(IV) सर्पिल

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

**Options :**

- 92090687445. 1
- 92090687446. 2
- 92090687447. 3
- 92090687448. 4

**Question Number : 63 Question Id : 92090622129 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The high impact species whose removal from community affects persistence of other species, and their impact is disproportionate to abundance are known as \_\_\_\_\_.

- (1) Umbrella species
- (2) Flagship species
- (3) Exotic species
- (4) Keystone species

**Options :**

- 92090687449. 1
- 92090687450. 2
- 92090687451. 3
- 92090687452. 4

**Question Number : 63 Question Id : 92090622129 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

उच्च संघत वाले प्रजातियाँ जिन्हें समुदाय से हटाने के परिणाम स्वरूप अन्य प्रजातियों का अस्तित्व में बने रहना प्रभावित होता है और उनका प्रभाव बाहुल्यता के अनुपात में नहीं होता है, यह कहलाता है:

- (1) अम्ब्रेला स्पीसीज
- (2) फ्लैगशिप स्पीसीज
- (3) एकजोटिक स्पीसीज
- (4) की-स्टोन स्पीसीज

**Options :**

- 92090687449. 1
- 92090687450. 2
- 92090687451. 3
- 92090687452. 4

**Question Number : 64 Question Id : 92090622130 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



Which of the following IUCN category is assigned when a species faces an extremely high or very high risk of extinction in the wild in immediate or near future?

- (1) CR – Critically endangered species
- (2) NT – Near threatened species
- (3) VU – Vulnerable species
- (4) Extinct species

**Options :**

92090687453. 1  
92090687454. 2  
92090687455. 3  
92090687456. 4

**Question Number : 64 Question Id : 92090622130 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जब प्रजातियों को आसन्नकाल में अथवा निकट भविष्य में विलुप्तप्राय होने का बहुत अधिक खतरा होता है तो उन्हें आई यू सी एन के किस श्रेणी में रखा जाता है?

- (1) सी आर – क्रांतिक रूप से जोखिमग्रस्त प्रजाति
- (2) एन टी – खतराग्रस्त प्राय प्रजाति
- (3) वी यू – दुर्बल (सुभेद्य) प्रजाति
- (4) विलुप्त प्रजातियां

**Options :**

92090687453. 1  
92090687454. 2  
92090687455. 3  
92090687456. 4

**Question Number : 65 Question Id : 92090622131 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is the key fauna in the Gulf of Mannar biosphere reserve for in-situ conservation of biodiversity in India ?

- |                     |                       |
|---------------------|-----------------------|
| (1) Indian Wild Ass | (2) Dugong or sea cow |
| (3) Snow leopard    | (4) Nilgiri – Tahr    |

**Options :**

- 92090687457. 1
- 92090687458. 2
- 92090687459. 3
- 92090687460. 4

**Question Number : 65 Question Id : 92090622131 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

भारत में स्व-स्थाने जैव विविधता के लिए मन्नार जैव मंडल अभयारण्य के खाड़ी में निम्नांकित में से कौन प्रमुख जन्तु है?

- |                              |                                       |
|------------------------------|---------------------------------------|
| (1) भारतीय वन्य गर्द         | (2) ड्योगोंग या समुद्री गाय (सी कारु) |
| (3) हिम तेंदुआ (स्रो लेपर्ड) | (4) नीलगिरी तार                       |

**Options :**

- 92090687457. 1
- 92090687458. 2
- 92090687459. 3
- 92090687460. 4

**Question Number : 66 Question Id : 92090622132 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the following Taxonomic groups in the decreasing order of the number of species described on the earth :

- (A) Vascular plants
- (B) Insects
- (C) Fungi
- (D) Algae
- (E) Fish

Choose the correct answer from the options given below:

- (1) (A), (B), (C), (D), (E)
- (2) (B), (A), (C), (D), (E)
- (3) (E), (D), (C), (B), (A)
- (4) (C), (D), (E), (A), (B)

**Options :**

- 92090687461. 1
- 92090687462. 2
- 92090687463. 3
- 92090687464. 4

**Question Number : 66 Question Id : 92090622132 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

पृथ्वी पर वर्णित प्रजातियों की संख्या के घटते क्रम में निम्नांकित वर्गिकी समूहों को व्यवस्थित कीजिए:

- A. संवाही पादप
- B. कीट
- C. कवक
- D. शैवाल
- E. मत्स्य

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) A, B, C, D, E
- (2) B, A, C, D, E
- (3) E, D, C, B, A
- (4) C, D, E, A, B

**Options :**

- 92090687461. 1
- 92090687462. 2
- 92090687463. 3
- 92090687464. 4

**Question Number : 67 Question Id : 92090622133 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Pteridophytes are the first terrestrial plants to possess vascular tissues.

Statement II : The common examples of ferns are Funaria and Sphagnum.

