

Telangana State Council Higher Education

Notations :

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

Question Paper Name :	Geo Engineering and Geo Informatics 11th Aug 2021 Shift 1
Subject Name :	Geo Engineering and Geo Informatics
Creation Date :	2021-08-11 12:28:38
Duration :	120
Total Marks :	120
Display Marks:	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console? :	Yes

Geo Engineering and Geo Informatics

Group Number :	1
Group Id :	63643121
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No

Edit Attended Group? :	No
Break time :	0
Group Marks :	120
Is this Group for Examiner? :	No

Mathematics

Section Id :	63643139
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	63643139
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 6364312401 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If the system of equations $x + 3y + 2z = 4$, $2x - y + z = 1$ and $3x + 2y + az = b$ have no solutions, then

Options :

1. ✘ $a = 3, b = 5$

2. ✔ $a = 3, b \neq 5$

3. ✘ $a \neq 3, b = 5$

4. ✘ $a \neq 3$, any value of b

Question Number : 2 Question Id : 6364312402 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The sum of Eigen values of the matrix $\begin{bmatrix} 1 & 2 & 3 \\ 2 & 3 & 1 \\ 3 & 1 & 2 \end{bmatrix}$ is

Options :

1. ✘ 3

2. ✘ 5

3. ✔ 6

4. ✘ 8

Question Number : 3 Question Id : 6364312403 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If A is of order $m \times n$ and $ax = 0$ implies $x = 0$, then

Options :

1. ✔ $\rho(A) = n$

2. ✘ $\rho(A) = m$

3. ✘ A^{-1} is not unique

4. ✘ $\text{Det}(A) = 0$

Question Number : 4 Question Id : 6364312404 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $\lim_{x \rightarrow 0} \frac{(x(1+a \cos x) - b \sin x)}{x^3} = 1$, then a, b are

Options :

1. ✔ $-\frac{5}{2}, -\frac{3}{2}$

2. ✘ $\frac{1}{2}, \frac{3}{2}$

3. ✘ $\frac{2}{3}, -\frac{1}{2}$

4. ✘ $-\frac{3}{2}, \frac{1}{2}$

Question Number : 5 Question Id : 6364312405 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If C is the curve bounded by the lines $x = \pm 1, y = \pm 1$, then $\int_C x \, dy - y \, dx =$

Options :

1. ✘ 4

2. ✘ 6

3. ✔ 8

4. ✘ 10

Question Number : 6 Question Id : 6364312406 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The directional derivative of $\phi = xy^2 + z^2x$ at $(1, -1, 2)$ in the direction of $\vec{i} + 2\vec{j} + 2\vec{k}$ is

Options :

1. ✘ 2

2. ✔ 3

3. ✘ 4

4. ✘ 5

Question Number : 7 Question Id : 6364312407 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Residue of $(1 + e^{2z})^{-1}$ at $z = \frac{\pi i}{2}$ is

Options :

1. ✘ $\frac{1}{4}$

2. ✘ $\frac{-1}{4}$

3. ✘ $\frac{1}{2}$

4. ✔ $\frac{-1}{2}$

Question Number : 8 Question Id : 6364312408 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

$$\int_{|z|=3\pi} \frac{dz}{1 + e^z} =$$

Options :

1. ✔ $-4\pi i$

2. ✘ $4\pi i$

3. ✘ $2\pi i$

4. ✘ $-2\pi i$

Question Number : 9 Question Id : 6364312409 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A number is chosen at random 1, 2, 3,.....100. The probability that the chosen number is a composite number is

Options :

1. ✘ $\frac{3}{4}$

2. ✘ $\frac{1}{4}$

3. ✔ $\frac{37}{50}$

4. ✘ $\frac{18}{25}$

Question Number : 10 Question Id : 6364312410 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If A and B are two events such that $P(A) = 0.1$, $P(B) = 0.2$ $P(A \cap B) = 0.09$,
then $P(\bar{B} / \bar{A}) =$

