# **National Testing Agency**

**Question Paper Name:** 5276 Online Refresher course in Earth Science and Allied 30th June 2019 Shift 1

Subject Name: Online Refresher course in Earth Science and Allied

**Creation Date:** 2019-06-30 13:01:43

Duration:180Total Marks:150Display Marks:Yes

### Online Refresher course in Earth Science and Allied

Group Number:

**Group Id:** 489994199

Group Maximum Duration :0Group Minimum Duration :120Revisit allowed for view? :NoRevisit allowed for edit? :NoBreak time:0Group Marks:150

### Online Refresher course in Earth Science and Allied

**Section Id:** 489994255

**Section Number:** 1 **Section type:** Online **Mandatory or Optional:** Mandatory **Number of Questions:** 150 **Number of Questions to be attempted:** 150 **Section Marks:** 150 **Display Number Panel:** Yes **Group All Questions:** No

Sub-Section Number: 1

**Sub-Section Id:** 489994279

**Question Shuffling Allowed:** Yes

Question Number: 1 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 1 Wrong Marks: 0

### Processing of rock samples to separate the microfossils from the matrix

- (a) is same for all types of microfossils
- (b) is different for different types of microfossils
- (c) Depends on type of matrix
- (d) Both (b) and (c)

#### **Options:**

- 1. 1
- 2.2
- 3.3

No Option Orientation : Vertical	tion Shuffling: No Disp	play Question Number : Yes Single Line Question Option :
Correct Marks: 1 Wrong Marks: 0		
Pteropods are tiny marine winged gastr (a) Calcitic (b) Aragonitic (c) Siliceous (d) Phosphatic	opods withte	ests
Options:		
1. 1		
2. 2		
3. 3		
4. 4		
Question Number: 3 Question Type: MCQ Op No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which of the following is the componen		play Question Number: Yes Single Line Question Option:
(a) Filter Chamber (b) Lithological Chart (c) Drainage (d) Reservoir		
Options:		
1. 1		
2. 2		
3. 3		
4. 4		
No Option Orientation : Vertical	tion Shuffling : No Disp	play Question Number : Yes Single Line Question Option :
Correct Marks: 1 Wrong Marks: 0 Which of the following structure is suita (a) Pond (b) Recharge Shaft (c) Recharge Well (d) Gabbion	ible in hilly region?	
Options: 1. 1		
2. 2		
3. 3		
4. 4		
No Option Orientation : Vertical	tion Shuffling : No Disp	play Question Number : Yes Single Line Question Option :
Correct Marks: 1 Wrong Marks: 0	ting the	
Subsurface dam/dyke is useful for arres (a) Surface run-off	ang are	
(b) Base flow		
(c) Soil moisture (d) Surface and groundwater run-off		

2. 2
3. 3
4. 4
Question Number : 6 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Percolation Tank is constructed to  (a) Conserve the water  (b) Accelerate the groundwater recharge  (c) Improve the soil moisture  (d) To enhance the surface water resource
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 7 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0  Piezometer is constructed to monitor the  (a) Groundwater run-off  (b) Groundwaterlevel  (c) Surface water level  (d) Soil moisture
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 8 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Permissible limit of Arsenic in groundwater is  (a) 10ppm (b) 50ppm (c) 10ppb (d) 50ppb
Options:
1. 1
2. 2
3. 3
4. 4

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

# Source of arsenic in groundwater is (a) Heamatite (b) Chalcopyrite (c) Arsenopyrite (d) Zincite **Options:** 1.1 2.2 3.3 4.4 Question Number: 10 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Source of nitrate in groundwater is (a) Industrial effluents (b) Sewer (c) Mineral (d) Rock **Options:** 1.1 2.2 3.3 4.4 Question Number: 11 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which element contamination in groundwater affects the maximum habitation? (a) Aluminum (b) Arsenic (c) Cadmium (d) Iron **Options:** 1. 1 2.2 3.3 4.4 Question Number: 12 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which element is closely associated with Arsenic? (a) Copper (b) Iron (c) Cadmium (d) Lead **Options:** 1. 1 2.2 3.3 4.4

