

National Testing Agency

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89 Environmental Sciences

Group Number : 1
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Break time: 0
Group Marks: 300

PART I General Aptitude

Section Id : 646350553
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 42
Number of Questions to be attempted: 42
Section Marks: 100
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 6463501408
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 64635028923 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0

As per the cognitive development theory of Jean Piaget, adolescent students are in which stage of development?

- (1) Sensory motor stage (2) Concrete operational stage
(3) Operational stage (4) Formal operational stage

Options :

646350113539. 1
646350113540. 2
646350113541. 3
646350113542. 4

Question Number : 1 Question Id : 64635028923 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

जीन पियाजे के संज्ञानात्मक विकास सिद्धांत के अनुसार, किशोर विद्यार्थी विकास के किस चरण में होते हैं?

- (1) संवेदी प्रेरक चरण (2) मूर्त संक्रियात्मक चरण
(3) संक्रियात्मक चरण (4) औपचारिक संक्रियात्मक चरण

Options :

646350113539. 1
646350113540. 2
646350113541. 3
646350113542. 4

Question Number : 2 Question Id : 64635028924 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Below is given a list of teaching methods and approaches. Which among them are individualized approach?

- (a) Demonstration method
(b) Modular approach based teaching
(c) Programmed learning
(d) Personalized teaching
(e) Collaborative method

Select your answer from the options given below :

- (1) (a), (b) and (c) (2) (b), (c) and (d)
(3) (c), (d) and (e) (4) (a), (d) and (e)

Options :

646350113543. 1
646350113544. 2
646350113545. 3
646350113546. 4

Question Number : 2 Question Id : 64635028924 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

नीचे शिक्षण विधियां और उपागम दिए गए हैं। उनमें से कौन-कौन सा व्यष्टिसापेक्ष उपागम है।

- (a) प्रदर्शन विधि
- (b) माड्युलर उपागम
- (c) अभिक्रमित/अधिगम
- (d) व्यष्टिसापेक्ष शिक्षण
- (e) सहयोगात्मक विधि

नीचे दिए गए विकल्पों में से सही उत्तर दीजिए

- | | |
|---------------------|---------------------|
| (1) (a), (b) और (c) | (2) (b), (c) और (d) |
| (3) (c), (d) और (e) | (4) (a), (d) और (e) |

Options :

- 646350113543. 1
- 646350113544. 2
- 646350113545. 3
- 646350113546. 4

Question Number : 3 Question Id : 64635028925 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following statements is true in the case of a test prepared by you as a teacher?

- (1) If a test is reliable, it is objective
- (2) If a test is valid, it is reliable also
- (3) If a test is reliable, it is valid
- (4) If a test is valid and reliable, it is usable

Options :

- 646350113547. 1
- 646350113548. 2
- 646350113549. 3
- 646350113550. 4

Question Number : 3 Question Id : 64635028925 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

एक अध्यापक के रूप में आपके द्वारा तैयार किए गए परीक्षण के मामले में निम्नलिखित में से कौन-सा कथन सही है?

- (1) यदि परीक्षण विश्वसनीय है तो वह वस्तुनिष्ठ होगा
- (2) यदि परीक्षण वैधता रखता है तो वह विश्वसनीय भी होगा
- (3) यदि परीक्षण विश्वसनीय है तो वह वैधता भी रखेगा
- (4) यदि परीक्षण वैधता रखता है, और विश्वसनीय है तो यह उपयोज्य होगा

Options :

646350113547. 1

646350113548. 2

646350113549. 3

646350113550. 4

**Question Number : 4 Question Id : 64635028926 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which of the following statements best explains the concept of team teaching?

- (1) More than two teachers teach
- (2) More than two teachers plan and teach together the same class
- (3) More than two teachers plan and teach the same class as per their expertise.
- (4) A team of teachers who are ready and available to teach the students

Options :

646350113551. 1

646350113552. 2

646350113553. 3

646350113554. 4

**Question Number : 4 Question Id : 64635028926 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित में से कौन-सा कथन-टीम शिक्षण की अवधारणा को सर्वोत्तम रूप से व्याख्यायित करता है?

- (1) दो से अधिक अध्यापक शिक्षण कार्य करते हैं
- (2) दो से अधिक अध्यापक एक ही कक्षा को एक साथ मिलकर पढ़ाने की योजना बनाते हैं और पढ़ाते हैं
- (3) दो से अधिक अध्यापक अपनी विशेषता के अनुसार एक ही कक्षा को पढ़ाने की योजना बनाते और पढ़ाते हैं
- (4) अध्यापकों की एक टीम जो विद्यार्थियों को पढ़ाने हेतु तैयार और उपलब्ध रहती है

Options :

646350113551. 1

646350113552. 2

646350113553. 3

646350113554. 4

Question Number : 5 Question Id : 64635028927 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which among the following bases can be counted to judge the effectiveness of teaching?

- (a) Marks obtained by students in overall subjects
- (b) Level of realization of instructional objectives
- (c) Time taken by the students to learn.
- (d) Resources used by the teacher in teaching
- (e) Regularity of students in class.

Select your answer from the options given below :

- | | |
|----------------------|----------------------|
| (1) (a), (b) and (c) | (2) (a), (b) and (d) |
| (3) (c), (d) and (e) | (4) (b), (c) and (d) |

Options :

646350113555. 1

646350113556. 2

646350113557. 3

646350113558. 4

Question Number : 5 Question Id : 64635028927 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

शिक्षण की प्रभावशीलता का निर्णय करने में निम्नलिखित में से किन बिन्दुओं पर विचार किया जाता है।

- (a) सभी विषयों में विद्यार्थियों का प्राप्तांक
- (b) शिक्षण उद्देश्यों की प्राप्ति का स्तर
- (c) सीखने में विद्यार्थियों द्वारा लिया जानेवाला समय
- (d) शिक्षण में अध्यापक द्वारा प्रयोग में लाया जानेवाला संसाधन
- (e) कक्षा में विद्यार्थियों की उपस्थिति की नियमितता

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए : :

- (1) (a), (b) और (c)
- (2) (a), (b) और (d)
- (3) (c), (d) और (e)
- (4) (b), (c) और (d)

Options :

- 646350113555. 1
- 646350113556. 2
- 646350113557. 3
- 646350113558. 4

Question Number : 6 Question Id : 64635028928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

When the researcher does not know the identity of the experimental and placebo groups, the study is termed as

- (1) Blind
- (2) Double - blind
- (3) Panel
- (4) Cohort

Options :

- 646350113559. 1
- 646350113560. 2
- 646350113561. 3
- 646350113562. 4

Question Number : 6 Question Id : 64635028928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

ऐसे अध्ययन को, जिसमें शोधकर्ता को प्रायोगिक और प्लेसिबो समूहों की पहचान की जानकारी नहीं होती, कहा जाता है

- (1) ब्लाइंड
- (2) डबल ब्लाइंड
- (3) पैनल
- (4) कोहोर्ट

Options :

- 646350113559. 1
- 646350113560. 2
- 646350113561. 3

646350113562. 4

Question Number : 7 Question Id : 64635028929 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Research that focuses on social inequality between men and women is called

- | | |
|--------------------------|---------------------------|
| (1) Comparative research | (2) Longitudinal research |
| (3) Action research | (4) Feminist research |

Options :

646350113563. 1

646350113564. 2

646350113565. 3

646350113566. 4

Question Number : 7 Question Id : 64635028929 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

वह शोध जिसमें पुरुष और महिला के बीच सामाजिक असमानता पर जोर दिया जाता है, कहलाता है

- | | |
|--------------------|--------------------|
| (1) तुलनात्मक शोध | (2) अनुदैर्घ्य शोध |
| (3) क्रियात्मक शोध | (4) नारीवादी शोध |

Options :

646350113563. 1

646350113564. 2

646350113565. 3

646350113566. 4

Question Number : 8 Question Id : 64635028930 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The easiest attitudinal scale which is a summated rating scale is the

- | | |
|---------------------|------------------|
| (1) Guttman Scale | (2) Likert scale |
| (3) Thurstone scale | (4) MLA scale |

Options :

646350113567. 1

646350113568. 2

646350113569. 3

646350113570. 4

Question Number : 8 Question Id : 64635028930 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

सर्वाधिक आसान अभिवृत्तिक स्केल जो एक समाकलित कोटि निर्धारण स्केल होता है, कहलाता है

- | | |
|------------------|-------------------|
| (1) गटमैन स्केल | (2) लिकर्ट स्केल |
| (3) थस्टॉन स्केल | (4) एम एल ए स्केल |

Options :

646350113567. 1
646350113568. 2
646350113569. 3
646350113570. 4

Question Number : 9 Question Id : 64635028931 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Quantitative research is also called the

- | | |
|---------------------------|---------------------------|
| (1) Ethnographic approach | (2) Unstructured approach |
| (3) Descriptive approach | (4) Structured approach |

Options :

646350113571. 1
646350113572. 2
646350113573. 3
646350113574. 4

Question Number : 9 Question Id : 64635028931 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

मात्रात्मक शोध को _____ भी कहा जाता है

- | | |
|----------------------|-------------------|
| (1) नृजातीय उपागम | (2) असंरचित उपागम |
| (3) वर्णनात्मक उपागम | (4) संरचित उपागम |

Options :

646350113571. 1
646350113572. 2
646350113573. 3
646350113574. 4

Question Number : 10 Question Id : 64635028932 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In the research method, generalisations may be made that will be applicable to other situations of the same type. What is this called?

- | | |
|------------------|-----------------|
| (1) Cohort study | (2) Case study |
| (3) Panel study | (4) Blind study |

Options :

646350113575. 1
646350113576. 2

646350113577. 3

646350113578. 4

Question Number : 10 Question Id : 64635028932 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

जिस शोध विधि में सामान्यीकरण किया जाता है जो उसी प्रकार की अन्य परिस्थितियों पर लागू होता है। इसे क्या कहा जाता है?

(1) कोहोर्ट स्टडी

(2) केस स्टडी

(3) पैनल स्टडी

(4) ब्लाइंड स्टडी

Options :

646350113575. 1

646350113576. 2

646350113577. 3

646350113578. 4

Sub-Section Number:

2

Sub-Section Id:

6463501409

Question Shuffling Allowed :

Yes

Question Id : 64635028933 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension
Questions : No

Question Numbers : (11 to 15)

Question Label : Comprehension

Read the passage carefully and answer question

Intelligence is associated with academic achievement by most people. The various theories of intelligence created by psychologists hold that there are two kinds of academic intelligence-verbal and mathematical or logical. Intelligence is an inherited trait that impacts individual behaviour and performance according to most experts. But, many research studies have revealed that the environment greatly impacts the development of intelligence. Since, one property of intelligence is analytical and reasoning skills, people with high intelligence quotient will understand the problem at hand better than people with a low IQ.

Many organizations consider intelligence as an important criterion while recruiting. For instance in many management schools, a lot of weightage is given to high IQ while admitting students or recruiting faculty members. The qualities of intelligent people are high energy drive, achievement and competitiveness. Very intelligent employees learn job – related skills and other organisational practices quickly and organisations have to spend less time training them. People with high intelligence have good decision making ability due to their good analytical and reasoning skills, with a high achievement drive, they are mostly by very productive. As the saying goes, ‘A wise enemy is better than a foolish ‘ friend ;

Even with such a high IQ very intelligent people may not always be very happy. The high IQ makes them dysfunctional leading to anxiety and depression. Generally speaking, people with at high intelligence quotient are often dissatisfied people.

Sub questions

Question Number : 11 Question Id : 64635028934 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

When a student stands first in the class, the general credit is given to :

- | | |
|---------------|-------------------------|
| (1) Contacts | (2) Intelligence |
| (3) Hard work | (4) Attractive features |

Options :

646350113579. 1

646350113580. 2

646350113581. 3

646350113582. 4

Question Number : 12 Question Id : 64635028935 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Those who understand a problem in a short span of time will be people with

- | | |
|----------------|-------------|
| (1) High IQ | (2) Low IQ |
| (3) Average IQ | (4) Good IQ |

Options :

646350113583. 1

646350113584. 2

646350113585. 3

646350113586. 4

Question Number : 13 Question Id : 64635028936 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

High energy drive, achievements and competitiveness are valued during

- | | |
|---------------|-------------------------------|
| (1) Admission | (2) Recruitment |
| (3) Promotion | (4) Admission and recruitment |

Options :

646350113587. 1

646350113588. 2

646350113589. 3

646350113590. 4

Question Number : 14 Question Id : 64635028937 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Dissatisfaction is often witnessed in people with

- | | |
|------------------------------------|-----------------------------------|
| (1) Creative skills | (2) High expectations |
| (3) Good decision – making ability | (4) High education qualifications |

Options :

646350113591. 1
646350113592. 2
646350113593. 3
646350113594. 4

Question Number : 15 Question Id : 64635028938 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Another word for 'Weightage' is

- (1) Credit (2) Mass
(3) Weight (4) Freedom

Options :

646350113595. 1
646350113596. 2
646350113597. 3
646350113598. 4

Question Id : 64635028933 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension
Questions : No

Question Numbers : (11 to 15)

Question Label : Comprehension

अधिकांश लोग बुद्धि को शैक्षणिक उपलब्धि से सम्बन्धित करते हैं। मनोवैज्ञानिकों द्वारा दिए गए बुद्धि के विभिन्न सिद्धांतों में माना गया है कि अकादमिक बुद्धि के दो प्रकार होते हैं – शाब्दिक और गणितीय अथवा तार्किक। अधिकांश विशेषज्ञों के अनुसार बुद्धि वंशानुगत विशेष गुण होती है जो व्यक्तिगत व्यवहार और कार्य निष्पादन को प्रभावित करती है। परन्तु अनेक शोध अध्ययनों से यह पता चला है कि वातावरण बुद्धि के विकास को अत्यधिक रूप से प्रभावित करता है। चूंकि बुद्धि की एक विशेषता विश्लेषणात्मक और तर्कपरक कौशल है, उच्च बुद्धि-लब्धि (आई क्यू) वाले लोग अल्प बुद्धि-लब्धि वाले लोगों की तुलना में समस्या को बेहतर ढंग से समझेंगे।

बहुत से संगठन कर्मचारियों की भर्ती करते समय बुद्धि को एक महत्वपूर्ण मानदंड मानते हैं। उदाहरणार्थ, अनेक मैनेजमेण्ट स्कूलों में विद्यार्थियों के प्रवेश और शिक्षकों की भर्ती में बुद्धि लब्धि (आई क्यू) पर काफी बल दिया जाता है। बुद्धिमान व्यक्तियों की विशेषता अति ऊर्जा आवेग, उपलब्धि और प्रतिस्पर्धात्मकता होती है। काफी बुद्धिमान कर्मचारी कार्य में संबंधित कौशल और अन्य संगठनात्मक पद्धतियों को शीघ्रता से सीखते हैं तथा संगठन को उन्हें प्रशिक्षित करने में अपेक्षाकृत कम समय लगता है। उच्च बुद्धिमत्ता वाले लोगों में अच्छी विश्लेषणात्मक और तार्किक कौशल होने के कारण उनमें निर्णय- लेने की अच्छी क्षमता होती है। उच्च उपलब्धि की ललक के साथ, ये लोग अधिकांशतः काफी सृजक होते हैं। जैसा कि कहावत है कि 'किसी मूर्ख मित्र की तुलना में बुद्धिमान शत्रु बेहतर है।'

ऐसी उच्च बुद्धि-लब्धि (आई क्यू) के बावजूद बहुत बुद्धिमान लोग हमेशा अति प्रसन्न नहीं हो सकते हैं। उच्च बुद्धि-लब्धि उन्हें निष्क्रिय बना देती है जिसकी परिणति उनकी चिंता और नैराश्य के रूप में होती है। आम तौर पर कहा जाता है कि उच्च बुद्धि-लब्धि वाले लोग प्रायः असंतुष्ट लोग होते हैं।

Sub questions

Question Number : 11 Question Id : 64635028934 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

जब विद्यार्थी कक्षा में प्रथम आता है तो इसका श्रेय किसे दिया जाता है?

