

Test Paper : II

Test Subject : EARTH SCIENCES

Test Subject Code : K-3213

Test Booklet Serial No. : \_\_\_\_\_

OMR Sheet No. : \_\_\_\_\_

Roll No. 

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(Figures as per admission card)

**Name & Signature of Invigilator/s**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name : \_\_\_\_\_

Name : \_\_\_\_\_

**Paper : II**

**Subject : EARTH SCIENCES**

Time : 1 Hour 15 Minutes

Maximum Marks : 100

Number of Pages in this Booklet : 8

Number of Questions in this Booklet : 50

**ಅಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು**

- ಈ ಪುಟದ ಮೇಲ್ಭಾಗದಲ್ಲಿ ಒದಗಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ನಿಮ್ಮ ರೋಲ್ ನಂಬರನ್ನು ಬರೆಯಿರಿ.
- ಈ ಪತ್ರಿಕೆಯು ಹತ್ತು ಅಂಶಗಳನ್ನು ಒಳಗೊಂಡಿದೆ.
- ಪರೀಕ್ಷೆಯ ಪ್ರಾರಂಭದಲ್ಲಿ ಪ್ರಶ್ನೆಪುಸ್ತಕವನ್ನು ನಿಮಗೇ ನೀಡಲಾಗುವುದು. ಮೊದಲ 5 ನಿಮಿಷಗಳಲ್ಲಿ ನೀವು ಪುಸ್ತಕವನ್ನು ತೆರೆಯಲು ಮತ್ತು ಕೆಳಗಿನಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಪರೀಕ್ಷಿಸಲು ಕೋರಲಾಗಿದೆ.
  - ಪ್ರಶ್ನೆಪುಸ್ತಕಕ್ಕೆ ಪ್ರವೇಶಾಪಕಾಶ ಪಡೆಯಲು, ಈ ಹೊದಿಕೆ ಪುಟದ ಅಂಚಿನ ಮೇಲಿರುವ ಪೇಪರ್ ಸೀಲನ್ನು ಹರಿಯಿರಿ. ಸ್ಕ್ರೇಪ್ ಸೀಲ್ ಇಲ್ಲದ ಪ್ರಶ್ನೆಪುಸ್ತಕ ಸ್ವೀಕರಿಸಬೇಡಿ. ತೆರೆದ ಪುಸ್ತಕವನ್ನು ಸ್ವೀಕರಿಸಬೇಡಿ.
  - ಪುಸ್ತಕದಲ್ಲಿನ ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ ಮತ್ತು ಪುಟಗಳ ಸಂಖ್ಯೆಯನ್ನು ಮುಖಪುಟದ ಮೇಲೆ ಮುದ್ರಿಸಿದ ಮಾಹಿತಿಯೊಂದಿಗೆ ತಾಳೆ ನೋಡಿರಿ. ಪುಟಗಳು/ಪ್ರಶ್ನೆಗಳು ಕಾಣೆಯಾದ, ಅಥವಾ ದ್ವಿಪುಟ ಅಥವಾ ಅನುಕ್ರಮವಾಗಿಲ್ಲದ ಅಥವಾ ಇತರ ಯಾವುದೇ ವ್ಯತ್ಯಾಸದ ದೋಷಪೂರಿತ ಪುಸ್ತಕವನ್ನು ಕೂಡಲೇ 5 ನಿಮಿಷದ ಅವಧಿ ಒಳಗೆ, ಸಂವೀಕ್ಷಕರಿಂದ ಸರಿ ಇರುವ ಪುಸ್ತಕಕ್ಕೆ ಬದಲಾಯಿಸಿಕೊಳ್ಳಬೇಕು. ಆ ಬಳಿಕ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಬದಲಾಯಿಸಲಾಗುವುದಿಲ್ಲ, ಯಾವುದೇ ಹೆಚ್ಚು ಸಮಯವನ್ನೂ ಕೊಡಲಾಗುವುದಿಲ್ಲ.
- 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	D
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(C) ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದಾಗ.
- ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ರಲ್ಲಿ ಕೊಟ್ಟಿರುವ OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ಮತ್ತು ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ II ರಲ್ಲಿ ಇರುವ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ಸೂಚಿಸತಕ್ಕದ್ದು. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಅಂಡಾಕೃತಿಯಲ್ಲದೆ ಬೇರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಉತ್ತರವನ್ನು ಗುರುತಿಸಿದರೆ, ಅದರ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲಾಗುವುದಿಲ್ಲ.
- OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಕೊಟ್ಟ ಸೂಚನೆಗಳನ್ನು ಜಾಗರೂಕತೆಯಿಂದ ಓದಿರಿ.
- ಎಲ್ಲಾ ಕೆರೆಡು ಕೆಲಸವನ್ನು ಪುಸ್ತಕವು ಕೊನೆಯಲ್ಲಿ ಮಾಡತಕ್ಕದ್ದು.
- ನಿಮ್ಮ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸಬಹುದಾದ ನಿಮ್ಮ ಹೆಸರು ಅಥವಾ ಯಾವುದೇ ಚಿಹ್ನೆಯನ್ನು ಸಂಗತವಾದ ಸ್ಥಳ ಹೊರತು ಪಡಿಸಿ, OMR ಉತ್ತರ ಹಾಳೆಯ ಯಾವುದೇ ಭಾಗದಲ್ಲಿ ಬರೆದರೆ, ನೀವು ಅನರ್ಹತೆಗೆ ಬಾಧ್ಯರಾಗಿರುತ್ತೀರಿ.
- ಪರೀಕ್ಷೆಯು ಮುಗಿದನಂತರ, ಕಡ್ಡಾಯವಾಗಿ OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ಸಂವೀಕ್ಷಕರಿಗೆ ನೀವು ಹಿಂತಿರುಗಿಸಬೇಕು ಮತ್ತು ಪರೀಕ್ಷಾ ಕೊಠಡಿಯ ಹೊರಗೆ OMR ನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ಕೊಂಡೊಯ್ಯ ಕೂಡದು.
- ಪರೀಕ್ಷೆಯ ನಂತರ, ಪರೀಕ್ಷಾ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಮತ್ತು ನಕಲು OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು.
- ನೀಲಿ/ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರವೇ ಉಪಯೋಗಿಸಿರಿ.
- ಕ್ಯಾಲ್ಕುಲೇಟರ್ ಅಥವಾ ಲಾಗ್ ಟೇಬಲ್ ಇತ್ಯಾದಿಯ ಉಪಯೋಗವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ.
- ಸರಿ ಅಲ್ಲದ ಉತ್ತರಗಳಿಗೆ ಋಣ ಅಂಕ ಇರುವುದಿಲ್ಲ.

