

Roll No.

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(Write Roll Number from left side exactly as in the Admit Card)

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Signature of Invigilator

Question Booklet Series

X

PAPER-II

Question Booklet No.

(Identical with OMR
Answer Sheet Number)

Subject Code : 27

EARTH SCIENCES

Time : 2 Hours

Maximum Marks: 200

Instructions for the Candidates

1. Write your Roll Number in the space provided on the top of this page as well as on the OMR Sheet provided.
2. At the commencement of the examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and verify it:
 - (i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page.
 - (ii) Faulty booklet, if detected, should be got replaced immediately by a correct booklet from the invigilator within the period of 5 (five) minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
 - (iii) Verify whether the Question Booklet No. is identical with OMR Answer Sheet No.; if not, the full set is to be replaced.
 - (iv) After this verification is over, the Question Booklet Series and Question Booklet Number should be entered on the OMR Sheet.
3. This paper consists of One hundred (100) multiple-choice type questions. All the questions are compulsory. Each question carries *two* marks.
4. Each Question has four alternative responses marked: **(A) (B) (C) (D)**. You have to darken the circle as indicated below on the correct response against each question.

Example: **(A) (B) (C) (D)**, where **(C)** is the correct response.
5. Your responses to the questions are to be indicated correctly in the OMR Sheet. If you mark your response at any place other than in the circle in the OMR Sheet, it will not be evaluated.
6. Rough work is to be done at the end of this booklet.
7. If you write your Name, Phone Number or put any mark on any part of the OMR Sheet, except in the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
8. Do not tamper or fold the OMR Sheet in any way. If you do so, your OMR Sheet will not be evaluated.
9. You have to return the Original OMR Sheet to the invigilator at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry question booklet and duplicate copy of OMR Sheet after completion of examination.
10. **Use only Black Ball point pen.**
11. **Use of any calculator, mobile phone, electronic devices/gadgets etc. is strictly prohibited.**
12. **There is no negative marks for incorrect answer.**

1. Half horse is called _____.
(A) Eohippus
(B) Oligohippus
(C) Miohippus
(D) Mesohippus
2. Riphean and Vendian units are sub-divisions of which of the following?
(A) Lower Proterozoic
(B) Upper Proterozoic
(C) Middle Proterozoic
(D) Both Lower and Upper Proterozoic
3. What is the relationship between primary porosity and burial depth of strata?
(A) Porosity increases with depth.
(B) Porosity decreases with depth.
(C) Porosity remains the same.
(D) Porosity is not related with depth.
4. If the half-life of a radioactive isotope is 10 million years, and a crystal forms containing 200 of these isotopes, how old is the crystal at the point when only 25 of the original radioactive isotopes are left in the crystal?
(A) 10 million years old
(B) 20 million years old
(C) 30 million years old
(D) 50 million years old
5. The rock assemblage chloritoid-garnet-mica schist indicates
(A) metamorphism of ultramafic rocks.
(B) metamorphism of silicious dolomite.
(C) metamorphism of pelitic rocks.
(D) metamorphism of a basaltic rock.
6. The spectral region of the electromagnetic radiation which passes through the atmosphere without much attenuation is known as
(A) Ozone hole
(B) Atmospheric window
(C) Ozone window
(D) Black hole
7. Which of the following landforms is a geomorphic marker of active faulting?
(A) Shutter Ridge
(B) Cuesta
(C) Mesa
(D) Inselberg
8. Peristerite refers to
(A) low temperature plagioclase unmixing zone on a sub-microscopic scale.
(B) high temperature solvus in plagioclase.
(C) a product which is the result due to assimilation between granitic magma and basaltic rock.
(D) Barium feldspar.
9. In Wilson cycle, the continent-ocean margin changes from (early to late stage)
(A) passive to active.
(B) active to passive.
(C) passive to more passive.
(D) active to island arc type.
10. Which of the following processes describes water seeping into ground?
(A) Infiltration
(B) Evaporation
(C) Condensation
(D) Transpiration

11. Which of the following coasts has a subduction zone?

- (A) East African coast
- (B) West African coast
- (C) East-South American coast
- (D) West-South American coast

12. In optic figures Melatope represents

- (A) a case where there is absence of any optic axis.
- (B) point of emergence of optic axes.
- (C) a case where optic axes subtend an angle of 30° .
- (D) a case where optic axes subtend an angle of 45° .

