| Test Paper : II | |
|---|---|
| Test Subject : EARTH SCIENCES | Test Booklet Serial No. : |
| , | OMR Sheet No. : |
| Test Subject Code : K-3213 | Roll No. |
| | (Figures as per admission card) |
| Name & Signature of Invigilator/s | |
| Signature: | Signature: |
| Name : | Name : |
| Paper : | 11 |
| • | EARTH SCIENCES |
| Time: 1 Hour 15 Minutes | Maximum Marks: 100 |
| Number of Pages in this Booklet : 8 | Number of Questions in this Booklet : 50 |
| ಆಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು 1. ಈ ಪುಟದ ಮೇಲ್ತುದಿಯಲ್ಲಿ ಒದಗಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ನಿಮ್ಮ ರೋಲ್ ನಂಬರನ್ನು ಬರೆಯಿರಿ. 2. ಈ ಪತ್ರಿಕೆಯು ಬಹು ಆಯ್ಕೆ ವಿಧದ ಐವತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. 3. ಪರೀಕ್ಷೆಯಪ್ರಾರಂಭದಲ್ಲಿ, ಪ್ರಶ್ನೆಪ್ರಸ್ತಿಕೆಯನ್ನು ನಿಮಗೆ ನೀಡಲಾಗುವುದು. ಮೊದಲ5 ನಿಮಿಷಗಳಲ್ಲಿ ನೀವು ಪ್ರಸ್ತಿಕೆಯನ್ನು ತೆರೆಯಲು ಮತ್ತು ಕೆಳಗಿನಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಪರೀಕ್ಷಿಸಲು ಕೋರಲಾಗಿದೆ. (i) ಪ್ರಶ್ನೆ ಪುಸ್ತಿಕೆಗೆ ಪ್ರವೇಶಾವಕಾಶ ಪಡೆಯಲು, ಈ ಹೊದಿಕೆ ಪುಟದ ಅಂಚಿನ ಮೇಲಿರುವ ಪೇಪರ್ ಸೀಲನ್ನು ಹರಿಯಿರಿ. ಸ್ಟಿಕ್ಟರ್ ಸೀಲ್ ಇಲ್ಲದ ಪ್ರಶ್ನೆಪುಸ್ತಿಕೆ ಸ್ವೀಕರಿಸಬೇಡಿ. ತೆರೆದ ಪುಸ್ತಿಕೆಯನ್ನು ಸ್ವೀಕರಿಸಬೇಡಿ. (ii) ಪುಸ್ತಿಕೆಯಲ್ಲಿನ ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ ಮತ್ತು ಪುಟಗಳ ಸಂಖ್ಯೆಯನ್ನು ಮುಖಪುಟದ ಮೇಲೆ ಮುದ್ರಿಸಿದ ಮಾಹಿತಿಯೊಂದಿಗೆ ತಾಳೆ ನೋಡಿರಿ. ಪುಟಗಳು/ಪ್ರಶ್ನೆಗಳು ಕಾಣೆಯಾದ, ಅಥವಾ ದ್ವಿಪ್ತತಿ ಅಥವಾ ಅನುಕ್ರಮವಾಗಿಲ್ಲದ ಅಥವಾ ಇತರ ಯಾವುದೇ ವೃತ್ಯಾಸದ ದೋಷಪೂರಿತ ಪುಸ್ತಿಕೆಯನ್ನು ಕೂಡಲೆ5 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 | Instructions for the Candidates 1. Write your roll number in the space provided on the top of this page. 2. This paper consists of fifty 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 this cover page. Do not accept a booklet without sticker-seal and do not accept an 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. |
| ಅಂಡಾಕೃತಿಯನ್ನು ಕಪ್ಪಾಗಿಸಬೇಕು. ಉದಾಹರಣೆ: (A) (B) (D) (C) ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದಾಗ. 5. ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ರಲ್ಲಿ ಕೊಟ್ಟಿರುವ OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ಮತ್ತು | 4. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the oval as indicated below on the correct response against each item. Example: (A) (B) (D) |
