

Number of Pages in Booklet : 16

पुस्तिका में पृष्ठों की संख्या

Serial No. of Booklet

पुस्तिका क्रमांक

Number of Questions in Booklet : 70

पुस्तिका में प्रश्नों की संख्या

240055

## Geology

Subject Code/विषय कोड : 24

Roll No. of Candidate/अभ्यर्थी का अनुक्रमांक : .....

OMR Serial Number/ओ.एम.आर. क्रमांक : .....

Signature of Candidate/अभ्यर्थी के हस्ताक्षर : .....

Date of Examination/परीक्षा तिथि : .....

Signature of Invigilator/बीक्षक के हस्ताक्षर : .....

Time/समय : 75 Minutes/मिनट्स

Maximum Marks/पूर्णांक : 70

### Instructions

1. Answer *all* questions.
2. *All* questions carry equal marks.
3. In this booklet, the questions from serial no. 1 to serial no. 10 are related to general awareness while questions from serial no. 11 to serial no. 70 are subject specific.
4. Each question has four alternatives marked as (A), (B), (C), (D).
5. Choose only one alternative as an answer of a question.
6. If more than one answer is marked, then it will be treated as wrong answer.
7. Candidate has to darken only one circle indicating the correct answer on the OMR sheet by using **BLUE/BLACK BALL POINT PEN**.
8. There is no provision of **Negative marking**.
9. Carrying Mobile phone in the examination hall is strictly prohibited. If any objectionable material is also found, then action will be taken as per University norms.
10. Please fill your Roll No. and other information carefully on OMR sheet. In case of any mistake on OMR sheet, candidate will be responsible.
11. If there is any difference between English and Hindi version of questions, then English version shall be correct.

### निर्देश

1. सभी प्रश्नों के उत्तर दीजिये ।
2. सभी प्रश्नों के अंक समान हैं ।
3. इस प्रश्न पुस्तिका में क्रमांक 1 से क्रमांक 10 तक के प्रश्न सामान्य अभिज्ञान के तथा क्रमांक 11 से क्रमांक 70 तक के प्रश्न विषय केन्द्रित हैं ।
4. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर हैं जिन्हें क्रमशः (A), (B), (C), (D) से अंकित किया गया है ।
5. प्रत्येक प्रश्न का केवल एक विकल्प उत्तर के रूप में चुनिये ।
6. एक से अधिक उत्तर देने की दशा में प्रश्न का उत्तर गलत माना जाएगा ।
7. अभ्यर्थी को सही उत्तर हेतु केवल एक गोले को ओ.एम.आर. शीट पर नीले/काले बॉल प्वाइंट पेन से गहरा करना है ।
8. नकारात्मक अंक प्रदान करने का कोई प्रावधान नहीं है ।
9. मोबाइल फोन का परीक्षा हॉल में लाना पूर्णतया निषिद्ध है । साथ ही कोई भी अन्य वर्जित सामग्री मिलने पर विश्वविद्यालय के नियमानुसार कार्यवाही होगी ।
10. अभ्यर्थी अपना रोल नम्बर एवं अन्य जानकारियाँ ओ.एम.आर. शीट पर सावधानी से भरें । ओ.एम.आर. शीट पर कोई भी त्रुटि होने पर उसका पूर्ण दायित्व अभ्यर्थी का होगा ।
11. यदि प्रश्नों के हिंदी और अंग्रेजी रूपान्तरणों के मध्य किसी प्रकार का फर्क पाया जाता है, तब अंग्रेजी रूपान्तरण को ही सही माना जाएगा ।

SEAL

**Space for Rough Work**  
**कच्चे कार्य के लिए स्थान**

1. Which gas is present in maximum percentage in the atmosphere ?

(A) O<sub>3</sub>

(B) CO<sub>2</sub>

(C) N<sub>2</sub>

(D) Ar

2. 'Aaram Haram Hai' is the famous quote of :

(A) Gandhiji

(B) Bal Gangadhar Tilak

(C) Jawaharlal Nehru

(D) Sardar Patel

3. Who was the first woman Governor of independent India ?

(A) Vijay Laxmi Pandit

(B) Sarojini Naidu

(C) Indira Gandhi

(D) Savitri Bai Phule

1. वातावरण में कौनसी गैस अधिकतम प्रतिशतता में उपस्थित है ?