13. What is an arête?

- (A) A bowl-shaped depression on a mountain carved out by a valley glacier.
- (B) A pyramidal mountain peak in a glacially eroded region.
- (C) A knife-like ridge of rock between two glacially eroded valleys.
- (D) A U-shaped tributary valley that sits high above a deeper valley.

14. Which of the following statements is not true regarding the Carbonate Compensation Depth (CCD)?

- (A) CCD varies from ocean to ocean.
- (B) At CCD the rate of carbonate accumulation equals the rate of dissolution.
- (C) Carbonate oozes do not accumulate below the CCD.
- (D) Carbonate oozes only accumulate below the CCD.

15. A consequence of the outer core being liquid is—

- (A) The inner core is liquid.
- (B) S-wave velocities decrease suddenly at the edge of the outer core.
- (C) P-waves are unable to pass through the outer core.
- (D) An S-wave shadow zone at greater than 103° away from an earthquake focus.

16. In type I superposed fold, the hinge line of early and late fold plunge direction show

- (A) constant direction across the axial traces of other fold.
- (B) only early fold hinge changes direction across the axial traces of late fold.
- (C) both early and late fold hinge changes direction across axial traces of other fold.
- (D) only late fold hinge change direction across the axial trace of early fold.

17. For interpolation of satellite data used for monitoring dynamic changes that occurs on the earth surface, the most suitable orbit for the satellite is

- (A) Circular orbit
- (B) Sun synchronous orbit
- (C) Near polar orbit
- (D) None of the above

18. W_0 and W_w are the weights of a rock sample in completely dry and water saturated conditions, respectively. If the volume of this sample is 'V', then the value of its porosity 'n' will be expressed as

- (A) $n = \frac{(W_w - W_0)}{V} \times 100$
- (B) $n = \frac{(W_w + W_0)}{V} \times 100$
- (C) $n = \frac{V}{(W_w - W_0)} \times 100$
- (D) $n = \frac{V}{(W_w + W_0)} \times 100$

19. A granite body with peraluminous character, normative corundum and presence of muscovite and biotite may be best designated as

- (A) I-type granite
- (B) A-type granite
- (C) M-type granite
- (D) S-type granite

20. The type of volcanic hazard that involves a mudflow made up of ash is called a

- (A) Debris avalanche
- (B) Pyroclastic flow
- (C) Tsunami
- (D) Lahar

21. The 'Big Bang', with which the evolution of the universe started, is believed to have happened approximately

- (A) 25 billion years ago
- (B) 15 billion years ago
- (C) 25 million years ago
- (D) 15 million years ago

22. The distance between the oceanic trench and the island arc in ocean-ocean plate collision zone depends on

- (A) thickness of the converging plates.
- (B) thickness of the subducted plate.
- (C) inclination of the subducting plate.
- (D) rate of movement of the overriding plate.

23. Isolated SiO_4 Tetrahedra are linked by octahedral Mg in

- (A) hornblende
- (B) forsterite
- (C) augite
- (D) biotite

24. In klippe structure, the hanging wall (HW) and footwall (FW) rocks occur as follows:

- (A) The FW rock is surrounded by HW rocks on all sides.
- (B) The HW rock is surrounded by FW rocks on all sides.
- (C) The younger rock is surrounded by older rock on all sides.
- (D) None of the above

25. A body freely moving on the earth's surface deflects rightward in the northern hemisphere and leftward in the southern hemisphere. This is due to the _____.

- (A) Coriolis effect
- (B) Ekman effect
- (C) El Nina and El Nino effect
- (D) Milankovich effect

26. The basic requirement of any sensor system is

- (A) Radiometric resolution
- (B) Spatial resolution
- (C) Spectral resolution
- (D) All of the above

27. Sigmoidal trails of mineral-inclusions in porphyroblasts formed during metamorphism is known as

- (A) Helicitic texture
- (B) Plumose texture
- (C) Granophyric texture
- (D) Decussate texture

28. Which of the following represents the correct sequence of the faults from south to north of Himalaya?

- (A) STDZ, MBT, MFT, MCT
- (B) MFT, MBT, MCT, STDZ
- (C) MBT, MCT, STDZ, MFT
- (D) MCT, MBT, MFT, STDZ

29. Which of the following statements is not true regarding availability of electromagnetic energy (EME) on the earth?

- (A) Ozone layer absorbs ultraviolet EME in the atmosphere.
- (B) Water vapour absorbs some part of the shortwave infrared EME.
- (C) Carbon dioxide strongly absorbs the thermal infrared EME.
- (D) Nitrogen strongly absorbs the microwave EME.