In the light of the above Statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but statement II is false
- (4) Statement I is false but statement II is true

**Options :**

- 92090687465. 1
- 92090687466. 2
- 92090687467. 3
- 92090687468. 4

**Question Number : 67 Question Id : 92090622133 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : टेरिडोफाइट संवहन ऊतकों वाले प्रथम स्थलीय पादप हैं।

कथन II : फुनारिया और स्फैग्रम, पर्णांगो के सामान्य उदाहरण है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

92090687465. 1
92090687466. 2
92090687467. 3
92090687468. 4

**Question Number : 68 Question Id : 92090622134 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R):

Assertion (A) : Some species of Katydid (or Bushcrickets) resembles with complete leaf or appears to be a part of leaf.

Reasons (R) : Katydid show camouflage as a behavioural strategy to avoid predation.

In the light of the above Statements, choose the correct answer from the options given below:

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

92090687469. 1
92090687470. 2
92090687471. 3

**Question Number : 68 Question Id : 92090622134 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये है:

अभिकथन A : केटिडिड् (या बुशक्रिकेट) की कुछ प्रजातियाँ पूरे पत्र से मिलती जुलती है या पत्री का अंश प्रतीत होती है।

कारण R : केटिडिड् परभक्षण से बचने हेतु व्यावहारिक सामर्थ्य के रूप में छद्मवेश प्रदर्शित करता है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही हैं, किन्तु R गलत है
- (4) A गलत हैं, किन्तु R सही है

**Options :**

92090687469. 1

92090687470. 2

92090687471. 3

92090687472. 4

**Question Number : 69 Question Id : 92090622135 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Biographic Zone)	List II (Biotic Provinces)
(A) Himalayan	(I) Kutch
(B) Desert	(II) North West Himalaya
(C) Semi Arid	(III) Punjab
(D) Western Ghats	(IV) Malabar Coast

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

- 92090687473. 1
- 92090687474. 2
- 92090687475. 3
- 92090687476. 4

**Question Number : 69 Question Id : 92090622135 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को सूची II के साथ सुमेलित कीजिए:

सूची-I (जैव भौगोलिक क्षेत्र)	सूची-II (जैविक क्षेत्र)
(A) हिमालयी	(I) कच्छ
(B) मरुस्थली	(II) उत्तर-पश्चिम हिमालय
(C) अर्ध शुष्क	(III) पंजाब
(D) पश्चिमी घाट	(IV) मालाबार तट

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(III), (B)-(I), (C)-(III), (D)-(IV)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

92090687473. 1  
92090687474. 2  
92090687475. 3  
92090687476. 4

**Question Number : 70 Question Id : 92090622136 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following cell lines does not grow in suspension culture?

- |           |          |
|-----------|----------|
| (1) THP-1 | (2) K562 |
| (3) U937  | (4) A549 |

**Options :**

92090687477. 1  
92090687478. 2  
92090687479. 3  
92090687480. 4

**Question Number : 70 Question Id : 92090622136 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



निम्नलिखित में से कौन सा कोशिका वंश निलंबन संवर्ध में वृद्धि नहीं करता है?

- |           |          |
|-----------|----------|
| (1) THP-1 | (2) K562 |
| (3) U937  | (4) A549 |

**Options :**

92090687477. 1  
92090687478. 2  
92090687479. 3  
92090687480. 4

**Question Number : 71 Question Id : 92090622137 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Respiratory quotient is defined as

- (1) Number of respiration per minute
- (2) Amount of energy produced as ATP during given period of time
- (3) Ratio of amount of CO<sub>2</sub> produced to the amount of O<sub>2</sub> taken in
- (4) Ratio of amount of ATP produced to the amount of O<sub>2</sub> used

**Options :**

92090687481. 1  
92090687482. 2  
92090687483. 3  
92090687484. 4

**Question Number : 71 Question Id : 92090622137 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

श्वसन भागफल को निम्नलिखित रूप से परिभाषित किया जाता है:

- (1) प्रतिमिनट श्वसन की संख्या
- (2) प्रदत्त कालावधि के दौरान ATP के रूप में उत्पादित ऊर्जा की मात्रा
- (3) ग्रहण की गई O<sub>2</sub> की मात्रा से उत्पादित CO<sub>2</sub> की मात्रा का अनुपात
- (4) प्रयुक्त O<sub>2</sub> की मात्रा से उत्पादित ATP की मात्रा का अनुपात

**Options :**

92090687481. 1

92090687482. 2

92090687483. 3

92090687484. 4

**Question Number : 72 Question Id : 92090622138 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Some of the substances move out of the peritubular capillaries and are moved into the nephron by which process?

- (1) Secretion
- (2) Absorption
- (3) Reabsorption
- (4) Filtration

**Options :**

92090687485. 1

92090687486. 2

92090687487. 3

92090687488. 4

**Question Number : 72 Question Id : 92090622138 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से किस प्रक्रिया द्वारा कुछ पदार्थ परिनलिकाकार केशिका से बाहर आते हैं और नेफ्रॉन में चले जाते हैं?