(A) O<sub>3</sub>

(B) CO<sub>2</sub>

(C) N<sub>2</sub>

(D) Ar

2. 'आराम हराम है', किसका प्रसिद्ध उद्धरण है ?

(A) गांधीजी

(B) बालगंगाधर तिलक

(C) जवाहरलाल नेहरू

(D) सरदार पटेल

3. स्वतंत्र भारत की प्रथम महिला राज्यपाल कौन थीं ?

(A) विजयलक्ष्मी पंडित

(B) सरोजिनी नायडू

(C) इन्दिरा गांधी

(D) सावित्रीबाई फुले

4. Canada is also popular as :

(A) Holy Land

(B) Land of Midnight Sun

(C) Land of Maple Leaf

(D) Land of Rising Sun

5. In a certain code language MIND becomes KGLB and ARGUE becomes YPESC, then what will DIAGRAM be in that code ?

(A) BGYEPYK

(B) BGYPYEK

(C) GLPEYKB

(D) LKBGYPK

4. कनाडा इस नाम से भी लोकप्रिय है :

(A) होली लैंड

(B) लैंड ऑफ मिडनाइट सन

(C) लैंड ऑफ मेपल लीफ

(D) लैंड ऑफ राइजिंग सन

5. किसी सांकेतिक भाषा में MIND हो जाता है KGLB तथा ARGUE हो जाता है YPESC, तो DIAGRAM उस भाषा में क्या हो जायेगा ?

(A) BGYEPYK

(B) BGYPYEK

(C) GLPEYKB

(D) LKBGYPK

6. Three out of the four given alternatives are same in a certain way and form a group. Find the odd one that *does not* belong to the group :

- (A) Triangle
- (B) Tangent
- (C) Square
- (D) Pentagon

7. A is the daughter of B. B is the mother of C. D is the brother of C. What is the relation of D with A ?

- (A) Father
- (B) Grandfather
- (C) Brother
- (D) Son

8. Choose the *correct* word to fill up the blank :

This is ..... interesting book.

- (A) the
- (B) a
- (C) an
- (D) none of the above

6. दिये गये चार विकल्पों में से तीन समान हैं तथा एक समूह बनाते हैं, समूह से भिन्न शब्द खोजिए :

- (A) त्रिकोण
- (B) स्पर्शरेखा
- (C) चौकोर
- (D) पंचकोण

7. A, B की पुत्री है । B, C की माँ है । D, C का भाई है । यह बताइए कि D का A से क्या रिश्ता है ?

- (A) पिता
- (B) दादा
- (C) भाई
- (D) पुत्र

8. रिक्त स्थान को भरने के लिए सही शब्द चुनिए :

This is ..... interesting book.

- (A) the
- (B) a
- (C) an
- (D) none of the above

9. Choose the *correct* word to fill up the blank :

Take the stale bun away and bring the ..... one.

(A) New

(B) Fresh

(C) Good

(D) Sweet

10. Synonym of 'Anomaly' is :

(A) Normality

(B) Abnormality

(C) Regularity

(D) Standard

9. रिक्त स्थान को भरने के लिए सही शब्द चुनिए :

Take the stale bun away and bring the ..... one.

(A) New

(B) Fresh

(C) Good

(D) Sweet

10. 'Anomaly' का पर्यायवाची है :

(A) Normality

(B) Abnormality

(C) Regularity

(D) Standard

11. Flat surface around a crystal are called :
- (A) Cleavage
  - (B) Joint
  - (C) Face
  - (D) Plane
12. How many crystallographic axes are present in a crystal belonging to hexagonal system ?
- (A) 6
  - (B) 3
  - (C) 4
  - (D) 2
13. Crystals have been divided into how many groups ?
- (A) 6
  - (B) 9
  - (C) 5
  - (D) 12
14. What is the basis of dividing the crystal system into classes ?
- (A) Difference in the size of crystals
  - (B) Difference in symmetry elements present in crystals
  - (C) Presence or absence of cleavages
  - (D) None of the above
15. Which type of symmetry axis is *not* found in crystals ?
- (A) 2 fold
  - (B) 3 fold
  - (C) 5 fold
  - (D) 6 fold
16. Contact Goniometer is used to determine the :
- (A) Number of symmetry planes in the crystal
  - (B) Type of symmetry axis in the crystal
  - (C) Angle between two adjacent faces of the crystal
  - (D) Ratio of lengths of various crystallographic axes in the crystal

