Test Paper : III Test Subject : EARTH SCIENCE Test Subject Code : K-3217	Test Booklet Serial No. : OMR Sheet No. : Roll No. (Figures as per admission card)
Name & Signatu	re of Invigilator/s
Signature : Name :	
Paper : Subject : Time : 2 Hours 30 Minutes	III EARTH SCIENCE Maximum Marks: 150

Number of Pages in this Booklet: 8

ಅಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು

- 1. ಈ ಪುಟದ ಮೇಲ್ಕುದಿಯಲ್ಲಿ ಒದಗಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ನಿಮ್ಮ ರೋಲ್ ನಂಬರನ್ನು ಬರೆಯಿರಿ.
- 🖕 2. 😝 ಪತ್ರಿಕೆಯು ಬಹು ಆಯ್ಕೆ ವಿಧದ ಎಪ್ಪತ್ತೈದು ಪ್ರಶ್ನೆಗಳನ್ನು ಒಳಗೊಂಡಿದೆ.
 - 3. ಪರೀಕ್ಷೆಯ ಪ್ರಾರಂಭದಲ್ಲಿ, ಪ್ರಶ್ನೆಪುಸ್ತಿಕೆಯನ್ನು ನಿಮಗೆ ನೀಡಲಾಗುವುದು. ಮೊದಲ 5 ನಿಮಿಷಗಳಲ್ಲಿ ನೀವು ಪುಸ್ಕಿಕೆಯನ್ನು ತೆರೆಯಲು ಮತ್ತು ಕೆಳಗಿನಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಪರೀಕ್ಷಿಸಲು ಕೋರಲಾಗಿದೆ.
 - (i) ಪ್ರಶ್ನೆ ಪುಸ್ತಿಕೆಗೆ ಪ್ರವೇಶಾವಕಾಶ ಪಡೆಯಲು, ಈ ಹೊದಿಕೆ ಪುಟದ ಅಂಚಿನ ಮೇಲಿರುವ ಪೇಪರ್ ಸೀಲನ್ನು ಹರಿಯಿರಿ. ಸ್ಥಿಕ್ಷರ್ ಸೀಲ್ ಇಲ್ಲದ ಅಥವಾ ತೆರೆದ ಪುಸ್ಕಿಕೆಯನ್ನು ಸ್ವೀಕರಿಸಬೇಡಿ.
 - (ii) ಪುಸ್ತಿಕೆಯಲ್ಲಿನ ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ ಮತ್ತು ಪುಟಗಳ ಸಂಖ್ಯೆಯನ್ನು ಮುಖಪುಟದ ಮೇಲೆ ಮುದ್ರಿಸಿದ ಮಾಹಿತಿಯೊಂದಿಗೆ ತಾಳೆ ನೋಡಿರಿ. ಪುಟಗಳು/ಪ್ರಶ್ನೆಗಳು ಕಾಣೆಯಾದ, ಅಥವಾ ದ್ರಿಪ್ರತಿ ಅಥವಾ ಅನುಕ್ರಮವಾಗಿಲ್ಲದ ಅಥವಾ ಇತರ ಯಾವುದೇ ವ್ಯತ್ಯಾಸದ ದೋಷಪೂರಿತ ಪುಸ್ತಿಕೆಯನ್ನು ಕೂಡಲೆ 5 ನಿಮಿಷದ ಅವಧಿ ಒಳಗೆ, ಸಂವೀಕ್ಷಕರಿಂದ ಸರಿ ಇರುವ ಪುಸ್ತಿಕೆಗೆ ಬದಲಾಯಿಸಿಕೊಳ್ಳಬೇಕು. ಆ ಬಳಿಕ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಬದಲಾಯಿಸಲಾಗುವುದಿಲ್ಲ, ಯಾವುದೇ ಹೆಚ್ಚು ಸಮಯವನ್ನೂ ಕೊಡಲಾಗುವುದಿಲ್ಲ.
 - 4. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ(A), (B), (C) ಮತ್ತು (D) ಎಂದು ಗುರುತಿಸಿದ ನಾಲ್ಕು ಪರ್ಯಾಯ ಉತ್ತರಗಳಿವೆ. ನೀವು ಪ್ರಶ್ನೆಯ ಎದುರು ಸರಿಯಾದ ಉತ್ತರದ ಮೇಲೆ, ಕೆಳಗೆ ಕಾಣಿಸಿದಂತೆ ಅಂಡಾಕೃತಿಯನ್ನು ಕಪ್ಪಾಗಿಸಬೇಕು.