- (1) स्रवण (स्राव)
- (2) अवशोषण
- (3) पुर्नअवशोषण
- (4) निस्पंदन

**Options :**

92090687485. 1

92090687486. 2

92090687487. 3

92090687488. 4

**Question Number : 73 Question Id : 92090622139 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Anatomy term)	List II (Definition)
(A) Bone	(I) A fibrous protein
(B) Collagen	(II) Mature bone cell
(C) Osteocyte	(III) Blood cell production
(D) Marrow	(IV) Mineralized connective tissue

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

**Options :**

92090687489. 1

92090687490. 2

92090687491. 3

92090687492. 4

**Question Number : 73 Question Id : 92090622139 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को सूची II के साथ सुमेलित कीजिए:

सूची-I (आकारिकी पद)	सूची -II (परिभाषा)
(A) आस्थि	(I) रेशेदार प्रोटीन
(B) कोलैजन	(II) परिपक्व अस्थिकोशिका
(C) अस्थ्यणु	(III) रक्त कोशिका निर्माण
(D) मज्जा	(IV) खनिजितसंयोजी ऊतक

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

**Options :**

92090687489. 1  
92090687490. 2  
92090687491. 3  
92090687492. 4

**Question Number : 74 Question Id : 92090622140 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Apoptosis is a pro-inflammatory mode of cell death.

Statement II : During apoptosis inflammatory substances are released which alerts other cells in the vicinity of dying cell.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but statement II is false
- (4) Statement I is false but statement II is true

**Options :**

92090687493. 1  
92090687494. 2  
92090687495. 3  
92090687496. 4

**Question Number : 74 Question Id : 92090622140 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : एपॉपटॉसिस कोशिका मृत्यु का प्रज्वलनशील प्रकार्य है।

कथन II : एपॉपटॉसिस के दौरान ज्वलनशील पदार्थ स्रावित होते हैं जो मृत कोशिका के नजदीकी क्षेत्र में अन्य कोशिकाओं को सचेत करते हैं।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

92090687493. 1  
92090687494. 2  
92090687495. 3  
92090687496. 4

**Question Number : 75 Question Id : 92090622141 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The first Jawed vertebrates (Placoderms), arose in which period?

- (1) Cambrian
- (2) Ordovician
- (3) Devonian
- (4) Silurian

**Options :**

92090687497. 1  
92090687498. 2  
92090687499. 3  
92090687500. 4

**Question Number : 75 Question Id : 92090622141 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सर्वप्रथम हनुयुक्त कशेरुकी (प्लेकोडर्म्स) किस काल में उत्पन्न हुए:

- |                |                  |
|----------------|------------------|
| (1) कैम्ब्रियन | (2) ऑर्डोवियनियन |
| (3) डेवोनियन   | (4) सिलुरियन     |

**Options :**

92090687497. 1  
92090687498. 2  
92090687499. 3  
92090687500. 4

**Question Number : 76 Question Id : 92090622142 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

When phospholipid is added and shaken up with water, micelles may form. Which of the following is true regarding micelles?

- (1) Tiny spheres of lipids with hydrophobic tails outwards in contact with water
- (2) Tiny spheres of lipids with hydrophilic heads outwards in contact with water
- (3) Tiny spheres of lipids with randomly arranged hydrophobic and hydrophilic heads
- (4) Tiny spheres of lipids with hydrophobic heads away from water

**Options :**

92090687501. 1  
92090687502. 2  
92090687503. 3  
92090687504. 4

**Question Number : 76 Question Id : 92090622142 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

फॉस्फोलिपिड को जल में योजितकर इसे हिलाया जाता है तो मिसेल उत्पन्न हो सकता है। मिसेल के बारे में निम्नांकित में से कौन सा कथन सही है।

- (1) वसा के सूक्ष्म गोले जिनकी पूंछ जलवरागी होते हुए बाहर की ओर जल के सम्पर्क में होती है।
- (2) वसा के सूक्ष्म गोले जिनका सिर जलस्नेही होते हुए बाहर की ओर जल के सम्पर्क में होता है।
- (3) वसा के सूक्ष्म गोले जिनका सिर जलस्नेही व जलवरागी होते हैं और वे यादृच्छिक रूप से व्यवस्थित होते हैं।
- (4) वसा के सूक्ष्म गोले जिनका सिर जलवरागी होता है और वे जल से दूर रहते हैं।

**Options :**

- 92090687501. 1
- 92090687502. 2
- 92090687503. 3
- 92090687504. 4

**Question Number : 77 Question Id : 92090622143 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is the genetic material in Human Immunodeficiency Virus (HIV)?

- (1) DNA
- (2) RNA
- (3) Chromosomes
- (4) DNA and RNA hybrid molecule

**Options :**

- 92090687505. 1
- 92090687506. 2
- 92090687507. 3
- 92090687508. 4

**Question Number : 77 Question Id : 92090622143 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मानव प्रतिरक्षा न्यूनतम विषाणु (एच आई वी) का आनुवंशिक सामग्री (जेनेटिक मैटेरियल) कौन सा है?