- | | |
|------------------------------------|-----------------------|
| (1) संपर्क में रहनेवाले व्यक्ति को | (2) बुद्धि को |
| (3) कठिन परिश्रम को | (4) शारीरिक सौष्ठव को |

Options :

646350113579. 1

646350113580. 2

646350113581. 3

646350113582. 4

Question Number : 12 Question Id : 64635028935 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

जो लोग कम समय में समस्या को समझ जाते हैं वे ————— वाले होते हैं

- | | |
|-----------------------|------------------------|
| (1) उच्च बुद्धि-लब्धि | (2) निम्न बुद्धि-लब्धि |
| (3) औसत बुद्धि-लब्धि | (4) उत्तम बुद्धि-लब्धि |

Options :

646350113583. 1

646350113584. 2

646350113585. 3

646350113586. 4

Question Number : 13 Question Id : 64635028936 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित में से किसके दौरान उच्च ऊर्जा, अन्तर्त्तद, उपलब्धि और प्रतिस्पर्धात्मकता को महत्व दिया जाता है?

- | | |
|--------------|---------------------|
| (1) प्रवेश | (2) भर्ती |
| (3) पदोन्नति | (4) प्रवेश और भर्ती |

Options :

646350113587. 1

646350113588. 2

646350113589. 3

646350113590. 4

Question Number : 14 Question Id : 64635028937 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

असंतोष प्रायः ————— वाले लोगों में देखा जाता है

- | | |
|-------------------------|---------------------------|
| (1) सृजनात्मक कौशल | (2) उच्च उम्मीद |
| (3) उत्तम निर्णय क्षमता | (4) उच्च शैक्षणिक योग्यता |

Options :

- 646350113591. 1
- 646350113592. 2
- 646350113593. 3
- 646350113594. 4

Question Number : 15 Question Id : 64635028938 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

‘भारांक’ के लिए दूसरा शब्द है

- (1) क्रेडिट
- (2) द्रव्यमान
- (3) भार
- (4) स्वतंत्रता

Options :

- 646350113595. 1
- 646350113596. 2
- 646350113597. 3
- 646350113598. 4

Sub-Section Number: 3
Sub-Section Id: 6463501410
Question Shuffling Allowed : Yes

Question Number : 16 Question Id : 64635028939 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The cognitive domain of communication involves matters related to

- (1) Emotions
- (2) Knowledge
- (3) Fantasy
- (4) Escapism

Options :

- 646350113599. 1
- 646350113600. 2
- 646350113601. 3
- 646350113602. 4

Question Number : 16 Question Id : 64635028939 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

संप्रेषण के संज्ञानात्मक क्षेत्र में निम्नलिखित में से किससे संबंधित मामले शामिल हैं?

- (1) संवेग
- (2) ज्ञान
- (3) भ्रांति
- (4) पलायनवाद

Options :

- 646350113599. 1

646350113600. 2

646350113601. 3

646350113602. 4

Question Number : 17 Question Id : 64635028940 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a class room, a student to be an effective listener, has to take note of

- (a) The teacher appearance (b) The peer group
(c) The academic content (d) Communication distractions

Choose the correct answer from the options given below :

- (1) (a), (b) and (c) (2) (b), (c) and (d)
(3) (a), (d) and (c) (4) (c) and (d) only

Options :

646350113603. 1

646350113604. 2

646350113605. 3

646350113606. 4

Question Number : 17 Question Id : 64635028940 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

किसी कक्षा में विद्यार्थी को एक प्रभावी श्रोता होना चाहिए, उसे ————— ध्यान रखना चाहिए?

- (a) अध्यापक के शक्ल का (b) साथियों का
(c) अकादमिक पाठ का (d) संप्रेषण विकर्षणों का

नीचे दिए गए विकल्पों का प्रयोग करते हुए सही उत्तर का चयन कीजिए

कूट :

- (1) (a), (b) और (c) (2) (b), (c) और (d)
(3) (a), (d) और (c) (4) केवल (c) और (d)

Options :

646350113603. 1

646350113604. 2

646350113605. 3

646350113606. 4

Question Number : 18 Question Id : 64635028941 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Since most interactions with other people take place at a highly superficial level, making good _____ becomes difficult.

- | | |
|------------------------|-------------------|
| (1) Course corrections | (2) Predictions |
| (3) Deeds | (4) Announcements |

Options :

646350113607. 1
646350113608. 2
646350113609. 3
646350113610. 4

Question Number : 18 Question Id : 64635028941 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

चूँकि अन्य लोगों के साथ सर्वाधिक अन्योन्यक्रिया अति सतही स्तर पर होती है, अच्छे/अच्छी _____ करना काफी कठिन हो जाता है

- | | |
|-----------------|-----------------|
| (1) मार्ग-सुधार | (2) पूर्णानुमान |
| (3) कार्य | (4) घोषणाएं |

Options :

646350113607. 1
646350113608. 2
646350113609. 3
646350113610. 4

Question Number : 19 Question Id : 64635028942 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In both mass communication and classroom communication, filtering of information and contents is referred to as

- | | |
|------------------------|--------------------|
| (1) Rationalisation | (2) Gate keeping |
| (3) Content correction | (4) One – way flow |

Options :

646350113611. 1
646350113612. 2
646350113613. 3
646350113614. 4

Question Number : 19 Question Id : 64635028942 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

आम सम्प्रेषण और कक्षा में होनेवाले सम्प्रेषण में सूचना एवं विषय वस्तु के प्रक्रमण प्रक्रिया को _____ कहा जाता है

- | | |
|-----------------------|----------------|
| (1) औचित्य स्थापन | (2) गेटकीपिंग |
| (3) विषयसामग्री सुधार | (4) वन-वे फ्लो |

Options :

646350113611. 1
646350113612. 2
646350113613. 3
646350113614. 4

Question Number : 20 Question Id : 64635028943 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Assertion (A) : No enculturation takes place with resistance

Reason (R) : People have their own values and self – interest that filter communicated messages

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 :

646350113615. 1
646350113616. 2
646350113617. 3
646350113618. 4

Question Number : 20 Question Id : 64635028943 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

अभिकथन (A) : प्रतिरोध के साथ कई संस्कृतीकरण घटित नहीं होता है।

तर्क (R) : लोगों के अपने मूल्य और स्व-हित होते हैं जो संप्रेषित संवाद को परिशोधित करते हैं।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

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

Options :

646350113615. 1
646350113616. 2
646350113617. 3
646350113618. 4

Question Number : 21 Question Id : 64635028944 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If in a certain code, BAT = 23 and CAT = 24, then how you will code BALL?

(1) 27

(2) 28

(3) 32

(4) 39

Options :

646350113619. 1

646350113620. 2

646350113621. 3

646350113622. 4

Question Number : 21 Question Id : 64635028944 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

यदि किसी कूट में BAT = 23 और CAT = 24 है, तो आप BALL के लिए निम्नलिखित में से कौन-सा कूट लिखेंगे?

(1) 27

(2) 28

(3) 32

(4) 39

Options :

646350113619. 1

646350113620. 2

646350113621. 3

646350113622. 4

Question Number : 22 Question Id : 64635028945 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The product of two numbers a and b is twice the sum of the numbers. What is the sum of the reciprocals of a and b ?

(1) $1/8$

(2) $1/2$

(3) 2

(4) 4

Options :

646350113623. 1

646350113624. 2

646350113625. 3

646350113626. 4

Question Number : 22 Question Id : 64635028945 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

दो अंकों a और b का गुणनफल इन संख्याओं के योग का दोगुना है, तो a और b के व्युत्क्रम का योग कितना होगा?

(1) $1/8$

(2) $1/2$

(3) 2

(4) 4

Options :

646350113623. 1
646350113624. 2
646350113625. 3
646350113626. 4

Question Number : 23 Question Id : 64635028946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A group of 40 employees of Cadre A has a mean age of 31. A different group of 60 employees of Cadre B has a mean age of 28. What is the mean age of two employees of the two groups together?

- (1) 29.8 (2) 29.5
(3) 29.2 (4) 29

Options :

646350113627. 1
646350113628. 2
646350113629. 3
646350113630. 4

Question Number : 23 Question Id : 64635028946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

संवर्ग A के 40 कर्मचारियों के एक समूह की औसत आयु 31 वर्ष है। संवर्ग B के 60 कर्मचारियों के एक अलग समूह की औसत आयु 28 वर्ष है। इन दोनों समूहों के कर्मचारियों की एक साथ मिलाकर औसत आयु कितनी है?

- (1) 29.8 वर्ष (2) 29.5 वर्ष
(3) 29.2 वर्ष (4) 29 वर्ष

Options :

646350113627. 1
646350113628. 2
646350113629. 3
646350113630. 4

Question Number : 24 Question Id : 64635028947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

An aeroplane flies along the four sides of a square field at the speed of 400, 600, 800 and 200 km/hr. Find the average speed of the plane around the field.

- (1) 324 km/hr (2) 360 km/hr
(3) 384 km/hr (4) 396 km/hr

Options :

646350113631. 1
646350113632. 2
646350113633. 3
646350113634. 4

Question Number : 24 Question Id : 64635028947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

एक विमान एक वर्गाकार मैदान के चारों किनारों पर 400, 600, 800 और 200 कि.मी./घं. की गति से उड़ता है। मैदान के चारों तरफ विमान की औसत गति बताइए

- | | |
|--------------------|--------------------|
| (1) 324 कि.मी./घं. | (2) 360 कि.मी./घं. |
| (3) 384 कि.मी./घं. | (4) 396 कि.मी./घं. |

Options :

646350113631. 1

646350113632. 2

646350113633. 3

646350113634. 4

Question Number : 25 Question Id : 64635028948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A retailer marks all his goods at 40% above the cost price and thinking that he will still make 20% profit, offers a discount of 20% on the marked price. What is his actual profit percentage on the sales?

- | | |
|---------|---------|
| (1) 20% | (2) 18% |
| (3) 16% | (4) 12% |

Options :

646350113635. 1

646350113636. 2

646350113637. 3

646350113638. 4

Question Number : 25 Question Id : 64635028948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

एक खुदरा विक्रेता अपनी सभी वस्तुओं पर लागत मूल्य से 40% अधिक मूल्य अंकित करता है और इस प्रकार 20% लाभ की उम्मीद रखता है। इसके पश्चात् वह अंकित मूल्य पर 20% की छूट देता है। बिक्री पर उसे वास्तविक कितना प्रतिशत लाभ होगा?

- | | |
|---------|---------|
| (1) 20% | (2) 18% |
| (3) 16% | (4) 12% |

Options :

646350113635. 1

646350113636. 2

646350113637. 3

646350113638. 4

Question Number : 26 Question Id : 64635028949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

All gentlemen are polite
No criminals are polite
No criminals are gentlemen.
Identify the major term in above syllogism.

- (1) Predicate in the premises
- (2) Subject in the premises
- (3) Subject of the first premise and predicate of the conclusion
- (4) Subject of the second premise and subject of the conclusion

Options :

646350113639. 1
646350113640. 2
646350113641. 3
646350113642. 4

Question Number : 26 Question Id : 64635028949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0

सभी भद्र व्यक्ति विनम्र हैं।
कोई अपराधी विनम्र नहीं है।
कोई अपराधी भद्र व्यक्ति नहीं है।
उपर्युक्त न्याय वाक्य में प्रमुख पद की पहचान कीजिये

- (1) आधारवाक्यों में विधेय
- (2) आधारवाक्यों में कर्ता
- (3) प्रथम आधारवाक्य का कर्ता और निष्कर्ष का विधेय
- (4) दूसरे आधारवाक्य का कर्ता और निष्कर्ष का कर्ता

Options :

646350113639. 1
646350113640. 2
646350113641. 3
646350113642. 4

Question Number : 27 Question Id : 64635028950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0

Identify the argument under which instantial propositions are inferrable from Universal Proposition.

- (1) Deductive argument
- (2) Inductive argument
- (3) Reductive argument
- (4) Analogical argument

Options :

646350113643. 1
646350113644. 2

646350113645. 3

646350113646. 4

Question Number : 27 Question Id : 64635028950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

उस तर्क की पहचान कीजिये जिसके अन्तर्गत सार्वभौमिक तर्कवाक्य से दृष्टांतपरक आधारवाक्य का अनुमान लगाया जा सकता है

- | | |
|---------------------|----------------------|
| (1) निगमनात्मक तर्क | (2) आगमनात्मक तर्क |
| (3) लघुकारक तर्क | (4) सादृश्यमूलक तर्क |

Options :

646350113643. 1

646350113644. 2

646350113645. 3

646350113646. 4

Question Number : 28 Question Id : 64635028951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Bangalore is bigger than Jhansi, Satpura is bigger than Chittor, Rajgarh is not as big as Jhansi but is bigger than Satpura. Which is the smallest?

- | | |
|---------------|-------------|
| (1) Banaglore | (2) Jhansi |
| (3) Satpura | (4) Chittor |

Options :

646350113647. 1

646350113648. 2

646350113649. 3

646350113650. 4

Question Number : 28 Question Id : 64635028951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

बंगलौर झांसी से बड़ा शहर है, सतपुड़ा चित्तौड़ से बड़ा शहर है। राजगढ़ झांसी के समान बड़ा नहीं है, लेकिन वह सतपुड़ा से बड़ा है। सबसे छोटा कौन है?

- | | |
|-------------|--------------|
| (1) बंगलौर | (2) झांसी |
| (3) सतपुड़ा | (4) चित्तौड़ |

Options :

646350113647. 1

646350113648. 2

646350113649. 3

646350113650. 4

Question Number : 29 Question Id : 64635028952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A perception where we do not have the knowledge of an object characterized by any predicate but an apprehension of some unrelated elements is called as?

- | | |
|----------------------------|------------------------------|
| (1) Determinate perception | (2) Indeterminate perception |
| (3) Verbal testimony | (4) Implication |

Options :

- 646350113651. 1
- 646350113652. 2
- 646350113653. 3
- 646350113654. 4

Question Number : 29 Question Id : 64635028952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

वह प्रत्यक्ष जिसके द्वारा हमें किसी वस्तु का ज्ञान किसी विधेय की विशेषता द्वारा नहीं होता बल्कि कतिपय असंबंधित अवयवों के बोध से होता है, कहलाती है

- | | |
|---------------------|---------------------|
| (1) नियत प्रत्यक्ष | (2) अनियत प्रत्यक्ष |
| (3) वाचिक प्रत्यक्ष | (4) निहितार्थ |

Options :

- 646350113651. 1
- 646350113652. 2
- 646350113653. 3
- 646350113654. 4

Question Number : 30 Question Id : 64635028953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider the argument provided below :

“Sound is impermanent because it is audible”

Identify the fallacy involved in the above argument on the basis of Indian Logic from the options given below :

- | | |
|--------------------------------|-------------------------------------|
| (1) Fallacy of Trivial reason | (2) Fallacy of irrelevant reason |
| (3) Fallacy of Wrong assertion | (4) Fallacy of contradictory reason |

Options :

- 646350113655. 1
- 646350113656. 2
- 646350113657. 3
- 646350113658. 4

Question Number : 30 Question Id : 64635028953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित तर्क पर विचार कीजिये

‘ध्वनि अस्थायी है क्योंकि यह श्रव्य है।’

नीचे दिये गये विकल्प से भारतीय तर्कशास्त्र के आधार पर उपर्युक्त तर्क में हेत्वाभास की पहचान कीजिये

- | | |
|-----------------------------|----------------------------------|
| (1) तुच्छ तर्क का हेत्वाभास | (2) असंगत तर्क का हेत्वाभास |
| (3) गलत अभिकथन का हेत्वाभास | (4) विराधाभासी तर्क का हेत्वाभास |

Options :

646350113655. 1

646350113656. 2

646350113657. 3

646350113658. 4

Sub-Section Number:	4
Sub-Section Id:	6463501411
Question Shuffling Allowed :	Yes

Question Id : 64635028954 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (31 to 35)

Question Label : Comprehension

Consider the following table that shows the total number of students and percentage of females and males in five different departments.

Answer the questions based on the data contained in the table.

<i>Department</i>	<i>Percentage of Females</i>	<i>Percentage of males</i>	<i>Total No. of students</i>
Physics	45	55	450
Chemistry	35	65	550
English	55	45	300
Hindi	60	40	250
Mathematics	40	60	500

Sub questions

Question Number : 31 Question Id : 64635028955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the total number of females in English and Hindi departments together?

