DE-2937
B. Sc. (Sem. I) Examination
March / April – 2016
Environmental Science : Paper - II
(Env. 102 : Fundamentals of Earth Sciences)

Time : 2 Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of signs on your answer book.

Name of the Examination :
B. SC. (SEM. I)

Name of the Subject :
ENVIRONMENTAL SCIENCE : PAPER - 2

Subject Code No. : 2 9 3 7  Nil

Seat No. :

Student’s Signature

(2) There are total-50 multiple choice questions (MCQ) in question paper.

(3) All questions are compulsory.

(4) All questions carry equal marks.

(5) Select the best one from given options to give an answer.

(6) Answer the questions only into the OMR answer-sheet which is given to you.

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O.M.R. Sheet ब्रांच अंग्रेजी अस्पताल चूना जो आपेक्षिक O.M.R. Sheet की पहल अपेक्षा के.

Important instructions to fillup O.M.R. Sheet is given on back side of the provided O.M.R. Sheet.
1. 1st trace of life on land – plant
   (A) Mesozoic or Secondary
   (B) Cainozoic or Tertiary
   (C) Neozoic or Quaternary
   (D) Palaeozoic or Primary,

2. Major event in Cainozoic era:
   I. early Human Ancestor
   II. Rats-mice
   III. Marine invertebrate
   (A) I and III (B) II and III
   (C) All (D) I and II

3. The value of the prime meridian is:
   (A) 0° (B) 0°
   (C) None (D) 0°

4. The Antarctic circle is located in:
   (A) Southern hemisphere
   (B) Eastern hemisphere
   (C) Western hemisphere
   (D) Northern hemisphere

5. Days and nights are equal throughout the globe when the sun is above:
   (A) Equator
   (B) Tropic of Cancer
   (C) Tropic of Capricorn
   (D) Poles

6. Which of the following latitude forms a great circle?
   (A) 23.5° (B) 66.5°
   (C) 90° (D) 0°

7. _______ era started 4.6 billion years ago and ended 530 million years ago.
   (A) Palaeozoic or Primary
   (B) Mesozoic or Secondary
   (C) Cainozoic or Tertiary
   (D) Archaeozoic or Precambrian

8. Characteristics of Palaeozoic age:
   (A) life spans across 285 million years
   (B) Many animal and vegetal groups made their first appearance
   (C) All
   (D) called as "manifest life"

9. _______ started from 245 million years ago to 65 million years ago.
   (A) Mesozoic or Secondary
   (B) Cainozoic or Tertiary
   (C) Neozoic or Quaternary
   (D) Palaeozoic or Primary

10. Some green-blue autotrophic algae appeared in:
    (A) Palaeozoic or Primary
    (B) Mesozoic or Secondary
    (C) Cainozoic or Tertiary
    (D) Archaeozoic or Precambrian

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11 High mountains are weared away by the agents of denudation i.e. wind, water, glacier, waves etc. The remaining part of these mountains is known as 
(A) Block Mountain  
(B) Volcanic Mountain  
(C) Residual Mountain  
(D) Fold Mountain  

12 _____ are bordered on one side by mountains and on the other by a plain or sea.
(A) Piedmont plateaus  
(B) Continental plateaus  
(C) Volcanic plateaus  
(D) Intermontane plateaus  

13 _____ is example of intermontane plateau.
(A) Patagonian Plateau  
(B) Columbian Plateau  
(C) None  
(D) Tibetan Plateau  

14 What is the maximum number of lunar eclipses that can occur during a calendar year ?
(A) 3  
(B) 4  
(C) None  
(D) 2  

15 The red colour visible during a lunar eclipse is due to,
(A) Dust in earth's atmosphere  
(B) Dust in space  
(C) None  
(D) Dust in moon's atmosphere  

16 The length of the latitudes :
(A) is longest at the equator  
(B) is longest at the poles  
(C) all the latitudes have same length  
(D) becomes longer towards the poles  

17 The largest intrusion are called :
(A) Plutons  
(B) Dikes  
(C) Sills  
(D) Batholiths
18 According the different proportion of sand, silt & clay _____ main textural class are observed.
(A) 11
(B) 12
(C) 13
(D) 10

19 _____ soil have low percolation rate.
(A) Silt
(B) Clay
(C) None
(D) Sandy

20 Organic matter decomposition is rapid in :
(A) Silt
(B) Sand
(C) All
(D) Clay

21 The soil materials dominated by oxides of Fe & Al is known as
(A) Prairie soil
(B) Laterite
(C) Podzol
(D) Black cotton soil

