

Test Paper : II

Test Subject : EARTH SCIENCE

Test Subject Code : K-3215

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

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Roll No. \_\_\_\_\_

(Figures as per admission card)

**Name & Signature of Invigilator/s**

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

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

Paper : II

Subject : EARTH SCIENCE

Time : 1 Hour 15 Minutes

Maximum Marks : 100

Number of Pages in this Booklet : 8

Number of Questions in this Booklet : 50

**ಅಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು**

1. ಈ ಪುಟದ ಮೇಲ್ಭಾಗದಲ್ಲಿ ಒದಗಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ನಿಮ್ಮ ರೋಲ್ ನಂಬರನ್ನು ಬರೆಯಿರಿ.
2. ಈ ಪತ್ರಿಕೆಯು ಬಹು ಆಯ್ಕೆ ವಿಧದ ಐವತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಒಳಗೊಂಡಿದೆ.
3. ಪರೀಕ್ಷೆಯ ಪ್ರಾರಂಭದಲ್ಲಿ ಪ್ರಶ್ನೆಪುಸ್ತಕವನ್ನು ನಿಮಗೇ ನೀಡಲಾಗುವುದು. ಮೊದಲ 5 ನಿಮಿಷಗಳಲ್ಲಿ ನೀವು ಪುಸ್ತಕವನ್ನು ತೆರೆಯಲು ಮತ್ತು ಕೆಳಗಿನಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಪರಿಶೀಲಿಸಲು ಕೋರಲಾಗಿದೆ.  
(i) ಪ್ರಶ್ನೆ ಪುಸ್ತಕಕ್ಕೆ ಪ್ರವೇಶಾಪಕಾರ ಪಡೆಯಲು, ಈ ಹೊದಿಕೆ ಪುಟದ ಅಂಚಿನ ಮೇಲಿರುವ ಪೇಪರ್ ಸೀಲನ್ನು ಹರಿಯಿರಿ. ಸ್ವಿಚ್ ಸೀಲ್ ಇಲ್ಲದ ಅಥವಾ ತೆರದ ಪುಸ್ತಕವನ್ನು ಸ್ವೀಕರಿಸಬೇಡಿ.  
(ii) ಪುಸ್ತಕಿಯಲ್ಲಿನ ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ ಮತ್ತು ಪುಟಗಳ ಸಂಖ್ಯೆಯನ್ನು ಮುಖಪುಟದ ಮೇಲೆ ಮುದ್ರಿಸಿದ ಮಾಹಿತಿಯೊಂದಿಗೆ ತಾಳೆ ನೋಡಿರಿ. ಪುಟಗಳು/ಪ್ರಶ್ನೆಗಳು ಕಾಣೆಯಾದ, ಅಥವಾ ದ್ವಿಪ್ರತಿ ಅಥವಾ ಅನುಕ್ರಮವಾಗಿಲ್ಲದ ಅಥವಾ ಇತರ ಯಾವುದೇ ವ್ಯತ್ಯಾಸದ ದೋಷಪೂರಿತ ಪುಸ್ತಕಿಯನ್ನು ಕೂಡಲೆ 5 ನಿಮಿಷದ ಅವಧಿ ಒಳಗೆ, ಸಂವೀಕ್ಷಕರಿಂದ ಸರಿ ಇರುವ ಪುಸ್ತಕಿಗೆ 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 ಕವಚಿಸಬೇಕು.  
ಉದಾಹರಣೆ: (A) (B) (C) (D)  
(C) ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದಾಗ.
5. ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ರಲ್ಲಿ ಕೊಟ್ಟಿರುವ OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ಮತ್ತು ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ II ರಲ್ಲಿ ಇರುವ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ಸೂಚಿಸತಕ್ಕದ್ದು. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಅಂಡಾಕೃತಿಯಲ್ಲದ ಬೇರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಉತ್ತರವನ್ನು ಗುರುತಿಸಿದರೆ, ಅದರ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲಾಗುವುದಿಲ್ಲ.
6. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಕೊಟ್ಟ ಸೂಚನೆಗಳನ್ನು ಜಾಗರೂಕತೆಯಿಂದ ಓದಿರಿ.
7. ಎಲ್ಲಾ ಕರಡು ಕೆಲಸವನ್ನು ಪುಸ್ತಕಿಯ 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 ಪರೀಕ್ಷಾ ಕೋಶದ ಹೊರಗೆ OMR ನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ಕೊಂಡೊಯ್ಯಕೂಡದು.
10. ಪರೀಕ್ಷೆಯ ನಂತರ, ಪರೀಕ್ಷಾ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಮತ್ತು ನಕಲು OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು.
11. ನೀಲಿ/ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರವೇ ಉಪಯೋಗಿಸಿರಿ.
12. ಕ್ಯಾಲ್ಕುಲೇಟರ್ ಅಥವಾ ಲಾಗ್ ಟೇಬಲ್ ಇತ್ಯಾದಿಯ ಉಪಯೋಗವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ.
13. ಸರಿ ಅಲ್ಲದ ಉತ್ತರಗಳಿಗೆ ಋಣ ಅಂಕ ಇರುವುದಿಲ್ಲ.
14. ಕನ್ನಡ ಮತ್ತು ಇಂಗ್ಲೀಷ್ ಆವೃತ್ತಿಗಳ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಗಳಲ್ಲಿ ಯಾವುದೇ ರೀತಿಯ ವ್ಯತ್ಯಾಸಗಳ ಕಂಡುಬಂದಲ್ಲಿ, ಇಂಗ್ಲೀಷ್ ಆವೃತ್ತಿಗಳಲ್ಲಿರುವುದೇ ಅಂತಿಮವೆಂದು ಪರಿಗಣಿಸಬೇಕು.