- | | |
|---------|---------|
| (1) 315 | (2) 325 |
| (3) 335 | (4) 345 |

Options :

646350113659. 1

646350113660. 2

646350113661. 3

646350113662. 4

Question Number : 32 Question Id : 64635028956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the respective ratio of the number of male students in English Department to the number of male students in Mathematics department?

(1) 9 : 12

(2) 9 : 20

(3) 3 : 5

(4) 45 : 60

Options :

646350113663. 1

646350113664. 2

646350113665. 3

646350113666. 4

Question Number : 33 Question Id : 64635028957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the departments has maximum number of female students?

(1) Physics

(2) Chemistry

(3) English

(4) Mathematics

Options :

646350113667. 1

646350113668. 2

646350113669. 3

646350113670. 4

Question Number : 34 Question Id : 64635028958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The total number of students in the Chemistry department forms approximately what percent of the total number of students in the mathematics department?

(1) 90%

(2) 95%

(3) 105%

(4) 110%

Options :

646350113671. 1

646350113672. 2

646350113673. 3

646350113674. 4

Question Number : 35 Question Id : 64635028959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the department has minimum number of male students?

(1) Physics

(2) English

(3) Hindi

(4) Mathematics

Options :

646350113675. 1

646350113676. 2

646350113677. 3

646350113678. 4

Question Id : 64635028954 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (31 to 35)

Question Label : Comprehension

निम्नलिखित सारणी पर विचार कीजिये। इसमें पांच विभिन्न विभागों में विद्यार्थियों की कुल संख्या तथा उनमें छात्रों एवं छात्राओं का प्रतिशत दर्शाया गया है। सारणी में दिये गये आंकड़ों के आधार पर प्रश्नों के उत्तर दीजिये।

विभाग	छात्राओं का प्रतिशत	छात्रों का प्रतिशत	विद्यार्थियों की कुल संख्या
भौतिक विज्ञान	45	55	450
रसायन शास्त्र	35	65	550
अंग्रेज़ी	55	45	300
हिन्दी	60	40	250
गणित	40	60	500

Sub questions

Question Number : 31 Question Id : 64635028955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

अंग्रेज़ी तथा हिन्दी विभागों में कुल मिलाकर छात्राओं की कुल संख्या क्या है?

(1) 315

(2) 325

(3) 335

(4) 345

Options :

646350113659. 1

646350113660. 2

646350113661. 3

646350113662. 4

Question Number : 32 Question Id : 64635028956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

अंग्रेज़ी विभाग में छात्रों की संख्या तथा गणित विभाग में छात्रों की संख्या का अनुपात क्या है?

(1) 9 : 12

(2) 9 : 20

(3) 3 : 5

(4) 45 : 60

Options :

646350113663. 1

646350113664. 2

646350113665. 3

646350113666. 4

Question Number : 33 Question Id : 64635028957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

किस विभाग में छात्रों की अधिकतम संख्या है?

(1) भौतिक विज्ञान

(2) रसायन शास्त्र

(3) अंग्रेज़ी

(4) गणित

Options :

646350113667. 1

646350113668. 2

646350113669. 3

646350113670. 4

Question Number : 34 Question Id : 64635028958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

रसायन शास्त्र विभाग में विद्यार्थियों की कुल संख्या गणित विभाग में विद्यार्थियों की कुल संख्या का लगभग कितना प्रतिशत है?

(1) 90%

(2) 95%

(3) 105%

(4) 110%

Options :

646350113671. 1

646350113672. 2

646350113673. 3

646350113674. 4

Question Number : 35 Question Id : 64635028959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

किस विभाग में छात्रों की न्यूनतम संख्या है?

(1) भौतिक विज्ञान

(2) अंग्रेज़ी

(3) हिन्दी

(4) गणित

Options :

646350113675. 1
646350113676. 2
646350113677. 3
646350113678. 4

Sub-Section Number: 5
Sub-Section Id: 6463501412
Question Shuffling Allowed : Yes

**Question Number : 36 Question Id : 64635028960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

The main two components of CPU are _____.

- | | |
|--------------------------------|-------------------------------|
| (1) Control unit and ALU | (2) ALU and BUS |
| (3) Control unit and registers | (4) Registers and main memory |

Options :

646350113679. 1
646350113680. 2
646350113681. 3
646350113682. 4

**Question Number : 36 Question Id : 64635028960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

सी पी यू के दो मुख्य अवयव हैं

- | | |
|-------------------------------|---------------------------|
| (1) कन्ट्रोल यूनिट और ए एल यू | (2) ए एल यू और बस |
| (3) कन्ट्रोल यूनिट और रजिस्टर | (4) रजिस्टर और मेन मेमोरी |

Options :

646350113679. 1
646350113680. 2
646350113681. 3
646350113682. 4

**Question Number : 37 Question Id : 64635028961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which of the following is used to create web pages?

- | | |
|----------|----------|
| (1) HTTP | (2) URL |
| (3) FTP | (4) HTML |

Options :

646350113683. 1
646350113684. 2

646350113685. 3

646350113686. 4

Question Number : 37 Question Id : 64635028961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

वेब पेज के निर्माण हेतु निम्नलिखित में से किसका उपयोग किया जाता है?

(1) एच टी टी पी

(2) यू आर एल

(3) एफ टी पी

(4) एच टी एम एल

Options :

646350113683. 1

646350113684. 2

646350113685. 3

646350113686. 4

Question Number : 38 Question Id : 64635028962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is a search Engine?

(1) Flash

(2) Fire fox

(3) Internet explorer

(4) Google

Options :

646350113687. 1

646350113688. 2

646350113689. 3

646350113690. 4

Question Number : 38 Question Id : 64635028962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित में से कौन सर्च इंजन है?

(1) फ्लैश

(2) फायर फॉक्स

(3) इन्टरनेट एक्सप्लोरर

(4) गूगल

Options :

646350113687. 1

646350113688. 2

646350113689. 3

646350113690. 4

Question Number : 39 Question Id : 64635028963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Joint Photographic Experts Group (JPEG) is used to compress _____.

- | | |
|-----------|-----------|
| (1) Music | (2) Video |
| (3) Image | (4) Frame |

Options :

646350113691. 1
646350113692. 2
646350113693. 3
646350113694. 4

Question Number : 39 Question Id : 64635028963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

ज्वाइंट फोटोग्राफिक एक्सपर्ट्स ग्रुप (जे पी ई जी) का उपयोग किसे कम्प्रेस करने के लिये किया जाता है?

- | | |
|-------------|------------|
| (1) म्यूजिक | (2) वीडियो |
| (3) इमेज | (4) फ्रेम |

Options :

646350113691. 1
646350113692. 2
646350113693. 3
646350113694. 4

Question Number : 40 Question Id : 64635028964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The use of Information Technology (IT) to improve the ability of Government to address the needs of society is known as _____.

- | | |
|--------------------|------------------------|
| (1) E – Business | (2) E - Administration |
| (3) E – Governance | (4) E - Marketing |

Options :

646350113695. 1
646350113696. 2
646350113697. 3
646350113698. 4

Question Number : 40 Question Id : 64635028964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

सूचना प्रौद्योगिकी (आई टी) का वह उपयोग जिसे समाज की आवश्यकताएं पूरी करने हेतु सरकार की क्षमता में सुधार करने के लिये किया जाता है, कहलाता है

- | | |
|---------------|---------------|
| (1) ई-व्यापार | (2) ई-प्रशासन |
| (3) ई-शासन | (4) ई-विपणन |

Options :

646350113695. 1
646350113696. 2
646350113697. 3
646350113698. 4

Question Number : 41 Question Id : 64635028965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following pollutants is included in the Air Quality Index in India?

- | | |
|---------------------|--------------------------|
| (1) Carbon Dioxide | (2) Chlorofluoro carbons |
| (3) Sulphur dioxide | (4) Methane |

Options :

646350113699. 1
646350113700. 2
646350113701. 3
646350113702. 4

Question Number : 41 Question Id : 64635028965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित में से किस प्रदूषक को भारत में वायु गुणवत्ता सूचकांक में शामिल किया गया है?

- | | |
|----------------------|-------------------------|
| (1) कार्बन डायक्साइड | (2) क्लोरोफ्लोरो कार्बन |
| (3) सल्फर डायक्साइड | (4) मीथेन |

Options :

646350113699. 1
646350113700. 2
646350113701. 3
646350113702. 4

Question Number : 42 Question Id : 64635028966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The initiative to establish International Solar Alliance was jointly taken by

- | | |
|----------------------|----------------------|
| (1) USA and India | (2) France and India |
| (3) Sweden and India | (4) China and India |

Options :

646350113703. 1
646350113704. 2
646350113705. 3
646350113706. 4

Question Number : 42 Question Id : 64635028966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

अन्तरराष्ट्रीय सौर्य संधि (इन्टरनेशनल सोलर एलायन्स) की स्थापना हेतु संयुक्त रूप से किसने प्रयास किया था?

- | | |
|---------------------|--------------------|
| (1) यू एस ए और भारत | (2) फ्रांस और भारत |
| (3) स्वीडेन और भारत | (4) चीन और भारत |

Options :

646350113703. 1
646350113704. 2
646350113705. 3
646350113706. 4

Question Number : 43 Question Id : 64635028967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is / are missions under the national action plan on climate change?

- (a) Sustaining the Himalayan ecosystem
(b) Sustainable forest management
(c) Strategic knowledge for climate change

Select the correct answer :

- | | |
|----------------------|----------------------|
| (1) (a) and (b) only | (2) (b) only |
| (3) (b) and (c) only | (4) (a) and (c) only |

Options :

646350113707. 1
646350113708. 2
646350113709. 3
646350113710. 4

Question Number : 43 Question Id : 64635028967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

जलवायु परिवर्तन के संबंध में राष्ट्रीय कार्य योजना के अन्तर्ग निम्नलिखित में से कौन मिशन है/हैं?

- (a) हिमालयी पारिस्थितिकी तंत्र को सम्पोषण करना
(b) सतत वन प्रबंधन
(c) जलवायु परिवर्तन हेतु रणनीतिक जानकारी

सही उत्तर चुनिये

- | | |
|---------------------|---------------------|
| (1) केवल (a) और (b) | (2) केवल (b) |
| (3) केवल (b) और (c) | (4) केवल (a) और (c) |

Options :

646350113707. 1
646350113708. 2
646350113709. 3

646350113710. 4

Question Number : 44 Question Id : 64635028968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is a biological method of disposal of Municipal Solid Waste?

- | | |
|------------------|-------------------|
| (1) Land filling | (2) Pulverization |
| (3) Composting | (4) Shredding |

Options :

646350113711. 1
646350113712. 2
646350113713. 3
646350113714. 4

Question Number : 44 Question Id : 64635028968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

निम्नलिखित में से कौन नगरपालिकावाले ठोस कचरे की जैववैज्ञानिक विधि है?

- | | |
|-------------------------|---------------------------|
| (1) भू-भस्न | (2) चूर्णन (पॅलवॅराइजेशन) |
| (3) कम्पोस्ट तैयार करना | (4) श्रेडिंग |

Options :

646350113711. 1
646350113712. 2
646350113713. 3
646350113714. 4

Question Number : 45 Question Id : 64635028969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Blue – baby syndrome can happen due to excess of which component in water?

- | | |
|--------------|----------------|
| (1) Calcium | (2) Magnesium |
| (3) Nitrates | (4) Pesticides |

Options :

646350113715. 1
646350113716. 2
646350113717. 3
646350113718. 4

Question Number : 45 Question Id : 64635028969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

पानी में किसकी अधिकता से ब्ल्यू बेबी सिन्ड्रोम होती है?

(1) कैल्सियम

(2) मैग्नेसियम

(3) नाइट्रेट

(4) कृमिनाशक (पेस्टिसाइड)

Options :

646350113715. 1

646350113716. 2

646350113717. 3

646350113718. 4

Question Number : 46 Question Id : 64635028970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The medium of instruction in the vedic system of education has been,

(1) Sanskrit

(2) Pali

(3) Hindi

(4) Urdu

Options :

646350113719. 1

646350113720. 2

646350113721. 3

646350113722. 4

Question Number : 46 Question Id : 64635028970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

वैदिक शिक्षा पद्धति में शिक्षा का माध्यम था

(1) संस्कृत

(2) पाली

(3) हिन्दी

(4) उर्दू

Options :

646350113719. 1

646350113720. 2

646350113721. 3

646350113722. 4

Question Number : 47 Question Id : 64635028971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The methods of learning in Higher Education in India in the past consisted of

- (1) Memorization, Brain Storming procedure and Seminar
- (2) Memorization, Critical Analysis and Story telling
- (3) Critical Analysis, Assignment Writing and Oral reports
- (4) Story Telling, Brain storming procedure and Seminar

Options :

646350113723. 1
646350113724. 2
646350113725. 3
646350113726. 4

Question Number : 47 Question Id : 64635028971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

अतीत काल में भारत में उच्चतर शिक्षा के अन्तर्गत अधिगम की विधि में शामिल रहा हैं

- (1) याद करना, विचारावेशी प्रक्रिया (ब्रेन स्टॉर्मिंग) तथा सेमिनार
- (2) याद करना, समीक्षात्मक विश्लेषण तथा कथा वाचन
- (3) समीक्षात्मक विश्लेषण, समनुदेश लेखन तथा मौखिक रिपोर्ट
- (4) कथावाचन, विचारावेशी प्रक्रिया (ब्रेन स्टॉर्मिंग) तथा सेमिनार

Options :

646350113723. 1
646350113724. 2
646350113725. 3
646350113726. 4

Question Number : 48 Question Id : 64635028972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Name the scheme which aims to create research ambience in the institutes by promoting research in engineering sciences.

- (1) E – Shooth Sindhu
- (2) Entrepreneurship Development Cell
- (3) Research Promotion Schemes (RPS)
- (4) Institution Development Scheme

Options :

646350113727. 1
646350113728. 2
646350113729. 3
646350113730. 4

Question Number : 48 Question Id : 64635028972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

वह कौन-सी योजना है जिसका उद्देश्य अभियांत्रिकी विज्ञान में शोध को बढ़ावा देकर संस्थानाओं में शोध का वातावरण तैयार करना है?

- (1) ई-शूथ सिन्धू
- (2) उद्यमिता विकास प्रकोष्ठ
- (3) शोध संवर्धन योजनाएं (आर पी एस)
- (4) संस्थान विकास योजना

Options :

646350113727. 1

646350113728. 2

646350113729. 3

646350113730. 4

Question Number : 49 Question Id : 64635028973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

'Inspire scholarship' is intended by the funding agency _____.

- (1) Indian Council of Social Science and Research (ICSSR)
- (2) University Grants Commission (UGC)
- (3) Department of Science and Technology (DST)
- (4) National Council of Education, Research and Training (NCERT)

Options :

646350113731. 1

646350113732. 2

646350113733. 3

646350113734. 4

Question Number : 49 Question Id : 64635028973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

'इन्सपायर स्कालरशिप' का किस एजेंसी से वित्तपोषण होता है?

- (1) भारतीय समाज विज्ञान और अनुसंधान परिषद् (आई सी एस एस आर)
- (2) विश्वविद्यालय अनुदान आयोग (यू जी सी)
- (3) विज्ञान और प्रौद्योगिकी विभाग (डी एस टी)
- (4) राष्ट्रीय शैक्षणिक अनुसंधान और प्रशिक्षण परिषद् (एन सी ई आर टी)

Options :

646350113731. 1

646350113732. 2

646350113733. 3

646350113734. 4

Question Number : 50 Question Id : 64635028974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

National Curriculum Framework was developed by which of the following?

- (1) UGC (2) NCERT
(3) NCTE (4) CBSE

Options :

646350113735. 1
646350113736. 2
646350113737. 3
646350113738. 4

Question Number : 50 Question Id : 64635028974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

राष्ट्रीय पाठ्यचर्चा फ्रेमवर्क का निर्माण किसने किया था?

