

## PROVISIONAL ANSWER KEY

Question 27/2026/OL  
Paper Code:  
Category 190/2025  
Code:  
Exam: Geophysical Assistant  
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Department Ground Water

### Question1:-

Most important source of nitrate pollution in groundwater

A:-

industrial wastewaters

B:-

livestock manure

C:-

agricultural fertilizers

D:-

leachate from landfill sites

Correct Answer:- Option-C

### Question2:-

Darcy's law is applicable when ground water flow is

A:-

turbulent

B:-

capillary

C:-

vertical

D:-

laminar

Correct Answer:- Option-D

### Question3:-

Best example of an aquitard

A:-

loam

**B:-**

massive granite

**C:-**

sandy loam

**D:-**

clay

**Correct Answer:- Option-D**

**Question4:-**

Water hardness is mainly occurred due to presence of

**A:-**

Fe and Mn

**B:-**

Ca and Mg

**C:-**

Chloride and Sulphate

**D:-**

Na and K

**Correct Answer:- Option-B**

**Question5:-**

Aquifer that underlain and overlain by aquiclude is

**A:-**

unconfined aquifer

**B:-**

perched aquifer

**C:-**

confined aquifer

**D:-**

leaky aquifer

**Correct Answer:- Option-C**

**Question6:-**

In an unconfined aquifer the storage coefficient is approximately equal to :

**A:-**

porosity

**B:-**

specific retention

**C:-**

specific yield

**D:-**

transmissivity

**Correct Answer:- Option-C**

**Question7:-**

In Kerala, fluoride contamination is reported mainly from parts of :

**A:-**

Idukki and Wayanad

**B:-**

Palakkad and Alappuzha

**C:-**

Kasaragod and Kannur

**D:-**

Ernakulam and Thrissur

**Correct Answer:- Option-B**

**Question8:-**

Fluoride contamination in Kerala groundwater is mainly associated with :

**A:-**

coastal alluvium

**B:-**

crystalline hard rock aquifers

**C:-**

riverine flood plains

**D:-**

laterite soil alone

**Correct Answer:- Option-B**

## Question9:-

The factor which indicates organic pollution in groundwater

A:-

pH

B:-

BOD

C:-

Electrical conductivity

D:-

hardness

Correct Answer:- Option-B

## Question10:-

Reynolds number in porous media flow is used to :

A:-

measure groundwater age

B:-

determine laminar or turbulent flow

C:-

estimate recharge

D:-

measure porosity

Correct Answer:- Option-B

## Question11:-

The property of an aquifer from which water can be drained by the force of gravity

A:-

specific yield

B:-

specific retention

C:-

permeability

D:-

transmissivity

Correct Answer:- Option-A

Question12:-

Seepage velocity is always :

A:-

less than Darcy velocity

B:-

equal to Darcy velocity

C:-

greater than Darcy velocity

D:-

independent of Darcy velocity

Correct Answer:- Option-C

Question13:-

Where is the ULVZ found within the earth?

A:-

upper mantle

B:-

transition zone

C:-

near the core-mantle boundary

D:-

inner core

Correct Answer:- Option-C

Question14:-

Consider a satellite orbiting the earth in a circular orbit with radius 'r'. Which of the following statements is true?

A:-

The square of the period of the planet's orbit is proportional to the cube of the orbit's radius

B:-

The square of the period of the planet's orbit is proportional to the third root of the orbit's radius

C:-

The square of the period of the planet's orbit is proportional to the square of the orbit's radius

D:-

No option is correct

Correct Answer:- Option-A

Question15:-

Which of the following expressions is correct for the Bouguer anomaly ( $g_B$ ) where  $g_F$ ,  $\delta g_B$  and  $\delta g_T$  represent free air anomaly, Bouguer correction and terrain correction, respectively

A:-

$$g_B = g_F - \delta g_B + \delta g_T$$

B:-

$$g_B = g_F + \delta g_B + \delta g_T$$

C:-

$$g_B = g_F + \delta g_B - \delta g_T$$

D:-

$$g_B = g_F - \delta g_B - \delta g_T$$

Correct Answer:- Option-A

Question16:-

The discontinuity located at a depth of 410 km is associated with

A:-

Olivine changes to Wadsleyite

B:-

$\alpha$ -phase transforms into  $\beta$ -perovskite

C:-

Wadsleyite changes to ringwoodite

D:-

Ringwoodite turns to perovskite+magnesiowustite

Correct Answer:- Option-A

Question17:-

Which of the following options is correct about the core of the earth?

