

# Question Paper Preview

|                                        |                                                     |
|----------------------------------------|-----------------------------------------------------|
| Question Paper Name:                   | Geo Engineering and Geo Informatics 2nd May 2019 S1 |
| Subject Name:                          | Geo Engineering and Geo Informatics                 |
| Duration:                              | 120                                                 |
| Share Answer Key With Delivery Engine: | Yes                                                 |
| Actual Answer Key:                     | Yes                                                 |

Geo Engineering and Geo Informatics

|                       |     |
|-----------------------|-----|
| Display Number Panel: | Yes |
| Group All Questions:  | No  |

Question Number : 1 Question Id : 250107361 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which one of the following is an eigen value of the matrix  $A = \begin{bmatrix} -2 & 2 & -3 \\ 2 & 1 & -6 \\ -1 & -2 & 0 \end{bmatrix}$ .

Options :

- 1.  $-3$
- 2.  $0$
- 3.  $1$
- 4.  $-1$

Question Number : 2 Question Id : 250107362 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The system of equations  $x + 2y = 5, -2x + ay = 4$  is consistant if \_\_\_\_\_.

Options :

- 1.  $a = -4$

2.  $a < 4$

3.  $a \neq -4$

4.  $a > -4$

Question Number : 3 Question Id : 250107363 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The function  $f(x) = x^2 e^{-x}$  has minimum at  $x =$  \_\_\_\_\_.

Options :

1. 0

2. 1

3. 2

4. -1

Question Number : 4 Question Id : 250107364 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The vector field  $\vec{F} = x\vec{i} - y\vec{j}$  (where  $\vec{i}, \vec{j}$  are unit vectors) is \_\_\_\_\_.

Options :

1. divergence free but not irrotational

2. divergence free and irrotational

3. irrotational but not divergence free

4. neither divergence free nor irrotational

Question Number : 5 Question Id : 250107365 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The value of the line integral  $\int_C (y^2 dx + x^2 dy)$ , where  $C$  is the boundary of the square  $-1 \leq x \leq 1, -1 \leq y \leq 1$  is \_\_\_\_.

Options :

1. 0
2.  $2(x+y)$
3. 4
4.  $\frac{4}{3}$

Question Number : 6 Question Id : 250107366 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The value of  $k$ , so that  $x^2 + 2x + ky^2$  may be harmonic is \_\_\_\_\_.

Options :

1. 0
2. 1
3. -1
4. 2

Question Number : 7 Question Id : 250107367 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The value of  $\int_0^{1+i} z^2 dz$  along  $x=y$  is \_\_\_\_\_.

Options :

1. 0

2.  $\frac{i}{3}$

3.  $\frac{2i}{3}$

4.  $\frac{3}{2}$

Question Number : 8 Question Id : 250107368 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The two numbers x and y, whose mean is 5 and variance is 4, then \_\_\_\_\_.

Options :

1.  $x = 4, y = 6$

2.  $x = 3, y = 7$

3.  $x = 1, y = 9$

4.  $x = 3.5, y = 6.5$

Question Number : 9 Question Id : 250107369 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If A and B are any two events such that  $P(A) = \frac{3}{8}$ ,  $P(B) = \frac{1}{2}$  and  $P(A \cap B) = \frac{1}{4}$  then

$P(A' \cap B') =$  \_\_\_\_\_.

Options :

1.  $\frac{1}{8}$

2.  $\frac{2}{8}$

3.  $\frac{3}{8}$

4.  $\frac{5}{8}$

Question Number : 10 Question Id : 250107370 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The mean of a binomial distribution is 18 and the variance is 6 then the number of trails conducted is \_\_\_\_\_.

Options :

1. 25

2. 20

3. 17

4. 27

Question Number : 11 Question Id : 250107371 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Deepest point in world is Mariana Trench which lies in \_\_\_\_\_.

Options :

1. Eastern North Pacific

2. Western South Pacific

3. Western North Pacific

4. Eastern South Pacific

Question Number : 12 Question Id : 250107372 Question Type : MCQ Option Shuffling : Yes Display On

Igneous, sedimentary, and metamorphic rocks are usually composed of \_\_\_\_\_.

Options :

1. intergrown crystals
2. minerals
3. fossils
4. sediments

Question Number : 13 Question Id : 250107373 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The major elements present in the earth crust are \_\_\_\_\_.

