# **Banaras Hindu University**

**Question Paper Name:** 205 18thMay 2019 Shift 2

**Subject Name:** 205

**Creation Date:** 2019-05-18 17:57:12

**Duration:** 120 **Total Marks:** 360 **Display Marks:** Yes **Share Answer Key With Delivery** Yes

**Engine:** 

**Actual Answer Key:** 

Yes

#### MSc Environmental Science ISED

**Group Number:** 

45489325 Group Id:

**Group Maximum Duration:** 0 **Group Minimum Duration:** 120 Revisit allowed for view?: No Revisit allowed for edit?: No **Break time:** 0 **Group Marks:** 360

#### Section A Basic Environmental Science

Section Id: 45489328

**Section Number:** 1

**Section type:** Online **Mandatory or Optional:** Mandatory

**Number of Questions:** 40 **Number of Questions to be attempted:** 40 **Section Marks:** 120 **Display Number Panel:** Yes **Group All Questions:** No

**Sub-Section Number:** 

**Sub-Section Id:** 45489328 **Question Shuffling Allowed:** Yes

Question Number: 1 Question Id: 4548932841 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

# Sodium Adsorption Ratio (SAR) is highest in :

# **Options:**

Saline sodic soils

```
2. Sodic soils
   Saline soils
   Normal soils
Question Number: 2 Question Id: 4548932842 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question
Biosphere reserve network program was launched by :
Options:
   IUCN
   UNESCO
Question Number: 3 Question Id: 4548932843 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question
Ozone layer thickness is measured in :
Options:
   Dobson
   Hertz
  Decibel
   Becquerel
Question Number: 4 Question Id: 4548932844 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
```

No Control Enable : Yes Correct Marks : 3 Wrong Marks : 1

Methanogenic bacteria are :  Options :  1. Anaerobic
-
Anaerobic 1.
2. Aerobic
3. Facultative aerobic
4. Facultative anaerobic
Question Number: 5 Question Id: 4548932845 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
High carbon intensity is found in which of the following fuel?
Options:
1. Oil
2. Biomass
Natural gas 3.
4. Bituminous coal
Question Number: 6 Question Id: 4548932846 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The seasons on earth are primarily caused by :
Options:
1. Earth sun distance changes
2. The tilt of the earth
3. Earth's rotation rate
Changes in solar output from the sun

Question Number: 7 Question Id: 4548932847 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Nodal agency to grant environmental clearance for category A project is: **Options:** 1. Ministry of Energy Ministry of Environment, Forests and Climate Change CPCB SPCB Question Number: 8 Question Id: 4548932848 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which of the following is a herbicide? **Options:** Sodium sulphate aerosol Sodium azide Sodium arsenite PAN Question Number: 9 Question Id: 4548932849 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question CITES stands for : **Options:** The Convention on Indian Trade in Endangered Species of Wild Fauna and 1 Flora The Convention on International Trade in Endangered Species of Wild 2 Fauna and Flora

- 3 The Concept of International Trade in Endangered Species
- 4 The Convention on International Trade in Endangered Species

Question Number: 10 Question Id: 4548932850 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

What are sustainable development goals number 2 & 3?

## **Options:**

- Gender quality, No poverty
- No poverty, Zero hunger
- Zero hunger, Good health and well being
- Gender quality, quality education

Question Number: 11 Question Id: 4548932851 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Definition of sustainable development has been taken from :

#### **Options:**

- Brundtland report
- 2 IPCC report
- 3 CPCB report
- 4 Kyoto report

Question Number: 12 Question Id: 4548932852 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

What fraction of the solar radiation that arrives at the top of the atmosphere is absorbed in the atmosphere?

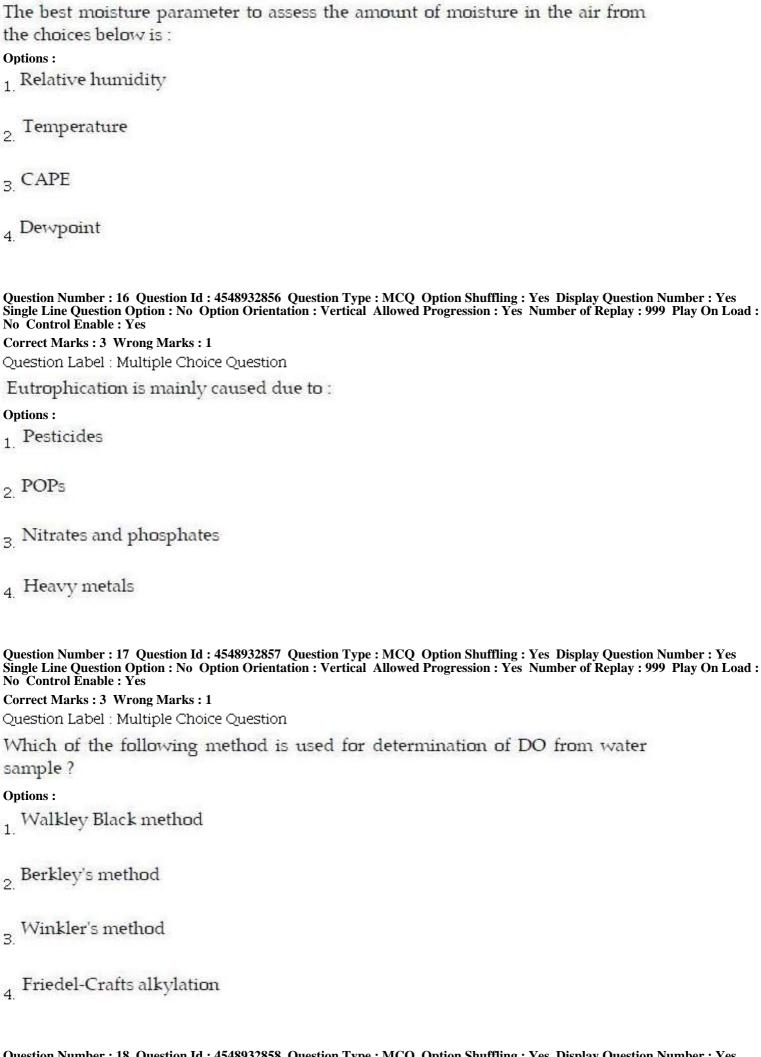
## **Options:**

70%

1.

50% 2.
30% 3.
20% 4.
Question Number: 13 Question Id: 4548932853 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question  When a taxon is facing an extremely high risk of extinction in the wild in the
immediate future, then it is called as :
Options:
1. Critically endangered
2. Endangered
3. Extinct
4. Vulnerable
Question Number: 14 Question Id: 4548932854 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Particulates (< 1μm size) remaining suspended in air indefinitely and transported
by wind currents are called :
Options:
1. smoke
2. fumes
aerosols 3.
4. mists
Question Number: 15 Question Id: 4548932855 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1

 ${\tt Question\ Label: Multiple\ Choice\ Question}$ 



Question Number: 18 Question Id: 4548932858 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Blue baby syndrome can also be caused by :
Options:
1. Iron in water
2. Nitrate in water
3. Sulphate in water
Arsenic in water
Question Number: 19 Question Id: 4548932859 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Examples of secondary pollutant is:
Options :
1. Pb
2. SO <sub>2</sub>
3. PAN
4. DDT
Question Number: 20 Question Id: 4548932860 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The father of "Green Revolution" is :
Options:
1. Norman Borlaug
2. Charles Elton
3. Eugene Odum
M. S. Swaminathan

Question Number: 21 Question Id: 4548932861 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The WHO limit of arsenic in drinking water is :
Options:
1. <sup>20</sup> ppb
2. <sup>50</sup> ppb
3. <sup>10</sup> ppb
4. <sup>5</sup> ppb
Question Number: 22 Question Id: 4548932862 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Electrostatic precipitators are used to control :
Options:
Particulate matter 1.
Sulphur dioxide 2.
Nitrogen oxides 3.
Lead 4.
Question Number: 23 Question Id: 4548932863 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Red Data book is published by :
Options:
TATIATE
1.
2. IUCN

```
BNHS
   Green Peace
Question Number: 24 Question Id: 4548932864 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The mangroves are a typical example of:
Options:
  Hydrophytes
   Mesophytes
   Xerophytes
   Halophytes
Question Number: 25 Question Id: 4548932865 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The order of increasing size of soil particles are:
Options:
Sand, silt and clay
2. Silt, sand and clay
  Clay, sand and silt
4 Clay, silt and sand
Question Number: 26 Question Id: 4548932866 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
```

Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

**Options:** 

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Which of the following have slow biodegradation?