A:-

The outer core is anisotropic in nature

B:-

The inner core geotherm is at temperatures above the melting temperature curve

C:-

The outer core geotherm must be above the solidus

D:-

Temperature decreases from the Inner-Core Boundary (ICB) to the centre of the Earth

Correct Answer:- Option-C

Question18:-

What makes hotspots reliable indicators of past plate motion?

A:-

Hotspots are not affected by gravity, which drives plate motion

B:-

Hotspots are relatively stationary, whereas plates move

C:-

Hotspots only erupt when a plate moves

D:-

Hotspots only erupt every 1,000 years

Correct Answer:- Option-B

Question19:-

Let's assume that the tectonic plate moves with a half-spreading rate of 5 mm/year. The ratio of the sea-floor depth away from the spreading centre at a distance of 400 km to 100 km is :

A:-

1

B:-

2

C:-

3

D:-

4

Correct Answer:- Option-B

Question20:-

Most deep focus earthquakes occur along which type of plate boundary?

A:-

divergent boundary

**B:-**

convergent boundary

**C:-**

transform boundary

**D:-**

all options are incorrect

**Correct Answer:- Option-B**

**Question21:-**

The relationship between inclination ( $I$ ) and latitude ( $\lambda$ ) as per the geocentric axial magnetic dipole model is :

**A:-**

$$\tan I = \tan \lambda$$

**B:-**

$$\tan I = 2 \tan \lambda$$

**C:-**

$$\sin I = \sin \lambda$$

**D:-**

$$\cos I = 2 \cos \lambda$$

**Correct Answer:- Option-B**

**Question22:-**

Which of the following statements is correct?

**A:-**

gravity is maximum at the inner core and outer core boundary

**B:-**

the outer core is in a solid state

**C:-**

the core has only 16% of the earth's volume but has almost one-third of the mass

**D:-**

the outer core is denser than the inner core

**Correct Answer:- Option-C**

**Question23:-**

Earth's lower mantle is mainly composed of which of the followings?

**A:-**

spinels and majorite

**B:-**

olivine, pyroxenes and garnet

**C:-**

liquid iron alloy

**D:-**

perovskite and ferropericlasite

**Correct Answer:- Option-D**

**Question24:-**

For a tectonic plate having a thickness of 10km, moving at a rate of 5 mm/year, the thermal diffusivity

$K=10^{-6} m^2 s^{-1}$ . The thermal Reynolds number (R) is

**A:-**

0.79

**B:-**

1.58

**C:-**

2.58

**D:-**

2.00

**Correct Answer:- Option-B**

**Question25:-**

Which of the following is true for the Wadati-Benioff zone?

**A:-**

a zone of earthquakes associated with mid-ocean ridges

**B:-**

a zone of earthquakes along transform faults

**C:-**

a zone of volcanism associated with mantle plumes

**D:-**

a dipping plane of seismicity associated with the subducting lithospheric slab beneath convergent plate boundaries

**Correct Answer:- Option-D**

**Question26:-**

Dimension of viscosity is given by

A:-

$ML^{-1}T^{-1}$

B:-

$ML^{-1}T^{-2}$

C:-

$ML^1T^{-2}$

D:-

$ML^{-2}T^{-1}$

Correct Answer:- Option-A

Question27:-

What will be the 'geometrical factor' (in m) for Wenner electrode configuration used in electrical prospecting with current electrode separation as  $30\text{ m}$ ?