ಉದಾಹರಣೆ: (A) (B) (C) ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದಾಗ.

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- ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಗಳನ್ನು , ಪತ್ರಿಕೆ III ಪುಸ್ತಿಕೆಯೊಳಗೆ ಕೊಟ್ಟಿರುವ OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ **ಮಾತ್ರವೇ ಸೂಚಿಸತಕ್ಕದ್ದು**. OMR ಹಾಳೆಯಲ್ಲಿನ ಅಂಡಾಕೃತಿ ಹೊರತುಪಡಿಸಿ ಬೇರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಗುರುತಿಸಿದರೆ, ಅದರ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲಾಗುವುದಿಲ್ಲ
- 6. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಕೊಟ್ಟ ಸೂಚನೆಗಳನ್ನು ಜಾಗರೂಕತೆಯಿಂದ ಓದಿರಿ.
- 7. ಎಲ್ಲಾ ಕರಡು ಕೆಲಸವನ್ನು ಪುಸ್ತಿಕೆಯ ಕೊನೆಯಲ್ಲಿ ಮಾಡತಕ್ಕದ್ದು
- 8. ನಿಮ್ಮ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸಬಹುದಾದ ನಿಮ್ಮ ಹೆಸರು ಅಥವಾ ಯಾವುದೇ ಚಿಹ್ನೆಯನ್ನು , ಸಂಗತವಾದ ಸ್ಥಳ ಹೊರತು ಪಡಿಸಿ, OMR ಉತ್ತರ ಹಾಳೆಯ ಯಾವುದೇ ಭಾಗದಲ್ಲಿ ಬರೆದರೆ, ನೀವು ಅನರ್ಹತೆಗೆ ಬಾಧ್ಯರಾಗಿರುತ್ತೀರಿ.
- 9. ಪರೀಕ್ಷೆಯು ಮುಗಿದನಂತರ, ಕಡ್ಡಾಯವಾಗಿ OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ಸಂವೀಕ್ಷಕರಿಗೆ ನೀವು ಹಿಂತಿರುಗಿಸಬೇಕು ಮತ್ತು ಪರೀಕ್ಷ್ಪಾ ಕೊಠಡಿಯ ಹೊರಗೆ OMR ನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ಕೊಂಡೊಯ್ಯಕೂಡದು.
- 10. ಪರೀಕ್ಷೆಯ ನಂತರ, ಪರೀಕ್ಷಾ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಮತ್ತು ನಕಲು OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ನಿಮ್ಕೊಂದಿಗೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು.
- 11. ನೀಲಿ/ಕಪ್ಪುಬಾಲ್ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರವೇ ಉಪಯೋಗಿಸಿರಿ.
- 12. ಕ್ಯಾಲ್ಕುಲೇಟರ್, ವಿದ್ಯುನ್ನಾನ ಉಪಕರಣ ಅಥವಾ ಲಾಗ್ ಟೇಬಲ್ ಇತ್ಯಾದಿಯ ಉಪಯೋಗವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ.
- 13. ಸರಿ ಅಲ್ಲದ ಉತ್ತರಗಳಿಗೆ ಋಣ ಅಂಕ ಇರುವುದಿಲ್ಲ .
- 14. ಕನ್ನಡ ಮತ್ತು ಇಂಗ್ಲೀಷ್ ಆವೃತ್ತಿಗಳ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಗಳಲ್ಲಿ ಯಾವುದೇ ರೀತಿಯ ವ್ಯತ್ಯಾಸಗಳು ಕಂಡುಬಂದಲ್ಲಿ, ಇಂಗ್ಲೀಷ್ ಆವೃತ್ತಿಗಳಲ್ಲಿರುವುದೇ ಅಂತಿಮವೆಂದು ಪರಿಗಣಿಸಬೇಕು.

Instructions for the Candidates

Number of Questions in this Booklet: 75.

