

# Andhra Pradesh State Council of Higher Education

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## Geo Engineering and Geo Informatics (GG)

<b>Group Number :</b>	1
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<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
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<b>Break time :</b>	0
<b>Group Marks :</b>	120
<b>Is this Group for Examiner? :</b>	No
<b>Revisit allowed for group Instructions? :</b>	Yes
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<b>Minimum Instruction Time :</b>	0

## Geo Engineering and Geo Informatics (GG)

<b>Section Id :</b>	29996528
<b>Section Number :</b>	1
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	120
<b>Section Marks :</b>	120
<b>Display Number Panel :</b>	Yes
<b>Group All Questions :</b>	Yes
<b>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	29996528
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 2999653241 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Let  $A = \begin{pmatrix} 4 & 2 \\ 2 & 4 \end{pmatrix}$ . Which of the following matrix is similar to  $A$ ?

Options :

1.  $\begin{pmatrix} 4 & 0 \\ 0 & 4 \end{pmatrix}$

2.  $\begin{pmatrix} 2 & 0 \\ 0 & 2 \end{pmatrix}$

3.  $\begin{pmatrix} 2 & 0 \\ 0 & 6 \end{pmatrix}$

4.  $\begin{pmatrix} 2 & 0 \\ 0 & 4 \end{pmatrix}$

Question Number : 2 Question Id : 2999653242 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If  $A = \begin{bmatrix} 1 & 2 \\ 2 & 1 \end{bmatrix}$  then the eigen vector corresponding to its eigen value 3 is \_\_\_\_\_.

Options :

1.  $\begin{bmatrix} 1 \\ -1 \end{bmatrix}$

2.  $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$

3.  $\begin{bmatrix} 0 \\ 1 \end{bmatrix}$

4.  $\begin{bmatrix} 1 \\ 0 \end{bmatrix}$

Question Number : 3 Question Id : 2999653243 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The value of  $\lim_{x \rightarrow \infty} \left(\frac{n+2}{n-3}\right)^n$  is \_\_\_\_\_.

Options :

1. 0
2. 1
3.  $e^5$
4.  $e^2$

Question Number : 4 Question Id : 2999653244 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The maximum value of the directional derivative of  $f = x + y$  at the point  $P(1, 1, 0)$  is \_\_\_\_\_.

Options :

1.  $\sqrt{2}$
2.  $-\sqrt{2}$
3. 2
4.  $\frac{1}{2}$

Question Number : 5 Question Id : 2999653245 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If  $\vec{A}$  is any non zero vector then which of the following holds?

Options :

1.  $\nabla \cdot \vec{A} = 0$
2.  $\nabla \times \vec{A} = 0$

3.  $\nabla \cdot (\nabla \times \bar{A}) = 0$

4.  $\nabla (\nabla \times \bar{A}) = 0$

Question Number : 6 Question Id : 2999653246 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the value of p such that the function  $f(z) = \frac{1}{2} \log_e(x^2 + y^2) + i \tan^{-1}\left(\frac{px}{y}\right)$  is analytic?

Options :

1.  $-1$

2.  $-2$

3.  $2$

4.  $1$

Question Number : 7 Question Id : 2999653247 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The value of the integral  $\oint_C \frac{e^z}{(z+2i)^2} dz$ , where  $C: |z| = 1$  \_\_\_\_\_.

Options :

1.  $2\pi i$

2.  $-2\pi(1+i)$

3.  $2\pi i e^\pi$

4.  $0$



Question Number : 8 Question Id : 2999653248 Question Type : MCQ Display Question Number : Yes Is Question

**Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

If 600 bolts are examined, it is found that 12 were defective then the probability for finding a non defective bolt is \_\_\_\_\_.

**Options :**

1.  $\frac{1}{50}$

2.  $\frac{40}{50}$

3.  $\frac{49}{50}$

4.  $\frac{12}{50}$

**Question Number : 9 Question Id : 2999653249 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The probability density function of a random variable  $X$  is given by

$$f(x) = \begin{cases} \frac{1}{2}(x+1), & -1 \leq x < 1 \\ 0, & \text{elsewhere} \end{cases}, \quad \text{Then Variance } (X) \text{ is } \underline{\hspace{2cm}}.$$

**Options :**

1.  $\frac{2}{9}$

2.  $\frac{4}{9}$

3.  $\frac{5}{9}$

4.  $\frac{7}{9}$

**Question Number : 10 Question Id : 2999653250 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

In a Binomial distribution, which of the following relation is true.