Options :

1. ✘ $\frac{78}{80}$

2. ✔ $\frac{79}{80}$

3. ✘ $\frac{3}{4}$

4. ✘ $\frac{80}{81}$

Geo Engineering and Geo Informatics

Section Id :	63643140
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	110
Number of Questions to be attempted :	110
Section Marks :	110
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	63643140
Question Shuffling Allowed :	Yes

Question Number : 11 Question Id : 6364312411 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The plutonic equivalent of phonolite

Options :

1. ✘ Olivine
2. ✘ Adamellite
3. ✘ Monzodiorite
4. ✔ Nepheline syenite

Question Number : 12 Question Id : 6364312412 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Diamictites are deposited by

Options :

1. ✘ Biological activity
2. ✘ Eolian activity
3. ✔ Glacial activity
4. ✘ Impact activity

Question Number : 13 Question Id : 6364312413 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Pyrite would be expected to form in a

Options :

1. ✘ Oxidizing environment
2. ✔ Reducing environment
3. ✘ Both oxidizing and reducing environment
4. ✘ Humid environment

Question Number : 14 Question Id : 6364312414 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A thrust is a

Options :

1. ✘ Normal fault
2. ✔ Low angle reverse fault
3. ✘ Decollement
4. ✘ Wrench fault

Question Number : 15 Question Id : 6364312415 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A landform which is raised and flat-surfaced is

Options :

1. ✘ Valley
2. ✘ Plain
3. ✔ Plateau
4. ✘ Hill

Question Number : 16 Question Id : 6364312416 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The seepage flow is present in

Options :

1. ✘ Surface drainage
2. ✔ Sub surface drainage
3. ✘ Camber
4. ✘ Cross slope

Question Number : 17 Question Id : 6364312417 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Quartz is often used as an example of which product of chemical weathering

Options :

1. ✘ Solutions
2. ✘ Gels
3. ✘ Secondary minerals
4. ✔ Registates

Question Number : 18 Question Id : 6364312418 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following pair control the density of seawater

Options :

1. ✘ Temperature and sea depth
2. ✔ Temperature and salinity
3. ✘ Salinity and depth
4. ✘ Salinity and plankton concentration

Question Number : 19 Question Id : 6364312419 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following does not support the claim that rates of stone decay is unpredictable

Options :

1. ✓ Rocks decay in linear fashion
2. ✗ Environmental conditions never stable
3. ✗ No evidence of decay at the rock surface for a number of years
4. ✗ Levels of pollution varied throughout the geological history

Question Number : 20 Question Id : 6364312420 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Why paleomagnetism is so important in discovering plate tectonics

Options :

1. ✗ It showed the location of north pole
2. ✗ It allowed the depth of the oceans to be measured
3. ✓ It has proved sea floor spreading

4. ✘ It showed the location of south pole

Question Number : 21 Question Id : 6364312421 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following are not the features associated with mid-oceanic ridges

Options :

1. ✘ Under water magma production
2. ✘ A central valley
3. ✔ Bio-chemical Activity
4. ✘ Widespread hydrothermal activity

Question Number : 22 Question Id : 6364312422 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

During either a full or new moon, when the Earth, Moon and Sun are all aligned, the combination of all tidal powers is called

Options :

1. ✔ Spring tides
2. ✘ Neap tides
3. ✘ Neap-to-neap tidal cycle

4. ✘ Spring-to-Spring tidal cycle

Question Number : 23 Question Id : 6364312423 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is more stable during tunnelling

Options :

1. ✘ Shale

2. ✘ Chalk

3. ✔ Granite

4. ✘ Friable sand stone

Question Number : 24 Question Id : 6364312424 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Horizontal component of Earth's magnetic field always directed towards

Options :

1. ✘ East

2. ✘ West

3. ✔ North

4. ✘ South

Question Number : 25 Question Id : 6364312425 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