**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 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 oval as indicated below on the correct response against each item.  
Example : (A) (B) (C) (D)  
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 place other than in the ovals in the Answer Sheet, it will not be evaluated.
6. Read the instructions given in OMR carefully.
7. Rough Work is to be done in the end of this booklet.
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.
9. 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.
10. You can take away question booklet and carbon copy of OMR Answer Sheet soon after the examination.
11. Use only Blue/Black Ball point pen.
12. Use of any calculator or log table etc., is prohibited.
13. There is no negative marks for incorrect answers.
14. In case of any discrepancy found in the Kannada translation of a question booklet the question in English version shall be taken as final.



**EARTH SCIENCE**  
**Paper – II**

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

1. Which of the following is not a greenhouse gas ?  
(A) Carbon dioxide  
(B) Oxygen  
(C) Methane  
(D) Chlorofluorocarbon
2. The zone having maximum concentration of Ozone in atmosphere is  
(A) Upto 15 km  
(B) From 15 km to 35 km  
(C) From 35 km to 55 km  
(D) Above 55 km
3. Sea level temperature and pressure at a point can be correlated with the height of  
(A) Troposphere  
(B) Tropopause  
(C) Stratosphere  
(D) Mesosphere
4. Which of the following gives net horizontal transport of moisture in air column ?  
(A) Ratio of evaporation and precipitation  
(B) Sum of evaporation and precipitation  
(C) Product of evaporation and precipitation  
(D) Difference of evaporation and precipitation
5. Jet streams confined to temperature gradient confined to upper troposphere are  
(A) Arctic front jet streams  
(B) Tropical jet streams  
(C) Subtropical jet streams  
(D) Easterly tropical jet streams
6. Curved lines sloping up from right to left in a tephigram reflect  
(A) Isotherms  
(B) Dry adiabats  
(C) Isobars  
(D) Saturated adiabats
7. From the surface of earth the approximate distance to its centre is \_\_\_\_\_ km and the distance to the base of mantle is \_\_\_\_\_ km.  
(A) 6370 and 2900  
(B) 4550 and 1550  
(C) 7250 and 4550  
(D) 6370 and 1550
8. The isostatic adjustment of the crust is caused by  
(A) Formation of new basaltic crust at the mid-ocean ridges  
(B) Differential rotation of inner and outer core  
(C) Buoyancy of Earth's lithosphere as it floats on plastic like upper mantle  
(D) Temperature variations in lower mantle