1. Cellulose
2. Xylene
3. Protein
4. Lignin
Question Number: 27 Question Id: 4548932867 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The term "Biodiversity" is coined by :
Options:
1. E. Haeckel
2. E. Odum
3. Walter G. Rosen
4. Charles Elton
Question Number: 28 Question Id: 4548932868 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Black Foot disease is caused by:
Options:
1. Excess of Fluoride in water
2. Deficiency of Iodine in water
3. Excess of Iodine in water
4. Excess of Arsenic in water
Question Number: 29 Question Id: 4548932869 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Shannon index is a measure of :
Options:
1. Species rarity
2. Species similarity
3. Species diversity
Population structure 4.
Question Number: 30 Question Id: 4548932870 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which one of the following is non-probability sampling?
Options:
Stratified 1.
2. Cluster
Systemic 3.
4. Convenience
Question Number: 31 Question Id: 4548932871 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The Cartagena Protocol is regarding safe use, transfer and handling of :
Options:
1. Nuclear waste
2. Invasive alien species
3. Living Modified Organisms (LMOs)
Toxic by-products and industrial effluent

Question Number: 32 Question Id: 4548932872 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following is false in case of active Satellites?
Options:
1. Natural source of energy
2. Artificial source of energy
3. Obtain measurements anytime
Require fairly large amount of energy
Question Number: 33 Question Id: 4548932873 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
t-distribution is approximately normal for sample size in :
Options:
1. ≥ 30
2. ≥ 20
3. ≥15
4. ≥ 10
Question Number: 34 Question Id: 4548932874 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The Stockholm Convention signed in 2001, a global convention to protect human
health and the environment from:
Options:
1. Persistent organic pollutants (POPs)
2. Heavy metals

3. Natural disasters

4 Air pollution

Question Number: 35 Question Id: 4548932875 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Public hearing is conducted:

# **Options:**

Prior to site selection

2 Prior to approval of terms of reference

3 After preparation of EIA

4 After environmental clearance

Question Number: 36 Question Id: 4548932876 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Medha Patkar is known for :

#### **Options:**

Save Ganga Movement

2. Himalaya Bachao Andolan

3 Narmada Bachao Andolan

4 Chipko Movement

Question Number: 37 Question Id: 4548932877 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

The largest number of tiger reserves are located in :

#### **Options:**

1 Karnataka

2. West Bengal 3 Andhra Pradesh 4 Madhya Pradesh Question Number: 38 Question Id: 4548932878 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question GPS stand for : **Options:** 1 Geographical Positioning Satellite 2 Global Positioning System 3 Global Positioning Satellite 4 Ground Postal Services Question Number: 39 Question Id: 4548932879 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question World Population Day falls every year on : **Options:** 7th July 2 11th July 3 6th August 4 11th August Question Number: 40 Question Id: 4548932880 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question

Which one of the following organisms is a free living nitrogen fixer?

**Options:** 

- Rhizobium
- Azotobacter
- Frankia
- Dorylines

# Section B Life Science

**Section Id:** 45489329

**Section Number:** 2 **Section type:** Online **Mandatory or Optional:** Optional 80 **Number of Questions:** Number of Questions to be attempted: 80 **Section Marks:** 240 **Display Number Panel:** Yes **Group All Questions:** No

Sub-Section Number:

**Sub-Section Id:** 45489329 **Question Shuffling Allowed:** Yes

Question Number: 41 Question Id: 4548932881 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

'Birth rate' is the number of birth per year per :

# **Options:**

- Thousand persons
- , Hundred persons
- Ten thousand persons
- 4 Lac persons

Question Number: 42 Question Id: 4548932882 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Knock knee syndrome is caused by :
Options:
Cadmium 1.
2. Mercury
3. Arsenic
4. Fluorides
Question Number: 43 Question Id: 4548932883 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which one of the following species of mammal is listed as critically endangered?
Options:
1. Himalayan wolf
2. India Bustard
3. Pondicherry shark
4. Red-crowned roofed turtle
Question Number: 44 Question Id: 4548932884 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which one of the following is a protozoan causing water born disease?
Options:  E. Coli
2. Giardia
3. Leptospha
4. Desmodesmus

Question Number: 45 Question Id: 4548932885 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Pyrophilous is a group of fungi that grows in :
Options:
Soils of burnt areas
2. Alkaline soil
3. Saline soil
4. Alluvial soil
Question Number: 46 Question Id: 4548932886 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Permafrost is defining characteristics of which biome:
Options:
Taiga 1.
2. Tundra
Grassland 3.
4. Desert
Question Number: 47 Question Id: 4548932887 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1  Question Label : Multiple Choice Question
The Coprophilous fungi grow on :
Options:
dead leaves
2. dung
3. wood

Question Number: 48 Question Id: 4548932888 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which group of organisms are known good air pollution indicators? **Options:** hungi algae 3 bryophytes 4 lichens Question Number: 49 Question Id: 4548932889 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Frankia is associated with: **Options:** Nitrification Denitrification 3. Nitrogen fixation 4 Ammonification Question Number: 50 Question Id: 4548932890 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In succession on bare rock surface the first colonizers are: **Options:** 

Mosses

2 Foliose lichen

Crustose lichen Brown algae Question Number: 51 Question Id: 4548932891 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In a food chain, the saprophytic organisms are: **Options:** Producers Consumers 3 Predators Decomposers Question Number: 52 Question Id: 4548932892 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The characteristic seral community that develops on sand dune is specifically known as: **Options:** Hydrosere Xerosere Psammosere Lithosere Question Number: 53 Question Id: 4548932893 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question

Acetabularia acetabulum is:

**Options:** 

Multicellular fungus Marine diatom Unicellular, uninuclear algae Connecting link between green and red algae Question Number: 54 Question Id: 4548932894 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question It has been observed that bacteria secrete toxin at high population density to check the population size. This phenomenon is termed as: **Options:** Quorum sensing Population control Allelopathy 3. 4 Interspecific competition Question Number: 55 Question Id: 4548932895 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Which of the following is an example of supporting ecosystem services? **Options:** Food production Pollination 3 Ecotourism Soil formation

Question Number: 56 Question Id: 4548932896 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

With reference to productivity, consider the following statements:

# **Options:**

Primary production is defined as the amount of biomass or organic matter.

1 produced per unit area over a time period by plants during photosynthesis.

The rate of biomass production is called productivity.

Net primary productivity of an ecosystem is the rate of production of organic matter during photosynthesis.

Secondary productivity is defined as the rate of formation of new organic matter by consumers.

Question Number: 57 Question Id: 4548932897 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

All the statements are correct regarding ecological succession, except :

### **Options:**

- . It is a random process
- Species diversity increases as succession proceeds
- 3 The food chain relationships becomes more complex
- The role of decomposers becomes more and more important

Question Number: 58 Question Id: 4548932898 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

As a consequence of succession, the P/B ratio (Gross production/Standing crop biomass) is changed. It is:

# **Options:**

- High during developmental stages and low at mature stage
- Remaining unchanged at all stages

 $_3$  1 or <1 at developmental stages and approximately 1 at mature stage 4 Low during developmental stages and high at mature stage Question Number: 59 Question Id: 4548932899 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The primary producers in the marine ecosystem are: **Options:**  Eubacteria and algae Cyanobacteria and algae 3. Algae and protozoans 4 All of the three Question Number : 60 Question Id : 4548932900 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question In which of the following ecosystems, the pyramid of biomass is inverted? **Options:** Forest Grassland Pond Desert Question Number: 61 Question Id: 4548932901 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Polyclimax theory in ecology was given by : **Options:** 1. Clements

2. Odum	
3. Huxley	
4. Tansley	
Question Number: 62 Question Id: 4548932902 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Loa No Control Enable: Yes	d :
Correct Marks: 3 Wrong Marks: 1	
Question Label : Multiple Choice Question	
Which of the following is an example of in situ conservation of biodiversity?	
Options:	
1. Captive breeding	
2. Seed bank	
3. National park	
4. Pollen bank	
Question Number: 63 Question Id: 4548932903 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Loa No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1	d :
Question Label : Multiple Choice Question	
Genetically modified 'Golden Rice' is useful for food security as it is rich in :	
Options:	
1. Alpha-carotene	
2. Cellulose	
3. Beta-carotene	
4. Biotin	
Question Number: 64 Question Id: 4548932904 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Loa No Control Enable: Yes	d :
Correct Marks: 3 Wrong Marks: 1	
Question Label : Multiple Choice Question	
Trophic level refers to organism's position in :	
Options:	