- 1. Write your roll number in the space provided on the top of this page.
- 2. This paper consists of seventy five multiple-choice type of questions.
- 3. At the commencement of examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and compulsorily examine it as below:
 - (i) To have access to the Question Booklet, tear off the paper seal on the edge of the cover page. Do not accept a booklet without sticker seal or open booklet.
 - (ii) Tally the number of pages and number of questions in the booklet with the information printed on the cover page. Faulty booklets due to pages/questions missing or duplicate or not in serial order or any . other discrepancy should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
- 4. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the circle as indicated below on the correct response against each item.

Example: (A) (B)

where (C) is the correct response.

- 5. Your responses to the question of Paper III are to be indicated in the OMR Sheet kept inside the Booklet. If you mark at any place other than in the circles in OMR Sheet, it will not be evaluated.
- Read the instructions given in OMR carefully.
- Rough Work is to be done in the end of this booklet.
- If you write your name or put any mark on any part of the OMR Answer Sheet, except for the space allotted for the relevant entries, which may disclose your identity, you will render yourself liable to disqualification.
- You have to return the test OMR Answer Sheet to the invigilators at the end of the examination compulsorily and must NOT carry it with you outside the Examination Hall.
- You can take away question booklet and carbon copy of OMR Answer Sheet after the examination.
- 11. Use only Blue/Black Ball point pen.
- Use of any calculator, Electronic gadgets or log table etc., is prohibited.
- 13. There is no negative marks for incorrect answers.
- In case of any discrepancy found in the Kannada translation of a question booklet the question in English version shall be taken as final.

ಪು.ತಿ.ನೋ./P.T.O.



EARTH SCIENCE PAPER - III

This paper contains seventy-five (75) objective type questions. Each question Note: carries two (2) marks. All questions are compulsory.

- 1. Oxbow lakes are formed due to the action of
 - (A) Erosion
- (B) Groundwater
- (C) River
- (D) Wind
- 2. Which of the following is not an example of an internal process?
 - (A) Diastrophism
 - (B) Vulcanism
 - (C) Massive crustal rearrangement
 - (D) Mass wasting
- 3. The correct erosional sequence in the degradation of land
 - (A) Gully, ravine, rill and bad land
 - (B) Rill, ravine, bad land and gully
 - (C) Rill, gully, ravine and bad land
 - (D) Ravine, gully, rill and bad land
- **4.** Which of the following statements on glacial landform are correct?
 - 1. Arete is the knife-edged boundary between cirques
 - 2. Medial moraines occur in the middle of the glacier
 - 3. Drumlins are a group of small hills made by glacial erosion
 - 4. Glacial striae indicate the direction of movement of glaciers
 - (A) 1, 2 and 4
- (B) 2, 3 and 4
- (C) 1 and 3
- (D) 2 and 4
- 5. Arkose contains which of the following mineral in addition to quartz?
 - (A) Orthoclase
- (B) Calcite
- (C) Aragonite
- (D) Garnet

- 6. The grain size and sphericity of the sediments indicate
 - (A) Distance travelled
 - (B) Duration of travel
 - (C) Settling time
 - (D) Nature of terrain
- 7. In which of the following environment would you expect the sediments to be poorly sorted?
 - (A) Alluvial
- (B) Beach
- (C) Desert
- (D) Glacial
- 8. The point of minimum elevation on the vertical profile of a ripple is called as
 - (A) Ripple length (B) Ripple height
- - (C) Stoss side
- (D) Trough point
- 9. When did the trilobite disappear from the earth?
 - (A) Devonian
 - (B) Carboniferous
 - (C) End of Permian
 - (D) End of Cretaceous
- 10. Corals are exclusively
 - (A) Marine and benthic
 - (B) Brackish and benthic
 - (C) Marine and pelagic
 - (D) Freshwater and neritic
- 11. Di-myrian condition in lamellibranches refers to the presence of
 - (A) 2 abductor impressions
 - (B) 1 abductor impression
 - (C) 2 abductor impressions
 - (D) 2 adjacent impressions