A:-

$10\pi$

B:-

$20\pi$

C:-

$30\pi$

D:-

$60\pi$

Correct Answer:- Option-B

Question28:-

The Schlumberger sounding carried out over 1-D resistivity distribution  $\rho_1 > \rho_2 < \rho_3 < \rho_4$  will exhibit which type of resistivity sounding curve?

A:-

HA-type

B:-

AK-type

C:-

KO-type

D:-

HK-type

Correct Answer:- Option-A

Question29:-

The dominant electrical conduction in subsurface rocks happens due which phenomenon?

A:-

electronic conduction

B:-

electrolytic conduction

C:-

dielectric conduction

D:-

all 3 (electronic, electrolytic and dielectric) conduction equally

Correct Answer:- Option-B

Question30:-

For 2D multi-electrode electrical resistivity imaging survey, a multi-channel resistivity meter will be effective in reducing recording time in comparison to a single channel resistivity meter for which electrode configuration?

A:-

Wenner array

B:-

Wenner-schlumberger array

C:-

Dipole-dipole array

D:-

all arrays

Correct Answer:- Option-C

Question31:-

Which rock type will exhibit the highest electrical resistivity?

A:-

clay

B:-

shale

C:-

sandstone

D:-

granite

Correct Answer:- Option-D

Question32:-

In a homogeneous half-space, the depth to the top of a 2D vertical conducting sheet type structure lies at 50m. Now, using Wenner array profiling, what will be the most appropriate minimum value of inter-electrode spacing to depict this conductor along a horizontal profile?

A:-

25 m

B:-

50 m

C:-

100 m

D:-

150 m

Correct Answer:- Option-B

Question33:-

KQ-type Schlumberger resistivity sounding data is recovered in the field. Which type of equivalence will be observed in the interpretation of resistivity ( $\rho_2$ ) and thickness ( $h_2$ ) of the second layer?

A:-

$h_2 \times \rho_2 = \text{constant}$

B:-

$h_2/\rho_2 = \text{constant}$

C:-

$h_2 + \rho_2 = \text{constant}$

D:-

$h_2 \cdot \rho_2 = \text{constant}$

Correct Answer:- Option-A

Question34:-

For an applied external electric field, the difference in the mobility (in the subsurface) of ions in the solution and electrons in the metallic minerals will exhibit which phenomenon in electrical prospecting?

A:-

Electrode polarization

B:-

Membrane polarization

C:-

Streaming potential

D:-

Nernst potential

Correct Answer:- Option-A

Question35:-

The resistivity measured in lab for a metallic rock sample at DC and AC (say 10 Hz) current are 50 and 40  $\Omega\text{m}$ , respectively. What is the % frequency effect?

A:-

10%

B:-

20%

C:-

25%

D:-

50%

Correct Answer:- Option-C

Question36:-

If  $V_c$  is steady state voltage and  $v(t)$  is transient voltage, then which is the correct relationship to compute chargeability (M) in IP survey?

A:-

$$M = \int_{t_1}^{t_2} v(t) dt :$$

B:-

$$M = \frac{1}{v_c} \int_{t_1}^{t_2} v(t) dt :$$

C:-

$$M = v_c \int_{t_1}^{t_2} v(t) dt :$$

D:-

$$M = \left[ \int_{t_1}^{t_2} v(t) dt \right] :$$

Correct Answer:- Option-B

Question37:-

How the frequency is affected during electromagnetic induction phenomena in the earth?

A:-

frequency of secondary field reduces in comparison to the primary field

B:-

frequency of secondary field increases in comparison to the primary field

C:-

frequency of secondary field remains the same of the primary field

D:-

frequency of secondary field becomes exactly half of the primary field

Correct Answer:- Option-C

Question38:-

At one skin depth, the amplitude of primary field reduces to what percentage of its amplitude at the earth's surface?

A:-

32%

B:-

37%

C:-

42%

D:-

50%

Correct Answer:- Option-B

Question39:-

Ionospheric current is the source of primary field in which electromagnetic method?

A:-

AFMAG method

B:-

Magnetotelluric method

C:-

VLf method

D:-

Slingram method

Correct Answer:- Option-B

Question40:-

Which component of fields are recorded in magneto telluric method?