Options :

1. iron and calcium
2. oxygen and silica
3. sodium and potassium
4. nitrate and phosphate

Question Number : 14 Question Id : 250107374 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The Earth's crust is the thinnest \_\_\_\_\_.

Options :

1. under the mountain ranges
2. under the continental masses
3. at the ocean bottoms

4. at the mid-oceanic ridges

Question Number : 15 Question Id : 250107375 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

\_\_\_\_\_ is the process involved in the formation of igneous rocks.

Options :

- 1 Endothermic process
- 2 Exothermic process
- 3 Geomagnetic process
- 4 Aeromagnetic process

Question Number : 16 Question Id : 250107376 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Largest of all igneous intrusions are \_\_\_\_\_.

Options :

- 1 Stock
- 2 Batholith
- 3 Plutons
- 4 Sill

Question Number : 17 Question Id : 250107377 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Some limestone is made of skeleton of tiny organisms known as \_\_\_\_\_.

Options :

- 1 coral
- 2 bacteria

3. virus

4. fungi

Question Number : 18 Question Id : 250107378 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

If a mineral is shiny, it has \_\_\_\_\_.

Options :

1. metallic luster

2. submetallic luster

3. nonmetallic luster

4. polymetallic luster

Question Number : 19 Question Id : 250107379 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

An example of nonsilicate mineral is \_\_\_\_\_.

Options :

1. quartz

2. feldspar

3. mica

4. sulfides

Question Number : 20 Question Id : 250107380 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Minerals are divided into \_\_\_\_\_ groups.

Options :

1. two

2. three

3. four

4. five

Question Number : 21 Question Id : 250107381 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

An example of 1:25,000 scale Indian topographical map is \_\_\_\_\_.

Options :

1. 56/N/10

2. 56/N

3. 56/N/NE

4. 56/N/9/NE

Question Number : 22 Question Id : 250107382 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Projection is meant to transform the spherical earth into a \_\_\_\_\_.

Options :

1. 3D object

2. 2D plane

3. unidimensional object

4. multi-dimensional object

Question Number : 23 Question Id : 250107383 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Cartography is a subject that deals with \_\_\_\_\_.

1. remote sensing
2. aerial photography
3. land surveying
4. map making

Question Number : 24 Question Id : 250107384 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Height of an object above sea level is known as \_\_\_\_\_.

Options :

1. elevation
2. altitude
3. aptitude
4. depth

Question Number : 25 Question Id : 250107385 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

What is the fundamental principle of photogrammetry?

Options :

1. Interference
2. Resection principle
3. Triangulation
4. Intersection principle

Question Number : 26 Question Id : 250107386 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

What is the type of photograph if the tilt of the axis of the camera from the plumb line is 2 degrees?

Options :

1. Oblique photograph
2. Horizontal photograph
3. Vertical photograph
4. Tilted photograph

Question Number : 27 Question Id : 250107387 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The maximum tolerance in a 20 m chain is \_\_\_\_\_.

Options :

1.  $\pm 2$  mm
2.  $\pm 3$  mm
3.  $\pm 5$  mm
4.  $\pm 8$  mm

Question Number : 28 Question Id : 250107388 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

In the prismatic compass \_\_\_\_\_.

Options :

1. the magnetic needle moves with the box
2. the line of the sight does not move with the box
3. the magnetic needle and graduated circle do not move with the box

the graduated circle is fixed to the box and the magnetic needle always remains in the N-S direction

4.

Question Number : 29 Question Id : 250107389 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Minimum number of photographs required for 3D view photogrammetry?

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 30 Question Id : 250107390 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Photographs taken from aero plane are called as \_\_\_\_\_.

Options :

1. meridian images

2. satellite images

3. landscape photographs

4. aerial photographs

Question Number : 31 Question Id : 250107391 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Relative brightness or colour of a feature on an image is indicated by \_\_\_\_\_.

Options :

1. texture

- 2. tone
- 3. shape
- 4. size

Question Number : 32 Question Id : 250107392 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

LISS IV sensor belongs to \_\_\_\_\_ satellite.

Options :

- 1. IRS 1A
- 2. IRS 1B
- 3. IRS 1C
- 4. Resourcesat I

Question Number : 33 Question Id : 250107393 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Sun-synchronous satellites are also called as \_\_\_\_\_.

Options :

- 1. polar orbiting satellites
- 2. geostationary satellites
- 3. GPS satellites
- 4. communication satellites

Question Number : 34 Question Id : 250107394 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which one of the following satellites is a Geostationary satellite?