**Options :**

1. Mean > Variance
2. Mean < Variance
3. Mean = Variance
4. Variance = 2 Mean

**Question Number : 11 Question Id : 2999653251 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The Mohorovičić discontinuity is existing in between \_\_\_\_\_.

**Options :**

1. crust and mantle
2. mantle and core
3. sial and Sima
4. crust and core

**Question Number : 12 Question Id : 2999653252 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which one of the following figures represents the age of the Earth?

**Options :**

1. 4.543 million years
2. 4.543 lakh years
3. 4.543 crore years
4. 4.543 billion years

**Question Number : 13 Question Id : 2999653253 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which one of the following is not a Sedimentary rock ?

Options :

1. Sandstone
2. Shale
3. Limestone
4. Marble

Question Number : 14 Question Id : 2999653254 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Contact metamorphism generally occurs at \_\_\_\_\_.

Options :

1. igneous extrusions
2. sediment intrusions
3. igneous intrusions
4. sediment extrusions

Question Number : 15 Question Id : 2999653255 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which theory states that plates of earth are continuously moving?

Options :

1. Trench Drift Theory
2. Sphere Drift Theory
3. Plate Tectonic Theory
4. Oceanic Drift Theory

Question Number : 16 Question Id : 2999653256 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Two halves into which Earth is divided are called \_\_\_\_\_.

Options :

1. ridges
2. trenches
3. equators
4. hemispheres

Question Number : 17 Question Id : 2999653257 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Process of collision of two plates with different densities is leads to \_\_\_\_\_.

Options :

1. abduction
2. subduction
3. occlusion
4. Transformation

Question Number : 18 Question Id : 2999653258 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following is a metamorphic rock?

Options :

1. Conglomerate
2. Gneiss
3. Granite



4. Dolerite

Question Number : 19 Question Id : 2999653259 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The most abundant element in the outer core of the Earth is \_\_\_\_\_.

Options :

1. Silica
2. Oxygen
3. Magnesium
4. Iron

Question Number : 20 Question Id : 2999653260 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Regular ocean waves are caused by \_\_\_\_\_.

Options :

1. Tides
2. Winds
3. Coriolis force
4. Tsunamis

Question Number : 21 Question Id : 2999653261 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If the distance between two points on a 1:50,000 scale map is 1 cm, their corresponding ground distance is \_\_\_\_\_.

Options :

1. 50 m

2. 500 m

3. 5 m

4. 5 Km

**Question Number : 22 Question Id : 2999653262 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The length of a chain is measured from \_\_\_\_\_.

**Options :**

1. centre of one handle to centre of the other handle

2. outside of one handle to the outside of other handle

3. outside of one handle to the inside of the other handle

4. inside of one handle to inside of the other handle

**Question Number : 23 Question Id : 2999653263 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Theodolite is an instrument used for \_\_\_\_\_.

**Options :**

1. tightening the capstan-headed nuts of level tube

2. measurement of horizontal angles only

3. measurement of vertical angles only

4. measurement of both horizontal and vertical angles

**Question Number : 24 Question Id : 2999653264 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Binocular vision is the facility which makes \_\_\_\_\_ possible.

Options :

1. Larger view of the features
2. Distant view of the features
3. Two-dimensional view of the features
4. Stereoscopic view of the features

Question Number : 25 Question Id : 2999653265 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The scale of the map divided into sections of  $4^\circ$  Latitude x  $4^\circ$  Longitude as per international series is \_\_\_\_\_.

Options :

1. 1: 1000000
2. 1:100000
3. 1: 2500000
4. 1: 250000

Question Number : 26 Question Id : 2999653266 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The oceans cover \_\_\_\_\_ of the surface of the earth.

Options :

1. 50%
2. 60%
3. 71%

80%

4.

Question Number : 27 Question Id : 2999653267 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Alidade is used in \_\_\_\_\_ survey.

Options :

1. Tachometry

2. Plane-Table

3. Chain

4. Compass

Question Number : 28 Question Id : 2999653268 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

EDM stands for \_\_\_\_\_.