Question Number : 13 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical	
Correct Marks: 1 Wrong Marks: 0 Any groundwater unit is declared as overexploited if decline in groundwater level is	
(a) 5cm/year (b) 10cm/year	
(c) 20-25cm/year	
(d) > 25cm/year	
Options:	
1. 1	
2. 2	
3. 3 4. 4	
4. 4	
Question Number: 14 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
To mitigate the groundwater depletionproblem, which attempt is needed?  (a) Canal Irrigation  (b) Groundwater withdrawal	
(c) Pumping	
(d) Artificial Recharge to Groundwater	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 15 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
If the rate of drawdown in groundwater is increased by 01 meter, the consumption of electricity by pump is increased by	
(a) 0.2KW/hour (b) 1.0KW/hour	
(c) 0.4KW/hour	
(d) 0.6KW/hour	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 16 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
Groundwater salinity in coastal area is influenced by  (a) High evaporational loss	
(b) Lower Precipitation	
(c) Saline Soil (d) Saline water intrusion	
Options: 1. 1	
2. 2	
3. 3	

Question Number: 17 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Semi-arid area in India is characterized by
(a) Good aquifer and higher precipitation
(b) Poor aquifer with higher precipitation (c) Good aquifer with poor precipitation
(d) Poor aquifer with poor precipitation
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 18 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Groundwater legislations made by Govt. of India can be implemented by  (a) Central Govt.
(b) State Govt.
(c) Both State and Central Govt.
(d) None of above
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 19 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:
No Option Orientation : Vertical  Connect Marks 11 Wrong Marks 10
Correct Marks: 1 Wrong Marks: 0  If the absorption of electromagnetic radiation by matter results in the emission of radiation of
same or longer wavelengths for a short time, the phenomenon is termed as
(a) Luminescence
(b) Fluorescence
(c) Phosphorescence (d) Spontaneous emission
Options:
1. 1
2. 2
3. 3
4. 4
-11.
Question Number : 20 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Measurement of intensity of fluorescent X-rays provide a simple and way of analysis
(a) Destructive, quantitative
(b) Non-destructive, quantitative
(c) Destructive, qualitative
(d) Non-destructive, qualitative

2. 2
3. 3
4. 4
Question Number : 21 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Energy of the emitted X-rays depends upon the of the atom and their intensity depends upon the (a) Atomic number, amount of sample (b) Mass number, amount of sample (c) Mass number, concentration of atoms (d) Atomic number, concentration of atoms
Options:
1.1
2. 2
3. 3
4. 4
Question Number : 22 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
In Wavelength-dispersive X-ray spectroscopy (WDXS or WDS) of characteristic x-rays is measured  (a) Wavelength (b) Energy (c) Both wavelength and energy (d) Only counts
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 23 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
XRF is a basic technique which can determine in the sample.  (a) Elements (b) Compounds (c) Both elements and compound (d) Molecules
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 24 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical

1. 1

# Eparchean unconformity separates geological units of (a) Early Archaean from late Archaean (b) Archaean from Proterozoic (c) Proterozoic from Palaeozoic (d) Archaean from Phanerozoic **Options:** 1.1 2.2 3.3 4.4 Question Number: 25 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 Point bar deposit is associated with (a) Braided River (b) Estuary (c) Meandering River (d) Beach **Options:** 1.1 2.2 3.3 4.4 Question Number: 26 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Polymetallic nodules on the ocean floor contain significant amounts of: (a) Cu-Ni-Co (b) Pb–Zn–Ti (c) Hg-Mo-Pt (d) U-Th-Nb **Options:** 1.1 2.2 3.3 4.4 Question Number: 27 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation : Vertical** Correct Marks: 1 Wrong Marks: 0 During its orbital motion around the Sun, Earth is nearest to the Sun on (a) March 21 (b) July 4 (c) September 23 (d) January 3 **Options:** 1.1 2.2 3.3

Question Number : 28 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0 Four basic points on compass are classified as
(a) Northings
(b) Cardinal points (c) Legend points
(d) Eastings
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 29 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
PH values for natural water lies between
(a) 4-7
(b) 0-4
(c) 4-9
(d) 2-7
Options: 1. 1
2. 2
3. 3
4. 4
Question Number : 30 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Radiometric age is often referred to as age. (a) Total (b) Absolute
(c) Historic
(d) Geologic
Options:
1. 1
2. 2
3. 3 
4. 4
Question Number : 31 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0 Which of the following is used to determine the relative ages in a rock sequence?  (a) Stratigraphy (b) Fossils (c) Cross-cutting relationships (d) All of these
Options:
1. 1
2. 2
3. 3
4. 4