- (1) डी एन ए (2) आर एन ए  
(3) क्रोमोसोम (गुणसूत्र) (4) डी एन ए और आर एन ए संकर अणु

**Options :**

92090687505. 1  
92090687506. 2  
92090687507. 3  
92090687508. 4

**Question Number : 78 Question Id : 92090622144 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following states is known for conservation of wild citrus?

- (1) Arunachal Pradesh (2) Manipur  
(3) Meghalaya (4) Sikkim

**Options :**

92090687509. 1  
92090687510. 2  
92090687511. 3  
92090687512. 4

**Question Number : 78 Question Id : 92090622144 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से किस राज्य को जंगली निंबुवंश (वाइल्ड सिट्रस) के संरक्षण के लिए जाना जाता है?

- (1) अरुणाचल प्रदेश (2) मणिपुर  
(3) मेघालय (4) सिक्किम

**Options :**

92090687509. 1  
92090687510. 2  
92090687511. 3  
92090687512. 4

**Question Number : 79 Question Id : 92090622145 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**



**Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the following in increasing order of land area :

- (A) Africa
- (B) Europe
- (C) North and Central America
- (D) Oceania
- (E) South America

Choose the correct answer from the options given below :

- (1) (A) < (B) < (E) < (C) < (D)
- (2) (A) < (C) < (B) < (E) < (A)
- (3) (B) < (D) < (E) < (A) < (C)
- (4) (D) < (E) < (C) < (B) < (A)

**Options :**

- 92090687513. 1
- 92090687514. 2
- 92090687515. 3
- 92090687516. 4

**Question Number : 79 Question Id : 92090622145 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित को भूक्षेत्र के आरोही क्रम में व्यवस्थित कीजिए:

- A. अफ्रीका
- B. यूरोप
- C. उत्तर एवं मध्य अमेरिका
- D. ओशेनिया
- E. दक्षिण अमेरिका

नीचे दिए गए विकल्पों में से सही उत्तर चुनिये :

- (1) A < B < E < C < D
- (2) A < C < B < E < A
- (3) B < D < E < A < C
- (4) D < E < C < B < A

**Options :**

- 92090687513. 1

92090687514. 2

92090687515. 3

92090687516. 4

**Question Number : 80 Question Id : 92090622146 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Biosphere Reserves)	List II (State)
(A) Agasthyamalai	(I) Assam
(B) Amarkantak	(II) Odisha
(C) Manas	(III) Madhya Pradesh
(D) Similipal	(IV) TamilNadu

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (2) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

**Options :**

92090687517. 1

92090687518. 2

92090687519. 3

92090687520. 4

**Question Number : 80 Question Id : 92090622146 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को सूची II के साथ सुमेलित कीजिए:

सूची-I

सूची -II

- |               |                  |
|---------------|------------------|
| (A) अगस्थमलाई | (I) असम          |
| (B) अमरकंटक   | (II) ओडिशा       |
| (C) मानस      | (III) मध्यप्रदेश |
| (D) सिम्लीपाल | (IV) तमिलनाडु    |

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (2) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

**Options :**

92090687517. 1
92090687518. 2
92090687519. 3
92090687520. 4

**Question Number : 81 Question Id : 92090622147 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Methanol, also referred as wood alcohol, was initially produced

- (1) via yeast derived fermentation of glucose
- (2) by destructive distillation of wood
- (3) by esterification of oil derived from plant source
- (4) via fermentation of starch in Kernels of corn

**Options :**

92090687521. 1
92090687522. 2
92090687523. 3
92090687524. 4

**Question Number : 81 Question Id : 92090622147 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मेथनॉल, जोकि काष्ठ एल्कोहल भी कहा जाता है, प्रारम्भ में निम्न से किस विधि द्वारा उत्पादित होता था?

- (1) ग्लूकोज के किण्वन से व्युत्पन्न यीस्ट के माध्यम से
- (2) काष्ठ के विध्वंसी आसवन द्वारा
- (3) पादप स्रोत से व्युत्पन्न तेल के ईस्टरीकरण द्वारा
- (4) मकई के मुख्य भाग में स्टार्च (मंड) के किण्वन के माध्यम से

**Options :**

92090687521. 1
92090687522. 2
92090687523. 3
92090687524. 4

**Question Number : 82 Question Id : 92090622148 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the coal types from lowest to highest rank?