From the Earth's topography acceleration due to gravity

Options :

1. ✔ Decreases with height
2. ✘ Increases with height
3. ✘ First increase and then decrease
4. ✘ Remains the same

Question Number : 26 Question Id : 6364312426 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which one of the following is mostly associated with concave slope profiles

Options :

1. ✘ Mass movements
2. ✘ Episodic erosional activity
3. ✘ Creep, rainsplash and gelifluction

4. ✓ Rillwash and fluvial processes

Question Number : 27 Question Id : 6364312427 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

According to the Clairut's theorem, the sum of geometric and gravitational flattenings is equal to _____ times the ratio of centrifugal force to gravity at the equator

Options :

1. ✓ $5/2$

2. ✗ $2/5$

3. ✗ 3

4. ✗ $3/5$

Question Number : 28 Question Id : 6364312428 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Why are cations attracted to clay minerals

Options :

1. ✗ Because no other minerals will bond with cations

2. ✗ Because of the temperature gradients

3. ✓ Because of electrostatic attractions

4. ✘ Because clay minerals are the largest soil particles

Question Number : 29 Question Id : 6364312429 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A hydrograph displays

Options :

1. ✔ Variations in river discharge over time
2. ✘ Variations in snowfall over time
3. ✘ Variations in sediment concentration against river discharge
4. ✘ Variations in water temperature against discharge

Question Number : 30 Question Id : 6364312430 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

As one moves inside the spherical Earth acceleration due to gravity

Options :

1. ✔ Decreases with depth
2. ✘ Increases with depth
3. ✘ First decrease and then increase

4. ✘ Remains the same

Question Number : 31 Question Id : 6364312431 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following happens when waves enter shallow water

Options :

1. ✘ The velocity of the wave becomes weaker
2. ✘ Their troughs deepen
3. ✘ They develop flat crests
4. ✔ They become increasingly asymmetrical

Question Number : 32 Question Id : 6364312432 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a type of image resolution that is very important in image analysis

Options :

1. ✔ Energy
2. ✘ Spectral
3. ✘ Spatial

4. ✘ Temporal

Question Number : 33 Question Id : 6364312433 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

How old is the Earth

Options :

1. ✔ 4.6 billion years
2. ✘ 4,00,000 years
3. ✘ 2.3 billion years
4. ✘ 3.1 billion years

Question Number : 34 Question Id : 6364312434 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Folding is which type of deformation

Options :

1. ✘ Brittle
2. ✘ Tensile
3. ✔ Ductile

4. ✘ Malleable

Question Number : 35 Question Id : 6364312435 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the name of the Supercontinent to which all of the land mass on Earth was joined approximately 600 million years ago

Options :

1. ✔ Pangaea
2. ✘ Gondwanaland
3. ✘ Gaia
4. ✘ Laurasia

Question Number : 36 Question Id : 6364312436 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the most common wavelength band which electro-optical scanners work within

Options :

1. ✘ 0.9 and 14 μ m
2. ✔ 0.3 and 14 μ m

3. ✘ 0.3 and 0.9 μ m

4. ✘ 0.9 and 12 μ m

Question Number : 37 Question Id : 6364312437 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one of the following about axial plane is not true

Options :

1. ✘ Axial plane is imaginary

2. ✘ Axial plane may be vertical, inclined or horizontal

3. ✘ Axial plane may be planar

4. ✔ Axial plane need not pass through all points of maximum curvature in a folded sequence

Question Number : 38 Question Id : 6364312438 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The International Gravity Formula calculates the undisturbed gravity field of the Earth presuming its shape to a

Options :

1. ✘ Solid sphere

2. ✓ Spheroid
3. ✗ Hollow sphere
4. ✗ Semi-solid sphere

Question Number : 39 Question Id : 6364312439 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If plunge is zero then the axis of the fold is

Options :