1. Food chain
2. Tropics
3. Ecosystem
4. Biome
Question Number: 65 Question Id: 4548932905 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
What is the function of cellulose enzyme in nature?
Options:
1. Hydrolysis of the β-1, 4 glycosidic bonds
2. Hydrolysis of the α-1, 4 glycosidic bonds
$_{ m 3.}$ Hydrolysis of the $\gamma$ -1, 4 glycosidic bonds
4. None of the three
Question Number: 66 Question Id: 4548932906 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which among the following is <i>not</i> the part of Indo-genetic biodiversity?
Options:
Dolphins
2. Cat-fish
3. Gharials
4. Pirhanas
Question Number: 67 Question Id: 4548932907 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Question saver : transper onoice Question

Which one of the following is nonreducing sugar?
Options:
1. Cellobiose
Maltose 2.
3. Sucrose
Lactose 4.
Question Number: 68 Question Id: 4548932908 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
On hydrolysis, the maltose gives :
Options:
Glucose and fructose
Only fructose
3. Only glucose
4. Glucose and galactose
Question Number: 69 Question Id: 4548932909 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which of the following pairs gives positive Tollen's test?
Options:
Glucose, Sucrose
Hexanal, Acetophenone
Glucose, Fructose
4. Fructose, Sucrose

Question Number: 70 Question Id: 4548932910 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question In food chain, how much potential energy of food is lost during transfer from one trophic level to another trophic level? **Options:** 1. 80-90 per cent 2 70-80 per cent 60-70 per cent 50-60 per cent Question Number: 71 Question Id: 4548932911 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which is an example of sedimentary cycle? **Options:** Nitrogen cycle 2 Water cycle 3 Carbon cycle Phosphorus cycle Question Number: 72 Question Id: 4548932912 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which of the following method is commonly used for measuring net primary productivity of aquatic ecosystem? **Options:** Harvest method 2. Oxygen measurement method

Chlorophyll method Carbon dioxide flux measurement method Question Number: 73 Question Id: 4548932913 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The increase in concentration of toxic chemicals in organisms at successive trophic level in the ecosystem is termed as : **Options:** Eutrophication Bioaccumulation 3. Biomagnification Bioremediation Question Number: 74 Question Id: 4548932914 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The hypothesis that 'succession is linear, orderly, predictable and developmental' was given by : **Options:** 1. Egler Clements Tansley 4 Gleason

Question Number: 75 Question Id: 4548932915 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Valley of flowers national park is located in :

**Options**:

1. Uttar Pradesh 2 Uttarakhand 3 Himachal Pradesh 4 Sikkim Question Number : 76 Question Id : 4548932916 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question distinctive units of relatively homogeneous ecology, biome representation and community and species composition are called: **Options:** Biosphere reserves 2 Sanctuaries Biogeographic zones 4. National parks Question Number: 77 Question Id: 4548932917 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Match the following correctly: (a) Bateleur Bir Indian Subcontinent (2) Amazon Basin (b) Bison (c) Piranhas (3) Africa (d) Bustard (4) North America **Options:** 1. a-3, b-4, c-2, d-1 2. a-2, b-1, c-3, d-4 a-4, b-3, c-1, d-2

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

Question Number : 78 Question Id : 4548932918 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Corals thrive in :

# **Options:**

, Arctic zone

2 Tropical zone only

3 Tropical and equatorial zones

Temperate climates

Question Number: 79 Question Id: 4548932919 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

The temperate grassland biome is commonly known as :

# **Options:**

1. Steppe in Central Asia

2 Prairie in North America

Reld in South America

4 Tundra in North America

Question Number: 80 Question Id: 4548932920 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The largest food grain producer country in the world is:

# **Options:**

1. Brazil

2. Japan

India China Question Number: 81 Question Id: 4548932921 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Who among the following is known as real founder of human geography? 1. Griffith Taylor Frederick Ratzel 3 Vidal de Lablache 4 Jean Brunhes Question Number: 82 Question Id: 4548932922 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Munda tribe is mostly found in : **Options:** 1. Uttar Pradesh Jharkhand 3 Odisha 4 Bihar Question Number: 83 Question Id: 4548932923 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The ratio of gross cropped are to the net area sown expressed in per centage is known as: **Options:** 1. capability of cropping

2. intensity of cropping pattern of cropping 4 land of capacity Question Number: 84 Question Id: 4548932924 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Based on geographical and agricultural regions, the planning commission of India has divided the country into the following number of geo-ecological regions: **Options:** 1. 10 2 12 3. <sup>15</sup> 4 17 Question Number: 85 Question Id: 4548932925 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Red soils in tropical regions are formed by : **Options:** Weathering of iron bearing metamorphic rocks Weathering of igneous rock Weathering of basaltic rocks 4 Leaching out top layer of soil Question Number: 86 Question Id: 4548932926 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes

Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

Question Label: Multiple Choice Question

The inhabitants of Nicobar Islands belong to this race:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Options:
Caucasoid
2. Astroloid
3. Mongoloid
4. Proto-astroloid
Question Number: 87 Question Id: 4548932927 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Sectoral growth model is related to :
Options:
1. Compact settlement
2. Scattered settlement
3. Fragmented settlement
4. Linear settlement
Question Number: 88 Question Id: 4548932928 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Red and yellow soils predominate in :
Options:
1. North - West Odisha
2. South - West Odisha
3. Eastern Odisha
4. North - East Odisha
Question Number: 89 Question Id: 4548932929 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question

Mangroves are abundant along:
Options:
1. West Bengal coast
2. Tamil Nadu coast
3. Maharashtra coast
4. Gujarat coast
Question Number: 90 Question Id: 4548932930 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Service of the servic
Which of the following is an example of lagoonal lake?
Options:  Chilika  1.
2. Wular
3. Sambhar
4. Lonar
Question Number: 91 Question Id: 4548932931 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Semi arid and Steppe climate is found in :
Options:
Parts of Karnataka and Maharashtra
2. Tamil Nadu
3. Madhya Pradesh
4. Odisha
Question Number: 92 Question Id: 4548932932 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question
Value of the variate which has the maximum frequency is :
Options:
1. Mode
2. Median
3. Mean
4. Both Median and Mean
Question Number: 93 Question Id: 4548932933 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
In compensation point, the light intensity at which photosynthesis and
respiration are:
Options:
1. High
2. Low
3. Medium
4. Equal
Question Number: 94 Question Id: 4548932934 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Connect Marks 4.3. Wrong Marks 4.1.
Correct Marks : 3 Wrong Marks : 1  Question Label : Multiple Choice Question
Aerenchymatous cells are present in :
Options:
Xerophytes 1.
2. Mesophytes
3. Hydrophytes
4. Heliophytes

Question Number: 95 Question Id: 4548932935 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1
Question Label : Multiple Choice Question
Holophytes plants are the indicators of :
Options:
1. Acidic habitat
2. Saline habitat
3. Neutral habitat
4. Marginal habitat
Question Number: 96 Question Id: 4548932936 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1
Question Label : Multiple Choice Question
Shelford's law of tolerance indicates :
Options:
1. Law of maximum
2. Law of minimum
3. Law of average frequency
4. Law of high frequency
Question Number: 97 Question Id: 4548932937 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1
Question Label : Multiple Choice Question
Profundal zones in aquatic systems are :
Options:
1. Upper zone, less productive
2. Upper zone, more productive
3. Middle zone, middle productive
Bottom zone, less productive

Question Number: 98 Question Id: 4548932938 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
At ecosystem level, the ability to resist change is called:
Options:
1. resilience
2. restoration
3. conservation
4. rehabilitation
Question Number: 99 Question Id: 4548932939 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Ecological niche is a :
Options:
1. Structural role
2. Functional role
3. Habitat role
4. Habit role
Question Number: 100 Question Id: 4548932940 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
In traditional decision making processes, social, economic and environmental
issues were addressed :
Options:
Independently 1.
Dependently 2.
Top-down 3.

Middle-down

Question Number: 101 Question Id: 4548932941 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The range of environmental conditions within which a species shows its characteristic potential of growth is known as:

#### **Options:**

1. Ecological amplitude

2 Ecological zone

3. Ecological region

4 Ecological distribution

Question Number: 102 Question Id: 4548932942 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The middle phase of population growth is called:

# **Options:**

Lag phase

2 Log phase

3. Initial phase

4 End phase

Question Number: 103 Question Id: 4548932943 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The growth form of dominant species are:

#### **Options:**

Major category

2. Minor category
3. Neutral category
4. Changing category
Question Number: 104 Question Id: 4548932944 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The transient region between two adjacent ecotype is:
Options:
1. Ecocline
2. Ecovegetation
Ecodevelopment 3.
4. Ecofield
Question Number: 105 Question Id: 4548932945 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Only one climax community in a climatic region is known as :
Options:
1. Monoclimax theory
2. Polyclimax theory
3. Continum theory
4. Discontinum theory
Question Number: 106 Question Id: 4548932946 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1  Question Label : Multiple Choice Question
The amount of inorganic materials in an ecosystem at any time is:
The amount of morganic materials in an ecosystem at any time is .