30. Which of the following parameters does not have a major impact on the process of mass wasting?

- (A) Gravity
- (B) Slope steepness
- (C) Elevation
- (D) Amount of air or water in the regolith

31. Lattice defects are found in the following set of minerals:

- (A) Kyanite, Yoderite and Staurolite
- (B) Sanidine and Microcline
- (C) Oligoclase and Andesine
- (D) Labradorite and Bytownite

32. The polar wandering curves of two lithospheric plates show that they have different paths crossing each other twice. It indicates that

- (A) the plates were joined together only when the paths were at crossing points.
- (B) the plates were joined together except when the paths were at crossing points.
- (C) plates wander independently and never were together.
- (D) the plates were at different hemisphere but on the same latitude twice.

33. Choose the correct statement from the following with regard to the increasing anthropogenic aerosol content in the atmosphere:

- (A) Atmosphere becomes warmer.
- (B) Lesser cloud formation in Atmosphere.
- (C) Incoming solar radiation at the surface decreases.
- (D) More radiation is reflected back to space.

34. What is the speciality of the Artesian water?

- (A) Has a characteristic colour
- (B) Has a characteristic odour
- (C) Requires no pumping
- (D) Requires special type of pumping

35. In a thunderstorm there is sufficient separation of electric charges within the thundercloud that leads to a discharge of lightening. What proportion of this lightening travels from cloud to the ground?

- (A) $\frac{3}{4}$
- (B) $\frac{2}{3}$
- (C) $\frac{1}{2}$
- (D) $\frac{1}{3}$

36. Which of the following rocks represents the highest $\delta^{18}\text{O}$ value ?

- (A) Marine limestone
- (B) Sandstone
- (C) Shale
- (D) Chert

37. Q-J based classification is applicable for

- (A) Olivine
- (B) Pyroxene
- (C) Nepheline
- (D) Plagioclase

38. What is the volume of voids in a rock mass expressed in percentage of total volume of rock called?

- (A) Specific yield
- (B) Voids ratio
- (C) Permeability
- (D) Porosity

39. If pole of Earth's rotation and pole of rotation of two divergent oceanic plates coincide, the transform faults across the MORR system is then

- (A) parallel to longitude of the Earth.
- (B) parallel to latitude of the Earth.
- (C) all faults intersect at the pole of rotation when they are extended.
- (D) neither parallel nor perpendicular to the latitude/longitude.

40. Porphyry-type Cu deposits are associated with

- (A) Mid-Oceanic Ridge setting
- (B) Intra-Cratonic rift setting
- (C) Ocean-Ocean subduction setting
- (D) Continent-Ocean subduction setting

41. Which of the following pair of elements is not considered as "low field strength" element?

- (A) Cs-Na
- (B) Rb-Sr
- (C) K-Ba
- (D) Ni-Co

42. Which one of the following minerals is found in Oxide zone of a weathered sulfide ore body?

- (A) Malachite
- (B) Chalcocite
- (C) Chalcopyrite
- (D) Arsenopyrite

43. Given below are three statements about the Jet streams:

1. Jet streams are meandering air currents flowing only from west to east.
2. Jet streams flow at 30-50 km above sea level.
3. Jet streams are typically a few hundred kilometres wide and less than 5 kilometres thick.

Which one of these statements is not true?

- (A) Statement 1 is not true.
- (B) Statement 2 is not true.
- (C) Statement 3 is not true.
- (D) All the statements are not true.

44. Polysomers in minerals

- (A) refer to high-temperature polymorphism in silica minerals.
- (B) refer to polymorphism in carbonate minerals.
- (C) refer to polymorphism in sulphide minerals.
- (D) are structures that can be created by combining two or more structurally and stoichiometrically distinct type of slab modules.