A:-

$E_x, E_y, H_x, H_y, H_z$

B:-

$E_x, E_y, E_z, H_x, H_y, H_z$

C:-

$E_x$  and  $H_y$  only

D:-

$E_y$  and  $H_x$  only

Correct Answer:- Option-A

Question41:-

The surface projection of the hypocenter is known as

A:-

epicenter

B:-

focus

C:-

fault line

D:-

seismic zone

Correct Answer:- Option-A

Question42:-

Which scale is commonly used to measure the magnitude of an earthquake?

A:-

Mercalli scale

B:-

Richter scale

C:-

Mohs scale

D:-

Beaufort scale

Correct Answer:- Option-B

Question43:-

The seismic waves are detected and recorded by which instrument

A:-

anemometer

B:-

hygrometer

C:-

seismometer

D:-

barometer

Correct Answer:- Option-C

Question44:-

If P-waves goes from solid to liquid, what would happen to its velocity?

A:-

stay the same

B:-

increase

C:-

decrease to zero

D:-

decrease

Correct Answer:- Option-D

Question45:-

For earthquakes of magnitude 5 and 6, the seismic wave amplitudes are  $A_5$  and  $A_6$  and the radiated energies are  $E_5$  and  $E_6$  respectively. Which one of the following is true?

A:-

$A_6 \approx (6/5) A_5$  and  $E_6 \approx 20 E_5$

B:-

$A_6 \approx 10 A_5$  and  $E_6 \approx 1000 E_5$

C:-

$A_6 \approx 10 A_5$  and  $E_6 \approx (6/5) E_5$

D:-

$A_6 \approx 10 A_5$  and  $E_6 \approx 32 E_5$

Correct Answer:- Option-D

Question46:-

S-wave does not travel through which layer of the earth?

A:-

crust

B:-

mantle

C:-

outer core

D:-

inner core

Correct Answer:- Option-C

Question47:-

Which agency is responsible for the preparation of seismic zonation map of India?

A:-

Bureau of Indian Standards (BIS)

B:-

Indian Meteorological Department (IMD)

C:-  
National Center for Seismology (NCS)

D:-

Indian Institute of Tropical Meteorology (IITM)

Correct Answer:- Option-A

Question48:-

The world-wide standardized seismograph network (WWSSN) is a global network of seismograph station and built in early :

A:-

1930s

B:-

1990s

C:-

1960s

D:-

1980s

Correct Answer:- Option-C

Question49:-

What is the term given to the maximum earthquake that is expected to occur once during the design life of the structure?

A:-

Design Mean Earthquake (DME)

B:-

Design Basis Earthquake (DBE)

C:-

Maximum Intensity Earthquake (MIE)

D:-

Maximum Credible Earthquake (MCE)

Correct Answer:- Option-B

Question50:-

A focal mechanism solution is determined by

A:-

the magnitude and depth of the earthquake

**B:-**

the first motion of P-waves recorded at seismic stations

**C:-**

the velocity of seismic waves in the mantle

**D:-**

the distance between the epicentre and seismic stations

**Correct Answer:- Option-B**

**Question51:-**

PcP and ScS are reflected from which boundary in the earth

**A:-**

Moho boundary

**B:-**

core mantle boundary

**C:-**

inner core-outer core boundary

**D:-**

upper mantle-lower mantle boundary

**Correct Answer:- Option-B**

**Question52:-**

Elastic rebound theory explains:

**A:-**

mountain building

**B:-**

generation of volcanic eruptions

**C:-**

cause of earthquakes

**D:-**

isostasy

**Correct Answer:- Option-C**

**Question53:-**

Surface waves are generated primarily due to :

**A:-**

refraction of seismic waves in the core

**B:-**

interaction of body waves with the earth's free surface

**C:-**

reflection at the Moho

**D:-**

scattering in the mantle

**Correct Answer:- Option-B**

**Question54:-**

When phase velocity decreases monotonically with frequency, the group velocity is :

**A:-**

equal to phase velocity

**B:-**

greater than phase velocity

**C:-**

less than phase velocity

**D:-**

zero

**Correct Answer:- Option-C**

**Question55:-**

Königsberger ratio refers to

**A:-**

anisotropy of magnetic susceptibility

**B:-**

ratio of the intensity of remnant magnetization and induced magnetization

**C:-**

ratio of longitudinal and transverse electrical resistivities

**D:-**

ratio of P and S wave velocities

Correct Answer:- Option-B

Question56:-

Which instrument is called as 'vector magnetometer'?