1. ✓ Horizontal
2. ✗ Vertical
3. ✗ Inclined at 30° to the vertical
4. ✗ Inclined at 30° to the horizontal

Question Number : 40 Question Id : 6364312440 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following types of sensors uses a highly focused beam of light

Options :

1. ✗ Sonar

2. ✘ Ground penetrating radar
3. ✔ Lidar
4. ✘ Side-looking radar

Question Number : 41 Question Id : 6364312441 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What happens when all pore spaces are filled and the water table is at the surface

Options :

1. ✔ Saturation-Excess overland flow
2. ✘ Infiltration-Excess overland flow
3. ✘ Throughflow
4. ✘ Infiltration

Question Number : 42 Question Id : 6364312442 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

When under water volcanoes erupt the lave cools rapidly and result in the formation of which type of rounded structures

Options :

1. ✔ Pillow lava

2. ✘ Shield volcano
3. ✘ Gabbros
4. ✘ Black smokers

Question Number : 43 Question Id : 6364312443 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which category of chemical weathering do nitrification processes and acidification of soil fall into

Options :

1. ✘ Solution
2. ✘ Carbonation
3. ✘ Hydrolysis
4. ✔ Biologically related weathering

Question Number : 44 Question Id : 6364312444 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the river gauging techniques involves the use of ultra-sound

Options :

1. ✘ Dilution Gauging
2. ✘ Velocity-Area Method
3. ✔ Acoustic Gauging
4. ✘ Rating Curve

Question Number : 45 Question Id : 6364312445 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Gravity potential of the spherical earth is maximum at

Options :

1. ✘ The surface
2. ✘ 2500 km depth
3. ✘ 5000 km depth
4. ✔ The centre

Question Number : 46 Question Id : 6364312446 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The point where earthquake triggers is known as

Options :

1. ✓ Focus
2. ✘ Epicentre
3. ✘ Dip
4. ✘ Strike

Question Number : 47 Question Id : 6364312447 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In diamagnetic minerals the direction of induced magnetic vector is

Options :

1. ✘ In the direction of magnetising field
2. ✓ Opposite to the direction of magnetising field
3. ✘ At 45° to the magnetising field
4. ✘ At 90° to the magnetising field

Question Number : 48 Question Id : 6364312448 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What types of faults are associated with shearing forces

Options :

1. ✓ Strike-slip

2. ✗ Normal

3. ✗ Reverse

4. ✗ Oblique-slip

Question Number : 49 Question Id : 6364312449 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Example of paramagnetic mineral

Options :

1. ✓ Garnet

2. ✗ Quartz

3. ✗ Gypsum

4. ✗ Feldspar

Question Number : 50 Question Id : 6364312450 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following surveying methods help to find distance between two inaccessible points that are not obstructed for vision

Options :

1. ✘ Chain survey
2. ✘ Compass survey
3. ✘ Plane table survey
4. ✔ Tacheometric survey

Question Number : 51 Question Id : 6364312451 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

When a P wave pass through a solid rock the particles of the rock move

Options :

1. ✘ In a circular motion
2. ✘ Back and forth perpendicular to the wave direction
3. ✔ Back and forth along the wave direction
4. ✘ At 50° to the wave direction

Question Number : 52 Question Id : 6364312452 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Slope length of a drainage basin is mostly related to

Options :

1. ✘ Drainage area
2. ✘ Stream width
3. ✔ Drainage density
4. ✘ Tectonic uplift

Question Number : 53 Question Id : 6364312453 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Surface ocean currents are mainly caused by

Options :

1. ✘ Temperature gradients
2. ✔ Prevailing winds
3. ✘ Surface water density
4. ✘ Salinity gradients

Question Number : 54 Question Id : 6364312454 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one the following sediment that does not found in deep ocean

Options :

1. ✘ Biogenous
2. ✔ Linguodous
3. ✘ Hydrogenous
4. ✘ Lithogenous

Question Number : 55 Question Id : 6364312455 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The number of seismograph stations needed to locate the epicenter of an earthquake