Question Number : 32 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Which of the following will not make a fossil?  (a) Decomposed organic material  (b) Plant impressions (casts)  (c) Animal footprints  (d) Loose animal bones
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 33 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0 Which of the following isotope is most useful for dating very young wood and charcoal?  (a) Rubidium-87 (b) Potassium-40 (c) Carbon-14 (d) Uranium-2 38
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 34 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0 The radon environmental hazard is associated with the radioactive decay of  (a) Rubidium-87 (b) Potassium-40 (c) Carbon-14 (d) Uranium-238
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 35 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0 The Paleozoic does not include the (a) Ordovician (b) Jurassic (c) Mississippian (d) Permian
Options:
1. 1
2. 2
3. 3

(c) Wood (d) Plastic

Options:

Question Number: 36 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Full Form of GPS is (a) Global Positioning System (b) Global Pointing System (c) Global Pension System (d) Global Posting System **Options:** 1.1 2.2 3.3 4.4 Question Number: 37 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 What is the number of GPS satellites used? (a) 54 (b) 12 (c) 05 (d) 24 **Options:** 1.1 2.2 3.3 4.4 Question Number: 38 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 How many planets are there in our solar system? (a) Eight (b) Nine (c) Ten (d) Eleven **Options:** 1.1 2.2 3.3 4.4 Question Number: 39 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Plane table is made of: (a) Metal (b) Rubber

3. 3
4. 4
Question Number : 40 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical  Correct Marks : 1 Wrong Marks : 0  Plane table surveying is a method.  (a) Graphical (b) Linear (c) Circular (d) Angular
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 41 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
Which of the below is used for levelling a plane table?  (a) Plumb bob  (b) Spirit level  (c) Compass  (d) U-frame
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 42 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Structure or form which depicts leaf-like sheets is (a) Fibrous
(b) Lamellar
(c) Radiating
(d) Granular
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 43 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

# Muscovite mica shows which structure? (a) Lamellar (b) Foliated (c) Fibrous (d) Radiating **Options:** 1.1 2.2 3.3 4.4 Question Number: 44 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Chromite shows which type of structure? (a) Granular (b) Globular (c) Reniform (d) Mammillary **Options:** 1.1 2.2 3.3 4.4 Question Number: 45 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which form resembles human kidney? (a) Globular (b) Reniform (c) Granular (d) Mammillary **Options:** 1.1 2.2 3.3 4.4 Question Number: 46 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Trenching is done: (a) Parallel to the strike of the ore body. (b) Across the strike of the ore body.

**Options:** 

(c) Diagonal to the strike of the ore body.

(d) In any possible direction.

1.1

2.2

4. 4
Question Number: 47 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Baramulla tree (cat stemma commune) is a valuable indicator for:
(a) Fe. (b) Cu-Mo. (c) U. (d) Mn-Fe.
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 48 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
In a virgin area where copper is expected, which method is used to start prospecting:
(a) Geobotanical. (b) Geophysical. (c) Geochemical. (d) Drilling
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 49 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Which one is the main constituent of gaseous formations of petroleum?
(a) Methane. (b) Ethane. (c) Propane. (d) Butane.
Options :
1. 1

- 2. 2
- 3.3
- 4.4

 $\label{eq:Question Number: Yes Single Line Question Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ 

Correct Marks: 1 Wrong Marks: 0

### Biogeochemical method of exploration include the:

- (a) Chemical analysis of elements in vegetation.
- (b) Chemical analysis of underlying soils.
- (c) Chemical analysis of elements in vegetation and its underlying soils.
- (d) Analysis of biological characters of the soil.

options :	
. 1	
2	
. 3	
. 4	
Question Number: 51 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Option Option Orientation: Vertical	n :
Forrect Marks: 1 Wrong Marks: 0	
Churn drill is a type of:	
(a) Percussion drilling. (b) Rotary drilling. (c) Jet drilling. (d) None of these.	
options:	
. 1	
. 2	
. 3	
. 4	
Question Number: 52 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Option Orientation: Vertical Forrect Marks: 1 Wrong Marks: 0  The purpose of the mud employed during drilling operation is /are:  (a) To seal any water bearing formation.  (b) To prevent the bore hole walls from collapsing.  (c) To keep cool the drilling bit.  (d) All the above are correct.	n
options :	
. 1	
. 2	
. 3	
. 4	
Question Number: 53 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Option Option Orientation: Vertical	n :
forrect Marks : 1 Wrong Marks : 0	
Term "Isostasy" was first proposed by	
(a) Sir George Airy (b) Clarence Datton (c) R.A. Daly (d) Archdeacon Pratt	
options :	
. 1	
. 2	
. 3	
. 4	
guestion Number : 54 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Optio	n:

No Option Orientation : Vertical

# Which of the following is formed by glacial erosion? (a) Yardang (b) Potholes (c) Arete (d) Cuesta **Options:** 1.1 2.2 3.3 4.4 Question Number: 55 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Beryl is commercially known as (a) Emerald (b) Ruby (c) Peridote (d) Moonstone **Options:** 1.1 2.2 3.3 4.4 Question Number: 56 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 What is the full form of XRD? (a) X-ray powder diffraction (b) X-ray diffraction (c) X-ray differentiation (d) X-ray detection **Options:** 1.1 2.2 3.3 4.4 Question Number: 57 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Use of XRD in the Earth Science is to (a) Determine Elemental composition (b) Determine Mineralogical composition (c) Determine Chemical composition

# Options:

(d) Determine Biological composition

- \_.\_\_
- 2.2
- 3.3

Question Number: 58 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

### To determine hardness of a mineral, scientists use

- (a) Perl's Scale
- (b) Richter Scale
- (c) Mohs Hardness Scale
- (d) Andy's Proficient Hardness Testing Scale

#### **Options:**

- 1. 1
- 2.2
- 3.3
- 4.4

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

Correct Marks: 1 Wrong Marks: 0

### A crystal's shape is determined by the

- (a) Position of Atoms
- (b) Arrangement of Atoms
- (c) Vibration of Atoms
- (d) Collision of Atoms

#### **Options:**

- 1.1
- 2.2
- 3. 3
- 4.4

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

Correct Marks: 1 Wrong Marks: 0

### Minerals contain maximum of

- (a) 80 Naturally Occurring Elements
- (b) 92 Naturally Occurring Elements
- (c) 100 Naturally Occurring Elements
- (d) 108 Naturally Occurring Elements

#### **Options:**

- 1.1
- 2.2
- 3. 3
- 4.4

Question Number: 61 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

**No Option Orientation : Vertical** 

# If a mineral is shiny, it has (a) Metallic Luster (b) Submetallic Luster (c) Nonmetallic Luster (d) Polymetallic Luster **Options:** 1. 1 2.2 3.3 4.4 Question Number: 62 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 Mineral's resistance to being scratched is called (a) Fracture (b) Cleavage (c) Streak (d) Hardness **Options:** 1. 1 2.2 3.3 4.4 Question Number: 63 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Rocks are made of (a) Mineral (b) Cement (c) Ash powder (d) Concrete **Options:** 1.1 2.2

Question Number: 64 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

3. 3 4. 4

No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

(a) Appearance (b) Shape (c) Colour (d) Streak

Options:
1. 1
2. 2
3. 3

Value of most gemstones depend on their

4. 4	
Question Number: 65 Question Type: MCQ Option No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0	Shuffling: No Display Question Number: Yes Single Line Question Option
Specific gravity of gold is	
(a) 13 (b) 15 (c) 17 (d) 19	
Options: 1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 66 Question Type: MCQ Option No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0	Shuffling: No Display Question Number: Yes Single Line Question Option
Metallic minerals are good conductors of	
(a) Heat Only (b) Electricity Only (c) Heat & Electricity both (d) Light & sound both	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 67 Question Type: MCQ Option No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0	Shuffling: No Display Question Number: Yes Single Line Question Option
An example of silicate minerals could be	
(a) Quartz (b) Oxides (c) Halides (d) Sulfates	

- 1. 1
- 2.2
- 3. 3
- 4.4

 $\label{eq:Question Number: Yes Single Line Question Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ 

# On Mohs hardness scale, rating of diamond is (a) 6 (b) 8 (c) 9(d) 10 **Options:** 1.1 2.2 3.3 4.4 Question Number: 69 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 One carat is equal to (a) 2 grams (b) 200 grams (c) 2 milligrams (d) 200 milligrams **Options:** 1. 1 2.2 3.3 4.4 Question Number: 70 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 One of most important gemstone is (a) Gold (b) Silver (c) Diamond (d) Silicon **Options:** 1. 1 2.2 3.3 4.4 Question Number: 71 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 The concentration of carbon dioxide in the atmosphere is in the range of (a) 1-10 parts per million (b) 10-100 parts per million (c) 100-1000 parts per million (d) 1000-10,000 parts per million **Options:** 1.1 2.2 3.3