Options :

1. IRS-1D
2. LANDSAT-6
3. INSAT-4A
4. CARTOSAT-2

Question Number : 35 Question Id : 250107395 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which one of the following is an Indian Radar satellite?

Options :

1. Radarsat
2. JERS
3. RISAT
4. SIR -A

Question Number : 36 Question Id : 250107396 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which wave band is having the longest wavelength?

Options :

1. Gamma rays
2. X-rays
3. Radio waves

4. Ultra Violet rays

Question Number : 37 Question Id : 250107397 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

SAR image is obtained from which of the following satellites?

Options :

1. ERS

2. Landsat

3. IRS

4. SPOT

Question Number : 38 Question Id : 250107398 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

When the particles causing scattering are much larger than the wavelength of the incident radiation, then the resultant scattering is called \_\_\_\_\_.

Options :

1. Mie Scattering

2. Rayleigh's Scattering

3. selective Scattering

4. non selective Scattering

Question Number : 39 Question Id : 250107399 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

IRS-IA was launched in \_\_\_\_\_ year.

Options :

1. 1986

2. 1988

3. 1989

4. 1990

Question Number : 40 Question Id : 250107400 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Number of grey levels present in a 8 bit data is \_\_\_\_\_.

Options :

1. 128

2. 256

3. 512

4. 1024

Question Number : 41 Question Id : 250107401 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

As per the Stefan-Boltzmann law, the total radiant heat energy emitted from a surface is proportional to the \_\_\_\_\_.

Options :

1. square of the absolute temperature

2. cube of the absolute temperature

3. 4<sup>th</sup> power of the absolute temperature

4. 5<sup>th</sup> power of the absolute temperature

Question Number : 42 Question Id : 250107402 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The refractive index of the ocean water \_\_\_\_\_.

1. increases with increase in salinity
2. increases with increase in temperature
3. decreases with increase in temperature
4. decreases with increase in salinity

Question Number : 43 Question Id : 250107403 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

NASA stands for \_\_\_\_\_.

Options :

1. National Atmospheric Space Agency
2. National Aeronautics and Space Administration
3. National Atmospheric Science Agency
4. National Academic Space Administration

Question Number : 44 Question Id : 250107404 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which one of the following is a passive sensor?

Options :

1. Synthetic aperture radar
2. Scatterometer
3. Photographic camera
4. Altimeter

Spectral resolution refers to the \_\_\_\_\_.

Options :

1. number of spectral bands and their band width
2. number of spectral bands
3. maximum spectral band width of the sensor
4. maximum number of gray levels in a sensor

Which one of the following sensors have long track stereo capability?

Options :

1. SPOT-HRV
2. ASTER
3. CARTOSAT-1 PAN
4. RADARSAT-1 PAN

INSAT satellites are basically for \_\_\_\_\_.

Options :

1. Meteorological satellite
2. Communication satellite

- 3. GPS satellite
- 4. Military satellite

Question Number : 48 Question Id : 250107408 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Angle between the radar line of sight and local vertical with respect to the geoid is called \_\_\_\_\_.

Options :

- 1. look angle
- 2. incident angle
- 3. depression angle
- 4. azimuth angle

Question Number : 49 Question Id : 250107409 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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 : 50 Question Id : 250107410 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

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

- 1. 0
- 2. 1
- 3. 255
- 4. 256

Question Number : 51 Question Id : 250107411 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Angiography uses \_\_\_\_\_ technique.

Options :

- 1. image addition
- 2. image multiplication
- 3. image subtraction
- 4. image division

Question Number : 52 Question Id : 250107412 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Wavelength of thermal infrared ranges for spaceborn satellites are \_\_\_\_\_.

Options :

- 1. 10.4-12.5  $\mu\text{m}$
- 2. 10.4-13.5  $\mu\text{m}$
- 3. 11.4-12.5  $\mu\text{m}$
- 4. 10.3-12.5  $\mu\text{m}$

LANDSAT series satellites are from which country?

Options :

1. France
2. USSR
3. USA
4. India

Which of the following is a device used for measuring spectral distribution of EMR?

Options :

1. Spectrophotometer
2. Radiometer
3. Spectrometer
4. Spectroradiometer

How many satellites are revolving in space for GPS system?

Options :

1. 25
2. 27

3. 24

4. 30

Question Number : 56 Question Id : 250107416 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

A compass bearing 165 degrees shows \_\_\_\_\_ direction.