- (A) Brown coal
- (B) Sub bituminous
- (C) Hard coal
- (D) Soft coal

Choose the correct answer from the options given below :

- |                        |                        |
|------------------------|------------------------|
| (1) (B), (A), (D), (C) | (2) (B), (D), (A), (C) |
| (3) (A), (B), (D), (C) | (4) (A), (D), (B), (C) |

**Options :**

92090687525. 1
92090687526. 2
92090687527. 3
92090687528. 4

**Question Number : 82 Question Id : 92090622148 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

कोयल के प्रकारों को निम्नतम से उच्चतम श्रेणी के क्रम में व्यवस्थित कीजिए:

- A. ब्राउन (भूरा) कोयला
- B. सबबिटूमिनस कोयला
- C. कठोर कोयला
- D. मुलायम कोयला

नीचे दिये गये विकल्पों में से सही उत्तर चुनिये :

- |                |                |
|----------------|----------------|
| (1) B, A, D, C | (2) B, D, A, C |
| (3) A, B, D, C | (4) A, D, B, C |

**Options :**

- 92090687525. 1
- 92090687526. 2
- 92090687527. 3
- 92090687528. 4

**Question Number : 83 Question Id : 92090622149 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the correct statements :

- (A) The pH of unpolluted natural rain water is ~5.6
- (B)  $H_2SO_4$  and  $HNO_3$  are predominant acids in acid rain
- (C) Acidic rainwater have pH less than 5.6
- (D) Acid rain affect monuments, buildings and soil fertility
- (E) Neutral pH of unpolluted natural rain water is 7

Choose the correct answer from the options given below :

- |                                |                           |
|--------------------------------|---------------------------|
| (1) (B), (C), (D) and (E) only | (2) (B), (C) and (E) only |
| (3) (A), (B), (C) and (D) only | (4) (A), (B) and (C) only |

**Options :**

- 92090687529. 1
- 92090687530. 2
- 92090687531. 3

92090687532. 4

**Question Number : 83 Question Id : 92090622149 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सही कथन चुनिये:

- A. अप्रदूषित प्राकृतिक वर्षा जल का pH ~5.6 होता है।
- B.  $H_2SO_4$  और  $HNO_3$  अम्ल वर्षा में प्रमुख अम्ल होते हैं।
- C. अम्लीय वर्षा जल का pH 5.6 से कम होता है।
- D. अम्ल वर्षा स्मारकों तथा भवनों और मृदा उर्वरता को प्रभावित करती है।
- E. अप्रदूषित प्राकृतिक वर्षा जल का उदासीन pH 7 होता है।

नीचे दिये गये विकल्पों में से सही विकल्प चुनिये :

- |                       |                    |
|-----------------------|--------------------|
| (1) केवल B, C, D और E | (2) केवल B, C और E |
| (3) केवल A, B, C और D | (4) केवल A, B और C |

**Options :**

92090687529. 1

92090687530. 2

92090687531. 3

92090687532. 4

**Question Number : 84 Question Id : 92090622150 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : London smog event was a suitable example of classical fog.

Statement II : Classical fog is characterised by high concentration of unburnt carbon soot as well as elevated levels of atmospheric sulfur dioxide.

In the light of the above Statements, choose the most appropriate answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but statement II is incorrect
- (4) Statement I is incorrect but statement II is correct

**Options :**

92090687533. 1  
92090687534. 2  
92090687535. 3  
92090687536. 4

**Question Number : 84 Question Id : 92090622150 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : लंदन धूम्रकोहरा परिघटना क्लासिकी कोहरे का उपयुक्त उदाहरण है

कथन II : अदृश्य कार्बन सूट के उच्च सान्द्रण के साथ-साथ वायुमंडलीय सल्फर डाई ऑक्साइड का बढ़ा हुआ स्तर आदर्श कोहरे की अभिलाक्षणिकता है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

92090687533. 1  
92090687534. 2  
92090687535. 3  
92090687536. 4

**Question Number : 85 Question Id : 92090622151 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following are NOT greenhouse gases?

- (A) Ozone
- (B) Water vapour
- (C) Carbon monoxide
- (D) Nitrous oxide
- (E) Nitrogen dioxide

Choose the correct answer from the options given below :

- (1) (A), (B) and (C) only
- (2) (B), (C) and (D) only
- (3) (C) and (E) only
- (4) (A), (B) and (C) only

**Options :**

92090687537. 1

92090687538. 2

92090687539. 3

92090687540. 4

**Question Number : 85 Question Id : 92090622151 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



निम्नलिखित में से कौन ग्रीनहाउस गैस सी नहीं है?

- A. ओजोन
- B. जल वाष्प
- C. कार्बन मोनोऑक्साइड
- D. नाइट्रस ऑक्साइड
- E. नाइट्रोजन डाईऑक्साइड

नीचे दिये गये विकल्पों में से सही उत्तर चुनिये :

- (1) केवल A, B और C
- (2) केवल B, C और D
- (3) केवल C और E
- (4) केवल A, B और C

**Options :**

- 92090687537. 1
- 92090687538. 2
- 92090687539. 3
- 92090687540. 4

**Question Number : 86 Question Id : 92090622152 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Ozone in troposphere is referred to as bad ozone.