A:-

flux-gate magnetometer

B:-

proton-precession magnetometer

C:-

absorption-cell magnetometer

D:-

rubidium vapor magnetometer

Correct Answer:- Option-A

Question57:-

The Bouguer anomaly obtained after applying all necessary corrections is due to

A:-

topographic undulations above the datum

B:-

increase in densities of crustal rocks with depth

C:-

lateral density variations

D:-

vertical density contrast across Moho

Correct Answer:- Option-C

Question58:-

The liquid used in sensor of a proton precession magnetometer should be rich in

A:-

carbon

B:-

hydrogen

C:-

oxygen

D:-

nitrogen

Correct Answer:- Option-B

Question59:-

Diurnal correction is applied on the geophysical data obtained from one of the geophysical methods

A:-

gravity field data

B:-

electrical field data

C:-

magnetic field data

D:-

seismic reflection data

Correct Answer:- Option-C

Question60:-

In gravity observation data, terrain correction is

A:-

only positive when datum lies below the observation point

B:-

only negative when datum lies below the observation point

C:-

always negative

D:-

always positive

Correct Answer:- Option-D

Question61:-

Elevation correction in the gravity data is a combination of

A:-

Free-air and Bouguer corrections

B:-

Bouguer and terrain corrections

C:-

Drift and free-air corrections

D:-

Drift and Bouguer correction

Correct Answer:- Option-A

Question62:-

Which of the geophysical method is based on potential field theory?

A:-

Gravity Geophysical Method

B:-

Magnetic Geophysical Method

C:-

Seismic Method

D:-

Both (1) and (2)

Correct Answer:- Option-D

Question63:-

Free-air correction is always of opposite sense to

A:-

Bouguer correction

B:-

latitude correction

C:-

terrain correction

D:-

tidal correction

Correct Answer:- Option-A

Question64:-

Free air anomaly is equal to

A:-

Observed Gravity Value - Theoretical Gravity Value  $\pm$  free-air correction

B:-

observed gravity value  $\pm$  free-air correction

C:-

observed gravity value + theoretical gravity value  $\pm$  free-air correction

D:-

observed gravity value - theoretical gravity value

Correct Answer:- Option-A

Question65:-

Gravimetry is the science which deals :

A:-

magnetic method

B:-

seismic method

C:-

gravity method

D:-

electrical method

Correct Answer:- Option-C

Question66:-

Magnetic susceptibility is a measure of

A:-

a rock's resistance to magnetic fields

B:-

the permanent magnetization of a mineral

C:-

the ability of a material to become magnetized in an external magnetic field

D:-

the variation of gravity with latitude

Correct Answer:- Option-C

Question67:-

The depth of magnetic source is obtained using

A:-

Upward continuation

B:-

Downward continuation

C:-  
Euler deconvolution

D:-

Laplace transform

Correct Answer:- Option-C

Question68:-

International <sup>Geomagnetic</sup> Reference Field (IGRF) represents :

A:-

theoretical magnetic field at any point on the Earth's surface

B:-

observed magnetic field at any point on the Earth's surface

C:-

theoretical magnetic field at any point on the Sun's surface

D:-

observed magnetic field at any point on the Sun's surface

Correct Answer:- Option-A

Question69:-

The radioactivity decay law is related to which parameter/parameters?

A:-

the number of atoms present after time

B:-

the number of atoms present at time

C:-

the decay constant of a radionuclide

D:-

all of the above

Correct Answer:- Option-D

Question70:-

What type of radioactive mineral is connected to monazite?