Options :

1. northern

2. north western

3. south eastern

4. south western

Question Number : 57 Question Id : 250107417 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The contour interval on a topographic map of 1:50,000 scale is \_\_\_\_\_.

Options :

1. 20 m

2. 32 m

3. 45 m

4. 54 m

Question Number : 58 Question Id : 250107418 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

If  $\theta$  is the angle of scan measured from the nadir, the ground distance swept by the sensor IFOV is proportional to \_\_\_\_\_.

Options :

1.  $\sin^2\theta$

2.  $\sec^2\theta$

3.  $\tan^2\theta$

4.  $\cos^2\theta$

Question Number : 59 Question Id : 250107419 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

A long-term platform which provides a medium for research in space is called \_\_\_\_\_.

Options :

1. space craft

2. space station

3. space shuttle

4. space satellite

Question Number : 60 Question Id : 250107420 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

A satellite which transmits computer data along with television and radio broadcasts is called \_\_\_\_\_.

Options :

1. military satellite

2. weather satellite

3. communication satellite

4. remote sensing satellite

Question Number : 61 Question Id : 250107421 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Coherence of two electromagnetic waves takes place if their phase difference is \_\_\_\_\_.

Options :

1. constant in time
2. constant in space
3. constant in time and space
4. constant in frequency

Question Number : 62 Question Id : 250107422 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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. proportional to the square of the bandwidth
4. proportional to the cube of the bandwidth

Question Number : 63 Question Id : 250107423 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Choose the correct statement from the following.

Options :

1. Topology does not describe the geometric characteristics of objects which do not change under transformations and are independent of any coordinate system

2. Topological characteristics of an object are dependent on scale measurement.

3. The three elements of topology are adjacency, containment, and connectivity.

4. Topology gives full information of the software.

Question Number : 64 Question Id : 250107424 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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 : 65 Question Id : 250107425 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The angle subtended by earth at the geostationary communication satellite is \_\_\_\_\_.

Options :

1.  $17.34^\circ$

2.  $51.4^\circ$

3.  $120^\circ$

4.  $60^\circ$

The refractive index of the ocean water \_\_\_\_\_.

Options :

1. increases with salinity
2. increases with temperature
3. decreases with salinity
4. decreases with temperature

Question Number : 67 Question Id : 250107427 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The first geostationary satellite launched in year 1965 is called \_\_\_\_\_.

Options :

1. Anik
2. Early bird (Intelsat-i)
3. Westar
4. Molniya

Question Number : 68 Question Id : 250107428 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Rotation of a geosynchronous satellite means \_\_\_\_\_.

Options :

1. drift from a stationary position
2. wobbling
3. three-axis stabilization

three-dimensional stabilization

4.

Question Number : 69 Question Id : 250107429 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The spectral region of the electromagnetic radiation which passes through the atmosphere without much attenuation is known as \_\_\_\_\_.

Options :

1. ozone hole

2. atmospheric window

3. white window

4. black hole

Question Number : 70 Question Id : 250107430 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The object of photo-interpretation is \_\_\_\_\_.

Options :

1. manipulation

2. reassembling of objects

3. judging the significance of objects

4. converting 2D into 3D

Question Number : 71 Question Id : 250107431 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which one of the following is an open source DBMS?

Options :

1. FoxBase

2. MS-Access

3. PostgreSQL

4. InterBase

Question Number : 72 Question Id : 250107432 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

\_\_\_\_\_ overlay is used in landslide hazard zonation.

Options :

1. Simple

2. Arithmetic

3. Boolean

4. Weighted

Question Number : 73 Question Id : 250107433 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which one of the following is NOT the data format of ArcView?

Options :

1. DWG

2. DXF

3. TIN

4. SHP

Question Number : 74 Question Id : 250107434 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Inheritance, polymorphism and instantiation are the properties of a \_\_\_\_\_ Database Management System.

Options :

1. network
2. relational
3. object-oriented
4. hierarchical

Question Number : 75 Question Id : 250107435 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

What is meta data?

Options :

1. meterological data
2. contour data
3. data about data
4. oceanic data

Question Number : 76 Question Id : 250107436 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Isoline map is \_\_\_\_\_.

Options :

1. an atlas map
2. a contour map
3. a map containing different subjects

a thematic map

4.