Options :

1. Errorless Distance Measurement

2. Electronic Direct Measurement

3. Electronic Distance Measurement

4. Errorless Direct Measurement

Question Number : 29 Question Id : 2999653269 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is the correct expression for the scale of a vertical photograph with focal length of camera 'f', flying height (H) and average elevation of terrain 'h'?

Options :

1.  $S = H/(f - h)$

2.  $S = f/(H - h)$

3.  $S = (H - h)/f$

4.  $S = f*(H - h)$

**Question Number : 30 Question Id : 2999653270 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The amount of end lap in successive aerial photographs along the flight line is conventionally in the range of \_\_\_\_\_.

**Options :**

1. 5% to 15%

2. 20% to 30%

3. 55% to 65%

4. 35% to 45%

**Question Number : 31 Question Id : 2999653271 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which of the following does not cause geometrical distortions in satellite images?

**Options :**

1. Earth rotation

2. Earth curvature

3. Atmospheric absorption

4. Topographic variations

Question Number : 32 Question Id : 2999653272 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The first geostationary satellite was Syncom-3, launched in the year \_\_\_\_\_.

Options :

1. 1974
2. 1988
3. 1964
4. 1981

Question Number : 33 Question Id : 2999653273 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What are the primary colours?

Options :

1. Blue, Green and Red
2. Ultra violet, Yellow and Magenta
3. Red, Green and Yellow
4. Blue, Orange and Yellow

Question Number : 34 Question Id : 2999653274 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which part of the electromagnetic spectrum the human eye can perceive?

Options :

1. 380-740 micro meters
2. 380-740 nano meters
3. 380-740 millimeters

4. 380-740 centimeters

Question Number : 35 Question Id : 2999653275 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If the Representative Fraction is 1:50,000, 1 cm on the image equals to \_\_\_\_\_.

Options :

1. 50 m on ground
2. 500 cm on ground
3. 500 m on the ground
4. 50 cm on the ground

Question Number : 36 Question Id : 2999653276 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Geosynchronous satellites orbital period is \_\_\_\_\_ minutes.

Options :

1. 1436
2. 1458
3. 1463
4. 1485

Question Number : 37 Question Id : 2999653277 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The reflectance of vegetation is very high in which region of electromagnetic spectrum.

Options :

1. Red
2. Near Infrared

3. Thermal Infrared

4. Green

**Question Number : 38 Question Id : 2999653278 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The changes in the reflectivity/emissivity with time, is called

Options :

1. Spectral variation

2. Spatial variation

3. Temporal variation

4. Radiometric variation

**Question Number : 39 Question Id : 2999653279 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

What moves in Inverse Synthetic Aperture (ISAR) imaging?

Options :

1. The radar

2. The Earth

3. The Target

4. The antenna height

**Question Number : 40 Question Id : 2999653280 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Black colour in image processing is usually represented by \_\_\_\_\_.

Options :

1. 0



1.

2. 255

3. 256

Question Number : 41 Question Id : 2999653281 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In case of reflection and refraction of electromagnetic radiation angle of \_\_\_\_\_.

Options :

1. incidence = angle of refraction

2. incidence = angle of reflection

3. refraction = sum of the angles of incidence and reflection

4. reflection = sum of the angles of incidence and refraction

Question Number : 42 Question Id : 2999653282 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Instrument that is designed to provide 3-dimensional view of objects on overlapping pairs of photos is \_\_\_\_\_.

Options :

1. Goniometer

2. Collimator

3. Theodolite

4. Stereoscope

Question Number : 43 Question Id : 2999653283 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

WorldView-3 satellite sensor of NOAA provides panchromatic resolution is \_\_\_\_\_.

Options :

1. 31 cm
2. 45 cm
3. 65 cm
4. 50 cm

Question Number : 44 Question Id : 2999653284 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Formation of snow occurs if the cloud temperature is \_\_\_\_\_.

Options :

1. just above the freezing point
2. at the freezing point
3. below the freezing point
4. at the thawing point

Question Number : 45 Question Id : 2999653285 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The coherence length over which there is a strong relationship between amplitudes is \_\_\_\_\_.

Options :

1. directly proportional to the bandwidth

2. inversely proportional to the bandwidth
3. the square of the bandwidth
4. the cube of the bandwidth

Question Number : 46 Question Id : 2999653286 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The arrangement of terrain features which provides attributes: the shape, size and texture of objects, is called \_\_\_\_\_.