- **12.** Which of the following is a freshwater fossil?
 - (A) Physa
 - (B) Cerethium
 - (C) Nucula
 - (D) Ammonite
- **13.** Which of the following divisions of the geologic time scale is known as the "age of mammals"?
 - (A) Cenozoic
- (B) Paleozoic
- (C) Mesozoic
- (D) Precambrian
- 14. A distinctive assemblage of soft bodied metazoans, metaphytic algae and trace fossils indicative of terminal proterozoic age and found in limestone from top of the Krol Group in Himalaya is called
 - (A) Edicaran Fauna (B) Ostracod
 - (C) Stromatolite
- (D) Ammonites
- 15. Paleozoic era does not include
 - (A) Mississippian (B) Permian
 - (C) Ordovician
- (D) Jurassic
- **16.** Boudins are products of
 - (A) Homogeneous deformation
 - (B) Inhomogeneous, brittle deformation
 - (C) Inhomogeneous, ductile deformation
 - (D) Homogeneous, ductile deformation
- 17. Which one of the following has sharp hinge line?
 - (A) Fan fold
- (B) Chevron fold
- (C) Similar fold
- (D) Parallel fold
- 18. Which process can be attributed to the formation of both outliers and inliers?
 - 1. Folding
 - 2. Faulting
 - 3. Erosion
 - (A) 1 and 2
- (B) 2 and 3
- (C) 3 and 1
- (D) 1, 2 and 3

- 19. Transform faults occur within
 - (A) Continental lithosphere
 - (B) Oceanic lithosphere
 - (C) Both continental and oceanic lithosphere
 - (D) Passive continental margins
- 20. Quartz and Tridymite are the example of
 - (A) Polymorphism
 - (B) Isomorphism
 - (C) Diadochy
 - (D) Solid solution
- 21. One of the following mineral pairs characteristically show first and fourth order interference colours respectively in thin section.
 - (A) Quartz and calcite
 - (B) Muscovite and olivine
 - (C) Diopside and olivine
 - (D) Hornblende and calcite
- 22. Play of colours is seen in the following mineral
 - (A) Agate
- (B) Labradorite
- (C) Azurite
- (D) Pyrite
- 23. General structural formula of pyroxene is
- (B) XY₂O₆
- (D) XYO,
- 24. Elements which readily form ions with an outermost 8 electron shell are
 - (A) Siderophile
 - (B) Chaleophile
 - (C) Lithophile
 - (D) Atmophile
- 25. Siderites consist essentially of
 - (A) Nickel iron alloy
 - (B) Nickel iron alloy and silicates
 - (C) Silicates only
 - (D) Silicates and graphite



- 26. Depleted mantle is characterized by
 - (A) Low 87 Sr/86 Sr and high 143 Nd/ 144 Nd values
 - (B) High 87 Sr/86 Sr and low 143 Nd/ 144 Nd values
 - (C) High 87 Sr/86 Sr and high 143 Nd/ 144 Nd values
 - (D) Low 87 Sr/86 Sr and low 143 Nd/ 144 Nd values
- **27.** Sensitive High Resolution Ion Probe (SHRIMP) is a
 - (A) Dating method using Zireon crystal
 - (B) Type of remote sensing survey
 - (C) Type of film used for remote sensing survey
 - (D) Type of mineral exploration method
- **28.** When the groundmass is glassy in a porphyritic texture, it is called
 - (A) Poikilitic texture
 - (B) Orthophyric texture
 - (C) Vitrophyric texture
 - (D) Felsophyric texture
- 29. Presence of water in the melt causes
 - (A) Lowering of the solidus and liquidus temperatures
 - (B) Rising of the solidus and liquidus temperatures
 - (C) No change of the solidus and liquidus temperatures
 - (D) A, B and C
- **30.** Extrusive (Volcanic) igneous rocks have smaller grain size than intrusive (plutonic) igneous rocks because
 - (A) Extrusive rocks cool faster
 - (B) Extrusive rocks cool more slowly
 - (C) Oxygen in the atmosphere inhibits crystal growth
 - (D) Nitrogen in the atmosphere inhibits crystal growth