45. What is the upper surface of water in a confined aquifer called?

- (A) Primary layer
- (B) Secondary layer
- (C) First layer
- (D) Piezometric layer

46. Hydrostatic stress represented in Mohr circle as

- (A) a circle with its centre on σ_n (normal stress)-axis.
- (B) a point on σ_s (shear stress)-axis.
- (C) a point on σ_n -axis.
- (D) 3 circles with their centres on σ_n -axis.

47. Which of the following isotope ratios get significantly fractionated during evaporation of sea water?

- (A) $^{12}\text{C}/^{13}\text{C}$
- (B) $^{143}\text{Nd}/^{144}\text{Nd}$
- (C) $^{16}\text{O}/^{18}\text{O}$
- (D) $^{87}\text{Sr}/^{86}\text{Sr}$

48. Satellite launch sites are invariably located on Eastern seaboard to ensure that

- (A) launch takes place eastward.
- (B) expenditure of propulsion fuel is reduced during plane changing.
- (C) the satellite achieves circular orbit quickly.
- (D) spent rocket motor and other launcher debris falls into sea.

49. The distance between the MORR system along a transform fault is controlled by

- (A) the slip sense along the transform fault.
- (B) rate of movement of the plates across the MORR system.
- (C) dip of the fault.
- (D) None of the above

50. Which of the following results from the deformation mechanism of pressure solutions?

- (A) Stylolite
- (B) Stromatolite
- (C) Skolithos
- (D) Slickensides

51. Phacolith refers to

- (A) an intrusive body being controlled by fold-geometry.
- (B) special type of volcanic crater.
- (C) a typical structure from which Deccan Lavas came out.
- (D) an intrusive body marked by shallow depression.

52. When referring to groundwater, (1) _____ refers to the volume percentage of a rock made up of open space that can fill with water, whereas (2) _____ refers to the ability of water to flow through the rock.

- (A) (1) permeability, (2) porosity
- (B) (1) permeability, (2) infiltration capacity
- (C) (1) infiltration capacity, (2) permeability
- (D) (1) porosity, (2) permeability

53. Plane-strain is a strain in which K (in Flinn diagram) value is

- (A) 0
- (B) 0 to 1
- (C) $1-\infty$
- (D) 1

54. Which one of the following statements is not correct with regard to the plate tectonic concept?

- (A) Transform faults are characterized by shallow, variable-magnitude earthquakes exhibiting lateral motion.
- (B) Divergent plate boundaries (Ocean ridges) are characterized by small-magnitude, shallow earthquakes with vertical motions reflecting formation of new lithosphere.
- (C) In general there are more than 6 types of plate boundaries, that have resulted in the present configuration of earth surface.
- (D) New subduction zones commonly form at zones of weakness such as transform faults or fracture zones.

55. In flash figures, the section represents

- (A) a case where there is absence of any optic axis.
- (B) a case where the section is parallel to the C-axis.
- (C) a case where optic axis subtend an angle of 30° .
- (D) a case where optic axis subtend an angle of 45° .

56. Nickel bearing laterites are formed by chemical weathering of

- (A) Banded Iron Formation
- (B) Granite
- (C) Ultramafic rocks
- (D) Syenite

57. _____ is an example of Reservoir Induced seismicity.

- (A) 1905 Kangra earthquake
- (B) 1969 Koyna earthquake
- (C) 1993 Latur earthquake
- (D) 1997 Jabalpur earthquake

58. Clockwise P-T-t paths are related to

- (A) Collision orogen
- (B) Divergent plate setting
- (C) Within plate setting
- (D) Transform fault

59. What activity results in the development of a feature called “a cone of depression”?

- (A) Compaction
- (B) Over pumping
- (C) Subsidence
- (D) Saltwater incursion

60. In a conjugate shear fracture, the

- (A) σ_1 bisects the acute angle between the fracture planes.
- (B) σ_3 bisects the acute angle between the fracture planes.
- (C) σ_2 bisects the acute angle between the fracture planes.
- (D) None of the above relation exists.

61. Which one of the following is an image rectification technique?

- (A) Histogram Equalization
- (B) Rubbersheeting
- (C) Histogram Normalization
- (D) Density Slicing

62. Which of the following elements is classified as HYGROMAGMATOPHILE when having charge?

- (A) Equal to commonly abundant elements
- (B) $+1$
- (C) $+2$
- (D) $+3$ or higher

63. Gold-quartz lode deposits are commonly found in

- (A) Proterozoic sedimentary basins.
- (B) Tertiary volcanic belts.
- (C) Layered anorthosite complexes.
- (D) Precambrian greenstone belts.