Options :

1. spectral variation
2. spatial variation
3. radiometric variation
4. temporal variation

Question Number : 47 Question Id : 2999653287 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The altitudinal distance of a geostationary satellite from the earth is about \_\_\_\_\_.

Options :

1. 26,000 km
2. 30,000 km
3. 36,000 km
4. 44,000 km

Question Number : 48 Question Id : 2999653288 Question Type : MCQ Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In thermal infrared images, brighter areas of the image indicate \_\_\_\_\_.

Options :

1. snow covered areas
2. cooler areas
3. hotter areas
4. sandy areas

Question Number : 49 Question Id : 2999653289 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Who coined the term 'Remote Sensing' ?

Options :

1. G.F. Tournachon
2. Evelyn Pruitt
3. Wilbur Write
4. Roger Tomlinson

Question Number : 50 Question Id : 2999653290 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The ratio of the total solar radiant energy returned by a planetary body to the total radiant energy incident on the body, is called \_\_\_\_\_.

Options :

1. reflectance
2. reflectance factor
3. albedo

4. refraction

Question Number : 51 Question Id : 2999653291 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The width of the ground covered by a sensor along the path of an orbiting satellite is called \_\_\_\_\_.

Options :

1. IFOV
2. Swath
3. Synoptic view
4. Ground resolution

Question Number : 52 Question Id : 2999653292 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Apogee refers to \_\_\_\_\_.

Options :

1. The point farthest from the earth
2. The point nearest from the earth
3. The point farthest from the sun
4. The point nearest from the sun

Question Number : 53 Question Id : 2999653293 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

S/N ratio is defined as \_\_\_\_\_.

Options :

1. Ratio of signal power to noise power

2. Ratio of signal power to distortion
3. Ratio of noise power to distortion
4. Ratio of Attenuation to distortion

**Question Number : 54 Question Id : 2999653294 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The most energetic rays of EM radiation spectrum are \_\_\_\_\_.

**Options :**

1. X-rays
2. gamma rays
3. ultraviolet rays
4. visible rays

**Question Number : 55 Question Id : 2999653295 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which waves can penetrate through clouds?

**Options :**

1. ultrasonic
2. microwave
3. visible and infrared
4. gamma

**Question Number : 56 Question Id : 2999653296 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Image enhancement and restoration are used to process \_\_\_\_\_.

**Options :**

1. degraded images
2. high resolution images
3. high quality images
4. brighter images

Question Number : 57 Question Id : 2999653297 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the spatial resolution of PAN sensor of CARTOSAT-3?

Options :

1. 0.25 m
2. 0.50 m
3. 1 m
4. 2.5 m

Question Number : 58 Question Id : 2999653298 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the other name for Across-Track Multispectral Scanning?

Options :

1. Pushbroom scanner
2. Whiskbroom scanner
3. Along-Track Multispectral scanner
4. Multispectral scanner

Question Number : 59 Question Id : 2999653299 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Landsat program began in \_\_\_\_\_ year.

Options :

1. 1972
2. 2003
3. 1973
4. 1937

Question Number : 60 Question Id : 2999653300 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

When RGB is assigned to their respective RGB bands, then the resultant image is

\_\_\_\_\_.

Options :

1. true color composite
2. false color composite
3. pseudo color composite
4. black and white composite

Question Number : 61 Question Id : 2999653301 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Cyan dye absorbs \_\_\_\_\_ component of the white light.

Options :

1. red
2. blue
3. green
4. magenta

Question Number : 62 Question Id : 2999653302 Question Type : MCQ Display Question Number : Yes Is



Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

NDVI is defined as \_\_\_\_\_.

Options :

1.  $(\text{NIR}-\text{Red})/(\text{NIR}+\text{Red})$
2.  $(\text{NIR}+\text{Red})/(\text{NIR}+\text{Green})$
3.  $(\text{NIR}+\text{Red})/(\text{NIR}-\text{Red})$
4.  $(\text{NIR}-\text{Red})/(\text{NIR}-\text{Green})$

Question Number : 63 Question Id : 2999653303 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Rayleigh scattering occurs when:

Options :

1. Shorter wavelengths of energy are scattered more than the longer wavelengths
2. Longer wavelengths of energy are scattered more than the shorter wavelengths
3. All wavelengths of energy are scattered uniformly
4. The particles are just the same size as the wavelengths of the incident radiation

Question Number : 64 Question Id : 2999653304 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The descending ground trace of the remote sensing satellite orbit is called as \_\_\_\_\_.