Question Number: 72 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Spacing of contour lines depend on
(a) steepness
(b) altitude (c) area
(d) elevation
Ontions :
Options: 1. 1
2. 2
3. 3 
4. 4
Question Number : 73 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Contour lines that cross a valley or stream are
(a) dotted (b) solid
(c) V-shaped
(d) U-shaped
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 74 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
In X-ray spectrometers, the specimen or sample is placed after (a) X-ray tube
(b) Monochromator
(c) Collimator
(d) Detector
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 75 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
The study which deals with behaviour of rocks under applied forces is called (a) Soil mechanics
(b) Rock mechanics
(c) Lithology
(d) Geology
Options:
1. 1

3. 3
4. 4
Question Number: 76 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
Which material can be used as a roofing material among the following?  (a) Slate (b) Granite (c) Marble (d) Gneiss
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 77 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  In urban area the most feasible groundwater recharge structure is  (a) Percolation Tank  (b) Recharge well and Recharge Shaft  (c) Gabbion Structure  (d) Check Dams
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 78 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
In rural area, which is not suitable and durable groundwater recharge structure (a) Conservation Pond
(b) Recharge well and Recharge Shaft
(c) Contour Bunds

(d) Check Dams

### **Options:**

- 1.1
- 2. 2
- 3. 3
- 4.4

 $\label{eq:Question Number: Yes Single Line Question Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ 

 $Correct\ Marks: 1\ \ Wrong\ Marks: 0$ 

# Which is the component of ground water recharge structure

- (a) Filter Chamber
- (b) Lithological Chart
- (c) Drainage
- (d) Reservoir

1. 1
2. 2
3. 3
4. 4
*· *
Question Number : 80 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Following structure is suitable in hilly region  (a) Pond  (b) Recharge Shaft  (c) Recharge Well  (d) Gabbion
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 81 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0  Subsurface dam/dyke is useful because it arrests the  (a) Surface run-off  (b) Base flow  (c) Soil moisture  (d) Surface and groundwater run-off
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 82 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
The source of arsenic in groundwater is
(a) Heamatite (b) Chalcopyrite
(c) Arsenopyrite
(d) Zincite
Options:
1. 1
2. 2
3. 3
4. 4
• •
Question Number: 83 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical

# The source of nitrate in groundwater is (a) Industrial effluents (b) Sewer (c) Mineral (d) Rock **Options:** 1.1 2.2 3.3 4.4 Question Number: 84 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Acid treatment is required before analysis of following (a) Iron (b) Calcium (c) Magnesium (d) Sodium **Options:** 1. 1 2.2 3.3 4.4 Question Number: 85 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 The most suitable instrument for trace and rare earth elements analysis of water is (a) Atomic Absorption Spectrophotometer (b) Mass Spectrophotometer (c) Flame Photometer (d) Spectrophotometer **Options:** 1.1 2.2 3.3 4.4 Question Number: 86 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 The higher concentration of arsenic in groundwater poses following health hazards (a) Fluorosis (b) Gastrointestinal problem (c) Skin Cancer (d) Osteoporosis **Options:** 1.1 2.2 3.3

Question Number: 87 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 any groundwater unit is declared as overexploited if decline in groundwater level is (a) 5cm/year (b) 10cm/year (c) 20-25cm/year (d) > 25cm/year **Options:** 1.1 2.2 3.3 4.4 Question Number: 88 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0 to mitigate the problem of groundwater depletion, the following attempt is needed (a) Canal Irrigation (b) Groundwater withdrawl (c) Water Conservation (d) Artificial Recharge to Groundwater **Options:** 1.1 2.2 3.3 4.4 Question Number: 89 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 if the rate of drawdown in groundwater is increased by 01meter, the consumption of electricity by pump is increased by (a) 0.2KW/hour (b) 1.0KW/hour (c) 0.4KW/hour (d) 0.6KW/hour **Options:** 1.1 2.2

3.3

4.4

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

Correct Marks: 1 Wrong Marks: 0

# Groundwater salinity in coastal area is influenced by

- (a) High evaporational loss
- (b) Lower Precipitation
- (c) Saline Soil
- (d) Saline water intrusion