9. The earth's core is made up of  
(A) Silicates of various elements  
(B) Elemental nickel, iron and sulphur  
(C) Oxides of nickel and iron  
(D) Elemental gold, platinum and lead
10. The age of dinosaurs is geologically known as \_\_\_\_\_ period that belongs to \_\_\_\_\_ Era covering a time period of around \_\_\_\_\_ million years (select correct combination).  
(A) Jurassic, Mesozoic, 60  
(B) Triassic, Cenozoic, 200  
(C) Jurassic, Palaeozoic, 60  
(D) Triassic, Mesozoic, 200
11. The most abundant element in the earth's crust is  
(A) Silicon            (B) Oxygen  
(C) Iron                (D) Aluminium
12. Why Nepheline Syntites do not contain mineral quartz ?  
(A) Because Nepheline Syntites form at temperatures higher than melting temperature of quartz  
(B) Because Nepheline Syntites are formed from magma that does not contain silicon  
(C) Because Nepheline Syntites are formed from silica under saturated magma  
(D) Because Nepheline Syntites are formed from silica over saturated magma
13. The breakdown of rocks and minerals by chemical interaction with the meteoric water is termed as  
(A) Weathering  
(B) Erosion  
(C) Metamorphism  
(D) Sedimentation
14. The most fundamental fuel (energy) for all biogeochemical processes occurring on Earth surface is  
(A) Water  
(B) Carbon dioxide  
(C) Oxygen  
(D) Sun light
15. The monsoons are the result of  
(A) Different heat capacity of land and ocean  
(B) Different elevations of land at different places  
(C) Oceanic gyres in the subtropical regions  
(D) Cyclonic storms sweeping the clouds
16. The ozone layer in the atmosphere is located between  
(A) Troposphere and tropopause  
(B) Tropopause and stratosphere  
(C) Stratosphere and mesosphere  
(D) Above mesosphere



17. The temperature of hydrothermal fluids at the point of discharge at the bottom of ocean as high as
- (A) 50°C
  - (B) 100°C
  - (C) 300°C
  - (D) 1000°C
18. The different water masses on the oceans can be identified by
- (A) Temperature alone
  - (B) Salinity type alone
  - (C) Silica content alone
  - (D) Temperature and salinity combination
19. Which one of the following represents highest toxicity in the environment ?
- (A) Mn
  - (B) Cd
  - (C) Zn
  - (D) Fe
20. Vermiculture technology is used in
- (A) Animal Husbandry
  - (B) Poultry Farming
  - (C) Organic Farming
  - (D) Production of Fish
21. The ecology is a system science which comprises
- (A) Processes controlling only biological activity
  - (B) Processes which link biological activity and biodiversity
  - (C) Processes which involve biosphere, hydrosphere, geosphere and atmosphere acting in delicate balance
  - (D) Processes controlling evolution of biosphere
22. The CO<sub>2</sub> in modern atmosphere is around
- (A) 200 ppm
  - (B) 400 ppm
  - (C) 600 ppm
  - (D) 800 ppm
23. Energy flow in an ecosystem is
- (A) Cyclic
  - (B) Multidirectional
  - (C) Sequential
  - (D) Unidirectional
24. Vermi-composting is done by
- (A) Fungus
  - (B) Bacteria
  - (C) Worms
  - (D) Animals