22 _____ mostly help to store nutrient & bind particles together into aggregates.
(A) Silt
(B) Clay
(C) Gravels
(D) Sand

23 Which processes were involved in podzolization ?
(A) Translocation and addition
(B) Transformation and translocation
(C) Leaching and translocation
(D) Addition and leaching

24 Laterization is a process of accumulation in soil
(A) CaCO₃
(B) CaSO₄
(C) Iron and aluminium oxides
(D) Silica
25. If voids of soil mass are full of air only, term as:
   (A) Partially saturated soil
   (B) Dry soil
   (C) Dehydrated soil
   (D) Air entrained soil

26. Decomposing matter is referred to as:
   (A) Litter
   (B) Soil Biomass
   (C) Minerals
   (D) Humus

27. Thickness of Asthenosphere:
   (A) 180 km
   (B) 350-700 km
   (C) 700 km
   (D) 1380 km

28. Crystallization of molten rock is known as:
   (A) Sedimentary rock
   (B) Metamorphic rock
   (C) None
   (D) Igneous rock

29. Sedimentary rocks may be chemically altered in form by heat, pressure or chemically active fluids, known as _______
   (A) Sedimentary rock
   (B) Metamorphic rock
   (C) None
   (D) Igneous rock

30. 'Igneous' comes from the Latin language is for:
   (A) Flame
   (B) Burn
   (C) None
   (D) Fire
31. Granite is composed of:
   (A) Sodium rich feldspar  
   (B) Biotite  
   (C) Amphibole  
   (D) Potassium rich feldspar

32. Which are included in cation?
   (A) Sulphate  
   (B) Calcium  
   (C) Hydroxide  
   (D) Nitrate

33. The small pore retained water against the gravity force known as:
   (A) Capillary water  
   (B) Gravitational water  
   (C) Permanent wilting point  
   (D) Saturation water

34. The water retained in soil between the states of field capacity & wilting point known as:
   (A) Available water  
   (B) Field capacity  
   (C) All  
   (D) Hygroscopic water

35. The removal of solid or dissolved material from one horizon is known as:
   (A) Eluviation  
   (B) Enrichment  
   (C) All  
   (D) Illuviation

36. E horizon are commonly occur in:
   (A) Desert area  
   (B) Low rainfall area  
   (C) Grassland area  
   (D) Highrainfall area

37. The unweathered bedrock is known as:
   (A) B horizon  
   (B) C horizon  
   (C) D horizon  
   (D) A horizon

38. Intermediate grade metamorphic rock known as ______.
   (A) Schist  
   (B) Gneiss  
   (C) None  
   (D) Slate

39. High temperature-low pressure metamorphism is characteristics of ______.
   (A) Contact metamorphism  
   (B) Subduction metamorphism  
   (C) None  
   (D) Regional metamorphism

40. What is the general term for periods of mountain-building that include folding, faulting, magmatism and metamorphism?
   (A) Convergence  
   (B) Orogeny  
   (C) Sedimentation  
   (D) Rejuvenation
41 How old is the Earth?
(A) 4.6 million years
(B) 4.6 billion years
(C) 400000 years
(D) 2.3 billion years

42 The hot rock under the earth's surface is called:
(A) Magma
(B) Dormant
(C) None
(D) Lava

43 _____ consist great masses of folded sedimentary rocks.
(A) Fold mountains
(B) Volcanic mountain
(C) Residual mountain
(D) Block mountain

44 Which of following is correct:
I. All great mountain system of earth are structural type
II. Fold and Block mountain system are structural type?
(A) II only
(B) Both I and II
(C) None
(D) I only

45 Which of the following is/are example of chemical weathering?
I. Frost action on rocks
II. Repeated wetting and drying
III. Oxidation of minerals in a rock
(A) I and III only
(B) III
(C) I, II, III
(D) I and II

[ Contd... ]
46 ______ are formed when a mass of land was pushed up between parallel crack in earth crust or sinking of land around them.
(A) Block Mountain
(B) Volcanic Mountain
(C) Residual Mountain
(D) Fold Mountain

47 ______ is low lying expanse of land between the coast & higher ground inland.
(A) Delta plain
(B) Lava Plain
(C) Depositional plain
(D) Coastal Plain

48 ______ formed by the deposition of materials brought by various agents of transportation such as rivers, wind, waves, and glaciers.
(A) Destruction Plains
(B) Deposition Plains
(C) None
(D) Costal Plains

49 ______ plains formed by rivers.
(A) Glacial
(B) Abyssal
(C) Lava
(D) Alluvial

50 Lunar eclipses always occur during:
(A) New Moon
(B) First quarter moon
(C) None
(D) Full moon