Number of Pages in Booklet: 16
Number of Questions in Booklet: 70

Geology

Subject Code: 22

Roll No. of Candidate/अभ्यर्थी का अनुक्रमांक:  
OMR Serial Number/आ.एम.आर. क्रमांक:  
Signature of Candidate/अभ्यर्थी के हस्ताक्षर:  
Date of Examination/परीक्षा तिथि:  
Signature of Invigilator/विद्यक के हस्ताक्षर:  

Time/समय: 75 Minutes/मिनिट्स

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 aptitude 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 answer sheet by using BLUE 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.

Maximum Marks/पूर्णांक: 70
1. Fill in the blank in the given sentence so as to make sense. Select the correct word from the answer choices:

Sixty houses were totally gutted ________________ the fire accident.

(a) at
(b) beyond
(c) in
(d) off

2. A word has been written in four different ways out of which only one is correctly spelt. Find the correctly spelt word:

(a) Incumbent
(b) Incumbant
(c) Incambant
(d) Incambent

3. Out of the four alternatives, choose the one which best expresses the meaning of the given word:

OPULENT

(a) Greedy
(b) Hungry
(c) Heavy
(d) Wealthy

1. नीचे दिये गये वाक्य में रिक्त स्थान भरिये ताकि वाक्य अपरिपूर्ण न हो। निम्नलिखित में से इस हेतु उपयुक्त चुनाव कीजिये:

Sixty houses were totally gutted ________________ the fire accident.

(अ) at
(ब) beyond
(स) in
(द) off

2. एक शब्द को नीचे चार भिन्न तरीकों से लिखा गया है इसमें से एक को स्पेलिंग ही सही है। सही स्पेलिंग चाले शब्द का चुनाव कीजिये:

(अ) Incumbent
(ब) Incumbant
(स) Incambant
(द) Incambent

3. नीचे दिये गये चार विकल्पों में से उस विकल्प को चुनिये जो दिये गये शब्द का सबसे उपयुक्त उत्तर है:

OPULENT

(अ) Greedy
(ब) Hungry
(स) Heavy
(द) Wealthy
4. What is the difference between the Internet and an Intranet?
   (a) One is public, the other is private
   (b) One is safer than the other
   (c) One can be monitored, the other can’t
   (d) None of the above

5. The oldest mountains in India are:
   (a) Aravalis
   (b) Vindhya
   (c) Satpuras
   (d) Nilgiri hills

6. When was the National Rural Health Mission established?
   (a) Year 2008
   (b) Year 2006
   (c) Year 2005
   (d) Year 2007

7. The simple interest on a sum of money at 8% per annum for 6 years is half the sum. The sum is:
   (a) Rs. 4800
   (b) Rs. 6000
   (c) Rs. 8000
   (d) None of the above
8. If one-seventh of a number exceeds its eleventh part by 100, then the number is:
   (a) 770
   (b) 1100
   (c) 1825
   (d) 1925

9. Four words have been given, out of which three are alike in some manner and the fourth one is different. Choose out the odd one.
   (a) Anger
   (b) Grief
   (c) Humorous
   (d) Kindness

10. If in certain language 853264 is coded as WISDOM and 1808172 is coded as AWKWARD, how would you code 8533?
    (a) WISS
    (b) MISS
    (c) KISS
    (d) WIDD
11. Flat surface around a crystal is 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. In Monoclinic system of crystals, the angle between which of the two axes is not 90 degrees?
   (a) a and c
   (b) a and b
   (c) b and c
   (d) all of the above

14. Euhehdral crystals have:
   (a) Fractures inside the crystals
   (b) Well developed faces
   (c) Rounded corners
   (d) Poorly developed faces

15. 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

16. Gypsum type symmetry class belongs to which system?
   (a) monoclinic system
   (b) orthorhombic system
   (c) tetragonal system
   (d) cubic system
17. Crystals of pyrite and galena belongs to which system?
   (a) monoclinic system
   (b) orthorhombic system
   (c) hexagonal system
   (d) cubic system