Reasons (R) : Fifty percent of ozone in troposphere is emitted directly from fossil fuel combustion and rest comes from stratosphere.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

- 92090687541. 1

92090687542. 2

92090687543. 3

92090687544. 4

**Question Number : 86 Question Id : 92090622152 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये हैं:

अभिकथन A : क्षोभमंडल में पाये जाने वाले ओजोन को खराब ओजोन के रूप में जाना जाता है।

कारण R : क्षोभमंडल में पचास प्रतिशत ओजोन सीधे तौर पर जीवाश्म ईंधन दहन से उत्सर्जित होती है और शेष ओजोन समताप मंडल से आती है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही हैं, किन्तु R गलत है
- (4) A गलत हैं, किन्तु R सही है

**Options :**

92090687541. 1

92090687542. 2

92090687543. 3

92090687544. 4

**Question Number : 87 Question Id : 92090622153 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is not a criteria air pollutant under National Ambient Air Quality Standards?

- |                    |                     |
|--------------------|---------------------|
| (1) Ozone          | (2) Carbon monoxide |
| (3) Carbon dioxide | (4) Sulfur dioxide  |

**Options :**

92090687545. 1

92090687546. 2

92090687547. 3

92090687548. 4

**Question Number : 87 Question Id : 92090622153 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

राष्ट्रीय परिवेश वायु गुणता मानक के अन्तर्गत निम्न में से कौन कंटक वायु प्रदूषक नहीं है?

- |                       |                         |
|-----------------------|-------------------------|
| (1) ओजोन              | (2) कार्बन मोनो ऑक्साइड |
| (3) कार्बन डाईऑक्साइड | (4) सल्फर डाईऑक्साइड    |

**Options :**

- 92090687545. 1
- 92090687546. 2
- 92090687547. 3
- 92090687548. 4

**Question Number : 88 Question Id : 92090622154 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following bacteria are involved in nitrification process in nitrogen cycle?

- (A) Pseudomonas
- (B) Nitrobactor
- (C) Nitrosomonas
- (D) Bacillus

Choose the correct answer from the options given below :

- |                      |                      |
|----------------------|----------------------|
| (1) (A) and (B) only | (2) (A) and (C) only |
| (3) (C) and (D) only | (4) (B) and (C) only |

**Options :**

- 92090687549. 1
- 92090687550. 2
- 92090687551. 3
- 92090687552. 4

**Question Number : 88 Question Id : 92090622154 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नाइट्रोजन चक्र में नाइट्रीकरण प्रक्रिया में शामिल बैक्टीरिया निम्नलिखित में से कौन से हैं?

- A. स्यूडोमोनास
- B. नाइट्रोबैक्टर
- C. नाइट्रोसोमनास
- D. बैसिलस

नीचे दिये गये विकल्पों में से सही उत्तर चुनिये :

- |                 |                 |
|-----------------|-----------------|
| (1) केवल A और B | (2) केवल A और C |
| (3) केवल C और D | (4) केवल B और C |

**Options :**

- 92090687549. 1
- 92090687550. 2
- 92090687551. 3
- 92090687552. 4

**Question Number : 89 Question Id : 92090622155 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Within the dissolved fraction, inorganic P (dissolved inorganic phosphorous) occurs as

- |                    |                       |
|--------------------|-----------------------|
| (1) Metaphosphate  | (2) Pyrophosphate     |
| (3) Orthophosphate | (4) Organic Phosphate |

**Options :**

- 92090687553. 1
- 92090687554. 2
- 92090687555. 3
- 92090687556. 4

**Question Number : 89 Question Id : 92090622155 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

विलयित भिन्न (फ्रैक्शन) में, अकार्बनिक P (विलयित अकार्बनिक फॉस्फोरस) निम्नलिखित रूप में उपस्थित होता है:

- |                   |                      |
|-------------------|----------------------|
| (1) मेटाफॉस्फेट   | (2) पाइरोफॉस्फेट     |
| (3) आर्थो फॉस्फेट | (4) कार्बनिक फॉस्फेट |

**Options :**

- 92090687553. 1
- 92090687554. 2
- 92090687555. 3
- 92090687556. 4

**Question Number : 90 Question Id : 92090622156 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

All forms of mercury are potent toxin. Which form of Hg is most readily absorbed and bioaccumulated?

- |               |               |
|---------------|---------------|
| (1) $Hg^0$    | (2) $Hg^{+1}$ |
| (3) $Hg^{+2}$ | (4) MeHg      |

**Options :**

- 92090687557. 1
- 92090687558. 2
- 92090687559. 3
- 92090687560. 4

**Question Number : 90 Question Id : 92090622156 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मरकरी (पारे) के सभी रूप शक्तिशाली आविष होते हैं। Hg का कौन सा रूप सर्वाधिक शीघ्रता पूर्वक विलयित और जैव संचयित होता है?