Options :

1. ✔ 3
2. ✘ 2
3. ✘ 1
4. ✘ 4

Question Number : 56 Question Id : 6364312456 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Strike-slip faults have

Options :

1. ✓ Primarily horizontal movement
2. ✗ Primarily vertical movement
3. ✗ No appreciable displacements
4. ✗ Oblique displacements

Question Number : 57 Question Id : 6364312457 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What is the average temperature at 10 km depth from the earth surface

Options :

1. ✓ 300°
2. ✗ 105°
3. ✗ 20°
4. ✗ 70°

Question Number : 58 Question Id : 6364312458 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Earth's magnetic field is generated

Options :

1. ✘ In the crust
2. ✘ In the mantle
3. ✔ In the outer core
4. ✘ In the inner core

Question Number : 59 Question Id : 6364312459 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The lithosphere includes

Options :

1. ✔ Crust and uppermost rigid mantle
2. ✘ Outer core and inner core
3. ✘ Asthenosphere and mesosphere
4. ✘ Outer core and lower mantle

Question Number : 60 Question Id : 6364312460 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Overthrusts are caused by large-scale

Options :

1. ✘ Shearing forces
2. ✘ Tensional forces
3. ✔ Compressive forces
4. ✘ Both tensional and compressive forces

Question Number : 61 Question Id : 6364312461 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The shear modulus measures

Options :

1. ✘ The resistance to change in volume of a solid
2. ✘ The resistance to change in volume of a liquid
3. ✘ The resistance to flow of a liquid
4. ✔ The resistance to change in shape

Question Number : 62 Question Id : 6364312462 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The most destructive earthquake waves are

Options :

1. ✘ P waves
2. ✘ S waves
3. ✔ Surface waves
4. ✘ Q waves

Question Number : 63 Question Id : 6364312463 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following regions consists primarily of olivine and pyroxene

Options :

1. ✔ Upper mantle
2. ✘ The core
3. ✘ Continental crust
4. ✘ Oceanic crust

Question Number : 64 Question Id : 6364312464 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Approximate lifetime of Geostationary satellites is

Options :

1. ✘ 35 years

2. ✘ 42 years

3. ✔ 10 years

4. ✘ 25 years

Question Number : 65 Question Id : 6364312465 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a linear surveying methods

Options :

1. ✔ Theodolite

2. ✘ EDM

3. ✘ Chain

4. ✘ Tape

Question Number : 66 Question Id : 6364312466 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which region of the Earth occupies large volume

Options :

1. ✘ The crust

2. ✘ The outer core
3. ✘ The inner core
4. ✔ The mantle

Question Number : 67 Question Id : 6364312467 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is a classification based on the instrument used

Options :

1. ✘ Topographic surveying
2. ✘ Cadastral surveying
3. ✔ Traverse surveying
4. ✘ Hydrographic surveying

Question Number : 68 Question Id : 6364312468 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The direction of orbit in the opposite direction of earth rotation is called

Options :

1. ✔ Retrograde

2. ✘ Posigrade

3. ✘ Perigee

4. ✘ Apogee

Question Number : 69 Question Id : 6364312469 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The mantle consists mainly of

Options :

1. ✘ Granitic rocks

2. ✘ Basaltic rocks

3. ✘ Gabbroic rocks

4. ✔ Ultramafic rocks

Question Number : 70 Question Id : 6364312470 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Low Earth Orbit satellites has the rotation period of

Options :

1. ✘ 70 to 80 min

2. ✘ 90 to 100 min
3. ✘ 80 to 90 min
4. ✔ 90 to 120 min

Question Number : 71 Question Id : 6364312471 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which term is used for the surface to which elevations are referred

Options :

1. ✔ Datum
2. ✘ Horizontal plane
3. ✘ Level line
4. ✘ Level surface

Question Number : 72 Question Id : 6364312472 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What is the horizontal angle which a line makes with the true meridian through one of the extremities of the line