Options :

1. path
2. row
3. column
4. way

Question Number : 65 Question Id : 2999653305 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following satellites possess a relatively high spectral resolution?

Options :

1. Landsat 3
2. Spot 4
3. Cartosat-1
4. Modis

Question Number : 66 Question Id : 2999653306 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The wavelength region of Blue band is \_\_\_\_\_.

Options :

1. 450 nm to 485 nm
2. 380 nm to 450 nm
3. 485 nm to 500 nm
4. 500 nm to 565 nm

Question Number : 67 Question Id : 2999653307 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Wavelength of microwave are approximately in the range of \_\_\_\_\_.

Options :

1. 1 mm to 50 cm
2. 1 nm to 60 cm
3. 1 mm to 90 cm

4. 1 mm to 30 cm

Question Number : 68 Question Id : 2999653308 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following is not a part of cross track scanning system?

Options :

1. Magnetic tape recorder
2. Electric motor
3. CCD
4. Mirror

Question Number : 69 Question Id : 2999653309 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Number of grey levels present in a 10 bit data is \_\_\_\_\_.

Options :

1. 128
2. 256
3. 512
4. 1024

Question Number : 70 Question Id : 2999653310 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which Landsat Satellite given below is a failure?

Options :

1. Landsat-3
2. Landsat-4

3. Landsat-5

4. Landsat-6

**Question Number : 71 Question Id : 2999653311 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

By 'spatial data', we mean that data which has \_\_\_\_\_.

**Options :**

1. complex values

2. graphic values

3. decimal values

4. positional values

**Question Number : 72 Question Id : 2999653312 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Interpolation is made possible by a principle called \_\_\_\_\_.

**Options :**

1. spatial Autocorrelation

2. spatial auto-correction

3. thematic Autocorrelation

4. thematic auto-correction

**Question Number : 73 Question Id : 2999653313 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

A \_\_\_\_\_ is a set of regularly spaced (and contiguous) cells with associated (field) values. The associated values represent cell values, not point values. This means that the value for a cell is assumed valid for all locations within the cell.

**Options :**

1. crystal
2. raster
3. segment
4. polygon

Question Number : 74 Question Id : 2999653314 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The 'boundary model' is sometimes also called \_\_\_\_\_.

Options :

1. temporal data model
2. topological discrete model
3. topological data model
4. temporal discrete model

Question Number : 75 Question Id : 2999653315 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is 'metadata'?

Options :

1. Meteorological data
2. Data on metamorphic rocks
3. Data on metabolism
4. Data about data



Question Number : 76 Question Id : 2999653316 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following converts raster data in to vector data?

Options :

1. Scanning
2. Plotting
3. Digitizing
4. Sampling

Question Number : 77 Question Id : 2999653317 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is related to GIS?

Options :

1. Euclidean space
2. Ramanujan space
3. Euler's space
4. Lagrangian space

Question Number : 78 Question Id : 2999653318 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The geographic coordinate system is defined by \_\_\_\_\_.

Options :

1. points
2. latitudes and longitudes
3. lines
4. polygons

Question Number : 79 Question Id : 2999653319 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Overlaying of a stream on a district map is an example for \_\_\_\_\_ overlay.

Options :

1. point in polygon
2. line in polygon
3. polygon in point
4. line buffering

Question Number : 80 Question Id : 2999653320 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following is not an input device?

Options :

1. Digitizer
2. Scanner
3. Keyboard
4. Plotter

Question Number : 81 Question Id : 2999653321 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following refers to explicit expression of the spatial relationships between features?

Options :

1. Topology
2. Interpolation

3. Kriging

4. Geocoding

Question Number : 82 Question Id : 2999653322 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a spatial analysis software?

Options :

1. Fract

2. PySAL

3. INGRESS

4. DynTM

Question Number : 83 Question Id : 2999653323 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Selection of features that are within the specified distance of features is termed as

\_\_\_\_\_.