64. The bearing capacity of the rocks is decided based on their _____.

- (A) Strength
- (B) Porosity
- (C) Permeability
- (D) Specific gravity

65. The following mineral (from the list given below) shows omission solid solution:

- (A) Galena
- (B) Plagioclase
- (C) Quartz
- (D) Pyrrhotite

66. Gravity field variations on the surface

- (A) reflects the density variation vertically in the sub surface.
- (B) reflects topographic variations only.
- (C) reflects the density variation laterally in the sub surface.
- (D) do not reflect density variation.

67. In a box fold the possible curvature between the two hinges is

- (A) 0
- (B) between 0 and ∞
- (C) > 0 but less than the curvature at the hinges.
- (D) more than the curvature of one hinge but less than the curvature of the other hinge.

68. Submarine mass wasting leads to the deposition of

- (A) Alluvial sands
- (B) Turbidites
- (C) Loess
- (D) Carbonate mounds

69. Transition elements have incompletely filled

- (A) "s" orbital
- (B) "p" orbital
- (C) "d" orbital
- (D) "f" orbital

70. Which one of the following minerals exhibit internal reflections under reflected light microscope?

- (A) Magnetite
- (B) Chalcopyrite
- (C) Galena
- (D) Sphalerite

71. Imaginary lines joining points of equal salinity in seas/oceans are called

- (A) Isosalines
- (B) Thermosalines
- (C) Isohalines
- (D) Thermohalines

72. Genesis of magma in mantle by equilibrium batch melting involves

- (A) 100% melt-escape during melting.
- (B) 35.5% melt-escape during melting.
- (C) 20.7% melt-escape during melting.
- (D) 0% melt-escape during melting.

73. The difference between magnetic north and true north is called (1) _____ whereas the angle between Earth's magnetic field lines and the Earth's surface is the (2) _____.

- (A) (1) magnetic deviation, (2) magnetic inclination
- (B) (1) magnetic declination, (2) magnetic reversal
- (C) (1) magnetic error, (2) magnetic declination
- (D) (1) magnetic declination, (2) magnetic inclination

74. Axial plane of a fold represents

- (A) XY plane of strain ellipsoid.
- (B) YZ plane of strain ellipsoid.
- (C) a plane that makes an angle of 45° with the fold axis.
- (D) XZ plane of strain ellipsoid.

75. In the limestone cave deposits, the depositional feature formed that is hanging from roof of the cave is called

- (A) Stylolite
- (B) Stalagmite
- (C) Stalactites
- (D) Geode

76. Laccolith refers to

- (A) an intrusive body with convex upward geometry.
- (B) special type of volcanic crater.
- (C) a typical structure from which Deccan lavas came out.
- (D) an intrusive body marked by shallow depression.

77. Which one of the following statements is correct regarding mineral property?

- (A) Galena exhibits Luminescence under ultra-violet light.
- (B) Baryte has high specific gravity.
- (C) Magnetite shows cherry red streak.
- (D) Magnesite has pisolitic structure.

78. Which of the following dating techniques could be used for dating speleothemes?

- (A) Uranium/Thorium (U/Th)
- (B) Thermoluminescence (TL)
- (C) Optically Stimulated Luminescence (OSL)
- (D) Berilium-10 (^{10}Be)

79. Coarse grain sizes of pegmatites are caused due to

- (A) large amount of volatile concentration in the magma resulting in prolong crystallization of minerals.
- (B) sudden pushing of the parent magma at the surface of the earth.
- (C) assimilation of granite magma with limestone country rock.
- (D) magma mixing.

80. Which of the following types of seismic waves does not emanate from the focus of the earthquake?

- (A) Body waves
- (B) P-waves
- (C) Surface waves
- (D) Secondary waves

81. In Anderson's theory of faulting, one of the three principal stresses is oriented vertical because

- (A) Earth's surface is horizontal.
- (B) principal stresses are perpendicular to each other.
- (C) the value of vertical axis is minimum.
- (D) shearing stress along the surface of the Earth is 0.