| ಪ್ರಶ್ನ ಪತ್ರಕ 1 ರಲ್ಲಿ ಕೊಟ್ಟರುವ OMN ಉತ್ತರ ಹುಳಿಯಲ್ಲಿ, ಪ್ರಶ್ನ ಪತ್ರಕ 1 ಮತ್ತು ಪ್ರಶ್ನೆ ಪತ್ರಿಕ 11 ರಲ್ಲಿ ಇರುವ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ಸೂಚಿಸತಕ್ಕದ್ದು, OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಅಂಡಾಕೃತಿಯಲ್ಲದೆ ಬೇರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಉತ್ತರವನ್ನು ಗುರುತಿಸಿದರೆ, ಆದರ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲಾಗುವುದಿಲ್ಲ. | where (C) is the correct response. 5. Your responses to the questions are to be indicated in the OMR Sheet kept inside the Paper I Booklet only. If you mark at any |
| 6. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಕೊಟ್ಟ ಸೂಚನೆಗಳನ್ನು ಜಾಗರೂಕತೆಯಿಂದ ಓದಿರಿ. | place other than in the ovals in the Answer Sheet, it will not be evaluated. |
| 7. ಎಲ್ಲಾ ಕರಡು ಕೆಲಸವನ್ನು ಪುಸ್ತಿಕೆಯ ಕೊನೆಯಲ್ಲಿ ಮಾಡತಕ್ಕದ್ದು . 8. ನಿಮ್ಮ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸಬಹುದಾದ ನಿಮ್ಮ ಹೆಸರು ಅಥವಾ ಯಾವುದೇ | 6. Read the instructions given in OMR carefully.7. Rough Work is to be done in the end of this booklet. |
| ಚಿಹ್ನೆಯನ್ನು ಸಂಗತವಾದ ಸ್ಥಳ ಹೊರತು ಪಡಿಸಿ, OMR ಉತ್ತರ ಹಾಳೆಯ ಯಾವುದೇ ಭಾಗದಲ್ಲಿ ಬರೆದರೆ, ನೀವು ಅನರ್ಹತೆಗೆ ಬಾಧ್ಯರಾಗಿರುತ್ತೀರಿ. 9. ಪರೀಕ್ಷೆಯು ಮುಗಿದನಂತರ, ಕಡ್ಡಾಯವಾಗಿ OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ಸಂವೀಕ್ಷಕರಿಗೆ | 8. 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. |
| ನೀವು ಹಿಂತಿರುಗಿಸಬೇಕು ಮತ್ತು ಪರೀಕ್ಷಾ ಕೊಠಡಿಯ ಹೊರಗೆ OMR ನ್ನು ನಿಮ್ಮೊಂದಿಗೆ | 9. You have to return the test OMR Answer Sheet to the invigilators |
| ಕೊಂಡೊಯ್ಯ ಕೂಡದು. 10. ಪರೀಕ್ಷೆಯ ನಂತರ, ಪರೀಕ್ಷಾ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಮತ್ತು ನಕಲು OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು | at the end of the examination compulsorily and must NOT carry it with you outside the Examination Hall. |
| ನಿಮ್ಮೊಂದಿಗೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು. | 10. You can take away question booklet and carbon copy of OMR Answer Sheet soon after the examination. |
| 11. ನೀಲಿ/ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರವೇ ಉಪಯೋಗಿಸಿರಿ. | 11. Use only Blue/Black Ball point pen. |
| 12. ಕ್ಯಾಲ್ಕುಲೇಟರ್ ಅಥವಾ ಲಾಗ್ ಟೇಬಲ್ ಇತ್ಯಾದಿಯ ಉಪಯೋಗವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ. 13. ಸರಿ ಅಲ್ಲದ ಉತ್ತರಗಳಿಗೆ ಋಣ ಅಂಕ ಇರುವುದಿಲ್ಲ . | 12. Use of any calculator or log table etc., is prohibited.13. There is no negative marks for incorrect answers. |