25. Which of the following is not biodegradable ?  
(A) Vegetables  
(B) Fruits  
(C) Earthworm  
(D) Aluminum foil
26. Trapping plume occurs when  
(A) Temperature increases with height  
(B) Temperature decreases with height  
(C) Temperature remains steady with height  
(D) Plume lies in a lapse region and sandwiched between inversion layers
27. The mean annual rainfall in India is  
(A) 50 cm  
(B) 110 cm  
(C) 200 cm  
(D) 500 cm
28. What percentage of India's population lives in urban centers ?  
(A) 10                      (B) 20  
(C) 30                      (D) 50
29. Lignite bearing formations in Neyveli belong to  
(A) Proterozoic  
(B) Cretaceous  
(C) Pliocene-Pleistocene  
(D) Mio-Pliocene
30. Which of the following states contains Manganese ores of economic importance ?  
(A) Madhya Pradesh  
(B) Kerala  
(C) West Bengal  
(D) Uttar Pradesh
31. Damuda Group of Gondwana Supergroup of Rocks in India is associated with  
(A) Copper deposits  
(B) Gold deposits  
(C) Coal deposits  
(D) Limestone deposits
32. Which of the following place is associated with Aluminum plant ?  
(A) Kalpakkam  
(B) Korba  
(C) Sawai Madhopur  
(D) Bhopal
33. The most abundant mineral in the planet earth  
(A) Perovskite  
(B) Olivine  
(C) Garnet  
(D) Plagioclase



34. Which of the following is formed in continental rift setting ?  
(A) Granite  
(B) Rhyolite  
(C) Phonolite  
(D) Tholeiite
35. Diamond bearing conglomerates are present in  
(A) Cuddapah Supergroup  
(B) Vindhyan Supergroup  
(C) Kaladagi Supergroup  
(D) Aravalli Supergroup
36. Coal deposits of lower Gondwana are derived from  
(A) Ptylophyllum  
(B) Glassopteris  
(C) Lepidendron  
(D) Calamites
37. Gulcheruvu quartzite belongs to  
(A) Cuddapah Supergroup  
(B) Kurnool Supergroup  
(C) Bhima Supergroup  
(D) Kaladagi Supergroup
38. Eparchean unconformity separates  
(A) Precambrian – Cambrian  
(B) Archean – Proterozoic  
(C) Paleozoic – Mesozoic  
(D) Paleoarchean – Mesoarchean
39. Rialo series belongs to  
(A) Vindhyan Supergroup  
(B) Cuddapah Supergroup  
(C) Delhi Supergroup  
(D) Aravalli Supergroup
40. The \_\_\_\_\_ forms basement for Aravalli Supergroup.  
(A) Bundelkhand granite  
(B) Banded Gneiss Complex  
(C) Peninsular gneiss  
(D) Old metamorphic tonalitic gneiss
41. Heat advection is in the planet Earth  
(A) Upward  
(B) Lateral  
(C) Downward  
(D) Inward
42. Largest oceanic plateau is  
(A) Caribbean Plateau  
(B) Ontong-Java Plateau  
(C) Deccan Plateau  
(D) South Pacific Plateau
43. The theory of uniformitarianism has been proposed by  
(A) James Hutton  
(B) Alfred Wegner  
(C) Dan Makanzie  
(D) Dana



44. Earth's magnetic field is controlled by  
(A) Only Crust  
(B) Only Mantle  
(C) Only Core  
(D) Both Crust and Mantle
45. Continental drift hypothesis was first proposed by  
(A) James Hutton  
(B) Alfred Wegner  
(C) D. N. Wadia  
(D) Dan Mc Kenzie
46. The seismic velocities attain their maximum value for the earth in  
(A) Upper Mantle  
(B) Lower Mantle  
(C) Outer core  
(D) Inner core
47. "Swarms" are minor earthquakes which are mostly of  
(A) Shallow focus  
(B) Intermediate focus  
(C) Deep focus  
(D) Combination of shallow and deep
48. Which of the following possess both stellar and planetary characteristics ?  
(A) Jupiter  
(B) Venus  
(C) Saturn  
(D) Pluto
49. The difference between equatorial and polar diameters of the Earth is  
(A) 21 km  
(B) 43 km  
(C) 65 km  
(D) 87 km
50. The average gravitational force of the earth is  
(A)  $98 \text{ cm/sec}^2$   
(B)  $980 \text{ cm/sec}^2$   
(C)  $9800 \text{ cm/sec}^2$   
(D)  $980 \text{ cm/sec}$



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ಚಿತ್ತು ಬರಹಕ್ಕಾಗಿ ಸ್ಥಳ  
Space for Rough Work