- (1) यू जी सी (2) एन सी ई आर टी
(3) एन सी टी ई (4) सी बी एस ई

Options :

646350113735. 1
646350113736. 2
646350113737. 3
646350113738. 4

PART II Environmental Science

Section Id :	646350554
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	100
Number of Questions to be attempted:	100
Section Marks:	200
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	6463501413
Question Shuffling Allowed :	Yes

Question Number : 51 Question Id : 64635028975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : Strategic Environmental Assessment (SEA) is a more advanced tool in environmental management.

Reason (R) : SEA is applicable at the level of policy, planning and programmes.

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 :

646350113739. 1

646350113740. 2

646350113741. 3

646350113742. 4

Question Number : 51 Question Id : 64635028975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : Strategic Environmental Assessment (SEA) is a more advanced tool in environmental management.

Reason (R) : SEA is applicable at the level of policy, planning and programmes.

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 :

- 646350113739. 1
- 646350113740. 2
- 646350113741. 3
- 646350113742. 4

Question Number : 52 Question Id : 64635028976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Atmospheric Scale Height (H) is the height over which pressure decreases by a factor of

- 1. e
- 2. 10
- 3. π
- 4. 2

Options :

- 646350113743. 1
- 646350113744. 2
- 646350113745. 3
- 646350113746. 4

Question Number : 52 Question Id : 64635028976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Atmospheric Scale Height (H) is the height over which pressure decreases by a factor of

- 1. e
- 2. 10
- 3. π
- 4. 2

Options :

- 646350113743. 1
- 646350113744. 2
- 646350113745. 3
- 646350113746. 4

Question Number : 53 Question Id : 64635028977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A 100 mL sample of paper industry effluent is digested in acidified dichromate solution and by back titration it is found that 5×10^{-4} mol of dichromate has been consumed in chemical oxidation. What is COD ($\text{mgO}_2\text{L}^{-1}$) of the sample?

1. 120
2. 620
3. 240
4. 310

Options :

646350113747. 1

646350113748. 2

646350113749. 3

646350113750. 4

Question Number : 53 Question Id : 64635028977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A 100 mL sample of paper industry effluent is digested in acidified dichromate solution and by back titration it is found that 5×10^{-4} mol of dichromate has been consumed in chemical oxidation. What is COD ($\text{mgO}_2\text{L}^{-1}$) of the sample?

1. 120
2. 620
3. 240
4. 310

Options :

646350113747. 1

646350113748. 2

646350113749. 3

646350113750. 4

Question Number : 54 Question Id : 64635028978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Acid mine drainage from underground mines occurs as

1. Non-point discharge
2. Point discharge
3. Spoil tip drainage
4. Slurry lagoon drainage

Options :

- 646350113751. 1
- 646350113752. 2
- 646350113753. 3
- 646350113754. 4

Question Number : 54 Question Id : 64635028978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Acid mine drainage from underground mines occurs as

1. Non-point discharge
2. Point discharge
3. Spoil tip drainage
4. Slurry lagoon drainage

Options :

- 646350113751. 1
- 646350113752. 2
- 646350113753. 3
- 646350113754. 4

Question Number : 55 Question Id : 64635028979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Predators and parasites are similar in that, both can be characterised by

1. $+/+$ interaction
2. $+/-$ interaction
3. $-/-$ interaction
4. $+/0$ interaction

Options :

646350113755. 1
646350113756. 2
646350113757. 3
646350113758. 4

**Question Number : 55 Question Id : 64635028979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Predators and parasites are similar in that, both can be characterised by

1. +/+ interaction
2. +/- interaction
3. -/- interaction
4. +/-0 interaction

Options :

646350113755. 1
646350113756. 2
646350113757. 3
646350113758. 4

**Question Number : 56 Question Id : 64635028980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which one among the following do all the terrestrial biomes have in common?

1. Annual average rainfall in excess of 25 cm
2. Clear boundaries between adjacent biomes
3. Vegetation demonstrating adjacent stratification
4. Biodiversity pattern that is directly proportional to latitude

Options :

646350113759. 1
646350113760. 2
646350113761. 3
646350113762. 4

**Question Number : 56 Question Id : 64635028980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which one among the following do all the terrestrial biomes have in common?

1. Annual average rainfall in excess of 25 cm
2. Clear boundaries between adjacent biomes
3. Vegetation demonstrating adjacent stratification
4. Biodiversity pattern that is directly proportional to latitude

Options :

- 646350113759. 1
- 646350113760. 2
- 646350113761. 3
- 646350113762. 4

Question Number : 57 Question Id : 64635028981 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following modes of energy generation has maximum conversion efficiency?

1. Hydroelectric
2. Thermoelectric
3. Hydrogen fuel cell
4. Geothermal

Options :

- 646350113763. 1
- 646350113764. 2
- 646350113765. 3
- 646350113766. 4

Question Number : 57 Question Id : 64635028981 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following modes of energy generation has maximum conversion efficiency?

1. Hydroelectric
2. Thermoelectric
3. Hydrogen fuel cell
4. Geothermal

Options :

646350113763. 1

646350113764. 2

646350113765. 3

646350113766. 4

Question Number : 58 Question Id : 64635028982 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Spring tides occur

1. When sun and moon are at right angle with respect to earth
2. In spring season
3. During half-moons
4. When sun, moon and earth are aligned linearly

Options :

646350113767. 1

646350113768. 2

646350113769. 3

646350113770. 4

Question Number : 58 Question Id : 64635028982 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Spring tides occur

1. When sun and moon are at right angle with respect to earth
2. In spring season
3. During half-moons
4. When sun, moon and earth are aligned linearly

Options :

646350113767. 1
646350113768. 2
646350113769. 3
646350113770. 4

Question Number : 59 Question Id : 64635028983 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the required solar panel area for photovoltaic cells with efficiency of 20% and incident solar radiation of 400 W/m^2 to run an electric geyser of 2 kW?

1. 2.5 m^2
2. 25 m^2
3. 37.5 m^2
4. 0.25 m^2

Options :

646350113771. 1
646350113772. 2
646350113773. 3
646350113774. 4

Question Number : 59 Question Id : 64635028983 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the required solar panel area for photovoltaic cells with efficiency of 20% and incident solar radiation of 400 W/m^2 to run an electric geyser of 2 kW?

1. 2.5 m^2
2. 25 m^2
3. 37.5 m^2
4. 0.25 m^2

Options :

646350113771. 1
646350113772. 2
646350113773. 3
646350113774. 4

Question Number : 60 Question Id : 64635028984 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A windmill has 10-m diameter and efficiency of 40%. Wind velocity at normal temperature and pressure is 10 m/s and the density of air is 1.29 kg/m^3 . The expected power output from the windmill is

1. 20.0 kW
2. 20.27 kW
3. 10.27 kW
4. 10.0 kW

Options :

646350113775. 1

646350113776. 2

646350113777. 3

646350113778. 4

Question Number : 60 Question Id : 64635028984 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A windmill has 10-m diameter and efficiency of 40%. Wind velocity at normal temperature and pressure is 10 m/s and the density of air is 1.29 kg/m^3 . The expected power output from the windmill is

1. 20.0 kW
2. 20.27 kW
3. 10.27 kW
4. 10.0 kW

Options :

646350113775. 1

646350113776. 2

646350113777. 3

646350113778. 4

Question Number : 61 Question Id : 64635028985 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

An ozone analyser shows 100 ppb concentration at 1 atmosphere or atm and 25 °C.
Convert the observed concentration of ozone in $\mu\text{g}/\text{m}^3$:

1. 96.0
2. 196.2
3. 200.0
4. 48.92

Options :

646350113779. 1

646350113780. 2

646350113781. 3

646350113782. 4

**Question Number : 61 Question Id : 64635028985 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

An ozone analyser shows 100 ppb concentration at 1 atmosphere or atm and 25 °C.
Convert the observed concentration of ozone in $\mu\text{g}/\text{m}^3$:

1. 96.0
2. 196.2
3. 200.0
4. 48.92

Options :

646350113779. 1

646350113780. 2

646350113781. 3

646350113782. 4

**Question Number : 62 Question Id : 64635028986 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Match List-I (Gases) with List-II (Measurement Techniques) :

List-I
(Gases)

List-II
(Measurement Techniques)

- | | |
|---------------------|-----------------------------|
| (a) Ozone | (i) IR Absorption |
| (b) NO _x | (ii) Pulsed Fluorescence |
| (c) SO ₂ | (iii) Chemiluminescence |
| (d) CO | (iv) Ultraviolet Absorption |

Choose the correct answer from the options given below :

- (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
- (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)
- (a)–(ii); (b)–(iv); (c)–(i); (d)–(iii)
- (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

646350113783. 1
646350113784. 2
646350113785. 3
646350113786. 4

Question Number : 62 Question Id : 64635028986 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Gases) with List-II (Measurement Techniques) :

List-I
(Gases)

List-II
(Measurement Techniques)

- | | |
|---------------------|-----------------------------|
| (a) Ozone | (i) IR Absorption |
| (b) NO _x | (ii) Pulsed Fluorescence |
| (c) SO ₂ | (iii) Chemiluminescence |
| (d) CO | (iv) Ultraviolet Absorption |

Choose the correct answer from the options given below :

- (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
- (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)
- (a)–(ii); (b)–(iv); (c)–(i); (d)–(iii)
- (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

646350113783. 1
646350113784. 2
646350113785. 3
646350113786. 4

Question Number : 63 Question Id : 64635028987 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one is labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Refuse derived fuel from municipal solid waste has higher energy content than raw municipal solid waste.

Reason (R) : Combustible organic material gets concentrated in fuel pellets produced from municipal solid waste.

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 :

646350113787. 1

646350113788. 2

646350113789. 3

646350113790. 4

**Question Number : 63 Question Id : 64635028987 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one is labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Refuse derived fuel from municipal solid waste has higher energy content than raw municipal solid waste.

Reason (R) : Combustible organic material gets concentrated in fuel pellets produced from municipal solid waste.

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 :

646350113787. 1

646350113788. 2

646350113789. 3

646350113790. 4

Question Number : 64 Question Id : 64635028988 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider a normal distribution $f(x)$ of variable x . What percentage of variable values deviate from the mean by more than $2\sigma_x$?

1. $\sim 0.26\%$
2. $\sim 2.64\%$
3. $\sim 31.74\%$
4. $\sim 4.56\%$

Options :

646350113791. 1

646350113792. 2

646350113793. 3

646350113794. 4

Question Number : 64 Question Id : 64635028988 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider a normal distribution $f(x)$ of variable x . What percentage of variable values deviate from the mean by more than $2\sigma_x$?

1. $\sim 0.26\%$
2. $\sim 2.64\%$
3. $\sim 31.74\%$
4. $\sim 4.56\%$

Options :

646350113791. 1

646350113792. 2

646350113793. 3

646350113794. 4

Question Number : 65 Question Id : 64635028989 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If x and y are two variables with independent frequency distributions with means μ_x and μ_y and variances σ_x^2 and σ_y^2 , then the population variance of their difference σ_{x-y}^2 is

1. $\sigma_x^2 + \sigma_y^2$
2. $\sigma_x^2 - \sigma_y^2$
3. $\mu_x \sigma_x^2 + \mu_y \sigma_y^2$
4. $\mu_x \sigma_x^2 - \mu_y \sigma_y^2$

Options :

646350113795. 1

646350113796. 2

646350113797. 3

646350113798. 4

Question Number : 65 Question Id : 64635028989 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If x and y are two variables with independent frequency distributions with means μ_x and μ_y and variances σ_x^2 and σ_y^2 , then the population variance of their difference σ_{x-y}^2 is

1. $\sigma_x^2 + \sigma_y^2$
2. $\sigma_x^2 - \sigma_y^2$
3. $\mu_x \sigma_x^2 + \mu_y \sigma_y^2$
4. $\mu_x \sigma_x^2 - \mu_y \sigma_y^2$

Options :

646350113795. 1

646350113796. 2

646350113797. 3

646350113798. 4

Question Number : 66 Question Id : 64635028990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Sounds with a frequency <100 Hz (base notes) need to be of a higher energy before damage to ear occurs.

Reason (R) : Human ear has variable frequency response.

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 :

646350113799. 1

646350113800. 2

646350113801. 3

646350113802. 4

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Sounds with a frequency <100 Hz (base notes) need to be of a higher energy before damage to ear occurs.

Reason (R) : Human ear has variable frequency response.

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 :

646350113799. 1

646350113800. 2

646350113801. 3

646350113802. 4

Correct Marks : 2 Wrong Marks : 0

Landslide incidences in the Himalayas have increased due to :

- (a) Increased rainfall
- (b) Deforestation
- (c) Construction of new roads

Choose the correct option :

1. (a) and (b) only
2. (b) and (c) only
3. (c) only
4. (b) only

Options :

646350113803. 1
646350113804. 2
646350113805. 3
646350113806. 4

**Question Number : 67 Question Id : 64635028991 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Landslide incidences in the Himalayas have increased due to :

- (a) Increased rainfall
- (b) Deforestation
- (c) Construction of new roads

Choose the correct option :

- 1. (a) and (b) only
- 2. (b) and (c) only
- 3. (c) only
- 4. (b) only

Options :

646350113803. 1
646350113804. 2
646350113805. 3
646350113806. 4

**Question Number : 68 Question Id : 64635028992 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Hardness of minerals depends on

- 1. Chemical composition and physical makeup
- 2. Physical makeup and atomic constitution
- 3. Parent material
- 4. Chemical composition and atomic constitution

Options :

646350113807. 1
646350113808. 2
646350113809. 3
646350113810. 4

Question Number : 68 Question Id : 64635028992 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Hardness of minerals depends on

1. Chemical composition and physical makeup
2. Physical makeup and atomic constitution
3. Parent material
4. Chemical composition and atomic constitution

Options :

646350113807. 1

646350113808. 2

646350113809. 3

646350113810. 4

Question Number : 69 Question Id : 64635028993 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Taxa) with List-II (Taxa Property) :

List-I (Taxa)	List-II (Taxa Property)
(a) Mycorrhiza	(i) Stem hypertrophy
(b) Mangroves	(ii) Mutualism
(c) Orchids	(iii) Lenticels
(d) Aquatic trees	(iv) Epiphytes

Choose the correct answer from the options given below :

1. (a)–(ii); (b)–(iii); (c)–(i); (d)–(iv)
2. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
3. (a)–(i); (b)–(iii); (c)–(ii); (d)–(iv)
4. (a)–(iii); (b)–(iv); (c)–(i); (d)–(ii)

Options :

646350113811. 1

646350113812. 2

646350113813. 3

Question Number : 69 Question Id : 64635028993 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Taxa) with List-II (Taxa Property) :

List-I (Taxa)	List-II (Taxa Property)
(a) Mycorrhiza	(i) Stem hypertrophy
(b) Mangroves	(ii) Mutualism
(c) Orchids	(iii) Lenticels
(d) Aquatic trees	(iv) Epiphytes

Choose the correct answer from the options given below :

1. (a)–(ii); (b)–(iii); (c)–(i); (d)–(iv)
2. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
3. (a)–(i); (b)–(iii); (c)–(ii); (d)–(iv)
4. (a)–(iii); (b)–(iv); (c)–(i); (d)–(ii)

Options :

646350113811. 1

646350113812. 2

646350113813. 3

646350113814. 4

Question Number : 70 Question Id : 64635028994 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which is the correct hierarchical level of organisation in ecology?

1. Organism, population, community, ecosystem, biome, landscape, ecosphere
2. Organism, population, community, ecosystem, landscape, biome, ecosphere
3. Organism, community, population, ecosystem, landscape, biome, ecosphere
4. Organism, population, community, landscape, ecosystem, biome, ecosphere

Options :

646350113815. 1

646350113816. 2

646350113817. 3

646350113818. 4

**Question Number : 70 Question Id : 64635028994 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which is the correct hierarchical level of organisation in ecology?