ಪು.ತಿ.ನೋ./P.T.O.

K-3213





EARTH SCIENCES

Paper – II

Note: This paper contains fifty (50) objective type questions. Each question carries two (2) marks. All questions are compulsory.

- **1.** What do meteorites reveal about the solar system?
 - (A) The early solar system consisted mostly of hydrogen and helium gases
 - (B) Meteorites are much older than comets and planets
 - (C) The age of the solar system is approximately 4.6 Billion years
 - (D) The solar system once contained 10 planets
- 2. Why are the inner planets made of denser material when compared to the outer planets?
 - (A) In the beginning, when the proto planetary disk was spinning faster, centrifugal forces flung the lighter materials towards the outer parts of the solar nebula
 - (B) In the inner part of the nebula only metals and rocks were able to condense because of the high temperatures, whereas hydrogen compounds, although more abundant, were only able to condense in the cooler outer regions.
 - (C) Denser materials sank to the center of the nebula
 - (D) The sun's gravity pulled denser materials towards the inner part of the solar nebula while lighter gases escaped more easily

- **3.** The central part of the earth's core is a solid because
 - (A) The pressure at the centre raises the melting point
 - (B) The magnetic field cannot penetrate the center of the core
 - (C) Convection does not extent all the way to the centre of the core
 - (D) The earth initially formed from solid particles in the solar nebula
- **4.** The most favourable environment for preservation of fossil is
 - (A) Terrestrial
 - (B) Laccustrine
 - (C) Fluvial
 - (D) Marine

| 5. | Compared to | the | continental | crust | the |
|----|---------------|------|-------------|-------|-----|
| | oceanic crust | is _ | | | |

- (A) Thinner and more dense
- (B) Thinner and less dense
- (C) Thicker and more dense
- (D) Thicker and less dense

| 6. | | | _of the | earth's | atmosph | nere |
|----|-----------|-----|---------|---------|---------|------|
| | shields | the | earth | from | ultravi | olet |
| | radiation | _ | | | | |

- (A) Equatorial bulge
- (B) Ozone layer
- (C) Ionic layer
- (D) Protective layer

Paper II (2) K-3213



- 7. What type of a fault is a Thrust fault?
 - (A) Low angle normal fault
 - (B) Low angle reverse fault
 - (C) Low angle strike slip fault
 - (D) Low angle dip slip fault
- **8.** Which of the following statements is false?
 - (A) Deep crustal rocks are more likely to undergo ductile deformation than shallow crustal rocks
 - (B) Hotter rocks are more likely to undergo ductile deformation than cooler rocks
 - (C) Most sedimentary rocks are more deformable than igneous rocks
 - (D) Rocks under low confining pressure are more likely to undergo ductile deformation than rocks under high confining pressure
- **9.** When a shale is subjected to increasing heat and pressure, it changes in the sequence _____
 - (A) Shale Slate Phyllite Schist Gneiss
 - (B) Shale Schist Phyllite Slate Gneiss
 - (C) Shale Gneiss Phyllite Slate Schist
 - (D) Shale Gneiss Phyllite Schist– Slate

| 10are the most characte | | |
|-------------------------|--|--|
| | eruptive rock of the island arc systems. | |

- (A) Granodiorites
- (B) Blue schist
- (C) Andesites
- (D) Basalt
- 11. Gravity faults are formed under
 - (A) A compressive stress regime
 - (B) A tensile stress regime
 - (C) A shear regime
 - (D) A torsion regime

| 12. | Lamprophyres | characteristically | exhibit |
|-----|--------------|--------------------|---------|
| | | texture. | |

- (A) Allotriomorphic
- (B) Automorphic
- (C) Hypidiomorphic
- (D) Panidiomorphic
- **13.** The loose heterogeneous weathered material lying on rocky hill slopes is called
 - (A) Regolith
 - (B) Soil
 - (C) Alluvium
 - (D) Delivium
- **14.** _____ is a sedimentary rock without stratification.
 - (A) Sand stone
 - (B) Lime stone
 - (C) Tillite
 - (D) Shale

K-3213 (3) Paper II



Total Number of Pages: 8

| 15. | is a cylindrical cavity | 20. is the most prone to |
|-----|--|---|
| | stream channel produced by abrasion. | earthquake in India. |
| | (A) Borehole | (A) The Himalaya |
| | (B) Pot hole | (B) The Indian Peninsula |
| | (C) Sink hole | (C) The Indogangetic plane |
| | (D) Drip hole | (D) Precambrian shield |
| 16. | is the characteristic soil developed on the Archaean basement in peninsular India. (A) Regur (B) Alluvial soil (C) Lateritic soil (D) Red soil | 21. What drives the earth's internal hear engine?(A) Solar energy(B) Volcanoes(C) Magnetic energy(D) Radio activity |
| 17. | A lime stone composed entirely of organic detritus is referred to as (A) Coquina (B) Encrinite (C) Spergenite (D) Oolite | (A) Cool and rigid(B) Hot and plastic(C) Cool and plastic(D) Hot and rigid |
| 18. | Calcareous and siliceous Oozes occur inenvironments. | 23. A vertical dyke showing transverse veins is known as |
| | (A) Low oxygen and Bog | (A) Stock work |
| | (B) Deep sea | (B) Saddle reef |
| | (C) Continental shelf | (C) Ladder vein |
| | (D) Lagoonal | (D) Vug |
| 19. | The mid Atlantic ridge is a plate boundary. | 24. The only active volcano in India is |
| | (A) Shear | (A) Nicobar island |
| | (B) Consuming | (B) Laccadive island |
| | (C) Accreting | (C) St. Mary's island |
| | (D) Stable | (D) Barren island |