1. Standing crop Standing state 3 Standing biomass Standing vegetation Question Number: 107 Question Id: 4548932947 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In a multilayered plant community whose upper stratum is dominated by a single species, is known as: **Options:** Compensation Association 2. 3. Sociability Consociation Question Number: 108 Question Id: 4548932948 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Malthusian population growth is to know: **Options:** Qualitative population Quantitative population Sequential population Migratory population

Question Number: 109 Question Id: 4548932949 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question IVI is equal to: **Options:**  $_{1.}$  RF + RD + RD<sub>0</sub> RM + RR + RA $_{3}$  RO + RF + RD  $_{4}$  RN + RM + RA Question Number: 110 Question Id: 4548932950 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Hyperplasia means: **Options:** Excessive motility of a muscle Voracious eating Abnormal increase in number of cells An increase in size of a cell Question Number: 111 Question Id: 4548932951 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Sodium is usually estimated by which of the following analytical technique? **Options:** Flame photometry 2. Colourimetry

3 High pressure liquid chromatography Visible spectrophotometry Question Number: 112 Question Id: 4548932952 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Which combination of the following elements constitutes a major portion of earth crust? **Options:** Oxygen and silicon Oxygen and iron Silicon and iron Aluminium and iron Question Number: 113 Question Id: 4548932953 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Group of individuals of the same species that share common attributes are called: **Options:** Community Population Ecotype Society Question Number: 114 Question Id: 4548932954 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which one of the following is the correct food chain?

# **Options:** Algae -> Daphnia -> Dragon fly nymph -> Newt -> Grass snake Daphnia -> Dragon fly nymph -> Newt -> Algae -> Grass snake Grass snake -> Newt -> Dragon fly nymph -> Daphnia -> Algae Newt -> Grass snake -> Dragon fly nymph -> Algae -> Daphnia Question Number: 115 Question Id: 4548932955 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Bacterial decomposition of biological material under aerobic condition is: **Options:** Fermentation Fertilization Contamination Composting Question Number: 116 Question Id: 4548932956 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The chemical that is used to ripen mangoes is: **Options:** Calcium sulphide Calcium carbide Calcium carbonate Calcium chloride

Question Number: 117 Question Id: 4548932957 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Organisms that generate energy using light are :
Options:
Oligotrophs
1.
2. Chaemorganotrophs
3. Chaemolithotrophs
Photoautotrophs 4.
Question Number: 118 Question Id: 4548932958 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Oxidation of glucose with nitric acid gives:
Options:
Gluconic acid 1.
2. Glucaric acid
Glucoside 3.
4. Glycollic acid
Question Number: 119 Question Id: 4548932959 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Pyridine can be synthesized by :
Options:
1. Skraup synthesis
2. Hantzsch synthesis

3. Madelung synthesis

# Bischler-Napieralski synthesis

Question Number: 120 Question Id: 4548932960 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Fossils of which of the following groups of animals are mostly found preserved in black carbonaceous shales?

#### **Options:**

- 1. Nummulites
- Echinoids
- 3. Graptolites
- 4 Trilobites

# Section B Physical

**Section Id:** 45489330 **Section Number:** 3 **Section type:** Online **Mandatory or Optional:** Optional 80 **Number of Questions: Number of Questions to be attempted:** 80 **Section Marks:** 240 Yes **Display Number Panel: Group All Questions:** No

**Sub-Section Number:** 

**Sub-Section Id:** 45489330 **Question Shuffling Allowed:** Yes

Question Number: 121 Question Id: 4548932961 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Photovoltaic effect was first discovered in ..... by ........

#### **Options:**

1839; Edmond Becquerel

2 1897; Joseph John Thomson 1835; Edmond Becquerel 1898; Joseph John Thomson Question Number: 122 Question Id: 4548932962 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question A bubble rising in a glass of coke is synonymous with: **Options:** Forced dynamic lifting 2 Instability release Convective inhibition 4 Negative buoyancy Question Number: 123 Question Id: 4548932963 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The percent that the air is saturated with respect to water vapor describes: **Options:** Mixing ratio 2 Relative humidity 3. Dewpoint 4 Absolute humidity Question Number: 124 Question Id: 4548932964 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question

Lorenz curve has:

Cumulative percentage Exponential percentage Simple percentage 4 Both Cumulative percentage and Exponential percentage Question Number: 125 Question Id: 4548932965 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which of the following reasons explains why the stratosphere is absolutely stable? **Options:** Air temperatures are too cold Air pressure is too low The absorption of radiant energy by ozone The wind speed is too strong Question Number: 126 Question Id: 4548932966 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Karl Pearson's coefficient of correlation method of measuring correlation is: **Options:** Graphic 2 Mathematical Positional All of the three Question Number: 127 Question Id: 4548932967 Question Type: MCQ\_Option Shuffling: Yes\_Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question
The scale of temperature, on which the temperatures are only positive is:
Options:
Fahrenheit 1.
2. Celsius
3. Kelvin
4. Reumer
Question Number: 128 Question Id: 4548932968 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
If a big drop of water is broken into smaller drops, the surface energy :
Options:
Decreases 1.
2. Increases
3. Remains unchanged
Can increases as well as decreases
Question Number: 129 Question Id: 4548932969 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The velocity profile of a viscous liquid, flowing through a capillary tube of
circular cross section, is :
Options:
1. Cylindrical
2. Circular
3. Hyperbolic

4. Parabolic

Question Number: 130 Question Id: 4548932970 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

According to Wien's law, a star which appears blue will be :

#### **Options:**

Very cold

Colder than the sun

3. As hot as sun

Hotter than the sun

Question Number: 131 Question Id: 4548932971 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The most important characteristics of a laser is :

# **Options:**

. Polarization

Coherence

High intensity

Directionality

Question Number: 132 Question Id: 4548932972 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Raman effect occurs because of :

#### **Options:**

1. Elastic collisions

2. Inelastic collisions Nuclear collisions 4 No collisions Question Number: 133 Question Id: 4548932973 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question As per Ampere's law, the line integral of the magnetic field around a closed path is equal to: **Options:** The charge enclosed The current enclosed The energy enclosed 4 The flux enclosed Question Number: 134 Question Id: 4548932974 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The value of current at resonance in series LCR circuit is affected by the value of: **Options:** R only C only 3 Lonly 4 R, C and L Question Number: 135 Question Id: 4548932975 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which of the following techniques is concerned with ultrasonic waves?
Options:
1. X-ray photography
2. Sonography
3. CATSCAN
4. ECG
Question Number: 136 Question Id: 4548932976 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Which of the following is a coordination compound?
Options:  1. KCl
2. $K_2 SO_4 . Al_2 (SO_4)_3 . 24H_2 O$
3. $[Fe(CN)_6]^{3-}$
4. KSCN
Question Number: 137 Question Id: 4548932977 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following has smallest ionic radius?
Options:  1. $Fe^{3+}$
2. Fe <sup>4+</sup>
$_{3.}$ $Fe^{+}$
$_{4.}$ $Fe^{2+}$

Question Number: 138 Question Id: 4548932978 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following ions forms coloured complexes?
Options:
$1. Vo^{2+}$
2. Cu <sup>+</sup>
$3. Zn^{2+}$
4. $Ti^{4+}$
Question Number: 139 Question Id: 4548932979 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The number of unpaired electrons in a diamagnetic compound is:
Options:
1. 3
2. 1
3. <sup>4</sup>
4. 0
Question Number: 140 Question Id: 4548932980 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The purple colour of $KMnO_4$ solution is due to the :
Options:
d-d transition
2. Charge transition
3. f-f transition

4 d-f transition

Question Number: 141 Question Id: 4548932981 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Nylon is a:

#### **Options:**

1 Addition polymer

2 Free radical chain polymer

Condensation polymer

4 Natural polymer

Question Number: 142 Question Id: 4548932982 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The reaction of chlorobenzene with methylchloride in presence of sodium metal gives Toluene, is a:

#### **Options:**

1. Wurtz reaction

Friedel-Craft reaction

3 Kolbe's reaction

4. Wurtz-Fitting reaction

Question Number: 143 Question Id: 4548932983 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Half life period of a second order reaction is:

#### **Options:**

Directly proportional to initial concentration

- Inversely proportional to initial concentration
- Inversely proportional to square of initial concentration
- Independent of initial concentration

Question Number: 144 Question Id: 4548932984 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

The unit of rate constant for a zero order reaction:

# **Options:**

- 1 Mole litre<sup>-1</sup>time<sup>-1</sup>
- $_2$  mole<sup>-1</sup>litre time<sup>-1</sup>
- 3 Mole<sup>-1</sup>litre<sup>2</sup>time<sup>-1</sup>
- $_{4}$  time<sup>-1</sup>

Question Number: 145 Question Id: 4548932985 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

In a monoclinic system :

#### **Options:**

$$a = b = c$$
,  $\alpha = \beta = \gamma = 90^{\circ}$ 

$$a \neq b \neq c$$
,  $\alpha = \beta = \gamma = 90^{\circ}$ 

a = 
$$b \neq c$$
,  $\alpha = \beta = \gamma \neq 90^{\circ}$ 

$$a \neq b \neq c$$
,  $\alpha = \beta = \gamma = 90^{\circ}$ ,  $\beta \neq 90^{\circ}$ 

Question Number: 146 Question Id: 4548932986 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Unit of Vander Waal's constant 'a' is :

- $_{1.}$  work  $K^{-1}$   $mol^{-1}$
- $_{2.}$  atm-litre $^{2}$  mol $^{-2}$
- $_{\rm 3.}$  litre- ${\rm mol}^{-1}$
- $_4$  atm-litre $^{-1}$ mol $^{-1}$

Question Number: 147 Question Id: 4548932987 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Which of the following electronic configuration is in accordance with Hund's rule?

**Options:** 

$$1. \frac{1s^2 2s^2 2p_x^2 2p_y^1 2p_z^0}{1}$$

2. 
$$1s^2 2s^2 2p_x^2 2p_y^{-1} 2p_z^{-1}$$

3. 
$$1s^2 2s^2 2p_x^2 2p_y^1 2p_z^3$$

4. 
$$1s^2 2s^2 2p_x^2 2p_y^2 2p_z^0$$

Question Number: 148 Question Id: 4548932988 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

A process is carried out at constant volume and at constant entropy. It will be spontaneous if:

$$1. \Delta U < 0$$

$$_2$$
.  $\Delta G < 0$ 

$$_{\rm 3.}\,\Delta\,H<0$$

$$_{4.}$$
  $\Delta A < 0$ 

Question Number: 149 Question Id: 4548932989 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following compounds has the highest boiling point?
Options:
1. Methane
2. Ethane
3. Ethanol
4. Dimethyl ether
Question Number: 150 Question Id: 4548932990 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following is a tetrabasic acid?
Options:
1. Orthophosphoric acid
2. Orthophosphoric acid
3. Metaphosphoric acid
4. Pyrophosphoric acid
Question Number: 151 Question Id: 4548932991 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which of the elements listed below occurs in allotropic forms?
Options:
1. Iodine
1. Todate
2. Copper
3. Sulphur

4. Silver

Question Number: 152 Question Id: 4548932992 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The temperature of the system decreases in an :

## **Options:**

Adiabatic compression

2 Isothermal expansion

3 Isothermal compression

Adiabatic expansion

Question Number: 153 Question Id: 4548932993 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Which of the following acids is used in baking powder?

#### **Options**:

, Oxalic acid

. Citric acid

5 Tartaric acid

4 Lactic acid

Question Number: 154 Question Id: 4548932994 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

What is the name of the phase transition that occurs when a solid is converted directly into a gas (without going through the liquid phase)?

#### **Options:**

Melting

```
Boiling
   Condensing
   Sublimation
Question Number: 155 Question Id: 4548932995 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
If the frequency curve has a longer tail to the right, skewness will be:
Options:
   Negative
2 Zero
  Positive
4 Uncertain
Question Number: 156 Question Id: 4548932996 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Normal gravity:
Options:
  Is negative in continental areas and positive in oceanic areas
   Is negative in oceanic areas and positive in continental areas
Is very high in continental areas
4 Is very low in oceanic areas
Question Number: 157 Question Id: 4548932997 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Mass wasting fundamentally needs:
```

1. Slope
2. Water
3. Gravity
4. Wind
Question Number: 158 Question Id: 4548932998 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Geometric average can be simplified by :
Options:
1. Change of origin
2. Change of scale
Both Change of origin and Change of scale
4. Change of area
Question Number: 159 Question Id: 4548932999 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Tropopause, stratopause and mesopause are :
Options:
1. Sharp boundaries
2. Definite boundaries
3. Transitional boundaries
4. Indefinite boundaries
Question Number: 160 Question Id: 4548933000 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question Generally in a wave water, particles/molecules move: Along with trough and crest of the wave Vertically up and down 3 In circles Horizontally Question Number: 161 Question Id: 4548933001 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Waves break: **Options:** 1. When the depth of water is less than half the wavelength 2 When the depth of water is exactly the same as the wavelength 3 When the depth of water is more than the wavelength In shallow sease Question Number: 162 Question Id: 4548933002 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Thermocline in seas is normally observed: **Options:** Between 2000-3000 m depth Between 1000-2000 m depth Between 0-200 m depth Between 200-1000 m depth

Question Number: 163 Question Id: 4548933003 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Air pressure away from the surface of the earth :
Options:
Increases exponentially 1.
2. Decreases exponentially
3. Decreases uniformly
4. Increases uniformly
Question Number: 164 Question Id: 4548933004 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
This body reflects radiation well:
Options:
1. Fresh snow
2. Clouds
3. Water
4. Dry white sand
Question Number: 165 Question Id: 4548933005 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Scattering is more :
Options:
1. In blue radiation
2. In green radiation

In red radiation In infrared radiation Question Number: 166 Question Id: 4548933006 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The concept of neo-determinism was put forward by : **Options:** Vidal de Lablache Griffith Taylor Al-Masudi 4 Elsworth Huntington Question Number: 167 Question Id: 4548933007 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Urban heat island studies are part of : **Options:** Pure climatology Pure meteorology Applied geography Weather data collection

Question Number: 168 Question Id: 4548933008 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks : 3 Wrong Marks : 1

Question Label: Multiple Choice Question

When a plane electromagnetic wave propagates in a linear, isotropic, dielectric medium, the electric field E and magnetic field H vectors are:

- 1 Parallel to each other 2 Mutually perpendicular to each other
- At an angle of 45°
- None of the three

Question Number: 169 Question Id: 4548933009 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

For propagation of Em waves with minimum attenuation in microwave frequency range the system used is:

#### **Options:**

- Parallel wire transmission line
- 2. Parallel plate transmission line
- Rectangular wave guide
- 4. Co-axial cable

Question Number: 170 Question Id: 4548933010 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The amplitude of electric field component of sinusoidal plane wave having impedance 377 ohm in free space is 20 V/m. The power per square meter carried by the wave is:

- $0.53 \, \text{W/m}^2$
- 2.53 W/m<sup>2</sup>
- 3.77 W/m<sup>2</sup>

Question Number: 171 Question Id: 4548933011 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The extended Ampere's law equation can be expressed as:

# **Options:**

$$\nabla \times H = J$$

$$\nabla \times H = J + \partial D/\partial T$$

$$\nabla \times E = -\partial B/\partial T$$

$$\nabla \cdot (E \times H)$$

Question Number: 172 Question Id: 4548933012 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Which one of the following Maxwell's equation implies the absence of magnetic monopolo?