**Instructions for the Candidates**

- Write your roll number in the space provided on the top of this page.
- This paper consists of fifty multiple-choice type of questions.
- 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 :
  - 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.
  - 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.**
- 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	C	D
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where (C) is the correct response.
- 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 place other than in the ovals in the Answer 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 soon after the examination.
- Use only Blue/Black Ball point pen.**
- Use of any calculator or log table etc., is prohibited.**
- There is no negative marks for incorrect answers.**

**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) Lacustrine
  - (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 atmosphere shields the earth from ultraviolet radiation.
  - (A) Equatorial bulge
  - (B) Ozone layer
  - (C) Ionic layer
  - (D) Protective layer



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
10. \_\_\_\_\_ are the most characteristic 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



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



25. Meteorologically, \_\_\_\_\_ is the most significant layer of the atmosphere.
- (A) Troposphere
  - (B) Stratosphere
  - (C) Mesosphere
  - (D) Thermosphere
26. Most tropical cyclones originate \_\_\_\_\_
- (A) Between  $0^\circ$  and  $5^\circ$  north and south of the equator
  - (B) In the centers of sub-tropical highs
  - (C) Between  $10^\circ$  and  $20^\circ$  north and south of equator
  - (D) To the west of westerly winds
27. \_\_\_\_\_ lies closest to the equator.
- (A) Polar cell
  - (B) Hadley cell
  - (C) Farrell cell
  - (D) Kelvin cell
28. High altitude clouds are \_\_\_\_\_
- (A) Cirrus
  - (B) Nimbus
  - (C) Alto
  - (D) Stratus
29. The onset of precipitation marks the beginning of a thunderstorm's \_\_\_\_\_ stage.
- (A) Cumulus
  - (B) Dissipating
  - (C) Mature
  - (D) Tornadoic
30. Geostrophic wind results from a balance between \_\_\_\_\_
- (A) Coriolis force and centripetal force
  - (B) Centripetal force, pressure gradient force and Coriolis force
  - (C) Pressure gradient force, Coriolis force and friction
  - (D) Pressure gradient force and Coriolis force
31. \_\_\_\_\_ is the water that is trapped in sedimentary rocks.
- (A) Meteoric water
  - (B) Connate water
  - (C) Juvenile water
  - (D) Meteoritic water
32. The evaporation through plants and from the surrounding soil are together known as \_\_\_\_\_
- (A) Evapotranspiration
  - (B) Transpiration
  - (C) Evaporation
  - (D) Precipitation
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
35. \_\_\_\_\_ 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
36. The characteristic fossil of the intertrappean beds is \_\_\_\_\_
- (A) *Cardita Beaumonti*
  - (B) *Rhynchonella griesbachi*
  - (C) *Physa princepi*
  - (D) *Ooceras varaha*
37. Orogenic forces responsible for the formation of \_\_\_\_\_
- (A) Folded mountains
  - (B) Block mountains
  - (C) Volcanic mountains
  - (D) Monodack
38. \_\_\_\_\_ is a mineral of Zinc.
- (A) Covellite
  - (B) Anglesite
  - (C) Cerrusite
  - (D) Sphalerite
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
40. Oldest gneissic rocks exposed in Precambrian terrain constitute \_\_\_\_\_
- (A) Shield
  - (B) Craton
  - (C) Platform
  - (D) Orogenic belt
41. Tsunami is not produced by \_\_\_\_\_
- (A) Strong earthquakes
  - (B) Submarine landslides
  - (C) The gravitational attraction of sun and moon
  - (D) Submarine volcanic activity
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
43. The maximum CO emission is from \_\_\_\_\_
- (A) Auto mobile exhaust
  - (B) Solid waste disposal
  - (C) Forest fires
  - (D) Electrical utilities in industries



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)  $^{14}\text{C}$
  - (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