17. The process of conversion of ordinary light into polarized light is known as :
- (A) Polarisation
  - (B) Pleochroism
  - (C) Doble refraction
  - (D) Twinning
18. The properties of minerals studied under microscope are known as :
- (A) Physical
  - (B) Chemical
  - (C) Magnetic
  - (D) Optical
19. Which of the following minerals is composed of carbon ?
- (A) Calcite
  - (B) Baryte
  - (C) Graphite
  - (D) Gypsum
20. The mineral generally used for construction of Nicol prism is :
- (A) Dolomite
  - (B) Calcite
  - (C) Barite
  - (D) Hornblende
21. How many Nicol prisms are fitted in a petrological microscope ?
- (A) 2
  - (B) 4
  - (C) 1
  - (D) 3
22. How many minerals are incorporated in Moh's Scale of Hardness ?
- (A) 11
  - (B) 10
  - (C) 9
  - (D) 12



23. The fundamental unit in building of Silicate minerals is :
- (A)  $\text{SiO}_2$
  - (B)  $\text{SiO}$
  - (C)  $\text{SiO}_3$
  - (D)  $\text{SiO}_4$
24. Which mineral has been assigned hardness of 7 in Moh's Scale of Hardness ?
- (A) Quartz
  - (B) Topaz
  - (C) Feldspar
  - (D) Apatite
25. The Si : O ratio in Neosilicate minerals is :
- (A) 1 : 2
  - (B) 1 : 3
  - (C) 1 : 4
  - (D) 1 : 1
26. The luster of Quartz mineral is :
- (A) Pearly
  - (B) Silky
  - (C) Greasy
  - (D) Vitreous
27. Calcite is characterized by the following shape :
- (A) Cubic
  - (B) Fibrous
  - (C) Prismatic
  - (D) Rhombic
28. A disconformity is :
- (A) A rock unit that does not contain fossils
  - (B) An erosional surface between igneous and metamorphic rocks
  - (C) An erosional surface between horizontal sedimentary rocks
  - (D) An erosional surface between igneous and sedimentary rocks
29. Which of the following could be used to tell if a rock layer is right side up or upside down ?
- (A) Graded bedding
  - (B) Faults
  - (C) Lineation
  - (D) None of the above

30. A fold with parallel arrangement of limbs is :

- (A) Isoclinal fold
- (B) Inverted fold
- (C) Symmetrical fold
- (D) Parallel fold

31. A clinometer compass is used to measure :

- (A) Strike direction
- (B) Strike and dip direction
- (C) Strike, dip direction and dip amount
- (D) None of the above

32. Dip of a bed measured perpendicular to strike direction is called :

- (A) Normal dip
- (B) False dip
- (C) True dip
- (D) Apparent dip

33. Which of the following processes can lead to the formation of faults ?

- (A) Compression
- (B) Extension
- (C) Shearing
- (D) All of the above

34. Which of the following factors is responsible for metamorphism ?

- (A) Heat
- (B) Pressure
- (C) Chemically active fluids
- (D) All of the above

35. Which of the following is a metamorphic rock ?

- (A) Syenite
- (B) Basalt
- (C) Granite
- (D) Quartzite

36. A metamorphic rock with alternate light and dark bands can best be described as :
- (A) Gneiss
  - (B) Schist
  - (C) Granulite
  - (D) Slate
37. Metamorphism of sandstone will result in the formation of :
- (A) Charnockite
  - (B) Quartzite
  - (C) Marble
  - (D) Gneiss
38. Igneous rocks are formed by cooling/crystallization of :
- (A) Lava
  - (B) Magma
  - (C) Both (A) and (B)
  - (D) None of the above
39. Which of the following minerals is never present in granite ?
- (A) Biotite
  - (B) Orthoclase
  - (C) Olivine
  - (D) Quartz
40. Which of the following statements is *true* for volcanic rocks ?
- (A) They are formed by eruption of lava on the surface of the earth
  - (B) They are fine-grained
  - (C) They show effects of rapid cooling
  - (D) All of the above
41. Sedimentary rock mainly composed of calcite is :
- (A) Sandstone
  - (B) Limestone
  - (C) Shale
  - (D) Arkose