1. Organism, population, community, ecosystem, biome, landscape, ecosphere
2. Organism, population, community, ecosystem, landscape, biome, ecosphere
3. Organism, community, population, ecosystem, landscape, biome, ecosphere
4. Organism, population, community, landscape, ecosystem, biome, ecosphere

Options :

646350113815. 1

646350113816. 2

646350113817. 3

646350113818. 4

**Question Number : 71 Question Id : 64635028995 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

The largest unit, in which gene flow is possible, is

1. Population
2. Genus
3. Species
4. Family

Options :

646350113819. 1

646350113820. 2

646350113821. 3

646350113822. 4

**Question Number : 71 Question Id : 64635028995 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

The largest unit, in which gene flow is possible, is

1. Population
2. Genus
3. Species
4. Family

Options :

- 646350113819. 1
- 646350113820. 2
- 646350113821. 3
- 646350113822. 4

Question Number : 72 Question Id : 64635028996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Mycorrhizae enhance plant nutrition mainly by

1. Providing sugar to root cells
2. Absorbing water and minerals
3. Converting atmospheric nitrogen to ammonia
4. Enhancing root growth

Options :

- 646350113823. 1
- 646350113824. 2
- 646350113825. 3
- 646350113826. 4

Question Number : 72 Question Id : 64635028996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Mycorrhizae enhance plant nutrition mainly by

1. Providing sugar to root cells
2. Absorbing water and minerals
3. Converting atmospheric nitrogen to ammonia
4. Enhancing root growth

Options :

- 646350113823. 1
- 646350113824. 2

646350113825. 3

646350113826. 4

**Question Number : 73 Question Id : 64635028997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The occurrence of acid rain over the Indian landmass is extremely rare.

Reason (R) : The alkaline dust and ammonia (NH_3) produced from agricultural areas neutralise the acid formation in the atmosphere.

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 :

646350113827. 1

646350113828. 2

646350113829. 3

646350113830. 4

**Question Number : 73 Question Id : 64635028997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The occurrence of acid rain over the Indian landmass is extremely rare.

Reason (R) : The alkaline dust and ammonia (NH_3) produced from agricultural areas neutralise the acid formation in the atmosphere.

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 :

646350113827. 1

646350113828. 2

646350113829. 3

646350113830. 4

Question Number : 74 Question Id : 64635028998 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Environmental Pollutant) with List-II (Instruments Used for Analysis) :

List-I (Environmental Pollutant)	List-II (Instruments Used for Analysis)
(a) PAHs	(i) AAS
(b) Heavy metals	(ii) UV-Vis spectrophotometer
(c) Sulphate ions	(iii) Electrophoresis
(d) Nucleotides	(iv) HPLC

Choose the correct answer from the options given below :

1. (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
2. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
3. (a)–(i); (b)–(ii); (c)–(iv); (d)–(iii)
4. (a)–(iv); (b)–(i); (c)–(ii); (d)–(iii)

Options :

646350113831. 1
646350113832. 2
646350113833. 3
646350113834. 4

**Question Number : 74 Question Id : 64635028998 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Match List-I (Environmental Pollutant) with List-II (Instruments Used for Analysis) :

List-I (Environmental Pollutant)	List-II (Instruments Used for Analysis)
(a) PAHs	(i) AAS
(b) Heavy metals	(ii) UV-Vis spectrophotometer
(c) Sulphate ions	(iii) Electrophoresis
(d) Nucleotides	(iv) HPLC

Choose the correct answer from the options given below :

1. (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
2. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
3. (a)–(i); (b)–(ii); (c)–(iv); (d)–(iii)
4. (a)–(iv); (b)–(i); (c)–(ii); (d)–(iii)

Options :

- 646350113831. 1
- 646350113832. 2
- 646350113833. 3
- 646350113834. 4

Question Number : 75 Question Id : 64635028999 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : If BOD level of water in a reservoir is less than 5 mgL^{-1} , it is highly polluted.

Reason (R) : High BOD means high microbial activity.

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 :

646350113835. 1

646350113836. 2

646350113837. 3

646350113838. 4

Question Number : 75 Question Id : 64635028999 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : If BOD level of water in a reservoir is less than 5 mgL^{-1} , it is highly polluted.

Reason (R) : High BOD means high microbial activity.

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 :

646350113835. 1

646350113836. 2

646350113837. 3

646350113838. 4

Question Number : 76 Question Id : 64635029000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which among the following CAN NOT be categorized as VOCs?

1. Polycyclic Aromatic Hydrocarbons
2. Halocarbons
3. Non-methane Hydrocarbons
4. Oxygenates

Options :

646350113839. 1

646350113840. 2

646350113841. 3

646350113842. 4

Question Number : 76 Question Id : 64635029000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which among the following CAN NOT be categorized as VOCs?

1. Polycyclic Aromatic Hydrocarbons
2. Halocarbons
3. Non-methane Hydrocarbons
4. Oxygenates

Options :

646350113839. 1

646350113840. 2

646350113841. 3

646350113842. 4

Question Number : 77 Question Id : 64635029001 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Carbon dioxide content in soil air is more than atmospheric air.

Reason (R) : Carbon dioxide released from automobile exhaust and industries gets sequestered in the soil.

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 :

- 646350113843. 1
- 646350113844. 2
- 646350113845. 3
- 646350113846. 4

Question Number : 77 Question Id : 64635029001 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Carbon dioxide content in soil air is more than atmospheric air.

Reason (R) : Carbon dioxide released from automobile exhaust and industries gets sequestered in the soil.

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 :

- 646350113843. 1
- 646350113844. 2
- 646350113845. 3
- 646350113846. 4

Question Number : 78 Question Id : 64635029002 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Fulvic acid molecules in soil humus are

- (a) Randomly coiled
- (b) More polar
- (c) Highly charged
- (d) Smaller molecules than humic acid molecules

Choose the correct option :

- 1. (a), (b) and (c) only
- 2. (b), (c) and (d) only
- 3. (a), (c) and (d) only
- 4. (b) and (d) only

Options :

646350113847. 1

646350113848. 2

646350113849. 3

646350113850. 4

**Question Number : 78 Question Id : 64635029002 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Fulvic acid molecules in soil humus are

- (a) Randomly coiled
- (b) More polar
- (c) Highly charged
- (d) Smaller molecules than humic acid molecules

Choose the correct option :

- 1. (a), (b) and (c) only
- 2. (b), (c) and (d) only
- 3. (a), (c) and (d) only
- 4. (b) and (d) only

Options :

646350113847. 1

646350113848. 2

646350113849. 3

646350113850. 4

**Question Number : 79 Question Id : 64635029003 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Wind rose reveals

- (a) Percentage of times winds persist in a specific direction
- (b) Most probable direction of winds
- (c) Percentage duration for which wind speeds are in a given range
- (d) Wind energy potential

Select the correct answer from the options given below :

- 1. (a) and (b) only
- 2. (b), (c) and (d) only
- 3. (a), (b) and (d) only
- 4. (a), (b) and (c) only

Options :

646350113851. 1

646350113852. 2

646350113853. 3

646350113854. 4

**Question Number : 79 Question Id : 64635029003 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Wind rose reveals

- (a) Percentage of times winds persist in a specific direction
- (b) Most probable direction of winds
- (c) Percentage duration for which wind speeds are in a given range
- (d) Wind energy potential

Select the correct answer from the options given below :

- 1. (a) and (b) only
- 2. (b), (c) and (d) only
- 3. (a), (b) and (d) only
- 4. (a), (b) and (c) only

Options :

646350113851. 1

646350113852. 2

646350113853. 3

646350113854. 4

**Question Number : 80 Question Id : 64635029004 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Spectral response pattern of leaves in healthy vegetation in SWIR region of EMR is primarily a function of

- 1. Chlorophyll content
- 2. Leaf parenchyma
- 3. Water content of the leaf
- 4. Presence of waxy layer on epidermis

Options :

646350113855. 1

646350113856. 2

646350113857. 3

646350113858. 4

Question Number : 80 Question Id : 64635029004 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Spectral response pattern of leaves in healthy vegetation in SWIR region of EMR is primarily a function of

1. Chlorophyll content
2. Leaf parenchyma
3. Water content of the leaf
4. Presence of waxy layer on epidermis

Options :

646350113855. 1

646350113856. 2

646350113857. 3

646350113858. 4

Question Number : 81 Question Id : 64635029005 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which forest type has the highest percentage cover in the country?

1. Tropical deciduous
2. Tropical evergreen
3. Temperature deciduous
4. Mangrove

Options :

646350113859. 1

646350113860. 2

646350113861. 3

646350113862. 4

Question Number : 81 Question Id : 64635029005 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which forest type has the highest percentage cover in the country?

1. Tropical deciduous
2. Tropical evergreen
3. Temperature deciduous
4. Mangrove

Options :

646350113859. 1

646350113860. 2

646350113861. 3

646350113862. 4

Question Number : 82 Question Id : 64635029006 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Saturation vapour pressure at a given temperature is 900 mbar while it is 600 mbar at dew point temperature. What will be the relative humidity?

1. 90%
2. 66.7%
3. 60%
4. 76.6%

Options :

646350113863. 1

646350113864. 2

646350113865. 3

646350113866. 4

Question Number : 82 Question Id : 64635029006 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Saturation vapour pressure at a given temperature is 900 mbar while it is 600 mbar at dew point temperature. What will be the relative humidity?

1. 90%
2. 66.7%
3. 60%
4. 76.6%

Options :

646350113863. 1

646350113864. 2

646350113865. 3

646350113866. 4

**Question Number : 83 Question Id : 64635029007 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Major attributes of a restored ecosystem are :

- (a) Representation of all functional groups
- (b) Amelioration of physical environment
- (c) Resilience and integrity
- (d) Absence of potential threats

Choose the correct option :

1. (a) and (b) only
2. (a), (b), (c) and (d)
3. (b), (c) and (d) only
4. (a), (c) and (d) only

Options :

646350113867. 1

646350113868. 2

646350113869. 3

646350113870. 4

**Question Number : 83 Question Id : 64635029007 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Major attributes of a restored ecosystem are :

- (a) Representation of all functional groups
- (b) Amelioration of physical environment
- (c) Resilience and integrity
- (d) Absence of potential threats

Choose the correct option :

- 1. (a) and (b) only
- 2. (a), (b), (c) and (d)
- 3. (b), (c) and (d) only
- 4. (a), (c) and (d) only

Options :

646350113867. 1

646350113868. 2

646350113869. 3

646350113870. 4

Question Number : 84 Question Id : 64635029008 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one is labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Biogas production is reduced in winters.

Reason (R) : Methanogenesis occurs at mesophilic temperatures.

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 :

646350113871. 1

646350113872. 2

646350113873. 3

646350113874. 4

**Question Number : 84 Question Id : 64635029008 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one is labelled as Assertion (A) and the other as Reason (R).

Assertion (A) : Biogas production is reduced in winters.

Reason (R) : Methanogenesis occurs at mesophilic temperatures.

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 :

646350113871. 1

646350113872. 2

646350113873. 3

646350113874. 4

**Question Number : 85 Question Id : 64635029009 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Arrange the following biomes in the increasing order of primary productivity :

- (a) Savannah
- (b) Boreal forests
- (c) Temperate forests
- (d) Temperate grasslands

Choose the correct option :

- 1. (a), (c), (b) and (d)
- 2. (c), (b), (a) and (d)
- 3. (c), (a), (d) and (b)
- 4. (b), (c), (d) and (a)

Options :

646350113875. 1

646350113876. 2

646350113877. 3

646350113878. 4

**Question Number : 85 Question Id : 64635029009 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Arrange the following biomes in the increasing order of primary productivity :

- (a) Savannah
- (b) Boreal forests
- (c) Temperate forests
- (d) Temperate grasslands

Choose the correct option :

- 1. (a), (c), (b) and (d)
- 2. (c), (b), (a) and (d)
- 3. (c), (a), (d) and (b)
- 4. (b), (c), (d) and (a)

Options :

- 646350113875. 1
- 646350113876. 2
- 646350113877. 3
- 646350113878. 4

Question Number : 86 Question Id : 64635029010 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What percent of visible radiation accounts for total solar radiation incident on top of atmosphere?

- 1. 7
- 2. 41
- 3. 56
- 4. 75

Options :

- 646350113879. 1
- 646350113880. 2
- 646350113881. 3
- 646350113882. 4

Question Number : 86 Question Id : 64635029010 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What percent of visible radiation accounts for total solar radiation incident on top of atmosphere?

1. 7
2. 41
3. 56
4. 75

Options :

646350113879. 1

646350113880. 2

646350113881. 3

646350113882. 4

Question Number : 87 Question Id : 64635029011 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Ozone depleting potential is measured with reference to

1. CFC-11
2. CFC-12
3. HCFC-22
4. CFC-113

Options :

646350113883. 1

646350113884. 2

646350113885. 3

646350113886. 4

Question Number : 87 Question Id : 64635029011 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Ozone depleting potential is measured with reference to

1. CFC-11
2. CFC-12
3. HCFC-22
4. CFC-113

Options :

- 646350113883. 1
- 646350113884. 2
- 646350113885. 3
- 646350113886. 4

Question Number : 88 Question Id : 64635029012 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

According to National Ambient Air Quality Standards (NAAQS) annual average concentration ($\mu\text{g}/\text{m}^3$) for SO_2 and NO_2 in ecologically sensitive areas are

1. 20 and 60 respectively
2. 80 and 47 respectively
3. 50 and 20 respectively
4. 20 and 30 respectively

Options :

- 646350113887. 1
- 646350113888. 2
- 646350113889. 3
- 646350113890. 4

Question Number : 88 Question Id : 64635029012 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

According to National Ambient Air Quality Standards (NAAQS) annual average concentration ($\mu\text{g}/\text{m}^3$) for SO_2 and NO_2 in ecologically sensitive areas are

1. 20 and 60 respectively
2. 80 and 47 respectively
3. 50 and 20 respectively
4. 20 and 30 respectively

Options :

- 646350113887. 1
- 646350113888. 2
- 646350113889. 3
- 646350113890. 4

Question Number : 89 Question Id : 64635029013 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which toxic metal is present in the colour printing inks of magazine pages?

1. Lead
2. Cadmium
3. Arsenic
4. Mercury

Options :

- 646350113891. 1
- 646350113892. 2
- 646350113893. 3
- 646350113894. 4

Question Number : 89 Question Id : 64635029013 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which toxic metal is present in the colour printing inks of magazine pages?

1. Lead
2. Cadmium
3. Arsenic
4. Mercury

Options :

646350113891. 1
646350113892. 2
646350113893. 3
646350113894. 4

Question Number : 90 Question Id : 64635029014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which is an exotic epigeic earthworm used widely for vermicomposting in India?

1. *Perionyx excavatus*
2. *Eudrilus eugeniae*
3. *Drawida willsi*
4. *Lampito mauritii*

Options :

646350113895. 1
646350113896. 2
646350113897. 3
646350113898. 4

Question Number : 90 Question Id : 64635029014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which is an exotic epigeic earthworm used widely for vermicomposting in India?