18. Which of the following minerals is composed of carbon?
   (a) Calcite
   (b) Baryte
   (c) Graphite
   (d) Gypsum

19. Which of the following minerals is isotropic?
   (a) Quartz
   (b) Beryl
   (c) Tourmaline
   (d) Garnet

20. The mineral generally used for construction of Nicol Prism?
   (a) Dolomite
   (b) Calcite
   (c) Barite
   (d) Hornblende

21. Which of the following minerals does not show pleochroism?
   (a) Biotite
   (b) Glaucochpane
   (c) Hornblende
   (d) Quartz

22. Which mineral has been assigned hardness of 7 in Mohs scale of hardness?
   (a) Quartz
   (b) Topaz
   (c) Feldspar
   (d) Apatite
23. Calcite is characterized by the following shape:
   (a) cubic
   (b) fibrous
   (c) prismatic
   (d) rhombic

24. Which of the following minerals is not calcium rich?
   (a) Calcite
   (b) Baryte
   (c) Dolomite
   (d) Aragonite

25. Which of the following minerals is not a silicate?
   (a) Orthoclase
   (b) Muscovite
   (c) Augite
   (d) Magnetite

26. Which of the following could be used to tell if a rock layer is right side up or side down?
   (a) Graded bedding
   (b) Faults
   (c) Lineations
   (d) None of the above

27. A fold with parallel arrangement of limbs is:
   (a) isoclinal fold
   (b) inverted fold
   (c) symmetrical fold
   (d) parallel fold

28. 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
29. Dip of a bed measured perpendicular to strike direction is called:
   (a) Normal dip
   (b) False dip
   (c) True dip
   (d) Apparent dip

30. Which of the conditions is true in case of normal faults?
   (a) Hanging wall moves up relative to foot wall
   (b) Hanging wall moves down relative to foot wall
   (c) There is no change in relative position of hanging wall and foot wall
   (d) Foot wall remains stationary and hanging wall moves up

31. Which of the following statements is true for Horst and Graben structures?
   (a) They are bound by normal faults on either side
   (b) They are non-tectonic in origin
   (c) They are formed by differential weathering of basaltic rocks
   (d) They are formed under compressive forces

32. Columnar joints are generally associated with:
   (a) Contact metamorphic rocks
   (b) Sedimentary rocks of aeolian origin
   (c) Volcanic rocks
   (d) Plutonic rocks

33. Low-angle reverse faults are known as:
   (a) Thrust fault
   (b) Strike fault
   (c) Wrench fault
   (d) Dip slip fault

34. Which of the following factors is responsible for metamorphism?
   (a) Heat
   (b) Pressure
   (c) Chemically active fluids
   (d) All of the above
35. A metamorphic rock with alternate light and dark bands can best be described as .................  
   (a) Gneiss  
   (b) Schist  
   (c) Granulite  
   (d) Slate  

36. Which of the following textures/structures is not associated with metamorphic rocks?  
   (a) Cataclastic  
   (b) Schistose  
   (c) Porphyritic  
   (d) Gneissic  

38. Which of the following minerals is commonly present in schists?  
   (a) Olivine  
   (b) Nepheline  
   (c) Mica  
   (d) Pyroxene  

39. Metamorphism of sandstone will result in the formation of ..............  
   (a) Charnockite  
   (b) Quartzite  
   (c) Marble  
   (d) Gneiss  

40. Which of the following minerals is never present in granite?  
   (a) Biotite  
   (b) Orthoclase  
   (c) Olivine  
   (d) Quartz
41. Large mineral grains are surrounded by relatively smaller grains in an igneous rock. Such a texture can best be described as ..........................
   (a) Equigranular
   (b) Panidimorphic
   (c) Porphyritic
   (d) Euhedral

42. Which of the following is not a sedimentary rock ?
   (a) Marble
   (b) Breccia
   (c) Shale
   (d) Arkose

43. Which of the following is not a sedimentary structure ?
   (a) Vesicular
   (b) Graded bedding
   (c) Ripple marks
   (d) Cross-bedding