#### **Options:**

2. 2
3. 3
4. 4
Question Number: 91 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Semi-arid area in India is characterised by  (a) Good aquifer and higher precipitation  (b) Poor aquifer with higher precipitation  (c) Good aquifer with poor precipitation  (d) Poor aquifer with poor precipitation
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 92 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  What is the study of past life using fossils?  (a) paleontology (b) uniformitarianism (c) modern geology (d) catastrophism
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 93 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  How are rock layers arranged in the geologic column?  (a) oldest rocks are on the bottom (b) youngest rocks are on the bottom (c) youngest rocks are in the middle (d) oldest rocks are on the top
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 94 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  What is amber?  (a) wet, sticky tree sap (b) an insect's body (c) hardened tree sap (d) a hard shel

2. 2	
3. 3	
4. 4	
Question Number: 95 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Orientation: Vertical	tion
Correct Marks : 1 Wrong Marks : 0 Which of the following is an example of a trace fossil? (a ) a frozen mammoth	
(b) Preserved footprints (c) mould and cast (d) Hardened tree sap	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number : 96 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Opt No Option Orientation : Vertical	tion
Correct Marks: 1 Wrong Marks: 0	
Which kind of temperatures will slow down an organism's decay?  (a) freezing temperatures  (b) hot temperatures	
(c) warm temperatures in a wet climate (d) cool temperatures	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 97 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Orientation: Vertical	tion
Correct Marks: 1 Wrong Marks: 0 Bird's fossils are very rare because of:	
(a) Hollow bones (b) Flying characters	
(c) Very high weight (d) Both (a) and (b)	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 98 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option Orientation: Vertical	tion

Amphibians first time came into existence in: (a) Cambrian (b) Ordovician (c) Permo-carboniferous (d) Jurassic cretaceous.
Options: 1. 1
2. 2
3.3
4. 4
Question Number: 99 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
Stromatolites are preserved only in: (a) Shale (b) Sandstones (c) Carbonates (d) Coal.
Options:
1. 1
2. 2
3.3
4. 4
Question Number: 100 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Which period is known as age of fish?  (a) Carboniferous (b) Permian (c) Devonian (d) Triassic
Options:
1. 1
2. 2 3. 3
4. 4
Question Number: 101 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Which one is most famous for fossils vertebrate in India:  (a) Aravallis  (b) Wndhyans  (c) Siwalik  (d) All the above.
Options:
1. 1
2. 2
3. 3
4. 4

Question Number : 102 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical	
Correct Marks: 1 Wrong Marks: 0	
Infra- red spectrum is found in the region of	
(a) micro waves	
(b) visible waves (c) ultraviolet wave	
(d) Beyond the red part of the visible waves	
Options:	
1. 1 	
2. 2	
3. 3	
4. 4	
Question Number: 103 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
The Infra- red spectrum consists of wave	
(a) Shorter than those of visible light (b) Longer than those of visible light	
(c) Equal to that of visible light	
(d) None of the above is correct	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 104 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
Out of the following which one has the longest wave length	
(a) Ultaviolet light	
(b) x ray	
(c) Infra-red rays (d) Gamma ray	
Options:	
1. 1	
2. 2	
3. 3	
4. 4	
Question Number: 105 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
The range of visible light lies between	
(a) 4000A and 7800A	
(b) 3000A and 700A (c) 5800A and 7200A	
(d) 7800A and 9372A	
Options:	
1. 1	
2. 2	

(b) 1:5 (c) 1:10 (d) 1:20

Question Number: 106 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 Aeroplane which takes aerial photographs generally fly in (a) Toposphere (b) Stratosphere (c) lonospheres (d) exosphere **Options:** 1.1 2.2 3.3 4.4 Question Number: 107 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 What is the compressive strength of bone? (a) 150 MPa (b) 400 MPa (c) 500 MPa (d) 2400 MPa **Options:** 1.1 2.2 3.3 4.4 Question Number: 108 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 Which material has tensile strength higher than compressive strength? (a) Alumina (b) Silica (c) Cast iron (d) Fiber glass **Options:** 1.1 2.2 3.3 4.4 Question Number: 109 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 What is the approximate ratio of tensile strength to compressive strength for most of the ceramics? (a) 1:1

Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 110 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
What is the compressive strength of silicon nitride?  (a) 500 MPa  (b) 900 MPa  (c) 2400 MPa  (d) 3000 MPa
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 111 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Which statement is false?
(a) Metals have a compressive strength ranging from 100 to 1500 MPa
(b) Ceramics have a compressive strength ranging from 1000 to 5000 MPa
(c) Concrete is stronger in compression than in tension (d) Concrete is reinforced with materials which provide better compressive properties
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 112 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0  For value of a rate of loading, the value of strength comes out to be
(a) Lower, lower
(b) Lower, higher
(c) Any, same
(d) Any, different independent of a rate of loading
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 113 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical

# What will be the unit of compressive stress? (a) N (b) N/mm (c) N/mm (d) Nmm **Options:** 1.1 2.2 3.3 4.4 Question Number: 114 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 Which one of the following is a deep-sea drilling research vessel? (a) ORV SagarKanya (b) RV Sindhu Sadhana (c) RV Sindhu Sankalp (d) Chikyu **Options:** 1.1 2.2 3.3 4.4 $\label{eq:Question Number: Yes Single Line Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ Correct Marks: 1 Wrong Marks: 0 A solid circular shaft of diameter d is subjected to a torque T. the maximum normal stress induced in the shaft is (a) Zero (b) 16T/πd (c) 32T/πd (d) None of the mentioned **Options:** 1.1 2.2 3.3 4.4 Question Number: 116 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 When a rectangular beam is loaded transversely, the maximum compressive stress develops (a) Bottom fibre (b) Top fibre (c) Neutral axis (d) Every cross-section **Options:**

1. 1 2. 2

3. 3
4. 4
Question Number: 117 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
Planktonic foraminifera first evolved duringtimes.
(a) Devonion (b) Triassic (c) Jurassic (d) Cretaceous
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 118 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
(a) Increase with w/c ratio (b) Decrease with w/c ratio (c) Decrease in size of aggregates (d) Decrease in curing time
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 119 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  The basic igneous rock which is dark coloured and has been extensively used as road materials is  (a) Granite (b) Gabbro (c) Basalt (d) Syenite
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 120 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0

# Which of the following is not true about granite? a) Very high crushing strength b) Low absorption values c) Takes good polish d) High absorption values **Options:** 1.1 2.2 3.3 4.4 Question Number: 121 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Limestone can be used as facing stones at situations where (a) Air is polluted with industrial gases (b) Along sea coasts where sea water-rich winds can attack them (c) Less chemical exposure and mild weather (d) The place has very harsh weather **Options:** 1.1 2.2 3.3 4.4 Question Number : 122 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 An element that is naturally radioactive is (a) Argon (b) Xenon (c) Helium (d) Radium **Options:** 1.1 2.2 3.3 4.4 Question Number: 123 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which is non – radiogenic Lead (a) 208Pb (b) 207Pb (c) 204Pb (d) 208Pb **Options:**

1. 1 2. 2 3.3

4.4

Question Number: 124 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

### For dating recent Alluvium and also the method which is of interest to Archeologist is

- (a) K-Ar
- (b) Pb-Pb
- (c) Rb-Sr
- (d)\_14C

#### **Options:**

- 1.1
- 2.2
- 3.3
- 4.4

Question Number: 125 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0

### Atmospheric pressure distribution is represented by

- (a) Isobars
- (b) Isotherms
- (c) Isohyet
- (d)\_Isothel

#### **Options:**

- 1. 1
- 2.2
- 3.3
- 4.4

Question Number: 126 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

## Hydrogen, Deterium and Tritium are

- (a) Isomers of hydrogen
- (b) Isotopes of hydrogen
- (c) Isobars of hydrogen
- (d) Allotrops of hydrogen

### **Options:**

- 1.1
- 2. 2
- 3.3
- 4.4

Question Number: 127 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

# Which of the following is true in case of pure water: (a) $[H^+] > [OH^-]$ (b) $[H^+] < [OH^-]$ (c) $[H^+]$ < $[OH^-]$ > 1.10<sup>-7</sup> (d) $[H^+] = [OH^-]$ **Options:** 1. 1 2.2 3.3 4.4 Question Number: 128 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 A total station is a combination of: (a) EDM and Theodolite (b) Compass and EDM (c) Electronic Theodolite and EDM (d) EDM and electronic Compass **Options:** 1. 1 2.2 3.3 4.4 Question Number: 129 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0 Which unit in total station processes data collected? (a) Data collector (b) EDM (c) Storage system (d) Microprocessor **Options:** 1. 1 2.2 3.3 4.4 Question Number: 130 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 1 Wrong Marks: 0 The bubble in total station is centralised using: (a) Tripod (b) Levelling screw (c) Tangent screw (d) Foot screw

Options:
1. 1
2. 2

- 3. 3
- 4.4

Question Number: 131 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 1 Wrong Marks: 0