Question Number : 77 Question Id : 250107437 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

\_\_\_\_\_ is the software developed by ESRI.

Options :

1. ERDAS

2. ArcGIS

3. Geomedia

4. GRASS

Question Number : 78 Question Id : 250107438 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

GIS mainly deals with which kind of data?

Options :

1. Numeric data

2. Binary data

3. Spatial data

4. Complex data

Question Number : 79 Question Id : 250107439 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Remote sensing techniques makes use of the properties of \_\_\_\_\_ emitted,  
reflected or diffracted by the sensed objects.

Options :

1. ultrasonic waves

- 2. sound waves
- 3. electromagnetic waves
- 4. wind waves

Question Number : 80 Question Id : 250107440 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Triangulated irregular network is a \_\_\_\_\_ based representation of a surface.

Options :

- 1. raster data
- 2. vector data
- 3. canal network
- 4. road network

Question Number : 81 Question Id : 250107441 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

A digitized image prepared from an aerial photograph, in which the displacement caused by camera tilt and terrain relief have been removed is called a \_\_\_\_\_.

Options :

- 1. digital elevation model
- 2. digital orthophoto quad
- 3. digital raster graphic
- 4. digital vector graphic

Question Number : 82 Question Id : 250107442 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Object based model treats geographic space as a space populated by \_\_\_\_\_.

Options :

1. discrete objects
2. collateral data
3. undefinable objects
4. inseparable spatial objects

Question Number : 83 Question Id : 250107443 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

\_\_\_\_\_ is a process by which a layer is distorted to allow it to be seamlessly joined to an adjacent geographic layer or imagery.

Options :

1. Georeferencing
2. Map projection
3. Rubber sheeting
4. Sliver

Question Number : 84 Question Id : 250107444 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Variation of simple choropleth map is called a \_\_\_\_\_.

Options :

1. bar map
2. chart map
3. dasymetric map

4. isarithmic map

Question Number : 85 Question Id : 250107445 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

'Near things are more related than distant things' is commonly referred to as \_\_\_\_\_  
first law of Geography.

Options :

1. Tobler's

2. Kepler's

3. Anthony's

4. Thompson's

Question Number : 86 Question Id : 250107446 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a part of preprocessing procedure in a GIS work flow?

Options :

1. Data collection

2. Format conversion

3. Data reduction

4. Error editing

Question Number : 87 Question Id : 250107447 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Observation wells are used for measuring \_\_\_\_\_.

Options :

1. soil suction

- 2. infiltration
- 3. soil evaporation
- 4. ground water table fluctuations

Question Number : 88 Question Id : 250107448 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Highest porosity is present in \_\_\_\_\_.

Options :

- 1. gravel
- 2. sand
- 3. silt
- 4. clay

Question Number : 89 Question Id : 250107449 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Lines of latitude and longitude cross each other forming a \_\_\_\_\_ system.

Options :

- 1. table
- 2. geographical
- 3. magnetic
- 4. grid

Question Number : 90 Question Id : 250107450 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

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

1. Topology
2. Interpolation
3. Kriging
4. Geocoding

Question Number : 91 Question Id : 250107451 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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 of a cell is assumed to be valid for all locations within the cell.

Options :

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

Question Number : 92 Question Id : 250107452 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a full-fledged GIS package?

Options :

1. ILWIS
2. GeoMedia
3. ArcGIS

4. ERDAS

Question Number : 93 Question Id : 250107453 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which of the following is not an analysis method?

Options :

1. Temporal analysis

2. Meta Data analysis

3. Statistical analysis

4. Proximity analysis

Question Number : 94 Question Id : 250107454 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

By 'spatial data' we mean data that has \_\_\_\_\_ values.

Options :

1. complex

2. positional

3. graphic

4. decimal

Question Number : 95 Question Id : 250107455 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

LIS stands for \_\_\_\_\_.

Options :

1. Land Information System

2. Land Investigation System

3. Loss Identity System

4. Land Infrastructure System

Question Number : 96 Question Id : 250107456 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Global Positioning System is based on a principle called \_\_\_\_\_.

Options :

1. Arbitration

2. Trilateration

3. Orbiteration

4. Globalization

Question Number : 97 Question Id : 250107457 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which vector data can be used for spatial interpolation?

Options :

1. polygon

2. polyline

3. point

4. polygon and line

Question Number : 98 Question Id : 250107458 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Control points are best described as \_\_\_\_\_.