#### **Options:**

$$\int_{1} \operatorname{div} D = \rho$$

and 
$$A = 0$$

3. 
$$\operatorname{curl} E = -\frac{\partial B}{\partial T}$$

$$_{4} \operatorname{curl} H = J + \partial D / \partial T$$

Question Number: 173 Question Id: 4548933013 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

For the dominant mode in a rectangular wave guide (a > b/2) having lowest cut off wavelength is obtained in the mode :

3. TE<sub>10</sub>

TM10

Question Number: 174 Question Id: 4548933014 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Characteristic impedance of two wire transmission line will depend upon :

#### **Options:**

Capacitance between two wire

Separation between two wires and diameter of wire

- Mutual inductance between two wires
- Resistance of the wire

Question Number: 175 Question Id: 4548933015 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Transmission line used in MHz frequency is a distributed system because:

#### **Options:**

- Wavelength of signal wave is less than the dimension of the system
- 2 Wavelength of signal wave is greater than the dimension of the system
- Navelength of signal wave is exactly equal to the dimension of the system
- Velocity of wave is same as velocity of light

Question Number: 176 Question Id: 4548933016 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The relative magnitude of vector H in a plane wave is 1 A/m. The magnitude of electric vector E for a plane wave in free space is :

- 1. 377 V/m
- 2. 37.7 V/m
- 3. 1 V/m
- 4 3.77 V/m

Question Number: 177 Question Id: 4548933017 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

C 136 1 2 37

Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question

The phase velocity  $v_p$  and group velocity  $v_g$  of a EM wave through a dispersive medium is given by :

**Options:** 

$$v_g = v_p + \lambda \, dv_p / d\lambda$$

$$v_g = v_p - \lambda \, dv_p / d\lambda$$

$$v_{g} = v_{p} - dv_{p} / d\lambda$$

$$v_{\mathfrak{g}} = v_{\mathfrak{p}} - d^2 v_{\mathfrak{p}} / d\lambda^2$$

Question Number: 178 Question Id: 4548933018 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

An n type semiconductor is formed by adding impurity atoms of :

- Phosphorous, antimony or arsenic
- Aluminium, boron or indium
- Cobalt, aluminium or selenium
- Aluminium, boron or selenium

Question Number: 179 Question Id: 4548933019 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
When a reverse voltage increases from 5 V to 10 V in a semiconductor diode,
the depletion layer:
Options:
1. Become smaller
2. Become larger
3. Become unaffected
4. Breakdown
Question Number: 180 Question Id: 4548933020 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The conduction electron have more mobility than holes because they:
Options:
Are lighter 1.
Have negative charge 2.
3. Experiences collision less frequently
Needs less energy to move them
Question Number: 181 Question Id: 4548933021 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The breakdown does not destroy a zener diode provided the zener current is
less than the :
Options:
1. Breakdown voltage
Zener test current

Maximum zener current rating 4 Barrier potential Question Number: 182 Question Id: 4548933022 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The rms value of full wave rectified waveform is: **Options:** 0.636 times the peak value 0.707 times the peak value  $_3$  0.5 times the peak value 4 0.373 times the peak value Question Number: 183 Question Id: 4548933023 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which power supply is called a better power supply, if voltage regulation is: **Options:** 1. 5% 20% 3. 50% 4 100% Question Number: 184 Question Id: 4548933024 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Transistor is a: **Options:** Voltage controlled device

- 2 Current controlled device
- 3 Both voltage and current controlled device
- 4. None of the three

Question Number: 185 Question Id: 4548933025 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

When transistor is operating in active region, collector junction is:

**Options:** 

Reversed biased for npn transistor only

- 2 Reversed biased for pnp transistor only
- 3 Forward biased for both pnp and npn transistor
- A Reversed biased for both pnp and npn transistor

Question Number: 186 Question Id: 4548933026 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

The relation between current gains  $\beta$  and  $\alpha$  of a transistor is :

**Options:** 

$$_1$$
  $\beta = \alpha/(1+\alpha)$ 

$$_{2}$$
  $\beta = \alpha/(1-\alpha)$ 

$$\beta = (1 + \alpha)/\alpha$$

$$_{4.}$$
  $(1-\alpha)/\alpha$ 

Question Number: 187 Question Id: 4548933027 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

In an RC coupled amplifier, the reduction in voltage gain in the high frequency range results due to:

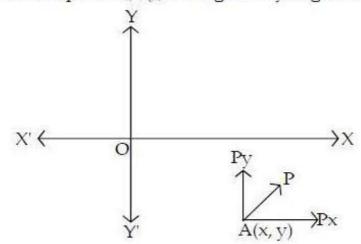
- Coupling capacitor
- Shunt capacitance in the circuit
- Series capacitance in the circuit
- 4 Bypass capacitor in the inter circuit

Question Number: 188 Question Id: 4548933028 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Fit a force P acts at point A(x, y) of a rigid body as given in the following figure :



The coordinates of the point A is considered with reference to rectangular axes OX and OY through a given point O. If the force P resolved into two forces Pxand Py parallel to the coordinate axes, then the force P at A is equivalent to forces Px and Py at O along OX and OY, respectively and a couple of moment:

# **Options:**

$$P_y \cdot x - P_x \cdot y$$

2. 
$$P_x \cdot y + P_y \cdot x$$

$$P_x \cdot x - P_y \cdot y$$

$$x \cdot y + P_x \cdot P_y$$

Question Number: 189 Question Id: 4548933029 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The input impedance of an amplifier of an amplifier increases by the introduction of feedback. It is due to :
Options:
1. Positive feedback
2. Current series negative feedback
3. Current shunt negative feedback
4. Voltage shunt negative feedback
Question Number: 190 Question Id: 4548933030 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
The moment of the force $\overline{F}(1,2)$ at $(2,1)$ about a point $(3,-4)$ is :
Options:
17
2. 2
32
4. 7
Question Number: 191 Question Id: 4548933031 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Forces equal to $3P$ , $7P$ and $5P$ act along the sides $AB$ , $BC$ and $CA$ of an equilateral triangle $ABC$ . The magnitude of resultant force is:
Options:
1. $\sqrt{21}P$
$_{2.}$ $\sqrt{3}$ $P$
3. <sup>3</sup> P
4. $\sqrt{12} P$

Question Number: 192 Question Id: 4548933032 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

A particle is moving with SHM and while making an excursion from one position of rest to the other, its distances from the middle point of its path at three consecutive seconds are observed to be  $x_1$ ,  $x_2$ ,  $x_3$ . The time of complete revolution is:

# **Options:**

$$2\pi/\cos\left(\frac{x_1+x_2}{2x_3}\right)$$

$$2\pi/\cos\left(\frac{x_1+x_3}{2x_2}\right)$$

$$2\pi/\cos^{-1}\left(\frac{x_1+x_2}{2x_3}\right)$$

$$2\pi/\cos^{-1}\left(\frac{x_1 + x_3}{2x_2}\right)$$

Question Number: 193 Question Id: 4548933033 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The orthogonal trajectories of the system of curves  $\left(\frac{dy}{dx}\right)^2 = \frac{a}{x}$  is:

#### **Options:**

$$9a(y+c)^2 = 4x^3$$

2. 
$$81a^2(y+c)^2 = 16x^3$$

$$_{3}$$
 9a(y+c) =  $x^{3}$ 

$$4. \ 9a(y+c)^2 = 16x^3$$

Question Number: 194 Question Id: 4548933034 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Solution of the integral equation  $y(t) - \int_{0}^{t} y(x) \sin(t-x) dx = t$  is:

**Options:** 

$$y(t) = t + \frac{t^3}{6}$$

$$y(t) = t + 2t^2$$

$$y(t) = t + \frac{t^5}{120}$$

$$y(t) = t + \frac{t^4}{24}$$

Question Number: 195 Question Id: 4548933035 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The parametric equation of the hyperbola is:

**Options:** 

$$x = a \sin \phi, y = b \sin \phi$$

$$x = a \sec \phi, y = b \tan \phi$$

$$x = a \cos \phi, y = b \cos \phi$$

$$x = a \sin \phi, y = b \sin \phi$$

Question Number: 196 Question Id: 4548933036 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The general equation of a cone containing the axes is:

$$\int yz + gzx + hxy = 0$$

2. 
$$fx^2 + gy^2 + hz^2 = 0$$

3. 
$$fyz + gzx + hxy = 1$$

$$fxy + (gzx + hyz)^2 = 0$$

Question Number: 197 Question Id: 4548933037 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Through any point in space, in general how many normals can be drawn to a paraboloid?