Options :

1. ✔ True bearing

2. ✘ Magnetic bearing
3. ✘ Dip
4. ✘ Arbitrary bearing

Question Number : 73 Question Id : 6364312473 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following classes of positioning technique possess high precision

Options :

1. ✘ GPS
2. ✘ Viscous technique
3. ✔ Kinematic technique
4. ✘ Real time technique

Question Number : 74 Question Id : 6364312474 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

GIS deals with

Options :

1. ✘ Numeric data

2. ✘ Binary data
3. ✘ Complex data
4. ✔ Spatial data

Question Number : 75 Question Id : 6364312475 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a method of levelling

Options :

1. ✘ Barometric levelling
2. ✘ Spirit levelling
3. ✘ Trigonometric levelling
4. ✔ Parabolic levelling

Question Number : 76 Question Id : 6364312476 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a part of the prismatic compass

Options :

1. ✘ Agate cap

2. ✘ Brake pin
3. ✘ Prism cap
4. ✔ Jewel bearing

Question Number : 77 Question Id : 6364312477 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Sharpness of the curve can be determined by

Options :

1. ✘ Tangent
2. ✔ Radius
3. ✘ Mid-ordinate
4. ✘ Starting point of the curve

Question Number : 78 Question Id : 6364312478 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What will be the length of the base line in case of short baseline method of GPS surveying

Options :

1. ✔ Less than 50 km

2. ✘ Greater than 50 km
3. ✘ Less than 2 km
4. ✘ Greater than 100 km

Question Number : 79 Question Id : 6364312479 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In GIS, interpolation is possible by

Options :

1. ✘ Thematic Autocorrelation
2. ✘ Thematic Auto-correction
3. ✔ Spatial Autocorrelation
4. ✘ Spatial Auto-correction

Question Number : 80 Question Id : 6364312480 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The largest reservoir of nitrogen on our planet is

Options :

1. ✘ Ocean

2. ✓ Atmosphere

3. ✗ Biosphere

4. ✗ Fossils

Question Number : 81 Question Id : 6364312481 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Vegetation of tropical deciduous forest falls under which of the following categories

Options :

1. ✓ Mesotherm

2. ✗ Megatherm

3. ✗ Microtherm

4. ✗ Hekistotherm

Question Number : 82 Question Id : 6364312482 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The angle of a fault plane with respect to vertical is

Options :

1. ✓ Hade

2. ✗ Throw

3. ✘ Heave

4. ✘ Dip

Question Number : 83 Question Id : 6364312483 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is related to GIS

Options :

1. ✔ Euclidean space

2. ✘ Pythagorian space

3. ✘ Ramanujan space

4. ✘ Random space

Question Number : 84 Question Id : 6364312484 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Terraces are remnants of

Options :

1. ✘ Rivers

2. ✘ Meanders

3. ✓ Flood plains

4. ✗ Alluvial fans

Question Number : 85 Question Id : 6364312485 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which mineral is dominant in hard water

Options :

1. ✗ Silica

2. ✓ Calcium

3. ✗ Lead

4. ✗ Sodium

Question Number : 86 Question Id : 6364312486 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Influent streams are

Options :

1. ✓ More common in arid regions

2. ✗ More common in humid regions

3. ✘ Only found in areas of permafrost

4. ✘ Found in sinkholes

Question Number : 87 Question Id : 6364312487 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is the suitable location for the construction of dams in a folded terrain

Options :

1. ✘ Trough of the fold

2. ✘ Crest of the fold

3. ✔ Limbs of the fold with favourable inclination

4. ✘ Hinge line of the fold

Question Number : 88 Question Id : 6364312488 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The point on the fault plane where slip is initiated is called

Options :

1. ✘ Epicenter

2. ✘ Fault dip

3. ✓ Hypocenter

4. ✗ Footwall

Question Number : 89 Question Id : 6364312489 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The primary producers in a forest ecosystem are