# The three types of rocks are

- (a) Weathering, erosion, deposition
- (b) Metamorphic, sedimentary, deposition
- (c) Igneous, sedimentary, metamorphic
- (d) Sedimentary, deposition, igneous

#### **Options:**

- 1.1
- 2.2
- 3. 3
- 4.4

Question Number: 132 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

#### TIN stands for

- (a) Traffic Internet Network
- (b) Triangulated Irregular Network
- (c) Temporal Interest Network
- (d) Temperature Interface Node

### **Options:**

- 1. 1
- 2.2
- 3. 3
- 4.4

Question Number : 133 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 1 Wrong Marks: 0

# DBMS stands for

- (a) Database Management System
- (b) Database Monitoring System
- (c) Database Manufacturing System
- (d) Database Mixing Station

### **Options:**

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number: 134 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

### Which of the following is a biodegradable organic chemical/substance?

- (a) Plastics
- (b) Oils
- (c) Pesticides
- (d) Garbage

2. 2
3. 3
4. 4
Question Number: 135 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option
No Option Orientation : Vertical  Correct Marks : 1 Wrong Marks : 0
Septic tank is:
(a) An aerobic attached growth treatment system (b) An aerobic suspended growth biological treatment system (c) An anaerobic attached growth biological treatment system (d) An anaerobic suspended growth treatment system
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 136 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Total dissolved solids (TDS) can be reduced by the following method  (a) Distillation  (b) Reverse osmosis  (c) Ion exchange  (d) All of the above
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 137 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Permanent hardness is caused due to  (a) Magnesium carbonate  (b) Magnesium bicarbonate  (c) Magnesium sulphate  (d) All of the above
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 138 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical

According to WHO, the soft water has 0 to milligram per litre as CaCO <sub>3</sub> .
(a) 30
(b) 60
(c) 90 (d) 120
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 139 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
The source of Arsenic in water is  (a) Industrial waste
(b) Fertilizers
(c) Phosphate rocks
(d) All of the above
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 140 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks : 1 Wrong Marks : 0 The atmospheric loss of water from plantis
(a) Precipitation (b) Infiltration
(a) Precipitation
(a) Precipitation (b) Infiltration (c) Condensation
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options: 1. 1
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1  2. 2  3. 3  4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1  2. 2  3. 3  4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0
(a) Precipitation (b) Infiltration (c) Condensation (d) Evapotranspiration  Options:  1. 1 2. 2 3. 3 4. 4  Question Number: 141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0

Question Number: 142 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0
Groundwater is a source of trouble at which place?  (a) Plains (b) Slopes (c) Rivers (d) Lakes
Options: 1. 1
2. 2
3.3
4. 4
Question Number: 143 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0  Which is the first state in India to make roof ten rain water harvesting compulsors to all the
Which is the first state in India to make roof top rain water harvesting compulsory to all the houses?  (a) Tamil Nadu  (b) Kerala  (c) Assam  (d) Goa
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 144 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical  Correct Marks: 1 Wrong Marks: 0  Which of the following is the major source of fresh water which is available in India?
(a) Ocean water (b) River water (c) Pond water (d) Ground water
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 145 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0  The infiltration of water into the subsurface is the  (a) influent (b) effluent (c) discharge (d) recharge
Options:
1. 1
2. 2

3. 3
4. 4
4. <del>4</del>
Question Number: 146 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
The most abundant, natural acid is:
(a) Nitric
(b) hydrochloric (c) carbonic
(d) citric
Options:
1. 1
2. 2
3. 3
4. 4
Question Number : 147 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 1 Wrong Marks: 0
Water that is good enough to drink is called  (a) Potable water
(b) Groundwater
(c) Surface water
(d) Artesian water
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 148 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Contaminated rainwater is result of
(a) higher soil moisture (b) poor sewerage system
(c) air pollution
(d) noise pollution
Options:
1. 1
2. 2
3. 3
4. 4
Question Number: 149 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Which of the following is true about pH?
(a) the scale runs 0-21 (b) level 9 is acidic
(c) level 4 is considered base
(d) level 7 is best for stream water

4. 4	
Question Number: 150 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical	
Correct Marks: 1 Wrong Marks: 0	
Pteropods are tiny marine winged gastropods with	tests
(a) Calcitic (b) Aragonitic (c) Siliceous (d) Phosphatic	
Options:	
1. 1	
2. 2	

1. 1 2. 2

3. 3

3. 3 4. 4