Options :

1. containment

2. intersect

3. proximity

4. adjacency

Question Number : 84 Question Id : 2999653324 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the full form of TIGER?

Options :

1. Topographical Integrated Geo-Echo and Referencing



2. Topologically Integrated Geographic Encoding and Referencing

2.

3. Topographical Integrated Geographical Enhanced and Reference

3.

4. Topology Integrated Geocoded Enhanced Raster

4.

**Question Number : 85 Question Id : 2999653325 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The process of reshaping lines by using some mathematical functions such as splines is called \_\_\_\_\_.

**Options :**

1. line disconnecting

1.

2. line smoothing

2.

3. line joining

3.

4. line flattening

4.

**Question Number : 86 Question Id : 2999653326 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

What happens in union operation in vector data analysis?

**Options :**

1. Input layers are combined into a single, composite layer including the data from all the input layers.

1.

2. Preserves only features that fall within the area extent.

2.

3. Preserves all features that fall within the common area of all the input layers.

3.

4. Removes all features in the input layers.

4.



**Question Number : 87 Question Id : 2999653327 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which of the following is not a GIS software?

Options :

1. ArcGIS
2. GeoMedia
3. Earth View
4. GE Smallworld

Question Number : 88 Question Id : 2999653328 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is a GIS model that emphasizes the changes of spatial data over time?

Options :

1. Statistical model
2. Vector model
3. Dynamic model
4. Descriptive model

Question Number : 89 Question Id : 2999653329 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not among the Stevens level of data scaling?

Options :

1. Ordinal
2. Nominal
3. Ratio
4. Dasymetric

**Question Number : 90 Question Id : 2999653330 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

A map showing the lines of equal rainfall is called as \_\_\_\_\_.

**Options :**

1. isobar map
2. isocline map
3. isohyetal map
4. isodaphane map

**Question Number : 91 Question Id : 2999653331 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

GPS means \_\_\_\_\_.

**Options :**

1. Global Projecting System
2. Global Positioning System
3. Global Processing System
4. Global Parsing System

**Question Number : 92 Question Id : 2999653332 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which of the following is not used as a command for queries in SQL?

**Options :**

1. JOIN
2. SELECT
3. INTERSECT

4. GROUP BY

Question Number : 93 Question Id : 2999653333 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

GIS deals with which kind of data?

Options :

1. Numeric data

2. Spatial data

3. Binary data

4. Complex data

Question Number : 94 Question Id : 2999653334 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

'Spatial databases' are also known as \_\_\_\_\_.

Options :

1. Geodatabases

2. Monodatabases

3. Concurrent databases

4. DBMS

Question Number : 95 Question Id : 2999653335 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

SDI stands for \_\_\_\_\_.

Options :

1. Spatial Data Interface

2. Spatial Data Infrastructure

3. Spatial Data Intention

4. Spatial Data International

Question Number : 96 Question Id : 2999653336 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following is not a grid based GIS spatial data?

Options :

1. GRID

2. Map model

3. Spaghetti model

4. IMGRID

Question Number : 97 Question Id : 2999653337 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The study and practice of map-making is known as \_\_\_\_\_.

Options :

1. Cartography

2. Geography

3. Coordinate systems

4. Geology

Question Number : 98 Question Id : 2999653338 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which analysis method determines what changes has occurred over time?

Options :

1. Temporal Analysis

2. Proximity Analysis
3. Statistical Analysis
4. Overlay Analysis

**Question Number : 99 Question Id : 2999653339 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which of the following is the sequence of digital land surveying conducted in sequence of \_\_\_\_\_.

**Options :**

1. Establishment of control point, Collection of field details, Automated mapping
2. Collection of field details, Establishment of control point, Automated mapping
3. Establishment of control point, Automated mapping, Collection of field details
4. Automated mapping, Collection of field details, Establishment of control point.

**Question Number : 100 Question Id : 2999653340 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

A shapefile differs from a geodatabase because \_\_\_\_\_

**Options :**

1. a shapefile can contain a single feature class and a geodatabase can contain multiple feature classes.
2. a shapefile can contain only point, line or polygon feature types but a geodatabase can use other geometric types.
3. a shapefile cannot be created in ArcCatalog but a geodatabase can
4. a shapefile is the only data format that can be viewed in ArcCatalog



**Question Number : 101 Question Id : 2999653341 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Which of the following data formats would most likely represent a file exported from Autodesk-AutoCAD?