- **31.** Name of the process where rocks previously metamorphosed under high-grade conditions are later metamorphosed under low-grade conditions.
 - (A) Metasomatism
 - (B) Cataclasis
 - (C) Foliation
 - (D) Retrograde metamorphism
- **32.** Transformation of shale into a slate and then into a phyllite is indicative of
 - (A) Increasing metamorphic grade
 - (B) Decreasing metamorphic grade
 - (C) Increasing followed by decreasing grade of metamorphism
 - (D) Decreasing followed by increasing grade of metamorphism
- **33.** Chromite deposits occur in association with
 - (A) Acid igneous rocks
 - (B) Acid volcanic rocks
 - (C) Alkaline rocks
 - (D) Ultrabasic rocks
- **34.** Minerals in which a country has total inadequacy and depend upon foreign sources for its needs are described as
 - (A) Strategic minerals
 - (B) Critical minerals
 - (C) Essential minerals
 - (D) Expendable minerals
- **35.** Among the following what is common to the minerals pyrite, galena, magnetite and spalerite.
 - (A) Opaque
 - (B) Cubic system
 - (C) Metallic lustre
 - (D) Perfect cleavage



- **36.** Magmatic sulphide deposits are formed by
 - (A) Fractional crystallisation of silicate magma
 - (B) Gravitational settling in magma chamber
 - (C) Flotation in magma chamber
 - (D) Separation of immiscible sulphide melt from a silicate magma
- **37.** Coral reefs are generally found in the latitudinal extensions of
 - (A) $20^{\circ} \text{ N} 20^{\circ} \text{ S}$
 - (B) $30^{\circ} \text{ N} 30^{\circ} \text{ S}$
 - (C) $60^{\circ} \text{ N} 60^{\circ} \text{ S}$
 - (D) $45^{\circ} \text{ N} 45^{\circ} \text{ S}$
- **38.** Within the continental margin, deep, steep sided valleys known as _____ are found.
 - (A) Continental shelves
 - (B) Submarine canyons
 - (C) Continental slopes
 - (D) Continental rises
- **39.** When a wave changes direction in shallow water, the change in path is called
 - (A) Absorption
 - (B) Refraction
 - (C) Reflection
 - (D) Erosion
- **40.** Flat-topped seamounts are known as
 - (A) Submarine volcanoes
 - (B) Guyots
 - (C) Groynes
 - (D) Terraces
- **41.** Methane is more abundantly found in the natural gas because
 - (A) It is the most unstable hydrocarbon
 - (B) It is the most stable hydrocarbon
 - (C) It is found at a greater depth
 - (D) It is soluble

- 42. Which one is the giant oil field of India?
 - (A) Mumbai (Bombay) High
 - (B) Digboi
 - (C) Ankleshwar
 - (D) Ratna
- 43. Tertiary coal is known to contain high
 - (A) Carbon
- (B) Phosphorous
- (C) Sulpher
- (D) Nitrogen
- **44.** Which of the following is least likely to contain oil traps?
 - (A) An anticline
- (B) Fault
- (C) Shear zones
- (D) Syncline
- **45.** Linear zones of high deformation, surrounding stable cratons are termed as
 - (A) Shield
 - (B) Platform
 - (C) Mobile belts
 - (D) Paired metamorphic belts
- **46.** Khondalite is the characteristic rock type in
 - (A) Greenstone belt
 - (B) Granitic terrain
 - (C) Granulite terrain
 - (D) Greenstone and Granite terrain
- **47.** Eastern Dharwars and Western Dharwars are separated by
 - (A) Closepet granite
 - (B) Chitradurga granite
 - (C) Chamundi granite
 - (D) Arasikere-Banavara granite
- **48.** In all the schist belts of Karnataka, the change from the shelf facies to deep water conditions is marked by
 - (A) Carbonate Iron Horizon
 - (B) Carbonate Gold Horizon
 - (C) Carbonate Manganese Horizon
 - (D) Carbonate Copper Horizon