Options :

1. ✓ Trees and plants containing chlorophyll

2. ✗ Herbivores

3. ✗ Carnivores

4. ✗ Bacteria and other micro-organism

Question Number : 90 Question Id : 6364312490 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which are defined as free falling fragments of rocks from steep cliff or slope

Options :

1. ✗ Toppling

2. ✓ Rockfalls

3. ✘ Debris avalanche

4. ✘ Earthflow

Question Number : 91 Question Id : 6364312491 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is not used in the tracking system

Options :

1. ✔ Multiple frequency

2. ✘ Dual frequency

3. ✘ Single frequency

4. ✘ Military navigation

Question Number : 92 Question Id : 6364312492 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which among the following EDM instruments is having more range

Options :

1. ✘ Infra-red

2. ✘ Visible light

3. ✓ Microwave

4. ✗ Gamma ray

Question Number : 93 Question Id : 6364312493 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following shapes are generally considered when the area is computed by map measurements

Options :

1. ✓ Triangle

2. ✗ Square

3. ✗ Rectangle

4. ✗ Pyramidal

Question Number : 94 Question Id : 6364312494 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The 'boundary model' is also called

Options :

1. ✓ Topological data model

2. ✗ Temporal data model

3. ✘ Topological discrete model

4. ✘ Temporal discrete model

Question Number : 95 Question Id : 6364312495 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following rocks has the highest permeability

Options :

1. ✘ Un-fractured shale

2. ✘ Un-fractured limestone

3. ✘ Cemented sandstone

4. ✔ Un-cemented sandstone

Question Number : 96 Question Id : 6364312496 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A disconformity is

Options :

1. ✘ An erosional surface between different rock types

2. ✘ An erosional surface between igneous and metamorphic rocks

3. ✔ An erosional surface between horizontal sedimentary rocks

4. ✘ A rock unit that does not contain fossils

Question Number : 97 Question Id : 6364312497 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following could be used to tell that a rock layer was right side up or up side down

Options :

1. ✘ Faults
2. ✘ Symmetrical fold
3. ✘ Asymmetrical ripple marks
4. ✔ Symmetrical ripple marks

Question Number : 98 Question Id : 6364312498 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Based on morphological characteristics, cleavages are classified into how many categories

Options :

1. ✘ 7
2. ✔ 4

3. ✘ 10

4. ✘ 15

Question Number : 99 Question Id : 6364312499 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Miller index of upper basal pinacoid in Gypsum type of Orthorhombic system is

Options :

1. ✘ (100)

2. ✘ (010)

3. ✔ (001)

4. ✘ (110)

Question Number : 100 Question Id : 6364312500 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The characteristic texture of komatiites is

Options :

1. ✘ Porphyritic

2. ✘ Spherulitic

3. ✔ Spinifex

4. ✘ Orbicular

Question Number : 101 Question Id : 6364312501 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a crushed material

Options :

1. ✘ Fault breccia
2. ✘ Mylonite
3. ✔ Kaolinite
4. ✘ Gouge

Question Number : 102 Question Id : 6364312502 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In shear zones of lower crust and upper mantle the nature of displacement is

Options :

1. ✘ Brittle
2. ✔ Ductile
3. ✘ Malleable

4. ✘ Gradual

Question Number : 103 Question Id : 6364312503 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

How many planes of symmetry existing in Tetragonal system

Options :

1. ✔ 5
2. ✘ 9
3. ✘ 3
4. ✘ 1

Question Number : 104 Question Id : 6364312504 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A silicate magma containing just sufficient silica to form the stable silicate minerals without free quartz is termed as

Options :

1. ✘ Supersaturated
2. ✘ Oversaturated
3. ✔ Saturated

4. ✘ Under saturated

Question Number : 105 Question Id : 6364312505 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

'D' layer in mantle is located at the depth of

Options :