## **Options:**

1. Two

Six

3. Five

4 Four

Question Number: 198 Question Id: 4548933038 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Isomers those differ in configuration at asymmetric carbon due to hemiacetal ring formations are known as:

#### **Options:**

Conformers

2 Epimers

<sub>a</sub> Anomers

Tautomers

Question Number: 199 Question Id: 4548933039 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

**Correct Marks: 3 Wrong Marks: 1** 

Question Label: Multiple Choice Question

Which one of the following phenols is used to	o the synthesis of fluorescence ?
Options:	
p-Methoxyphenol	
1.	
Catachal	
2. Catechol	
3 Resorcinol	
4 Hydroguinone	
4.	
Question Number 200 Question Id : 4548033040 Question Tyr	be: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical	Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable : Yes Correct Marks : 3 Wrong Marks : 1	
Question Label : Multiple Choice Question	
	-tl
Which one of the following pairs is <i>not</i> corre	ctly matched ?
Options:	
Ketene – Wolf rearrangement	
2. Isocyanate – Curtius reaction	
2.	
3. Carbanion – Baeyer Villiger oxidati	on
4. Carbocation – Pinacol - Pinacolone re	earrangement
4.	
Sect	tion B Earth Science
Section Id:	45489331
Section Number :	4
Section type :	Online
Mandatory or Optional:	Optional
Number of Questions:	80
Number of Questions to be attempted:	80
Section Marks:	240
Display Number Panel:	Yes
Group All Questions:	No
Sub-Section Number:	1
Sub-Section Id:	45489331
Question Shuffling Allowed:	Yes
0 4 1 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4	1.00 0 0 0 00 00 V DI 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
<b>Question Number : 201 Question Id : 4548933041 Question Typ Single Line Question Option : No Option Orientation : Vertical</b>	pe: MCQ Option Shuffling: Yes Display Question Number: Yes Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable : Yes	g

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question
Which of the following has the highest albedo and thus more reflected solar radiation?
Options:
1. Fresh snow
2. Grass
3. Water
4. Blacktop
Question Number: 202 Question Id: 4548933042 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which of the following is not a primary "control" of climate?
Options: Altitude 1.
2. Latitude
3. Daily weather
4. Ocean currents
Question Number: 203 Question Id: 4548933043 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Liquefied petroleum gas (LPG) is composed of :
Options:
1. Methane + Propane
2. Butane + Propane
3. Methane + Butane
4. Methane + Acetylene

Question Number: 204 Question Id: 4548933044 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Many of the world's desert regions are located:
Options:
1. Just north and south of the equator
2. West coast region along the Tropic of Capricorn and Cancer
3. At 60° North and 60° South
4. On the east coast of most continents
Question Number: 205 Question Id: 4548933045 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
This occurs when the downstream wind speeds are faster than the upstream
wind speeds:
Options:
Rising air
2. Sinking air
3. Convergence
4. Divergence
Question Number: 206 Question Id: 4548933046 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
A wind from 135 degrees is a :
Options:
Northeast 1.
2. Northwest
3. Southeast

Question Number: 207 Question Id: 4548933047 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

A large scale region of clockwise spinning air that tends to bring a lack of precipitation is a(n):

## **Options:**

- Cyclone
- 2. Anticyclone
- Vorticity max
- 4 Jet streak

Question Number: 208 Question Id: 4548933048 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

IPCC was set up by :

### **Options:**

- 1. WMO
- 2 UNEP
- 3. IUCN
- 4 Both WMO & UNEP

Question Number: 209 Question Id: 4548933049 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

When comparing the moisture content in the air between two locations, it is best to use?

# **Options:**

The dew point temperature

2 The wet bulb temperature Relative humidity The dry bulb temperature Question Number: 210 Question Id: 4548933050 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question On the global scale, the pressure gradient force points from the equator toward the pole in the middle latitudes. What force causes this wind to be deflected from the path of motion to create the typically west to east flowing jet stream aloft in the middle latitudes? **Options:** Friction Centripetal Gravity 4 Coriolis Question Number: 211 Question Id: 4548933051 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which of the following gas has the highest residence time in Atmosphere? **Options:** 1. Methane 2 HFC-32 3 HFC-134 4 Nitrous Oxide

Question Number: 212 Question Id: 4548933052 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The Paris Agreement is an agreement within the United Nations Framework dealing with:
Options:
1. Tuberculosis and Asthma
2. Regulation of POPs
3. Hazardous substances
4. Greenhouse gas emissions mitigation, adaptation and finance
Question Number: 213 Question Id: 4548933053 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which of the following is the most abundant element in the Lithosphere?
Options:
1. Oxygen
2. Chromium
3. Aluminium
4. Zinc
Question Number: 214 Question Id: 4548933054 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question
India has the world's fourth largest reserve of :
Options:
1. Coal
2. Iron Ore
3. Mica
4. Bauxite
Question Number: 215 Question Id: 4548933055 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Question Label: Multiple Choice Question
Nuclear fuel present in abundant supply in the ocean is :
Options:  1. Plutonium
2. Uranium
3. Deuterium
4. Thorium
Question Number: 216 Question Id: 4548933056 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
What is global warming potential of Methane for 20 years time horizon is?
Options:
1. 56
2. 21
3. 18
4. 24
Question Number: 217 Question Id: 4548933057 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Which of the following cycles is a sedimentary cycle?
Options:
1. Sulphur cycle
2. Oxygen cycle
3. Nitrogen cycle
4. Carbon cycle

Question Number: 218 Question Id: 4548933058 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The type of vegetation in climate having temperature range 5–20°C and rainfall 150-300 cm will be :
Options:
Temperate deciduous
2. Temperate evergreen
3. Taiga
4. Grasslands
Question Number: 219 Question Id: 4548933059 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
India's first satellite is:
Options:  Aryabhatta  1.
2. Chandrayaan-1
3. Kalpana
4. INSAT-3D
Question Number: 220 Question Id: 4548933060 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
The minerals which develop electric charge upon heating are called:
Options:
1. Pyro-electric minerals
2. Piezo-electric minerals
3. Paramagnetic minerals

Diamagnetic minerals Question Number: 221 Question Id: 4548933061 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Point at which earthquake takes place is known as: **Options:** Origin 2 Epicenter 3 Crust 4 Focus Question Number: 222 Question Id: 4548933062 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The cyclone that devastated the costal life of Odisha and Andhra Pradesh in October 2018: **Options:** Katrina 2 Hudhud 3 Titli 4 Ochki Question Number : 223 Question Id : 4548933063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question An increase of one unit of Richter scale represents an increase in amplitude by a factor of : **Options:** 1. 100

```
1000
4. 1
Question Number: 224 Question Id: 4548933064 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The earth system is highly:
Options:
   Dynamic
Acidic 2.
3. Static
4 None of the three
Question Number: 225 Question Id: 4548933065 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
This is not associated with fissure lava flows:
Options:
   Volcanic Dykes
  Volcanic Plateau
   Volcanic Neck
4 Horizontal lava flows
Question Number: 226 Question Id: 4548933066 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
What is the physical identifying factor in granite gneiss?
```

Very large crystals Banding or layering of crystals Large and small crystals randomly arranged Very small crystals Question Number: 227 Question Id: 4548933067 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Orogenesis deals with: **Options:** Continental drift Origin of ocean basins Formation of folds and faults 4 Mountain building Question Number: 228 Question Id: 4548933068 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The word 'lithosphere' means : **Options:** Upper crust plus lower crust Crust plus uppermost solid mantle 3. Asthenosphre plus crust Inner solid core plus outer liquid core Question Number: 229 Question Id: 4548933069 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question

No Control Enable: Yes

Total Control of the
What is isopiestic level ?
Options:
Shallowest depth below the earth surface at which pressure is equal everywhere  1.
2. Shallowest depth at which salinity of sea water is equal
Shallowest depth at which temperature within the earth is equal 3.
Shallowest depth at which pressure is unequal everywhere
Question Number: 230 Question Id: 4548933070 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
The word 'pedon' is associated with :
Options:
1. Weathering
2. Alluvium
3. Soils
4. Colluvium
Question Number: 231 Question Id: 4548933071 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
This is the basic requirement for Davis cycle of erosion :
Options:
1. Tectonic stability
2. Tectonic instability
3. Arid climate
4. Glacial climate

Question Number: 232 Question Id: 4548933072 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Which of the following is the indicator of high rate of uplift: **Options:** Convex slope Concave slope Straight slope Concave-convex slopes Question Number: 233 Question Id: 4548933073 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Weathering involves: **Options:** Climate In situ breakdown of earth materials Bulk transfer of rock masses from one place to another place Making of Arid landforms Question Number: 234 Question Id: 4548933074 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Salinity is more: **Options:** Off the Amazon estuary In the Mediterranean sea

3. In the Indian Ocean In the Pacific Ocean

Question Number: 235 Question Id: 4548933075 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Daly's theory on the origin of coral reefs is basically:

## **Options:**

Connected with subsidence of sea floor

Connected with glaciation

Connected with emergence of sea floor

Connected with tectonics

Question Number: 236 Question Id: 4548933076 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Semi diurnal tides are:

#### **Options:**

Two low tides and one high tide

Two high tides and two low tides of different heights

One high tide and one low tide

Two high tides and two low tides

Question Number: 237 Question Id: 4548933077 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Thermohaline circulation of ocean waters is influenced by :

Density of sea water Low salinity of sea water Temperature of sea water Global wind circulations Question Number: 238 Question Id: 4548933078 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Local and regional wind systems are basically: **Options:** Influenced by revolution of the earth Influenced by rotation of the earth Circulations because of coriolis force Thermal circulations Question Number: 239 Question Id: 4548933079 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable : Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If earth is homogeneous in surface composition, temperature distribution would be: **Options:** Strictly latitudinal Not very strictly latitudinal 3 Strictly meridional 4. Not very strictly meridional