1. *Perionyx excavatus*
2. *Eudrilus eugeniae*
3. *Drawida willsi*
4. *Lampito mauritii*

Options :

646350113895. 1
646350113896. 2
646350113897. 3
646350113898. 4

Question Number : 91 Question Id : 64635029015 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Greenhouse gas CO₂ has very strong absorption band in the wavelength region

1. 4–10 μm
2. >13·0 μm
3. 2–3·5 μm
4. 0·7–2 μm

Options :

- 646350113899. 1
- 646350113900. 2
- 646350113901. 3
- 646350113902. 4

Question Number : 91 Question Id : 64635029015 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Greenhouse gas CO₂ has very strong absorption band in the wavelength region

1. 4–10 μm
2. >13·0 μm
3. 2–3·5 μm
4. 0·7–2 μm

Options :

- 646350113899. 1
- 646350113900. 2
- 646350113901. 3
- 646350113902. 4

Question Number : 92 Question Id : 64635029016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (NGO Movements) with List-II (Years of Struggle) :

List-I (NGO Movements)	List-II (Years of Struggle)
(a) Silent Valley Struggle	(i) 1973
(b) Chipko Movement	(ii) 1978
(c) Appiko Movement	(iii) 1980
(d) Gandhamardan Movement	(iv) 1983

Choose the correct answer from the options given below :

1. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
2. (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
3. (a)–(iv); (b)–(i); (c)–(iii); (d)–(ii)
4. (a)–(ii); (b)–(i); (c)–(iv); (d)–(iii)

Options :

646350113903. 1
646350113904. 2
646350113905. 3
646350113906. 4

**Question Number : 92 Question Id : 64635029016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0**

Match List-I (NGO Movements) with List-II (Years of Struggle) :

List-I (NGO Movements)	List-II (Years of Struggle)
(a) Silent Valley Struggle	(i) 1973
(b) Chipko Movement	(ii) 1978
(c) Appiko Movement	(iii) 1980
(d) Gandhamardan Movement	(iv) 1983

Choose the correct answer from the options given below :

- (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
- (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
- (a)–(iv); (b)–(i); (c)–(iii); (d)–(ii)
- (a)–(ii); (b)–(i); (c)–(iv); (d)–(iii)

Options :

646350113903. 1
646350113904. 2
646350113905. 3
646350113906. 4

Question Number : 93 Question Id : 64635029017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In order of intensity of different components of electromagnetic radiation emitted from sun reaching earth's surface, identify the correct sequence :

- ultraviolet > visible > infrared
- ultraviolet < visible < infrared
- ultraviolet > infrared > visible
- ultraviolet < infrared < visible

Options :

646350113907. 1
646350113908. 2
646350113909. 3
646350113910. 4

Question Number : 93 Question Id : 64635029017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In order of intensity of different components of electromagnetic radiation emitted from sun reaching earth's surface, identify the correct sequence :

1. ultraviolet > visible > infrared
2. ultraviolet < visible < infrared
3. ultraviolet > infrared > visible
4. ultraviolet < infrared < visible

Options :

646350113907. 1

646350113908. 2

646350113909. 3

646350113910. 4

Question Number : 94 Question Id : 64635029018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Ground truth data in remote sensing is collected for :

- (a) Analysis of remote sensing data
- (b) Accuracy assessment
- (c) Calibration of remote sensing sensors

Choose the correct option :

1. (a), (b) and (c)
2. (a) and (c) only
3. (b) and (c) only
4. (a) and (b) only

Options :

646350113911. 1

646350113912. 2

646350113913. 3

646350113914. 4

Question Number : 94 Question Id : 64635029018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Ground truth data in remote sensing is collected for :

- (a) Analysis of remote sensing data
- (b) Accuracy assessment
- (c) Calibration of remote sensing sensors

Choose the correct option :

- 1. (a), (b) and (c)
- 2. (a) and (c) only
- 3. (b) and (c) only
- 4. (a) and (b) only

Options :

- 646350113911. 1
- 646350113912. 2
- 646350113913. 3
- 646350113914. 4

Question Number : 95 Question Id : 64635029019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A lake has 2.5 mgL^{-1} of dissolved organic carbon. The dissolved organic matter concentration in the lake is approximately

- 1. 6.25 mgL^{-1}
- 2. 4.25 mgL^{-1}
- 3. 3.25 mgL^{-1}
- 4. 2.75 mgL^{-1}

Options :

- 646350113915. 1
- 646350113916. 2
- 646350113917. 3
- 646350113918. 4

Question Number : 95 Question Id : 64635029019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A lake has 2.5 mgL^{-1} of dissolved organic carbon. The dissolved organic matter concentration in the lake is approximately

1. 6.25 mgL^{-1}
2. 4.25 mgL^{-1}
3. 3.25 mgL^{-1}
4. 2.75 mgL^{-1}

Options :

646350113915. 1

646350113916. 2

646350113917. 3

646350113918. 4

Question Number : 96 Question Id : 64635029020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Moderate disturbance in an ecosystem

1. Increases biodiversity
2. Decreases biodiversity
3. Has no effect on biodiversity
4. Increases carrying capacity

Options :

646350113919. 1

646350113920. 2

646350113921. 3

646350113922. 4

Question Number : 96 Question Id : 64635029020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Moderate disturbance in an ecosystem

1. Increases biodiversity
2. Decreases biodiversity
3. Has no effect on biodiversity
4. Increases carrying capacity

Options :

- 646350113919. 1
- 646350113920. 2
- 646350113921. 3
- 646350113922. 4

**Question Number : 97 Question Id : 64635029021 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Removal of decomposers from an ecosystem will lead to

1. Increase in number of herbivores
2. Reduction in nutrient cycling
3. Increased number of carnivores
4. Decreased number of carnivores

Options :

- 646350113923. 1
- 646350113924. 2
- 646350113925. 3
- 646350113926. 4

**Question Number : 97 Question Id : 64635029021 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Removal of decomposers from an ecosystem will lead to

1. Increase in number of herbivores
2. Reduction in nutrient cycling
3. Increased number of carnivores
4. Decreased number of carnivores

Options :

- 646350113923. 1
- 646350113924. 2
- 646350113925. 3
- 646350113926. 4

**Question Number : 98 Question Id : 64635029022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

What type of rock will be formed when the lava cools and crystallizes?

1. Intrusive igneous
2. Extrusive igneous
3. Metamorphic
4. Sedimentary

Options :

- 646350113927. 1
- 646350113928. 2
- 646350113929. 3
- 646350113930. 4

Question Number : 98 Question Id : 64635029022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What type of rock will be formed when the lava cools and crystallizes?

1. Intrusive igneous
2. Extrusive igneous
3. Metamorphic
4. Sedimentary

Options :

- 646350113927. 1
- 646350113928. 2
- 646350113929. 3
- 646350113930. 4

Question Number : 99 Question Id : 64635029023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following parameters provides information on ignition quality of diesel?

1. Octane number
2. Cetane number
3. Iodine value
4. Acid value

Options :

- 646350113931. 1

646350113932. 2
646350113933. 3
646350113934. 4

**Question Number : 99 Question Id : 64635029023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which of the following parameters provides information on ignition quality of diesel?

1. Octane number
2. Cetane number
3. Iodine value
4. Acid value

Options :

646350113931. 1
646350113932. 2
646350113933. 3
646350113934. 4

**Question Number : 100 Question Id : 64635029024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Hydroxides of Aluminium (III) or Iron (III) are quite effective in removing colloidal clay particles from turbid water.

Reason (R) : Hydroxides from positively charged flocs attract and carry down negatively charged colloidal clay particles.

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 :

646350113935. 1
646350113936. 2
646350113937. 3
646350113938. 4

Question Number : 100 Question Id : 64635029024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Hydroxides of Aluminium (III) or Iron (III) are quite effective in removing colloidal clay particles from turbid water.

Reason (R) : Hydroxides from positively charged flocs attract and carry down negatively charged colloidal clay particles.

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 :

646350113935. 1

646350113936. 2

646350113937. 3

646350113938. 4

Question Number : 101 Question Id : 64635029025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which energy conversion process is involved in syngas production from biomass?

1. Combustion
2. Gasification
3. Pyrolysis
4. Fermentation

Options :

646350113939. 1

646350113940. 2

646350113941. 3

646350113942. 4

Question Number : 101 Question Id : 64635029025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which energy conversion process is involved in syngas production from biomass?

1. Combustion
2. Gasification
3. Pyrolysis
4. Fermentation

Options :

646350113939. 1

646350113940. 2

646350113941. 3

646350113942. 4

Question Number : 102 Question Id : 64635029026 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Electrostatic precipitator (ESP) is good for controlling

1. VOCs
2. Greenhouse gases
3. Fine particulate matter
4. Sulphur compounds

Options :

646350113943. 1

646350113944. 2

646350113945. 3

646350113946. 4

Question Number : 102 Question Id : 64635029026 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Electrostatic precipitator (ESP) is good for controlling

1. VOCs
2. Greenhouse gases
3. Fine particulate matter
4. Sulphur compounds

Options :

646350113943. 1

646350113944. 2

646350113945. 3

646350113946. 4

Question Number : 103 Question Id : 64635029027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which method is most appropriate for separating tin cans from aluminium cans in municipal solid waste?

1. Shear shredding
2. Manual sorting
3. Pelletizing
4. Magnetic field separation

Options :

646350113947. 1

646350113948. 2

646350113949. 3

646350113950. 4

Question Number : 103 Question Id : 64635029027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which method is most appropriate for separating tin cans from aluminium cans in municipal solid waste?

1. Shear shredding
2. Manual sorting
3. Pelletizing
4. Magnetic field separation

Options :

646350113947. 1

646350113948. 2

646350113949. 3

646350113950. 4

Question Number : 104 Question Id : 64635029028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Fire occurrence in the forests depends on :

- (a) Fuel load
- (b) Vegetation type
- (c) Distance from the habitations

Choose the correct option :

- 1. (a) and (b) only
- 2. (a), (b) and (c)
- 3. (b) and (c) only
- 4. (a) and (c) only

Options :

- 646350113951. 1
- 646350113952. 2
- 646350113953. 3
- 646350113954. 4

**Question Number : 104 Question Id : 64635029028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Fire occurrence in the forests depends on :

- (a) Fuel load
- (b) Vegetation type
- (c) Distance from the habitations

Choose the correct option :

- 1. (a) and (b) only
- 2. (a), (b) and (c)
- 3. (b) and (c) only
- 4. (a) and (c) only

Options :

- 646350113951. 1
- 646350113952. 2
- 646350113953. 3
- 646350113954. 4

**Question Number : 105 Question Id : 64635029029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which of the following biomes has the largest area?

- 1. Grassland
- 2. Desert
- 3. Taiga
- 4. Rain forest

Options :

- 646350113955. 1
- 646350113956. 2
- 646350113957. 3
- 646350113958. 4

**Question Number : 105 Question Id : 64635029029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which of the following biomes has the largest area?

1. Grassland
2. Desert
3. Taiga
4. Rain forest

Options :

646350113955. 1
646350113956. 2
646350113957. 3
646350113958. 4

Question Number : 106 Question Id : 64635029030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (ISO Standards) with List-II (Environmental Management Aspects) :

List-I (ISO Standards)	List-II (Environmental Management Aspects)
(a) ISO 14010	(i) Environmental auditing
(b) ISO 14020	(ii) Environmental aspect in product standard
(c) ISO 14050	(iii) Environmental labelling standard
(d) ISO 14060	(iv) Environmental terms and definitions

Choose the correct answer from the options given below :

1. (a)–(i); (b)–(ii); (c)–(iv); (d)–(iii)
2. (a)–(iv); (b)–(iii); (c)–(i); (d)–(ii)
3. (a)–(i); (b)–(iii); (c)–(iv); (d)–(ii)
4. (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

646350113959. 1
646350113960. 2
646350113961. 3

Question Number : 106 Question Id : 64635029030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (ISO Standards) with List-II (Environmental Management Aspects) :

List-I (ISO Standards)	List-II (Environmental Management Aspects)
(a) ISO 14010	(i) Environmental auditing
(b) ISO 14020	(ii) Environmental aspect in product standard
(c) ISO 14050	(iii) Environmental labelling standard
(d) ISO 14060	(iv) Environmental terms and definitions

Choose the correct answer from the options given below :

1. (a)–(i); (b)–(ii); (c)–(iv); (d)–(iii)
2. (a)–(iv); (b)–(iii); (c)–(i); (d)–(ii)
3. (a)–(i); (b)–(iii); (c)–(iv); (d)–(ii)
4. (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

646350113959. 1

646350113960. 2

646350113961. 3

646350113962. 4

Question Number : 107 Question Id : 64635029031 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which is the first mineral to form in cooling magma?

1. Olivine
2. Quartz
3. Mica
4. Potassium feldspar

Options :

646350113963. 1
646350113964. 2
646350113965. 3
646350113966. 4

**Question Number : 107 Question Id : 64635029031 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which is the first mineral to form in cooling magma?

1. Olivine
2. Quartz
3. Mica
4. Potassium feldspar

Options :

646350113963. 1
646350113964. 2
646350113965. 3
646350113966. 4

**Question Number : 108 Question Id : 64635029032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which instrument is used to measure total irradiance?

1. Pyrheliometer
2. Anemometer
3. Pyranometer
4. Hygrometer

Options :

646350113967. 1
646350113968. 2
646350113969. 3
646350113970. 4

**Question Number : 108 Question Id : 64635029032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which instrument is used to measure total irradiance?

1. Pyrheliometer
2. Anemometer
3. Pyranometer
4. Hygrometer

Options :

- 646350113967. 1
- 646350113968. 2
- 646350113969. 3
- 646350113970. 4

Question Number : 109 Question Id : 64635029033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is a primary air pollutant?

1. Surface Ozone
2. Sulphate
3. Nitrate
4. Black carbon

Options :

- 646350113971. 1
- 646350113972. 2
- 646350113973. 3
- 646350113974. 4

Question Number : 109 Question Id : 64635029033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is a primary air pollutant?

1. Surface Ozone
2. Sulphate
3. Nitrate
4. Black carbon

Options :

646350113971. 1
646350113972. 2
646350113973. 3
646350113974. 4

**Question Number : 110 Question Id : 64635029034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which type of earthworms are most suitable for vermicomposting?

1. Anecic
2. Epigeic
3. Endogeic
4. Both endogeic and epigeic

Options :

646350113975. 1
646350113976. 2
646350113977. 3
646350113978. 4

**Question Number : 110 Question Id : 64635029034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which type of earthworms are most suitable for vermicomposting?

1. Anecic
2. Epigeic
3. Endogeic
4. Both endogeic and epigeic

Options :

646350113975. 1
646350113976. 2
646350113977. 3
646350113978. 4

**Question Number : 111 Question Id : 64635029035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Remote sensing data from which of the following remote sensing satellites is most suitable for urban ecological studies?

1. RISAT-2
2. CARTOSAT-2
3. LANDSAT-8
4. RESOURCESAT-2 WiFS

Options :

646350113979. 1

646350113980. 2

646350113981. 3

646350113982. 4

Question Number : 111 Question Id : 64635029035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Remote sensing data from which of the following remote sensing satellites is most suitable for urban ecological studies?

1. RISAT-2
2. CARTOSAT-2
3. LANDSAT-8
4. RESOURCESAT-2 WiFS

Options :

646350113979. 1

646350113980. 2

646350113981. 3

646350113982. 4

Question Number : 112 Question Id : 64635029036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Cartagena Protocol deals with

1. Waste management
2. Protection of plant variety
3. Natural resource management
4. Biosafety

Options :

646350113983. 1

646350113984. 2

646350113985. 3

646350113986. 4

**Question Number : 112 Question Id : 64635029036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Cartagena Protocol deals with

1. Waste management
2. Protection of plant variety
3. Natural resource management
4. Biosafety

Options :

646350113983. 1

646350113984. 2

646350113985. 3

646350113986. 4

**Question Number : 113 Question Id : 64635029037 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

First State to make rainwater harvesting compulsory in India is

1. Haryana
2. Tamilnadu
3. Gujarat
4. Madhya Pradesh

Options :

646350113987. 1
646350113988. 2
646350113989. 3
646350113990. 4

Question Number : 113 Question Id : 64635029037 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

First State to make rainwater harvesting compulsory in India is

1. Haryana
2. Tamilnadu
3. Gujarat
4. Madhya Pradesh

Options :

646350113987. 1
646350113988. 2
646350113989. 3
646350113990. 4

Question Number : 114 Question Id : 64635029038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

For a $H^2 + H^3$ fusion reaction if the desired confinement for the ionized fuel is 2 seconds, what must be the minimum concentration of ions per cubic meter for net gain of energy?

1. 0.25×10^{19}
2. 2.5×10^{19}
3. 5×10^{19}
4. 2×10^{19}

Options :

646350113991. 1
646350113992. 2
646350113993. 3
646350113994. 4

Question Number : 114 Question Id : 64635029038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

For a $H^2 + H^3$ fusion reaction if the desired confinement for the ionized fuel is 2 seconds, what must be the minimum concentration of ions per cubic meter for net gain of energy?