1. ✔ 660 km
2. ✘ 2900 km
3. ✘ 250 km
4. ✘ 400 km

Question Number : 106 Question Id : 6364312506 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The composition of sapphire is

Options :

1. ✔ Al_2O_3
2. ✘ CaTiO_3
3. ✘ $\text{Al}_2(\text{OH})_2$

4. ✘ AlSi_2O_5

Question Number : 107 Question Id : 6364312507 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Natural levees are built up by

Options :

1. ✘ Humans

2. ✘ Beavers

3. ✘ Erosion

4. ✔ Floods

Question Number : 108 Question Id : 6364312508 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Alidade is used for

Options :

1. ✘ Levelling

2. ✔ Sighting

3. ✘ Drawing lines

4. ✘ Transferring point to ground

Question Number : 109 Question Id : 6364312509 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Mercator projection shows the lines of latitude and longitude as

Options :

1. ✘ Curved paths
2. ✔ Straight lines
3. ✘ Graphs
4. ✘ Round paths

Question Number : 110 Question Id : 6364312510 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Steep slopes on a topographic map are represented by

Options :

1. ✔ Dense contour lines
2. ✘ Distant contour lines
3. ✘ Dotted contour lines
4. ✘ Solid contour lines

Question Number : 111 Question Id : 6364312511 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A map projection that shows an area between latitude and longitude equal in size to the area on the globe is known as

Options :

1. ✘ Cylindrical projection
2. ✘ Conic projection
3. ✔ Equal-Area projection
4. ✘ Azimuthal projection

Question Number : 112 Question Id : 6364312512 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Maximum coverage capacity of the lens used in aerial photogrammetry is

Options :

1. ✘ 65°
2. ✘ 81°
3. ✔ 93°
4. ✘ 43°

Question Number : 113 Question Id : 6364312513 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following rock characterize deep water environments

Options :

1. ✘ Marl
2. ✘ Sand stone
3. ✘ Loess
4. ✔ Carbonaceous shale

Question Number : 114 Question Id : 6364312514 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Transform faults are characterized by

Options :

1. ✔ Lateral slip of plates
2. ✘ Oblique slip of plates
3. ✘ Vertical slip of plates
4. ✘ No slip occurs

Question Number : 115 Question Id : 6364312515 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The pressure on the upper surface of an unconfined aquifer is

Options :

1. ✘ Very high
2. ✘ Lower than atmospheric pressure
3. ✔ Equal to atmospheric pressure
4. ✘ More than atmospheric pressure

Question Number : 116 Question Id : 6364312516 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An Address is _____ while pointer is a _____

Options :

1. ✘ Location, Variable
2. ✔ Variable, Location
3. ✘ Variable, Constant
4. ✘ Constant, Variable

Question Number : 117 Question Id : 6364312517 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Output of the following program is _____

```
int main()
{
    signed char a = -64;
    unsigned char b = 64;
    short int x=a, y=b;
    printf("%d,%d", x,y);
    return 0;
}
```

Options :

1. ✓ -64,64
2. ✗ 64,-64
3. ✗ -47,64
4. ✗ -65,64

Question Number : 118 Question Id : 6364312518 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the output of the below program

```
int main(){
    static int var = 5;
    printf("%d ",var--);
    if(var)
        main();
}
```

Options :

1. ✘ Error

2. ✔ 5 4 3 2 1

3. ✘ 1 2 3 4 5

4. ✘ 5 3 1 0 0

Question Number : 119 Question Id : 6364312519 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which geological structure can be rectified by grouting

Options :

1. ✓ Joints
2. ✗ Folds
3. ✗ Faults
4. ✗ Inclined strata

Question Number : 120 Question Id : 6364312520 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

At the depth greater than 16 km, the pressure increase can be up to

Options :

1. ✗ 15,000 atm
2. ✗ 1,000 atm
3. ✓ 4,000 atm
4. ✗ 10,000 atm