Options :

1. areas on the map where projection can easily change
2. points on the map that do not have a spatial reference
3. points in the data that share the same datum, no matter how the datasets are altered
4. common locations used in aligning two datasets

Question Number : 99 Question Id : 250107459 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which of the following is used to extract features and their attributes from one layer using a polygon from another as the boundary of the output?

Options :

1. Join
2. Merge
3. Union
4. Clip

Question Number : 100 Question Id : 250107460 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Uniform cell size is a description of \_\_\_\_\_.

Options :

1. a raster data structure
2. a vector data structure

- 3. a point data structure
- 4. a polygon data structure

Question Number : 101 Question Id : 250107461 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

‘Spatial databases’ are also known as \_\_\_\_\_.

Options :

- 1. Geodatabases
- 2. Monodatabases
- 3. Concurrent databases
- 4. Meta Databases

Question Number : 102 Question Id : 250107462 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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 : 103 Question Id : 250107463 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Equal area projections are used to map \_\_\_\_\_.

Options :

1. small areas like a street

2. small areas like a city

3. large areas like a state

4. large areas like a continent

Question Number : 104 Question Id : 250107464 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

People who use map projections to move the image of Earth's curved surface onto a flat surface are known as \_\_\_\_\_.

Options :

1. map converters

2. map markers

3. mapmakers

4. map generators

Question Number : 105 Question Id : 250107465 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The ability of \_\_\_\_\_ to penetrate through clouds and water, has been used to map surface during cyclone time.

Options :

1. microwaves

2. radio waves

3. IR waves

ultraviolet waves

4

Question Number : 106 Question Id : 250107466 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Which of the following may be considered as strategic applications of GIS?

Options :

Use of GIS to map school catchment areas.

1

Use of GIS to evaluate a site for its suitability for a particular purpose.

2

Use of GIS to decide which stores to expand and which to close.

3

Use of GIS to model population change and use this to reallocate government budgets.

4

Question Number : 107 Question Id : 250107467 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Geomorphology deals with \_\_\_\_\_.

Options :

rocks

1

landforms

2

minerals

3

groundwater

4

Question Number : 108 Question Id : 250107468 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Study of earthquake is called \_\_\_\_\_.

Options :

seismograms

1

- 2. tomograms
- 3. seismographs
- 4. seismology

Question Number : 109 Question Id : 250107469 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

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 : 110 Question Id : 250107470 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Soil texture refers to the \_\_\_\_\_.

Options :

- 1. grain size of the soil
- 2. amount of organic matter
- 3. tendency for the soil to split in clumps
- 4. amount of iron oxides

Question Number : 111 Question Id : 250107471 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The process of establishing values for areas between an existing set of discrete observations is called \_\_\_\_\_.

1. spatial interpolation
2. spectral interpolation
3. temporal interpolation
4. spatial and spectral interpolation

Question Number : 112 Question Id : 250107472 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

How long does it take a GPS satellite to orbit the earth?

Options :

1. 2 hours
2. 8 hours
3. 12 hours
4. 24 hours

Question Number : 113 Question Id : 250107473 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
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.

In the vector data representation geographic space is assumed as \_\_\_\_\_.

Options :

1. continuous
2. non continuous
3. discrete grids
4. quantized

Shape file structure does not store \_\_\_\_\_.

Options :

1. geometry
2. topographic information
3. attribute information
4. topological information

A relationship in which a single entity may have many attributes and each attribute is linked explicitly to many entities is called \_\_\_\_\_.

Options :

1. many to one
2. many to many

3. one to many

4. one to one

Question Number : 117 Question Id : 250107477 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The spatial resolution of Cartosat-2F Panchromatic data is \_\_\_\_\_.

Options :

1. 10 cm

2. 50 cm

3. 60 cm

4. 2.5 m

Question Number : 118 Question Id : 250107478 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

What is the swath dimension of the MODIS?

Options :

1. 2330 km × 10 km

2. 2430 km × 10 km

3. 2450 km × 10 km

4. 2380 km × 10 km

Question Number : 119 Question Id : 250107479 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The average annual rainfall of India is \_\_\_\_\_.

Options :

1. 297 cm

2. 243 cm

3. 114 cm

4. 199 cm

Question Number : 120 Question Id : 250107480 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

The depletion in the ozone layer is caused by \_\_\_\_\_.

Options :

1. nitrous oxide

2. carbon dioxide

3. chlorofluorocarbons

4. methane