82. Which one of the following pairs is not correctly matched?

- (A) Residual concentration : Bauxite
- (B) Hydrothermal : Gold
- (C) Sedimentation : Kyanite
- (D) Magmatic : Chromite

83. Isolated SiO_4 tetrahedra are represented by following mineral:

- (A) Hornblende
- (B) Olivine
- (C) Mica
- (D) Augite

84. Calculate the degree(s) of freedom of the assemblage orthopyroxene+clinopyroxene+plagioclase+hornblende+quartz in the chemical system $\text{CaO}-\text{FeO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ with pressure and temperature as physical variables.

- (A) 1
- (B) 3
- (C) 2
- (D) 0

85. An aggrading river channel would start degrading if the _____.

- (A) bedload increases
- (B) clast size increases
- (C) stream discharge increases
- (D) stream discharge decreases

86. Charnockites are normally encountered in

- (A) Greenschist facies metamorphic rocks.
- (B) Granulite facies metamorphic rocks.
- (C) zones of thermal metamorphism.
- (D) zones of dynamic metamorphism.

87. The interaction of the electromagnetic radiation produced with a specific wavelength to illuminate a target on the terrain for studying its scattered radiance, is called

- (A) Passive remote sensing
- (B) Active remote sensing
- (C) Neutral remote sensing
- (D) None of the above

88. In flexure-slip folding slickenside and slickenline are developed. The orientation of slickenline is

- (A) nearly perpendicular to the fold axis and well developed in the limb part.
- (B) nearly parallel to the fold axis and well developed in the limb part.
- (C) nearly parallel to the fold axis and well developed in the hinge part.
- (D) nearly parallel to the fold axis and well developed all throughout the fold.

89. Orographic rain occurs

- (A) when masses of warm, moist, rising air form cumulonimbus clouds.
- (B) when warm, moist air is driven by the wind up the side of a hill or mountain, causing it to condense into clouds and fall as rain.
- (C) when warm air rises in warm cold fronts, causing it to condense as clouds and fall as rain.
- (D) when cool, dry air is driven up by the side of a hill or mountain, causing it to condense into clouds and falls as rain.

90. What will be the correct coordination number when ionic radius ratio ($R_{\text{cation}}/R_{\text{anion}}$) is =1?

- (A) 12
- (B) 8
- (C) 4
- (D) 3

91. The term isostasy refers to

- (A) thermal equilibrium.
- (B) electrical equilibrium.
- (C) magnetic equilibrium.
- (D) gravity equilibrium.

92. Which of the following statements is not true about a flux-gate magnetometer?

- (A) It measures the strength of the magnetic field in a particular direction.
- (B) It yields absolute field values.
- (C) It provides a continuous record of field strength.
- (D) It is adaptable to being mounted in an airplane.

93. The terms like cumulates, adcumulates and mesocumulates are associated with

- (A) Zone refining of Deccan Trap
- (B) Bushveld complex
- (C) Singhbhum Granite batholith
- (D) Rapakivi granites of Bundelkhand province

94. Which one of the following helps to identify the objects on the earth surface?

- (A) Atmospheric window
- (B) Signature
- (C) Radiometric error
- (D) None of the above

95. Standing at the core of a fold and looking towards the closure, the right-hand limb may contain higher orders—

- (A) Z-fold
- (B) S-fold
- (C) Z-, S- and symmetrical folds
- (D) Z- and S- folds

96. A column of spiraling wind formed around a very low pressure center is known as

- (A) Tornado
- (B) Anticyclone
- (C) Thunderstorm
- (D) Hurricane

97. Which of the following planets has the famous satellite named as Titanic?

- (A) Mars
- (B) Jupiter
- (C) Saturn
- (D) Uranus

98. Brown coal that has high moisture content and commonly retains many of the original wood fragments is called

- (A) Anthracite
- (B) Bituminous coal
- (C) Lignite
- (D) Peat

99. Which of the following is a siliceous microfossil?

- (A) Oölite
- (B) Pellet
- (C) Foraminifer
- (D) Radiolaria

100. Bowen's thermal valley is a field demarkated in

- (A) Albite-Anorthite phase diagram
 - (B) Diopside-Albite-Anorthite phase diagram
 - (C) Forsterite-Silica system phase diagram
 - (D) Nepheline-Kalsilite-Silica phase diagram
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Space for Rough Work

Space for Rough Work

Space for Rough Work