Question Number: 240 Question Id: 4548933080 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
In middle and higher latitudes, insolation over oceans is:
Options:
Same as over land
2. Remain the same always
3. Higher
4. Lower
Question Number: 241 Question Id: 4548933081 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Wind normally should move across the isobars from high to low pressure. But
the wind that moves along the isobars is called:
Options:
1. Gradient wind
2. Geostrophic wind
3. Friction layer wind
4. Pressure gradient wind
Question Number: 242 Question Id: 4548933082 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
A geographical area with a certain functional coherence is called:
Options:
1. Natural region
2. Functional region
3. Economic region
4. Formal region

Question Number: 243 Question Id: 4548933083 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The industrial location theory postulated by Alfred Weber was based on :
Options:
1. Market area analysis
2. Profit maximization approach
3. Least cost approach
4. Cost revenue approach
Question Number: 244 Question Id: 4548933084 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Von Thumen's theory related to :
Options:
1. Agriculture
2. Industries
3. Rural development
4. Urban development
Question Number: 245 Question Id: 4548933085 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The Hindustan Steel Limited at Rourkela in Odisha is established in
collaboration with:
Options:
1. United Kingdom
2. Germany
3. Russia

United States of America

Question Number : 246 Question Id : 4548933086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The concept of continentality was given by :

# **Options:**

Ritter 1.

2 Ratzel

Humboldt

4 Hettner

Question Number: 247 Question Id: 4548933087 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which one of the following approaches is related to historical perspective of rural settlement studies?

### **Options:**

- 1. Behavioural approach
- Spatial approach
- 3 Ecological approach
- Retrogressive approach

Question Number : 248 Question Id : 4548933088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which one is the largest river basin:

### **Options:**

Mahanadi

2. Godavari
3. Krishna
4. Cauvery
Question Number: 249 Question Id: 4548933089 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Which state is covered mostly by Archaen rocks:
Options:
1. Maharashtra
2. Rajasthan
3. Odisha
4. Madhya Pradesh
Question Number: 250 Question Id: 4548933090 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
In general, the coast of Odisha is a :
Options:
1. deltaic coast
2. sedimentary coast
3. rocky coast
4. estuarine coast
Question Number: 251 Question Id: 4548933091 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Montane wet temperate vegetation is found in :
Options:

Kashmir Himalayas Eastern Himalayas Southern Peninsular India Central Himalayas Question Number: 252 Question Id: 4548933092 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Doda Betta is the highest peak is : **Options:** 1. Nilgiris 2 Western Ghats 3. Eastern Ghats 4 Aravallis Question Number: 253 Question Id: 4548933093 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Southern Odisha is endowed with: **Options:** coal deposits limestone deposits 3. oil and gas deposits 4 bauxite deposits Question Number: 254 Question Id: 4548933094 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Question Label : Multiple Choice Question

Correct Marks: 3 Wrong Marks: 1

Tanks are popular source of irrigation in :
Options:
1. Kashmir
2. Assam
3. Southern States of India
4. West Bengal
Question Number: 255 Question Id: 4548933095 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Cartography:
Options :
1. Is an art
Is an art as well as science
3. Is technology
4. Is a tool
Question Number: 256 Question Id: 4548933096 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Mahanadi surface delta deposits belong to :
Options :
1. Cambrian
2. Mesozoic
3. Cenozoic
4. Holocene

Question Number: 257 Question Id: 4548933097 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Chilika lake owes its origin to:
Options :
1. Marine activity
2. Karst activity
3. Glacial activity
4. Fluvial activity
Question Number: 258 Question Id: 4548933098 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
Geoid is determined by :
Options:
1. Tidal levels
2. Spheroid
Mean sea level
4. Gravity
Question Number: 259 Question Id: 4548933099 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
A survey of India topographic map on 1 : 50,000 scale :
Options :
1. Is a guide map
2. Is a thematic map
Is a general purpose map
4. Is a special purpose map

Question Number: 260 Question Id: 4548933100 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
A map is:
Options:
1. A true representation of the real world
An abstract representation of the real world
3. A false representation of the real world
Representation of the real world on 1 to 1 scale
Question Number: 261 Question Id: 4548933101 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
In optical remote sensing to get land water contrast, which band is good :
Options:
1. Blue band
2. Green band
Red band
4. RIR band
Question Number: 262 Question Id: 4548933102 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
There is no relief displacement:
Options:
1. In a map
2. In aerial photos
3. Radar remote sensing data

4 Optical remote sensing data

Question Number: 263 Question Id: 4548933103 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

IFOV determines:

## **Options:**

1 The pixel in remote sensing data

- 2 The total east-west coverage of remote sensing data
- 3 The total north-south coverage of remote sensing data
- 4 The scale of remote sensing data

Question Number: 264 Question Id: 4548933104 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Seasonal contrast in pressure between land and sea gives rise to :

# **Options:**

Monssons

- . Westerly winds
- Land and Sea breezes
- 4 Trade winds

Question Number: 265 Question Id: 4548933105 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

**No Control Enable : Yes** 

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which of the following is a GIS Operation?

## **Options:**

Image displaying

Contrast stretching

3. Map over laying Map designing Question Number: 266 Question Id: 4548933106 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Internal heat responsible for earth movements is generated by: **Options:** 1. Radioactive decay 2 Rotational or tidal friction Primordial heat 4 All of the three Question Number: 267 Question Id: 4548933107 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which one is more in concentration in sea water? **Options:** Chloride Magnesium 3 Sulphate Sodium Question Number: 268 Question Id: 4548933108 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Which is the only active volcano in the Indian subcontinent, lying in the :

Narcondam Koh-i-sultan Barren Island volcano 4 Popa Island Question Number: 269 Question Id: 4548933109 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Rare earth elements are very useful in : **Options:** Calculation of fractionating phases Calculation of age of a suite of rocks Calculation of partial melting Calculation of P-T of metamorphism Question Number: 270 Question Id: 4548933110 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Pyrolite is: **Options:** A rock found in mantle A rock found in continental crust  $_{\rm 3}$  A model rock composition which can occur anywhere A rock found on ocean floor Question Number: 271 Question Id: 4548933111 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

U-Pb zircon dating is very useful to date :
Options:
1. Baslatic rocks
2. Granitic rocks
3. Ultramafic rocks
4. All of the three rocks
Question Number: 272 Question Id: 4548933112 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The axial plane of a fold strikes N-S and dips 10° easterly. The fold axis plunges
9° towards N82°E. The fold is :
Options:
1. A reclined fold
2. An upright fold
3. A neutral fold
4. None of the three
Question Number: 273 Question Id: 4548933113 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Slickenside striations on a fault plane have a pitch of 25°. The fault is:
Options:
A strike-slip fault
A dip-slip fault
3. An oblique-slip fault
4. A transform fault

Question Number: 274 Question Id: 4548933114 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The oldest sea floor on Earth is :
Options:
1. 200 million years old
2. 2 billion years old
3. 20 million years old
4. 2 million years old
Question Number: 275 Question Id: 4548933115 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
A coal bed dips 50° towards N45°W. Its apparent dip towards N20°W will be
around:
Options:
1. 5°
2. <sup>45°</sup>
3. 60°
4. 80°
Question Number: 276 Question Id: 4548933116 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes  Correct Marks: 3 Wrong Marks: 1  Question Label: Multiple Choice Question
Initiation of Deccan eruption is associated with the weakened lithosphere and
reactivation of mantle plume at :
Options:
1. 150 million years with breakup of Gondwana
2. 90 million years breakup of Madagascar with India and Seychelles
3. 66 million years separation of Seychelles from India

 $_4$  45 million years collision of India with Asia

Question Number: 277 Question Id: 4548933117 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which of the following feature one gets at ocean-ocean subduction?

## **Options:**

Ophiolites

2 Island Arcs

3 Mid Oceanic Ridges

4 Sea Mounts

Question Number: 278 Question Id: 4548933118 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The continental rise is:

#### **Options:**

- A wedge of sediment at the base of the continental slope
- 2. An uplifted portion of the continent
- A portion of the mid-ocean ridge
- 4 A flat topped seamount

Question Number: 279 Question Id: 4548933119 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Which one is the basic unit of Biostratigraphy?

## **Options:**

Subzone

2. Zone

- 3. Chron
- 4. System

Question Number : 280 Question Id : 4548933120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

The monsoon has well developed cycle in :

- 1. South and South East Asia
- 2. North Australia
- 3. Africa
- 4. East United State