A:-

potassium

B:-

thorium

C:-

uranium

D:-

carnotite

Correct Answer:- Option-B

Question71:-

One of the best scintillation detector is made by growing natural crystal of which materials?

A:-

sodium iodide

B:-

quartzite

C:-

kaolinite

D:-

calcite

Correct Answer:- Option-A

Question72:-

What is the name of the line which comes after plot, of the ratio  $^{87}\text{Sr}/^{86}\text{Sr}$  against the ratio  $^{87}\text{Rb}/^{86}\text{Sr}$ ?

A:-

isochron

B:-

isopach

C:-

isochore

D:-

isotope

Correct Answer:- Option-A

Question73:-

Rb-Sr method is well suited for dating earth's history. Why?

**A:-**

simple computational method

**B:-**

long half-life

**C:-**

less time-consuming process

**D:-**

limited constants are present in method

**Correct Answer:- Option-B**

**Question74:-**

What is the radioactive equilibrium?

**A:-**

number of daughter atoms disintegrating per second is the double as the number being created by disintegration of the parent

**B:-**

number of daughter atoms disintegrating per second is the same as the number being created by disintegration of the parent

**C:-**

number of daughter atoms disintegrating per second is the triple as the number being created by disintegration of the parent

**D:-**

all of the above

**Correct Answer:- Option-B**

**Question75:-**

What is the exact unit of measuring the activity of a radioactive specimen?

**A:-**

Curie

**B:-**

Emission/minute

**C:-**

Cubic meters/minute

**D:-**

None of the above

**Correct Answer:- Option-A**

## Question76:-

Which of the following statements is/are correct about  $^{40}\text{K}$  disintegration during reaction?

- (i) capture of an electron from the innermost shell
- (ii) beta emission

A:-

only (i)

B:-

only (ii)

C:-

both (i) and (ii)

D:-

none of the above

Correct Answer:- Option-C

## Question77:-

The reliability of subsurface interpretation is highest when :

A:-

only geophysical surveys are used

B:-

only well logs are used

C:-

geophysical data are correlated with well logs or test-boring data

D:-

only surface geological mapping is used

Correct Answer:- Option-C

## Question78:-

The spontaneous potential (SP) log is mainly useful for :

A:-

differentiating shale from sandstone formations

B:-

detecting open and closed fractures

C:-

estimating rock strength

D:-

identifying igneous intrusions

Correct Answer:- Option-A

Question79:-

Spontaneous potential is a measure of the natural electrical potential that develops between :

A:-

two borehole electrodes

B:-

formation and surface electrodes

C:-

formation and borehole fluids

D:-

borehole fluid and casing

Correct Answer:- Option-C

Question80:-

Gamma rays recorded in well logging are emitted mainly due to the natural radioactivity of which elements?

A:-

sodium, calcium and magnesium

B:-

potassium, uranium and thorium

C:-

iron, manganese and nickel

D:-

silicon, aluminium and oxygen

Correct Answer:- Option-B

Question81:-

Which of the following statements regarding weathered zones and gamma ray activity is correct?

A:-

weathered zones always show low gamma activity

B:-

weathered zones always show high gamma activity

C:-

weathered zones may show either high or low gamma activity

D:-

weathering has no effect on gamma ray logs

Correct Answer:- Option-C

Question82:-

In gamma ray logging, the detector commonly used is a

A:-

Geiger-müller tube

B:-

Ionization chamber

C:-

Scintillation detector

D:-

Proportional counter

Correct Answer:- Option-C

Question83:-

Neutron logs are primarily used to estimate :

A:-

lithology only

B:-

permeability

C:-

porosity and water content

D:-

formation temperature

Correct Answer:- Option-C

Question84:-

The sonic log primarily records :

A:-

shear-wave velocity only

B:-

seismic P-wave velocity ( $V_p$ )

C:-

acoustic impedance directly

D:-

seismic reflection coefficient

Correct Answer:- Option-B

Question85:-

The waves measured by standard acoustic devices generally travel :