						Total	Num	ber of Pages :	
49.	Which one of the fol satellite sensor ? (A) TM (C) HRV	lowing is an Indian (B) LISS III (D) MSS	56.	calle (A)		· (n ore body is Shaft Pit	
50.	Healthy vegetation colour composite ima (A) Blue (C) Green	• •	57.	which (A) (B)	th takes adva Size of the Cleavage f	ntage of partic	beneficiation process ge of the differences in ticle cure of the particle		
51.	Which of the followi technologies uses so (A) Radar (B) Sonar (C) Microwave sen (D) Thermal infrare	 (C) Specific gravity of the particles (D) Hardness of the particles 58. In a radiactive survey, gamma radiati emitted by one of the following group elements is recorded 					cles mma radiation wing group o		
52.	An automated systestorage, retrieval, and spatial data is known (A) GPS (C) GIS	alysis and display of	59.	 (A) U, Th, Ca (B) U, Th, K (C) U, Th, Na (D) U, Th, Mo (E) One of the following is a direct evictory for the presence of ore deposit (A) Geochemical anomaly 					
53.	Which one of the possesses higher cru (A) Sandstone (B) Granite (C) Vesicular basal (D) Conglomerate	 (B) Gravity and magnetic anomalists (C) Float ore (D) Wallrock alteration 60. Water existing in capillary fringe is a part (A) Phreatic water (B) Gravity was an experience. 							
	The type of dam preference section is wide and unsound is (A) Gravity dam (C) Arch dam During tunnel excave	(B) Buttress dam (D) Earth fill dam	61.	According (A)		cy's lav		Vadose wate	
	a residual stress or a system of stresses, instantaneous or slow in character, accompanied by the movement of rock mass with variable degree of violence is called (A) Arching around the tunnel (B) Pressure relief (C) Logging (D) Sheathing		62.	(D) Gar cove and India (A)	Both (A) ar nga-Meghn ers a land ar	a-Bra ea of 3 for source (33 pe		

Total Number of Pages: 8



- **63.** An undisturbed rock sample has an over dry weight of 652.7 grams. After saturation with kerosene its weight is 731.5 grams. When the saturated rock sample is immersed in kerosene it displaces 300.60 grams of kerosene. The porosity of the rock sample is
 - (A) 20%
- (B) 26%
- (C) 30%
- (D) 32%
- **64.** Which one of the following exists over ocean surface?
 - (A) Weather
 - (B) Weather and climate
 - (C) Climate
 - (D) Neither weather nor climate
- **65.** Ecology of the marine environment is a function of
 - I. Salinity
 - II. Temperature
 - III. Substrate
 - IV. Flood
 - (A) I and II
- (B) I, II and IV
- (C) I, II, III and IV
- (D) I, III and IV
- **66.** The normal range of pH of sea water is
 - (A) 4.0 6.5
- (B) 7.5 8.4
- (C) 9.4 13.4
- (D) 13.5 16.5
- **67.** Most abundant element in sea water is
 - (A) Calcium
- (B) Magnesium
- (C) Sodium
- (D) Chlorine
- **68.** Which of the following cloud has streakline form?
 - (A) Stratus
- (B) Nimbus
- (C) Cumulus
- (D) Cirrus
- **69.** Homogenous nucleation takes place when the air parcel is
 - (A) Partly saturated
 - (B) Unsaturated
 - (C) Super saturated
 - (D) Semi saturated

- **70.** Complete development of the Atlantic polar front takes place during
 - (A) Spring
- (B) Summer
- (C) Winter
- (D) Autumn
- 71. Increase or decrease in temperature of Air Mass without addition or removal of heat is due to
 - (A) Adiabatic process
 - (B) Normal lapse rate
 - (C) Occlusion
 - (D) Thermal invasion
- **72.** The dependence of density and gravity with depth at the interior of the earth is responsible for
 - (A) Seismic travel time
 - (B) Bore hole deviation
 - (C) S-wave velocity
 - (D) Mineral phase change
- **73.** Gravity potential satisfies _____equation.
 - (A) Laplace's
- (B) Poisson's
- (C) Linear
- (D) Maxwell's
- **74.** Which of the following model achieves isostatic compensation by upper layer of earth floating on a denser magma like substratum?
 - (A) Pratt
 - (B) Airy
 - (C) Pratt-Heiskanen
 - (D) Airy-Heiskanen
- **75.** In wenner array of resistivity prospecting the current electrode separation is _____ of the potential electrode separation.
 - (A) One fifth
- (B) One third
- (C) Five times
- (D) Three times





ಚಿತ್ತು ಬರಹಕ್ಕಾಗಿ ಸ್ಥಳ Space for Rough Work