- |               |               |
|---------------|---------------|
| (1) $Hg^0$    | (2) $Hg^{+1}$ |
| (3) $Hg^{+2}$ | (4) MeHg      |

**Options :**

- 92090687557. 1
- 92090687558. 2
- 92090687559. 3

92090687560. 4

**Question Number : 91 Question Id : 92090622157 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Measure of the minerals and salts that can be dissolved in water is referred to as

- |                |               |
|----------------|---------------|
| (1) alkalinity | (2) turbidity |
| (3) salinity   | (4) acidity   |

**Options :**

- 92090687561. 1
- 92090687562. 2
- 92090687563. 3
- 92090687564. 4

**Question Number : 91 Question Id : 92090622157 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जल में विलयित किये जा सकने वाले खनिजों और लवणों की माप कहलाती है:

- |               |            |
|---------------|------------|
| (1) क्षारीयता | (2) आविलता |
| (3) लवणता     | (4) अम्लता |

**Options :**

- 92090687561. 1
- 92090687562. 2
- 92090687563. 3
- 92090687564. 4

**Question Number : 92 Question Id : 92090622158 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Human ear normally hears sounds originating from the vibrating objects with a frequency between

- |                      |                      |
|----------------------|----------------------|
| (1) 2 and 2000 Hz    | (2) 2 and 20,000 Hz  |
| (3) 10 and 20,000 Hz | (4) 20 and 20,000 Hz |

**Options :**

92090687565. 1  
92090687566. 2  
92090687567. 3  
92090687568. 4

**Question Number : 92 Question Id : 92090622158 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सामान्य तौर पर मनुष्य के कान निम्नलिखित में से किस आवृत्ति परास (रेंज) वाली उत्पन्न ध्वनि सुनते हैं?

- (1) 2 और 2000 Hz के बीच (2) 2 और 20,000 Hz के बीच  
(3) 10 और 20,000 Hz के बीच (4) 20 और 20,000 Hz के बीच

**Options :**

92090687565. 1  
92090687566. 2  
92090687567. 3  
92090687568. 4

**Question Number : 93 Question Id : 92090622159 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Measure of mass of water vapour for a given mass of dry air (in g/kg) is referred to as

- (1) Absolute humidity (2) Relative humidity  
(3) Mixing ratio (4) Specific humidity

**Options :**

92090687569. 1  
92090687570. 2  
92090687571. 3  
92090687572. 4

**Question Number : 93 Question Id : 92090622159 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्न में से कौन, जल वाष्प के द्रव्यमान और शुष्क वायु के द्रव्यमान का अनुपात (g/kg में) है?

- |                       |                       |
|-----------------------|-----------------------|
| (1) निरपेक्ष आर्द्रता | (2) सापेक्षी आर्द्रता |
| (3) मिश्रित अनुपात    | (4) विशिष्ट आर्द्रता  |

**Options :**

- 92090687569. 1
- 92090687570. 2
- 92090687571. 3
- 92090687572. 4

**Question Number : 94 Question Id : 92090622160 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following zones in a river stretch will have highest biological oxidation demand?

- |                                  |                                          |
|----------------------------------|------------------------------------------|
| (1) Sewage discharge entry point | (2) Sewage decomposition zone            |
| (3) Septic zone                  | (4) Top surface above decomposition zone |

**Options :**

- 92090687573. 1
- 92090687574. 2
- 92090687575. 3
- 92090687576. 4

**Question Number : 94 Question Id : 92090622160 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से नदी के किस क्षेत्र में जैविक आक्सीकरण मांग सर्वाधिक होगी?

- (1) वाहित मल विसर्जन प्रवेश बिन्दु
- (2) मल अपघटन क्षेत्र
- (3) सेप्टिक क्षेत्र
- (4) अपघटन क्षेत्र के ऊपर की ऊपरी सतह

**Options :**

- 92090687573. 1
- 92090687574. 2



92090687575. 3

92090687576. 4

**Question Number : 95 Question Id : 92090622161 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Catalytic convertors are used in vehicles to reduce air pollution.

Reasons (R) : Catalytic convertors reduces particulate matter in tail end emissions of vehicles.

In the light of the above Statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

92090687577. 1

92090687578. 2

92090687579. 3

92090687580. 4

**Question Number : 95 Question Id : 92090622161 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे अभिकथन A और तर्क R नामक दो कथन दिये गये हैं:

अभिकथन A : उत्प्रेरकी परिवर्तकों का प्रयोग वाहनों में वायु प्रदूषण को कम करने के लिए किया जाता है।

कारण R : उत्प्रेरकी परिवर्तक वाहनों के आत्यंतिक उत्सर्जन में कणिकीय पदार्थ को कम करता है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिये:

- (1) A और R दोनों सही हैं तथा R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, किन्तु R, A की सही व्याख्या नहीं है
- (3) A सही है, किन्तु R गलत है
- (4) A गलत है, किन्तु R सही है

**Options :**

92090687577. 1
92090687578. 2
92090687579. 3
92090687580. 4

**Question Number : 96 Question Id : 92090622162 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

During municipal sewage treatment, biosolids are produced as a by-product of

- (1) Primary treatment only
- (2) Biological (activated sludge) treatment only
- (3) Chemical (physicochemical precipitation of suspended solids) treatment only
- (4) All three, primary, biological and chemical treatments

**Options :**

92090687581. 1
92090687582. 2
92090687583. 3
92090687584. 4

**Question Number : 96 Question Id : 92090622162 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

म्यूनिसिपल बाहितमल शोधन के दौरान बायोसॉलिड्स निम्नलिखित के उपोत्पादन से उत्पन्न होते हैं:

- (1) केवल प्राथमिक शोधन से
- (2) केवल जैविक (सक्रियताआपंक) शोधन से
- (3) केवल रासायनिक (निलंबित कणों के भौतिक-रासायनिक निक्षेपण) शोधन से
- (4) प्राथमिक, जैविक और रासायनिक, सभी तीनों शोधन से

**Options :**

92090687581. 1  
92090687582. 2  
92090687583. 3  
92090687584. 4

**Question Number : 97 Question Id : 92090622163 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Instrumentation/Technique)	List II (Useful for)
(A) Hybridization	(I) Purification of biomolecules
(B) Confocal scanning microscope	(II) Separation of proteins
(C) Western Blotting	(III) Three-dimensional image
(D) Chromatography	(IV) Location of complementary DNA

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (3) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

92090687585. 1  
92090687586. 2  
92090687587. 3  
92090687588. 4

**Question Number : 97 Question Id : 92090622163 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I को सूची II के साथ सुमेलित कीजिए:

सूची-I (यांत्रिकी/पद्धति)

सूची -II (उपयोग)

- |                                  |                               |
|----------------------------------|-------------------------------|
| (A) संकरण                        | (I) जैव अणुओं का शुद्धीकरण    |
| (B) संनाभि स्कैनिंग सूक्ष्मदर्शी | (II) प्रोटीन पृथक्करण         |
| (C) वेस्टर्न ब्लोटिंग            | (III) त्रिबिंभीय चित्र        |
| (D) क्रोमेटोग्राफी               | (IV) पूरक डी एन ए की अवस्थिति |

नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (3) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

92090687585. 1
92090687586. 2
92090687587. 3
92090687588. 4

**Question Number : 98 Question Id : 92090622164 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Accuracy is the degree of agreement between the measured value and the accepted true value of the given parameter.

Statement II : Determinate error are random in nature and occur when something went wrong during the measurement.

In the light of the above Statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but statement II is false
- (4) Statement I is false but statement II is true

**Options :**

92090687589. 1  
92090687590. 2  
92090687591. 3  
92090687592. 4

**Question Number : 98 Question Id : 92090622164 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिये गये हैं:

कथन I : 'परिशुद्धता' मापित मान और दिये गये प्राचल के स्वीकार्य वास्तविक मान के बीच सुसंगति की सीमा है।

कथन II : निर्धारक त्रुटि प्रवृत्ति: यादृच्छिक होती है तथा यह तब घटित होती है जब मापन के दौरान कुछ गलत हो जाता है।

उपर्युक्त कथनों के आलोक में, नीचे दिये गये विकल्पों में से सही उत्तर चुनिए:

- (1) कथन I और कथन II दोनों सही हैं
- (2) कथन I और कथन II दोनों गलत हैं
- (3) कथन I सही है, किन्तु कथन II गलत है
- (4) कथन I गलत है, किन्तु कथन II सही है

**Options :**

- 92090687589. 1
- 92090687590. 2
- 92090687591. 3
- 92090687592. 4

**Question Number : 99 Question Id : 92090622165 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the incorrect statement about Atomic absorption spectrometer:

- (1) It requires hollow cathode lamp
- (2) It follows Beer-Lambert law
- (3) It is based on absorption of monochromatic beam of light by atoms
- (4) It requires only coloured solution for analysis

**Options :**

- 92090687593. 1
- 92090687594. 2
- 92090687595. 3
- 92090687596. 4

**Question Number : 99 Question Id : 92090622165 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

परमाण्विक अवशोषण स्पेक्ट्रममापी के संदर्भ में असत्य कथन को चुनिये:

- (1) इसमें खोखले कैथोड लैम्प की आवश्यकता होती है
- (2) यह बीयर-लैम्बर्ट नियम का अनुसरण करता है
- (3) यह अणुओं द्वारा प्रकाश की एक वर्णी किरण के अवशोषण पर आधारित होती है
- (4) इसमें केवल विश्लेषण हेतु रंगीन विलयन की आवश्यकता होती है

**Options :**

- 92090687593. 1
- 92090687594. 2
- 92090687595. 3
- 92090687596. 4

**Question Number : 100 Question Id : 92090622166 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Average salinity of sea water is

- |             |            |
|-------------|------------|
| (1) ~0.035% | (2) ~0.35% |
| (3) ~3.5%   | (4) ~35%   |

**Options :**

- 92090687597. 1
- 92090687598. 2
- 92090687599. 3
- 92090687600. 4

**Question Number : 100 Question Id : 92090622166 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

समुद्र जल की औसत लवणता होती है:

- |             |            |
|-------------|------------|
| (1) ~0.035% | (2) ~0.35% |
| (3) ~3.5%   | (4) ~35%   |

**Options :**

- 92090687597. 1
- 92090687598. 2
- 92090687599. 3
- 92090687600. 4