A:-

deep inside the formation

B:-

through surrounding beds

C:-

close to the borehole wall

D:-

only through borehole fluid

Correct Answer:- Option-C

Question86:-

The reason for using more than one caliper in a tool is :

A:-

to increase drilling speed

B:-

to correct lithology

C:-

non-circular borehole sections

D:-

electrical signal generation

Correct Answer:- Option-C

Question87:-

In the cement-bond log display, shaded areas represent :

A:-

positive wave portions

B:-

negative wave portions

C:-

cement thickness

D:-

borehole fluid effects

Correct Answer:- Option-A

Question88:-

Nuclear Magnetic Resonance (NMR) primarily detects signals from :

A:-

oxygen nuclei

B:-

silicon nuclei

C:-

hydrogen nuclei

D:-

carbon nuclei

Correct Answer:- Option-C

Question89:-

The instruments that acquire images in many, narrow, contiguous spectral bands without the visible, near-IR, mid-IR and thermal-IR portions of the spectrum is known as \_\_\_\_\_

A:-

hyperspectral sensors

B:-

multispectral sensors

C:-

panchromatic sensors

D:-

polychromatic sensors

Correct Answer:- Option-A

Question90:-

When radiation interact with atmospheric molecules that are much smaller in diameter than the wavelength of the interacting radiation is called \_\_\_\_\_ scattering.

A:-

Mie

B:-

Rayleigh

C:-

Raman

D:-

Brillouin

Correct Answer:- Option-B

Question91:-

\_\_\_\_\_ is the technique for comparing image and reference spectra.

A:-

signal angle mapping

B:-

scanner angle mapping

C:-

spectral angle mapping

D:-

sensor angle mapping

Correct Answer:- Option-C

Question92:-

Vertical exaggeration (VE) =

Where,

AVD = Apparent stereoscopic Viewing Distance

AB= Air Base, EB = Eye base,

H= Height of the camera

A:-

$(EB/H)(AVD/AB)$

B:-

$(AB/AVD)(EB/H)$

C:-

$(EB/AB)(H/AVD)$

D:-

$(AB/H)(AVD/EB)$

Correct Answer:- Option-D

Question93:-

\_\_\_\_\_ stores the geometry, topographic information and attribute information of the geographical features.

A:-

shape file

B:-

indexed file

C:-

vector file

D:-

raster file

Correct Answer:- Option-A

Question94:-

The relationship of electromagnetic spectrum with the associated percent reflectance is given by \_\_\_\_\_

A:-

spectral refraction curve

B:-

spectral reflectance curve

C:-

spectral diffraction curve

D:-

spectral dispersion curve

Correct Answer:- Option-B

Question95:-

The azimuth resolution of a SAR can be expressed as

A:-

$$R'_a = L/4.$$

B:-

$$R'_a = L/3.$$

C:-

$$R'_a = L/2.$$

D:-  
 $R'_a = L/l$ ;

Correct Answer:- Option-C

Question96:-

\_\_\_\_\_ map shows the boundaries and ownerships of a land.

A:-

political

B:-

thematic

C:-

topographical

D:-

cadastral

Correct Answer:- Option-D

Question97:-

The stray pixels are removed prior to use in GIS is known as

A:-

despeckling

B:-

greyscaling

C:-

resizing

D:-

re-projection

Correct Answer:- Option-A

Question98:-

\_\_\_\_\_ data structure DO NOT provide the precise location information.

A:-

vector

B:-

raster

C:-

hybrid

D:-

Correct Answer:- Option-B

Question99:-

A greybody has an emissivity that is \_\_\_\_\_ but is constant at all wavelength.

A:-

<-1

B:-

=1

C:-

<-1

D:-

>1

Correct Answer:- Option-C

Question100:-

The advanced very high resolution radiometer is a cross-track multispectral scanner that acquires images with swath width of \_\_\_\_\_

A:-

5700 km

B:-

4700 km

C:-

3700 km

D:-

2700 km

Correct Answer:- Option-D