44. Malani Igneous suite is overlain by :
   (a) Aravali Supergroup
   (b) Delhi Supergroup
   (c) Marwar Supergroup
   (d) Mewar gneiss

45. Which is the top most formation of Vindhyan Supergroup ?
   (a) Rewa
   (b) Bhandar
   (c) Kaimur
   (d) Semri

46. Which is the oldest rock group in Rajasthan ?
   (a) BGC
   (b) Aravali
   (c) Delhi
   (d) Birmania
47. One of the most ancient mountain ranges in India?
   (a) Himalaya
   (b) Vindhyan
   (c) Aravali
   (d) Cuddapah

48. Hill ranges exposed around Jaipur city belong to:
   (a) Vindhyans
   (b) Dharwars
   (c) Delhis
   (d) Cambrians

49. Sakoli series is exposed at:
   (a) Nagpur
   (b) Bijawar
   (c) Kutch
   (d) Gwalior

50. The term phaenerozoic is used for:
   (a) Paleozoic
   (b) Mesozoic
   (c) Cenozoic
   (d) All of the above

51. Great boundary fault separates:
   (a) Vindhyans from Pre Vindhyans
   (b) Kurnools from Cuddapahs
   (c) Delhis from Aravalis
   (d) None of the above

52. The General strike of Aravali mountain ranges is:
   (a) N-S
   (b) E-W
   (c) NE-SW
   (d) NNW-SSE
53. The age estimate for boundary between Proterozoic and Archean is ............... million years.
   (a) 570
   (b) 2500
   (c) 3000
   (d) 4500

54. *Calymene* is a trilobite:
   (a) with spines
   (b) without spines
   (c) with very large eyes
   (d) without eyes

55. Graptolite means:
   (a) small organisms
   (b) fossils look like something is written on the stone
   (c) black coloured fossils
   (d) none of the above

56. The oxidizing out cropping cellular mass of limonite and gangue overlying aggregated sulphide deposits is commonly known as:
   (a) Gondite
   (b) Gossan
   (c) Gash veins
   (d) Vugs

57. Rampura-Agucha is a .................... deposit.
   (a) Lead and Zinc
   (b) Copper
   (c) Iron
   (d) Bauxite

58. Hematite and Magnetite are ore of:
   (a) Gold
   (b) Copper
   (c) Iron
   (d) Zinc
59. Chalcopyrite is an ore of:
(a) Iron
(b) Copper
(c) Gold
(d) Zine

60. Jhamarkotra is famous for ................ deposit.
(a) Rock phosphate
(b) Granite
(c) Marble
(d) Sandstone

61. Kimberlite are famous for:
(a) Copper
(b) Diamond
(c) Limestone
(d) Atomic Fuel

62. Mangla, Rageshwari, Sarswati Oil fields are situated in ......................... state.
(a) Rajasthan
(b) Punjab
(c) Haryana
(d) Uttar Pradesh

63. Age of the earth is believed to be:
(a) 450 Million years
(b) 2000 Million years
(c) 4500 Million years
(d) 45000 Million years

64. Mohorovicic discontinuity is located between:
(a) Continent and oceans
(b) Crust and upper mantle
(c) Core and lower mantle
(d) None of the above
65. Ritcher's scale is used to measure:
   (a) Number of casualty in an earthquake
   (b) The damage from an earthquake
   (c) The distance of origin of earthquake
   (d) Intensity of earthquake

66. The core of the earth is considered to be made up of:
   (a) Peridotites
   (b) Iron and nickel
   (c) Chromium and nickel
   (d) Basalts

67. Which of the following is the principal agent of weathering?
   (a) Air
   (b) Water
   (c) Glaciers
   (d) Volcanic gases

68. Moraine deposits are related to:
   (a) River
   (b) Glacier
   (c) Wind
   (d) Volcano

69. More or less circular shaped coral reef masses are called:
   (a) Fringing reef
   (b) Barrier reefs
   (c) Atoll
   (d) None of the above

70. Orogeny is the process of:
   (a) Mountain building
   (b) Formation of oceans
   (c) Formation of continents
   (d) Eruption of volcanoes