1. 0.25×10^{19}
2. 2.5×10^{19}
3. 5×10^{19}
4. 2×10^{19}

Options :

646350113991. 1

646350113992. 2

646350113993. 3

646350113994. 4

Question Number : 115 Question Id : 64635029039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

As per the amended rules for the implementation of Forest Rights Act of 2006, the transit passes for the transport of minor forest produce are issued by

1. Gram Sabha
2. Forest Department
3. Biodiversity Monitoring Committee
4. District Level Committee

Options :

646350113995. 1

646350113996. 2

646350113997. 3

646350113998. 4

Question Number : 115 Question Id : 64635029039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

As per the amended rules for the implementation of Forest Rights Act of 2006, the transit passes for the transport of minor forest produce are issued by

1. Gram Sabha
2. Forest Department
3. Biodiversity Monitoring Committee
4. District Level Committee

Options :

- 646350113995. 1
- 646350113996. 2
- 646350113997. 3
- 646350113998. 4

Question Number : 116 Question Id : 64635029040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Municipal Solid Waste (Management and Handling) Rules, 2000 were replaced by

1. Solid Waste (Management and Handling) Rules, 2016
2. Solid Waste Management Rules, 2016
3. Municipal Solid Waste (Management and Handling) Rules, 2016
4. Solid Waste Management (Handling) Rules, 2018

Options :

- 646350113999. 1
- 646350114000. 2
- 646350114001. 3
- 646350114002. 4

Question Number : 116 Question Id : 64635029040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Municipal Solid Waste (Management and Handling) Rules, 2000 were replaced by

1. Solid Waste (Management and Handling) Rules, 2016
2. Solid Waste Management Rules, 2016
3. Municipal Solid Waste (Management and Handling) Rules, 2016
4. Solid Waste Management (Handling) Rules, 2018

Options :

646350113999. 1
646350114000. 2
646350114001. 3
646350114002. 4

**Question Number : 117 Question Id : 64635029041 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

As per Occupational Safety and Health Administration, hazard communication pictogram of flame over circle represents the hazardous waste, to be an

1. oxidizer
2. acutely toxic
3. explosive
4. irritant

Options :

646350114003. 1
646350114004. 2
646350114005. 3
646350114006. 4

**Question Number : 117 Question Id : 64635029041 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

As per Occupational Safety and Health Administration, hazard communication pictogram of flame over circle represents the hazardous waste, to be an

1. oxidizer
2. acutely toxic
3. explosive
4. irritant

Options :

646350114003. 1
646350114004. 2
646350114005. 3
646350114006. 4

**Question Number : 118 Question Id : 64635029042 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

UNEP awarded 'Champion of Earth' for the year 2018 for environmental contribution towards

- (a) Air pollution abatement
- (b) Beating plastic pollution
- (c) Establishing International Solar Alliance
- (d) Swachh Bharat Abhiyan

Choose the correct answer from the options given below :

- 1. (a) and (d) only
- 2. (b) and (d) only
- 3. (a) and (b) only
- 4. (b) and (c) only

Options :

646350114007. 1

646350114008. 2

646350114009. 3

646350114010. 4

**Question Number : 118 Question Id : 64635029042 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

UNEP awarded 'Champion of Earth' for the year 2018 for environmental contribution towards

- (a) Air pollution abatement
- (b) Beating plastic pollution
- (c) Establishing International Solar Alliance
- (d) Swachh Bharat Abhiyan

Choose the correct answer from the options given below :

- 1. (a) and (d) only
- 2. (b) and (d) only
- 3. (a) and (b) only
- 4. (b) and (c) only

Options :

- 646350114007. 1
- 646350114008. 2
- 646350114009. 3
- 646350114010. 4

Question Number : 119 Question Id : 64635029043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The power output from a windmill is maximum for an optimal wind speed.

Reason (R) : The turbulence in the atmosphere influences wind energy production.

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 :

- 646350114011. 1
- 646350114012. 2
- 646350114013. 3
- 646350114014. 4

Question Number : 119 Question Id : 64635029043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The power output from a windmill is maximum for an optimal wind speed.

Reason (R) : The turbulence in the atmosphere influences wind energy production.

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 :

- 646350114011. 1
- 646350114012. 2
- 646350114013. 3
- 646350114014. 4

Question Number : 120 Question Id : 64635029044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

An aeroplane causes a sound of level 110 dB on taking off. What is the sound level of 5 such identical aeroplanes taking off simultaneously?

1. ~117 dB
2. ~115 dB
3. ~113 dB
4. ~110 dB

Options :

- 646350114015. 1
- 646350114016. 2
- 646350114017. 3

646350114018. 4

Question Number : 120 Question Id : 64635029044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

An aeroplane causes a sound of level 110 dB on taking off. What is the sound level of 5 such identical aeroplanes taking off simultaneously?

1. ~117 dB
2. ~115 dB
3. ~113 dB
4. ~110 dB

Options :

646350114015. 1

646350114016. 2

646350114017. 3

646350114018. 4

Question Number : 121 Question Id : 64635029045 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A thermal power plant emits SO_2 at the rate of $500 \times 10^8 \mu\text{g/s}$. Its stack has an effective height of 200 m where wind speed is 5.0 m/s. If the horizontal and vertical dispersion coefficients are 400 m and 200 m, respectively, the downwind ground level concentration of SO_2 at a distance of 2 km will be

1. $\sim 241.4 \mu\text{g/m}^3$
2. $\sim 206.5 \mu\text{g/m}^3$
3. $\sim 75.8 \mu\text{g/m}^3$
4. $\sim 180.6 \mu\text{g/m}^3$

Options :

646350114019. 1

646350114020. 2

646350114021. 3

646350114022. 4

Question Number : 121 Question Id : 64635029045 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A thermal power plant emits SO_2 at the rate of $500 \times 10^8 \mu\text{g/s}$. Its stack has an effective height of 200 m where wind speed is 5.0 m/s. If the horizontal and vertical dispersion coefficients are 400 m and 200 m, respectively, the downwind ground level concentration of SO_2 at a distance of 2 km will be

1. $\sim 241.4 \mu\text{g/m}^3$
2. $\sim 206.5 \mu\text{g/m}^3$
3. $\sim 75.8 \mu\text{g/m}^3$
4. $\sim 180.6 \mu\text{g/m}^3$

Options :

- 646350114019. 1
- 646350114020. 2
- 646350114021. 3
- 646350114022. 4

Question Number : 122 Question Id : 64635029046 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In an ideal magnetohydrodynamic (MHD) generator, the velocity of fuel gas is increased by a factor of 1.5 and the magnetic field is increased by a factor of 2. By what factor, the maximum power produced from the MHD generator would increase?

1. 3
2. 6
3. 9
4. 4.5

Options :

- 646350114023. 1
- 646350114024. 2
- 646350114025. 3
- 646350114026. 4

Question Number : 122 Question Id : 64635029046 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In an ideal magnetohydrodynamic (MHD) generator, the velocity of fuel gas is increased by a factor of 1.5 and the magnetic field is increased by a factor of 2. By what factor, the maximum power produced from the MHD generator would increase?

1. 3
2. 6
3. 9
4. 4.5

Options :

- 646350114023. 1
- 646350114024. 2
- 646350114025. 3
- 646350114026. 4

Question Number : 123 Question Id : 64635029047 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A stream of waste water having BOD of 20.0 mg/L discharges water at the rate 1.0 m³/s into river with flow rate 8.0 m³/s and BOD of 5.0 mg/L. Assuming complete and instantaneous mixing, what is the resultant BOD just downstream from the point of discharge?

1. ~12.5 mg/L
2. ~6.7 mg/L
3. ~15.0 mg/L
4. ~1.5 mg/L

Options :

- 646350114027. 1
- 646350114028. 2
- 646350114029. 3
- 646350114030. 4

Question Number : 123 Question Id : 64635029047 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A stream of waste water having BOD of 20.0 mg/L discharges water at the rate 1.0 m³/s into river with flow rate 8.0 m³/s and BOD of 5.0 mg/L. Assuming complete and instantaneous mixing, what is the resultant BOD just downstream from the point of discharge?

1. ~12.5 mg/L
2. ~6.7 mg/L
3. ~15.0 mg/L
4. ~1.5 mg/L

Options :

646350114027. 1

646350114028. 2

646350114029. 3

646350114030. 4

Question Number : 124 Question Id : 64635029048 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A country has population of 350 million and an annual growth rate of population 2.0% at $t = 0$. There after the population stabilizes at 1.4 billion. How long it will take for the population to reach 0.7 billion?

1. ~41.2 years
2. ~17.9 years
3. ~5 years
4. ~35.0 years

Options :

646350114031. 1

646350114032. 2

646350114033. 3

646350114034. 4

Question Number : 124 Question Id : 64635029048 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A country has population of 350 million and an annual growth rate of population 2.0% at $t = 0$. There after the population stabilizes at 1.4 billion. How long it will take for the population to reach 0.7 billion?

1. ~41.2 years
2. ~17.9 years
3. ~5 years
4. ~35.0 years

Options :

- 646350114031. 1
- 646350114032. 2
- 646350114033. 3
- 646350114034. 4

**Question Number : 125 Question Id : 64635029049 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Match List-I (Ozone Depleting Substances) with List-II (Chemical Formulas) :

List-I
(Ozone Depleting Substances)

List-II
(Chemical Formulas)

(a) CFC-12

(i) $\text{CF}_2\text{ClCFCl}_2$

(b) CFC-113

(ii) CClF_2CF_3

(c) CFC-114

(iii) CF_2Cl_2

(d) CFC-115

(iv) $\text{CF}_2\text{ClCF}_2\text{Cl}$

Choose the correct answer from the options below.

1. (a)–(iii); (b)–(ii); (c)–(i); (d)–(iv)

2. (a)–(iii); (b)–(i); (c)–(ii); (d)–(iv)

3. (a)–(iii); (b)–(i); (c)–(iv); (d)–(ii)

4. (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)

Options :

646350114035. 1

646350114036. 2

646350114037. 3

646350114038. 4

Question Number : 125 Question Id : 64635029049 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Ozone Depleting Substances) with List-II (Chemical Formulas) :

List-I
(Ozone Depleting Substances)

List-II
(Chemical Formulas)

(a) CFC-12

(i) $\text{CF}_2\text{ClCFCl}_2$

(b) CFC-113

(ii) CClF_2CF_3

(c) CFC-114

(iii) CF_2Cl_2

(d) CFC-115

(iv) $\text{CF}_2\text{ClCF}_2\text{Cl}$

Choose the correct answer from the options below.

1. (a)–(iii); (b)–(ii); (c)–(i); (d)–(iv)

2. (a)–(iii); (b)–(i); (c)–(ii); (d)–(iv)

3. (a)–(iii); (b)–(i); (c)–(iv); (d)–(ii)

4. (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)

Options :

646350114035. 1

646350114036. 2

646350114037. 3

646350114038. 4

Question Number : 126 Question Id : 64635029050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The organic matter helps in formation and stabilization of soil texture.

Reason (R) : Humified organic matter has an affinity for water and can absorb and hold water upto several times of its dry weight.

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 :

646350114039. 1

646350114040. 2

646350114041. 3

646350114042. 4

**Question Number : 126 Question Id : 64635029050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

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

Assertion (A) : The organic matter helps in formation and stabilization of soil texture.

Reason (R) : Humified organic matter has an affinity for water and can absorb and hold water upto several times of its dry weight.

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 :

646350114039. 1

646350114040. 2

646350114041. 3

646350114042. 4

**Question Number : 127 Question Id : 64635029051 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Match List-I (Soil Type) with List-II (Degree of Compressibility) :

List-I (Soil Type)	List-II (Degree of Compressibility)
(a) Softy Clay	(i) Low
(b) Clay	(ii) High
(c) Silt	(iii) Medium
(d) Sandy Clay	(iv) Very High

Choose the correct answer from the options given below.

1. (a)–(ii); (b)–(i); (c)–(iii); (d)–(iv)
2. (a)–(iv); (b)–(iii); (c)–(i); (d)–(ii)
3. (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
4. (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

646350114043. 1

646350114044. 2

646350114045. 3

646350114046. 4

Question Number : 127 Question Id : 64635029051 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Soil Type) with List-II (Degree of Compressibility) :

List-I (Soil Type)	List-II (Degree of Compressibility)
(a) Softy Clay	(i) Low
(b) Clay	(ii) High
(c) Silt	(iii) Medium
(d) Sandy Clay	(iv) Very High

Choose the correct answer from the options given below.

1. (a)–(ii); (b)–(i); (c)–(iii); (d)–(iv)
2. (a)–(iv); (b)–(iii); (c)–(i); (d)–(ii)
3. (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
4. (a)–(iv); (b)–(ii); (c)–(iii); (d)–(i)

Options :

- 646350114043. 1
- 646350114044. 2
- 646350114045. 3
- 646350114046. 4

Question Number : 128 Question Id : 64635029052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A container has 3 white balls and 2 black balls identical in size. Two balls are drawn randomly without replacement. The probability that the two balls are of different colours is

1. $\frac{2}{5}$
2. $\frac{3}{5}$
3. $\frac{3}{10}$
4. $\frac{2}{10}$

Options :

- 646350114047. 1
- 646350114048. 2
- 646350114049. 3
- 646350114050. 4

Question Number : 128 Question Id : 64635029052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A container has 3 white balls and 2 black balls identical in size. Two balls are drawn randomly without replacement. The probability that the two balls are of different colours is

- 1. $2/5$
- 2. $3/5$
- 3. $3/10$
- 4. $2/10$

Options :

- 646350114047. 1
- 646350114048. 2
- 646350114049. 3
- 646350114050. 4

Question Number : 129 Question Id : 64635029053 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If s^2 is the variance of a sample of size N drawn from a normal population with variance σ^2 , then $\frac{Ns^2}{\sigma^2}$ has which one of the following distributions with $(N-1)$ degrees of freedom?

- 1. Chi-square
- 2. Normal
- 3. Student's t
- 4. Poisson

Options :

- 646350114051. 1
- 646350114052. 2
- 646350114053. 3
- 646350114054. 4

Correct Marks : 2 Wrong Marks : 0

If s^2 is the variance of a sample of size N drawn from a normal population with variance σ^2 , then $\frac{Ns^2}{\sigma^2}$ has which one of the following distributions with $(N-1)$ degrees of freedom?

1. Chi-square
2. Normal
3. Student's t
4. Poisson

Options :

- 646350114051. 1
- 646350114052. 2
- 646350114053. 3
- 646350114054. 4

Correct Marks : 2 Wrong Marks : 0

Simultaneous measurement of humidity Y (%) and temperature X ($^{\circ}\text{C}$) at a given site are given as under :

Y :	30	40	45	60	65
X :	40	35	30	25	20

The correlation coefficient between Y and X is

1. -0.987
2. 0.826
3. 0.621
4. -0.360

Options :

- 646350114055. 1
- 646350114056. 2
- 646350114057. 3
- 646350114058. 4

Correct Marks : 2 Wrong Marks : 0

Simultaneous measurement of humidity Y (%) and temperature X ($^{\circ}\text{C}$) at a given site are given as under :

Y :	30	40	45	60	65
X :	40	35	30	25	20

The correlation coefficient between Y and X is

1. -0.987
2. 0.826
3. 0.621
4. -0.360

Options :

- 646350114055. 1
- 646350114056. 2
- 646350114057. 3
- 646350114058. 4

Correct Marks : 2 Wrong Marks : 0

The marks of students in a certain course averaged 75 over a period of years. A class of 50 students has a mean marks 70 with a standard deviation of 10. To test whether this lower mean can be attributed to ordinary sampling variation, t -statistic is required. The value of t is

1. -3.5
2. -0.5
3. -2.5
4. $+1.5$

Options :

- 646350114059. 1
- 646350114060. 2
- 646350114061. 3
- 646350114062. 4

Correct Marks : 2 Wrong Marks : 0

The marks of students in a certain course averaged 75 over a period of years. A class of 50 students has a mean marks 70 with a standard deviation of 10. To test whether this lower mean can be attributed to ordinary sampling variation, t -statistic is required. The value of t is

1. -3.5
2. -0.5
3. -2.5
4. $+1.5$

Options :

- 646350114059. 1
- 646350114060. 2
- 646350114061. 3
- 646350114062. 4

Correct Marks : 2 Wrong Marks : 0

Consider the following simple regression equation of dependent variable (Y) and explanatory variable (X) :

$$Y = a + bX + \epsilon$$

Given the following data : $S^2 = 250$, residual variance = 5, $b = 0.2$ and $a = 0.5$.

What will be the overall variance S_y^2 ?

1. 15
2. 55
3. 45
4. 10

Options :

- 646350114063. 1
- 646350114064. 2
- 646350114065. 3
- 646350114066. 4

Question Number : 132 Question Id : 64635029056 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider the following simple regression equation of dependent variable (Y) and explanatory variable (X) :

$$Y = a + bX + \epsilon$$

Given the following data : $S^2 = 250$, residual variance = 5, $b = 0.2$ and $a = 0.5$.