| 25. | Meteorologically,is the most significant layer of the atmosphere. | 30. Geostrophic wind results from a balance between |
|-----|---|---|
| | (A) Troposphere | (A) Coriolis force and centripetal force |
| | (B) Stratosphere (C) Mesosphere | (B) Centripetal force, pressure gradient force and Coriolis force |
| | (D) Thermosphere | (C) Pressure gradient force, Coriolis force and friction |
| 26. | Most tropical cyclones originate (A) Between 0° and 5° north and south of the equator | (D) Pressure gradient force and Coriolis force |
| | (B) In the centers of sub-tropical highs(C) Between 10° and 20° north and south of equator(D) To the west of westerly winds | 31 is the water that is trapped in sedimentary rocks.(A) Meteoric water(B) Connate water |
| 27. | lies closest to the equator. (A) Polar cell (B) Hadley cell (C) Farrell cell | (C) Juvenile water(D) Meteoritic water32. The evaporation through plants and from |
| 28. | (D) Kelvin cell High altitude clouds are (A) Cirrus (B) Nimbus (C) Alto (D) Stratus | the surrounding soil are together known as (A) Evapotranspiration (B) Transpiration (C) Evaporation (D) Precipitation |
| 29. | The onset of precipitation marks the beginning of a thunderstorm's stage. (A) Cumulus (B) Dissipating (C) Mature (D) Tornadic | 33. Water-holding capacity is high in soils.(A) Sandy(B) Loamy(C) Clayey(D) Silty |
| | | |



| 34. The primary vertical movements of ocean water are due to(A) Currents(B) Density differences(C) Temperature differences(D) Tides | 39. Deep sea bottom currents in the polar regions are caused by (A) Formation ice bergs (B) Melting of glaciers (C) Excess evaporation of sea water (D) Down welling of cold waters |
|---|--|
| is the order of cyclic sedimentation in the Gondwana. (A) Coal, Shale, Sandstone (B) Sandstone, Shale, Coal (C) Coal, Sandstone, Shale (D) Shale, Sandstone, Coal | 40. Oldest gneissic rocks exposed in Precambrian terrain constitute (A) Shield (B) Craton (C) Platform (D) Orogenic belt |
| 36. The characteristic fossil of the intertrappean beds is(A) Cardita Beaumonti(B) Rhynconella griesbachi(C) Physa princepi(D) Ococeras varaha | 41. Tsunami is not produced by (A) Strong earthquakes (B) Submarine landslides (C) The gravitational attraction of sun and moon (D) Submarine volcanic activity |
| 37. Orogenic forces responsible for the formation of | 42. In the mid latitudes, the prevailing winds that can carry pollutants far beyond the source area are from (A) West (B) North (C) South (D) East |
| is a mineral of Zinc. (A) Covellite (B) Anglesite (C) Cerrusite (D) Sphalerite | 43. The maximum CO emission is from (A) Auto mobile exhaust (B) Solid waste disposal (C) Forest fires (D) Electrical utilities in industries |



Total Number of Pages: 8

- **44.** As the magnitude of natural disaster increases their frequency of occurrence is
 - (A) Increases
 - (B) Decreases
 - (C) Remains the same
 - (D) Varies over time
- **45.** The processes by which water molecules get attached to the rock is called _____
 - (A) Hydrolysis
 - (B) Hydrogenation
 - (C) Hydration
 - (D) Dehydration
- **46.** Minamata disease was caused by _____ pollution.
 - (A) Air
 - (B) Soil
 - (C) Marine
 - (D) Radio active
- **47.** _____ radio action dating method NOT useful for dating Precambrian rocks.
 - (A) 14 C
 - (B) Rb Sr
 - (C) Sm Nd
 - (D) U Pb

| 48. | Platinum group of minerals are |
|-----|--------------------------------|
| | commonly associated with |

- (A) Acidic rocks
- (B) Mafic rocks
- (C) Sedimentary rocks
- (D) Ultramafic rocks
- **49.** Rocks that show evidence of high ductile strain are well foliated and contain porphyrioclasts are ______
 - (A) Breccias
 - (B) Mylonites
 - (C) Cataclasites
 - (D) Gouges
- **50.** _____ is the most abundant ore deposits of Karnataka.
 - (A) Copper
 - (B) Bauxite
 - (C) Iron
 - (D) Graphite



Total Number of Pages: 8

ಚಿತ್ತು ಬರಹಕ್ಕಾಗಿ ಸ್ಥಳ Space for Rough Work