Options :

1. .SHP
2. .DXF
3. .TXT
4. .LAS

Question Number : 102 Question Id : 2999653342 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following is an open source GIS software?

Options :

1. ArcGIS
2. MapInfo
3. AutoCAD Map
4. QGIS

Question Number : 103 Question Id : 2999653343 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Rubber sheeting involves stretching the map in \_\_\_\_\_.

Options :

1. one direction only
2. in 2 directions
3. in 3 directions
4. in various directions

Question Number : 104 Question Id : 2999653344 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

GCP stands for \_\_\_\_\_.

Options :

1. Ground coordinate point
2. Ground control point
3. Global control point
4. Global coordinate point

Question Number : 105 Question Id : 2999653345 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The degrees of inclination of GPS satellites in an orbital planes is

Options :

1. 85
2. 75
3. 65
4. 55

Question Number : 106 Question Id : 2999653346 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

TIN stands for \_\_\_\_\_.

Options :

1. Traffic Internet Network
2. Triangulated Irregular Network
3. Temporal Interest Network



#### 4. Temperature Interface Node

Question Number : 107 Question Id : 2999653347 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which among the following does not come under proximity analysis?

Options :

1. Buffering
2. Interpolation
3. Georeferencing
4. Theissen polygons

Question Number : 108 Question Id : 2999653348 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is a typical characteristic of ground water?

Options :

1. High turbidity
2. Very low oxygen levels
3. Variable chemical composition
4. Variable temperature

Question Number : 109 Question Id : 2999653349 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The soil property that cannot be visualised from aerial or space sensors

Options :

1. Soil profile
2. Soil texture

3. Soil structure

4. Soil colour

Question Number : 110 Question Id : 2999653350 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The important characteristic of a well-graded soil is that \_\_\_\_\_.

Options :

1. it contains a wide range of particle sizes

2. it contains water

3. it contains sand grade particle only

4. it contains organic rich material

Question Number : 111 Question Id : 2999653351 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The direction in which a unit of terrain faces is called as

Options :

1. Slope

2. Aspect

3. Dip

4. Strike

Question Number : 112 Question Id : 2999653352 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which one of the following applications does not use Real-time GIS data?

Options :

1. Monitor vehicle location or traffic conditions

2. Monitor weather and hydrological conditions

3. Track tagged animals in habitat monitoring

4. Crop monitoring

Question Number : 113 Question Id : 2999653353 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following represents a raster model?

Options :

1. Grids

2. Nodes

3. Arcs

4. Polygons

Question Number : 114 Question Id : 2999653354 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is the largest scale?

Options :

1. 1:25,000

2. 1:50,000

3. 1:2,50,000

4. 1:5,000

Question Number : 115 Question Id : 2999653355 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Cadastral Map refers to \_\_\_\_\_.

Options :

1. Forest Map
2. Irrigation Map
3. Land Parcel/Survey Number Map
4. Soil Map

**Question Number : 116 Question Id : 2999653356 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

A database that stores information in a tree-like structure in GIS is \_\_\_\_\_.

**Options :**

1. Hierarchical database
2. Relational Database
3. Geospatial Database
4. Record Database

**Question Number : 117 Question Id : 2999653357 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

The estimation of surface values at un-sampled points based on known surface values of surrounding points is called \_\_\_\_\_.

**Options :**

1. Correlation
2. Interpolation
3. Segmentation
4. Autocorrelation

Question Number : 118 Question Id : 2999653358 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A protocol that allows the transmission of files between computers over a network is \_\_\_\_\_.

Options :

1. File Tethering Protocol
2. File Transmission Protocol
3. File Transfer Protocol
4. File Travel Protocol

Question Number : 119 Question Id : 2999653359 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A graphic representation of an interactive map on a computer screen using Internet is \_\_\_\_\_.

Options :

1. WebMap
2. ArcMap
3. Virtual Map
4. QMap

Question Number : 120 Question Id : 2999653360 Question Type : MCQ Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Process of adding geographical information to various media such as photographs, videos, websites, etc. is called \_\_\_\_\_.

Options :

1. Geotagging

2. Georeferencing

3. Georectification

4. Geoprocessing