What will be the overall variance S_y^2 ?

1. 15
2. 55
3. 45
4. 10

Options :

646350114063. 1

646350114064. 2

646350114065. 3

646350114066. 4

Question Number : 133 Question Id : 64635029057 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Two important characteristics of any population are

1. Diversity and density
2. Frequency and density
3. Abundance and dispersion
4. Density and dispersion

Options :

646350114067. 1

646350114068. 2

646350114069. 3

646350114070. 4

Question Number : 133 Question Id : 64635029057 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Two important characteristics of any population are

1. Diversity and density
2. Frequency and density
3. Abundance and dispersion
4. Density and dispersion

Options :

646350114067. 1

646350114068. 2

646350114069. 3

646350114070. 4

Question Number : 134 Question Id : 64635029058 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Property) with List-II (Ecological Level) :

List-I (Property)	List-II (Ecological Level)
(a) Fragmentation	(i) Community
(b) Assembly	(ii) Ecosystem
(c) Integrity	(iii) Population
(d) Dispersion	(iv) Landscape

Choose the correct answer from the options given below :

1. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
2. (a)–(iii); (b)–(i); (c)–(ii); (d)–(iv)
3. (a)–(iv); (b)–(i); (c)–(ii); (d)–(iii)
4. (a)–(i); (b)–(iii); (c)–(ii); (d)–(iv)

Options :

646350114071. 1

646350114072. 2

646350114073. 3

Question Number : 134 Question Id : 64635029058 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Property) with List-II (Ecological Level) :

List-I (Property)	List-II (Ecological Level)
(a) Fragmentation	(i) Community
(b) Assembly	(ii) Ecosystem
(c) Integrity	(iii) Population
(d) Dispersion	(iv) Landscape

Choose the correct answer from the options given below :

1. (a)–(ii); (b)–(iii); (c)–(iv); (d)–(i)
2. (a)–(iii); (b)–(i); (c)–(ii); (d)–(iv)
3. (a)–(iv); (b)–(i); (c)–(ii); (d)–(iii)
4. (a)–(i); (b)–(iii); (c)–(ii); (d)–(iv)

Options :

646350114071. 1

646350114072. 2

646350114073. 3

646350114074. 4

Question Number : 135 Question Id : 64635029059 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Match List-I (Clay Minerals) with List-II (Cation Exchange Capacity in $\text{cmol}(+) \text{kg}^{-1}$) :

List-I (Clay Minerals)	List-II (Cation Exchange Capacity in $\text{cmol}(+) \text{kg}^{-1}$)
(a) Vermiculite	(i) 5–25
(b) Smectite	(ii) 20–40
(c) Illite	(iii) 100–120
(d) Kaolinite	(iv) 150–160

Choose the correct answer from the options given below :

- (a)–(iv); (b)–(i); (c)–(iii); (d)–(ii)
- (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
- (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
- (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)

Options :

646350114075. 1

646350114076. 2

646350114077. 3

646350114078. 4

**Question Number : 135 Question Id : 64635029059 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Match List-I (Clay Minerals) with List-II (Cation Exchange Capacity in $\text{cmol}(+) \text{kg}^{-1}$) :

List-I (Clay Minerals)	List-II (Cation Exchange Capacity in $\text{cmol}(+) \text{kg}^{-1}$)
(a) Vermiculite	(i) 5–25
(b) Smectite	(ii) 20–40
(c) Illite	(iii) 100–120
(d) Kaolinite	(iv) 150–160

Choose the correct answer from the options given below :

- (a)–(iv); (b)–(i); (c)–(iii); (d)–(ii)
- (a)–(iii); (b)–(ii); (c)–(iv); (d)–(i)
- (a)–(i); (b)–(ii); (c)–(iii); (d)–(iv)
- (a)–(iv); (b)–(iii); (c)–(ii); (d)–(i)

Options :

646350114075. 1
646350114076. 2
646350114077. 3
646350114078. 4

**Question Number : 136 Question Id : 64635029060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

In an urban atmosphere the concentration of CH_4 and OH radical is 5×10^{19} molecules m^3 and 1.8×10^{12} molecules m^{-3} respectively. The rate constant for 2nd order reaction between OH and methane is $8.36 \times 10^{-21} \text{ m}^3 \text{ mol}^{-1} \text{ s}^{-1}$. What is the instantaneous rate of oxidation of CH_4 ?

1. 3.26×10^{11} molecules $\text{m}^{-3} \text{ s}^{-1}$
2. 2.52×10^{12} molecules $\text{m}^{-3} \text{ s}^{-1}$
3. 7.52×10^{11} molecules $\text{m}^{-3} \text{ s}^{-1}$
4. 7.52×10^{12} molecules $\text{m}^{-3} \text{ s}^{-1}$

Options :

646350114079. 1
646350114080. 2
646350114081. 3
646350114082. 4

Question Number : 136 Question Id : 64635029060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In an urban atmosphere the concentration of CH_4 and OH radical is 5×10^{19} molecules m^3 and 1.8×10^{12} molecules m^{-3} respectively. The rate constant for 2nd order reaction between OH and methane is $8.36 \times 10^{-21} \text{ m}^3 \text{ mol}^{-1} \text{ s}^{-1}$. What is the instantaneous rate of oxidation of CH_4 ?

1. 3.26×10^{11} molecules $\text{m}^{-3} \text{ s}^{-1}$
2. 2.52×10^{12} molecules $\text{m}^{-3} \text{ s}^{-1}$
3. 7.52×10^{11} molecules $\text{m}^{-3} \text{ s}^{-1}$
4. 7.52×10^{12} molecules $\text{m}^{-3} \text{ s}^{-1}$

Options :

646350114079. 1
646350114080. 2
646350114081. 3
646350114082. 4

Question Number : 137 Question Id : 64635029061 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Computation of radiative forcing due to Greenhouse Gas does NOT involve

1. Concentration of the Greenhouse Gases present in the atmosphere
2. Lapse rate of the atmosphere
3. Wavelength at which the gas molecules absorb
4. Intensity of the absorption per molecule

Options :

646350114083. 1

646350114084. 2

646350114085. 3

646350114086. 4

**Question Number : 137 Question Id : 64635029061 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Computation of radiative forcing due to Greenhouse Gas does NOT involve

1. Concentration of the Greenhouse Gases present in the atmosphere
2. Lapse rate of the atmosphere
3. Wavelength at which the gas molecules absorb
4. Intensity of the absorption per molecule

Options :

646350114083. 1

646350114084. 2

646350114085. 3

646350114086. 4

**Question Number : 138 Question Id : 64635029062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

In a typical solar pond which region has the salt concentration gradient?

1. Surface convective zone
2. Non-convective zone
3. Lower convective zone
4. Entire solar pond

Options :

- 646350114087. 1
- 646350114088. 2
- 646350114089. 3
- 646350114090. 4

Question Number : 138 Question Id : 64635029062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a typical solar pond which region has the salt concentration gradient?

1. Surface convective zone
2. Non-convective zone
3. Lower convective zone
4. Entire solar pond

Options :

- 646350114087. 1
- 646350114088. 2
- 646350114089. 3
- 646350114090. 4

Question Number : 139 Question Id : 64635029063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In the model of r^- and k^- selection, rate of increase of two species are portrayed as function of

- (a) Population density
- (b) Resource density
- (c) Habitat
- (d) Size

Choose the correct answer from the options given below :

- 1. (a) and (c)
- 2. (a) and (b)
- 3. (b) and (d)
- 4. (c) and (a)

Options :

- 646350114091. 1
- 646350114092. 2
- 646350114093. 3
- 646350114094. 4

Question Number : 139 Question Id : 64635029063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In the model of r^- and k^- selection, rate of increase of two species are portrayed as function of

- (a) Population density
- (b) Resource density
- (c) Habitat
- (d) Size

Choose the correct answer from the options given below :

- 1. (a) and (c)
- 2. (a) and (b)
- 3. (b) and (d)
- 4. (c) and (a)

Options :

- 646350114091. 1
- 646350114092. 2
- 646350114093. 3
- 646350114094. 4

Question Number : 140 Question Id : 64635029064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : In the Himalayas north-facing slopes have luxuriant growth of forests, whereas shrubby drought-resistant vegetation inhabits the south-facing slopes.

Reason (R) : South-facing slopes in the northern hemisphere receive more sunlight than nearby north-facing slopes and, therefore, are warmer and drier.

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 :

646350114095. 1

646350114096. 2

646350114097. 3

646350114098. 4

Question Number : 140 Question Id : 64635029064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : In the Himalayas north-facing slopes have luxuriant growth of forests, whereas shrubby drought-resistant vegetation inhabits the south-facing slopes.

Reason (R) : South-facing slopes in the northern hemisphere receive more sunlight than nearby north-facing slopes and, therefore, are warmer and drier.

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 :

- 646350114095. 1
- 646350114096. 2
- 646350114097. 3
- 646350114098. 4

Question Number : 141 Question Id : 64635029065 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which microbial metabolism involves immobilisation of soluble metal species by forming complexing agents like metal sulphides, metal carbonates and metal phosphates?

1. Biosorption
2. Bioaccumulation
3. Solubilization
4. Bioprecipitation

Options :

646350114099. 1
646350114100. 2
646350114101. 3
646350114102. 4

**Question Number : 141 Question Id : 64635029065 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Which microbial metabolism involves immobilisation of soluble metal species by forming complexing agents like metal sulphides, metal carbonates and metal phosphates?

1. Biosorption
2. Bioaccumulation
3. Solubilization
4. Bioprecipitation

Options :

646350114099. 1
646350114100. 2
646350114101. 3
646350114102. 4

**Question Number : 142 Question Id : 64635029066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

The first State to be declared as an organic State of the country is

1. Sikkim
2. Uttarakhand
3. Himachal Pradesh
4. Kerala

Options :

646350114103. 1
646350114104. 2
646350114105. 3
646350114106. 4

Question Number : 142 Question Id : 64635029066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The first State to be declared as an organic State of the country is

1. Sikkim
2. Uttarakhand
3. Himachal Pradesh
4. Kerala

Options :

646350114103. 1

646350114104. 2

646350114105. 3

646350114106. 4

Question Number : 143 Question Id : 64635029067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which among the following substances is responsible for global cooling instead of global warming?

1. Black carbon
2. Nitrous oxide
3. Sulphate aerosols
4. HCFC

Options :

646350114107. 1

646350114108. 2

646350114109. 3

646350114110. 4

Question Number : 143 Question Id : 64635029067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which among the following substances is responsible for global cooling instead of global warming?

1. Black carbon
2. Nitrous oxide
3. Sulphate aerosols
4. HCFC

Options :

646350114107. 1

646350114108. 2

646350114109. 3

646350114110. 4

Question Number : 144 Question Id : 64635029068 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Major environmental impacts of the Tehri dam in the Central Himalaya are :

- (a) Submergence of fertile agricultural lands
- (b) Reservoir-induced seismicity
- (c) Increased incidences of landslides in the reservoir rim
- (d) Loss of biodiversity

Choose the correct option :

1. (a) and (b) only
2. (a) and (c) only
3. (a) and (d) only
4. (a), (b), (c) and (d)

Options :

646350114111. 1

646350114112. 2

646350114113. 3

646350114114. 4

Correct Marks : 2 Wrong Marks : 0

Major environmental impacts of the Tehri dam in the Central Himalaya are :

- (a) Submergence of fertile agricultural lands
- (b) Reservoir-induced seismicity
- (c) Increased incidences of landslides in the reservoir rim
- (d) Loss of biodiversity

Choose the correct option :

- 1. (a) and (b) only
- 2. (a) and (c) only
- 3. (a) and (d) only
- 4. (a), (b), (c) and (d)

Options :

646350114111. 1

646350114112. 2

646350114113. 3

646350114114. 4

Correct Marks : 2 Wrong Marks : 0

Sustainable development presupposes :

- (a) Maintenance of ecosystem integrity
- (b) Improvement in economic and social conditions of people
- (c) Perpetual availability of ecosystem services

Choose the correct option :

- 1. (a), (b) and (c)
- 2. (a) and (b) only
- 3. (a) and (c) only
- 4. (b) and (c) only

Options :

646350114115. 1
646350114116. 2
646350114117. 3
646350114118. 4

**Question Number : 145 Question Id : 64635029069 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

Sustainable development presupposes :

- (a) Maintenance of ecosystem integrity
- (b) Improvement in economic and social conditions of people
- (c) Perpetual availability of ecosystem services

Choose the correct option :

- 1. (a), (b) and (c)
- 2. (a) and (b) only
- 3. (a) and (c) only
- 4. (b) and (c) only

Options :

646350114115. 1
646350114116. 2
646350114117. 3
646350114118. 4

**Question Number : 146 Question Id : 64635029070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 2 Wrong Marks : 0

For a negatively skewed distribution, which is the correct relation?

- 1. Arithmetic mean < Median < Mode
- 2. Arithmetic mean < Mode < Median
- 3. Arithmetic mean > Mode > Median
- 4. Median = Mode > Arithmetic mean

Options :

646350114119. 1
646350114120. 2
646350114121. 3
646350114122. 4

Question Number : 146 Question Id : 64635029070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

For a negatively skewed distribution, which is the correct relation?

1. Arithmetic mean < Median < Mode
2. Arithmetic mean < Mode < Median
3. Arithmetic mean > Mode > Median
4. Median = Mode > Arithmetic mean

Options :

646350114119. 1

646350114120. 2

646350114121. 3

646350114122. 4

Question Number : 147 Question Id : 64635029071 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which Article of the Indian Constitution was used by Government of India to enact the Environmental Protection Act (EPA), 1986?

1. 48 A
2. 253
3. 251
4. 51 A(g)

Options :

646350114123. 1

646350114124. 2

646350114125. 3

646350114126. 4

Question Number : 147 Question Id : 64635029071 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which Article of the Indian Constitution was used by Government of India to enact the Environmental Protection Act (EPA), 1986?

1. 48 A
2. 253
3. 251
4. 51 A(g)

Options :

646350114123. 1

646350114124. 2

646350114125. 3

646350114126. 4

Question Number : 148 Question Id : 64635029072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a breeder reactor

1. Neutrons first convert a fertile material into fissile material and then sustain the fission reaction
2. Neutrons first start the fission reaction and fissile material is a by-product
3. Fissile material produces fertile material
4. Ratio of amount of fissile material produced to fissile material consumed should be less than one

Options :

646350114127. 1

646350114128. 2

646350114129. 3

646350114130. 4

Question Number : 148 Question Id : 64635029072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a breeder reactor

1. Neutrons first convert a fertile material into fissile material and then sustain the fission reaction
2. Neutrons first start the fission reaction and fissile material is a by-product
3. Fissile material produces fertile material
4. Ratio of amount of fissile material produced to fissile material consumed should be less than one

Options :

- 646350114127. 1
- 646350114128. 2
- 646350114129. 3
- 646350114130. 4

Question Number : 149 Question Id : 64635029073 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a population, where the allele frequency shifts by a random chance, the mechanism of evolution at work is

1. Co-evolution
2. Mutation
3. Natural selection
4. Genetic drift

Options :

- 646350114131. 1
- 646350114132. 2
- 646350114133. 3
- 646350114134. 4

Question Number : 149 Question Id : 64635029073 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In a population, where the allele frequency shifts by a random chance, the mechanism of evolution at work is

1. Co-evolution
2. Mutation
3. Natural selection
4. Genetic drift

Options :

- 646350114131. 1
- 646350114132. 2
- 646350114133. 3
- 646350114134. 4

Question Number : 150 Question Id : 64635029074 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Maximum concentration of hydroxyl radical in earth's atmosphere is observed at

1. The equator, in middle of troposphere
2. The poles, in middle of troposphere
3. The equatorial surface
4. The Tropic of Cancer

Options :

- 646350114135. 1
- 646350114136. 2
- 646350114137. 3
- 646350114138. 4

Question Number : 150 Question Id : 64635029074 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Maximum concentration of hydroxyl radical in earth's atmosphere is observed at

1. The equator, in middle of troposphere
2. The poles, in middle of troposphere
3. The equatorial surface
4. The Tropic of Cancer

Options :

646350114135. 1

646350114136. 2

646350114137. 3

646350114138. 4