42. Which of the following is a sedimentary rock ?
- (A) Sandstone
  - (B) Granite
  - (C) Quartzite
  - (D) Marble
43. The halite is composed of :
- (A) Potassium chloride
  - (B) Sodium chloride
  - (C) Calcium chloride
  - (D) Calcium bromide
44. Which is the top most formation of Vindhyan Supergroup ?
- (A) Rewa
  - (B) Bhandar
  - (C) Kaimur
  - (D) Semri
45. Jurassic period is followed by :
- (A) Permian
  - (B) Triassic
  - (C) Cretaceous
  - (D) Neoproterozoic
46. The Gondwana sediments named after the Gond Kingdom from :
- (A) Bihar
  - (B) Uttar Pradesh
  - (C) Gujarat
  - (D) Madhya Pradesh
47. Which is the oldest rock group in Rajasthan ?
- (A) BGC
  - (B) Aravalli
  - (C) Delhi
  - (D) Birmania
48. Hill ranges exposed around Jaipur city belong to :
- (A) Vindhyaans
  - (B) Dharwars
  - (C) Delhis
  - (D) Cambrians

49. What are fossils ?

- (A) Organisms buried in the recent sediments
- (B) Organisms lived in the geological past
- (C) Remains of organisms lived in the geological past and buried under the sediments
- (D) Something dug up

50. Why are fossils useful ?

- (A) They are decorative pieces
- (B) They occur in Rajasthan
- (C) They tell many things about the geological past
- (D) None of the above

51. What is a *Glossopteris* ?

- (A) It is a leaf-fossil of Lower Gondwana
- (B) It is an index fossil of Gondwana Supergroup
- (C) It is a leaf fossil of Cretaceous
- (D) It is a fossil-wood

52. What is *Physa* ?

- (A) It is a leaf fossil
- (B) It is a dextrally coiled gastropod
- (C) It is a sinistrally coiled gastropod
- (D) None of the above

53. *Calymene* is Trilobite :

- (A) with spines
- (B) without spines
- (C) with very large eyes
- (D) without eyes

54. Invertebrate Palaeontology deals with :

- (A) All the fossils
- (B) Only vertebrate animals fossils
- (C) Only invertebrate animals fossils
- (D) Plant fossils

55. *Murex* is a :
- (A) Plant fossil
  - (B) Vertebrate animal
  - (C) Invertebrate animal
  - (D) Microorganism
56. Fossils are found in :
- (A) Igneous rocks
  - (B) Sedimentary rocks
  - (C) Metamorphic rocks
  - (D) In all types of rocks
57. The terms "ore" includes :
- (A) Ore minerals only
  - (B) Gangue minerals only
  - (C) Ore minerals and Gangue minerals both
  - (D) Gangue and tenor
58. Bauxite is formed by ..... process.
- (A) Residual concentration
  - (B) Hydrothermal
  - (C) Sedimentation
  - (D) Metamorphism
59. Wolframite is an ore of :
- (A) Vanadium
  - (B) Cobalt
  - (C) Antimony
  - (D) Tungsten
60. Which is a radioactive mineral ?
- (A) Gold
  - (B) Copper
  - (C) Iron
  - (D) Uranium
61. Which district has the largest good quality of marble deposits in Rajasthan ?
- (A) Nagaur (Makarana)
  - (B) Barmer
  - (C) Jodhpur
  - (D) Baran
62. Palana is famous for ..... deposit.
- (A) Lignite
  - (B) Gold
  - (C) Copper
  - (D) Iron

63. Oldest and deepest Gold Mine in India is :
- (A) Kolar
  - (B) Khetri
  - (C) Zawar
  - (D) Rampura-Agucha
64. Hematite and Magnetite are ore of :
- (A) Gold
  - (B) Copper
  - (C) Iron
  - (D) Zinc
65. Which is a fertilizer mineral ?
- (A) Gypsum
  - (B) Copper
  - (C) Diamond
  - (D) Feldspar
66. What mineral is the hardest known substance in nature ?
- (A) Graphite
  - (B) Native Gold
  - (C) Diamond
  - (D) Muscovite
67. Copper deposits in Rajasthan are located in ..... area.
- (A) Rampura-Agucha
  - (B) Khetri
  - (C) Kolar
  - (D) Degana
68. Sphelarite is an ore of :
- (A) Copper
  - (B) Lead
  - (C) Zinc
  - (D) Iron
69. In India, Mica occurs in :
- (A) Bihar
  - (B) Rajasthan
  - (C) Andhra Pradesh
  - (D) All the above are correct
70. Limestone is useful for :
- (A) Cement industries
  - (B) Gemstone
  - (C) Radioactive
  - (D) Fertilizer

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