

**B****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)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. SC. (SEM. I)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="ENVIRONMENTAL SCIENCE : PAPER - 2"/>	<input type="text"/>
Subject Code No. : <input type="text" value="2"/> <input type="text" value="9"/> <input type="text" value="3"/> <input type="text" value="7"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	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.

***O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ  
O.M.R. Sheet-ની પાછળ છાપેલ છે.  
Important instructions to fillup O.M.R. Sheet  
is given on back side of the provided O.M.R. Sheet.***

- 1 How old is the Earth ?
- (A) 400000 years
  - (B) 2.3 billion years
  - (C) 4.6 million years
  - (D) 4.6 billion years
- 2 The hot rock under the earth's surface is called :
- (A) None
  - (B) Lava
  - (C) Magma
  - (D) Dormant
- 3 \_\_\_\_\_ consist great masses of folded sedimentary rocks.
- (A) Residual mountain
  - (B) Block mountain
  - (C) Fold mountains
  - (D) Volcanic mountain
- 4 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) None
  - (B) I only
  - (C) II only
  - (D) Both I and II
- 5 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, II, III
  - (B) I and II
  - (C) I and III only
  - (D) III

- 6 \_\_\_\_\_ are formed when a mass of land was pushed up between parallel crack in earth crust or sinking of land around them.
- (A) Residual Mountain
  - (B) Fold Mountain
  - (C) Block Mountain
  - (D) Volcanic Mountain
- 7 \_\_\_\_\_ is low lying expanse of land between the coast & higher ground inland.
- (A) Depositional plain
  - (B) Coastal Plain
  - (C) Delta plain
  - (D) Lava Plain
- 8 \_\_\_\_\_ formed by the deposition of materials brought by various agents of transportation such as rivers, wind, waves, and glaciers.
- (A) None
  - (B) Costal Plains
  - (C) Destruction Plains
  - (D) Deposition Plains
- 9 \_\_\_\_\_ plains formed by rivers.
- (A) Lava
  - (B) Alluvial
  - (C) Glacial
  - (D) Abyssal
- 10 Lunar eclipses always occur during :
- (A) None
  - (B) Full moon
  - (C) New Moon
  - (D) First quater moon

- 11 1<sup>st</sup> trace of life on land – plant  
 (A) Neozoic or Quaternary  
 (B) Palaeozoic or Primary,  
 (C) Mesozoic or Secondary,  
 (D) Cainozoic or Tertiary,
- 12 Major event in Cainozoic era :  
 I. early Human Ancestor  
 II. Rats-mice  
 III. Marine invertebrate  
 (A) All (B) I and II  
 (C) I and III (D) II and III
- 13 The value of the prime meridian is :  
 (A) None (B) 90°  
 (C) 0° (D) 60°
- 14 The Antarctic circle is located in :  
 (A) Western hemisphere  
 (B) Northern hemisphere  
 (C) Southern hemisphere  
 (D) Eastern hemisphere
- 15 Days and nights are equal throughout the globe when the sun is above :  
 (A) Tropic of Capricorn  
 (B) Poles  
 (C) Equator  
 (D) Tropic of Cancer
- 16 Which of the following latitude forms a great circle ?  
 (A) 90 (B) 0  
 (C) 23.5 (D) 66.5
- 17 \_\_\_\_\_ era started 4.6 billion years ago and ended 530 million years ago.  
 (A) Cainozoic or Tertiary  
 (B) Archaeozoic or Precambrian  
 (C) Palaeozoic or Primary  
 (D) Mesozoic or Secondary
- 18 Characteristics of *Palaeozoic age* :  
 (A) All  
 (B) called as "manifest life"  
 (C) life spans across 285 million years  
 (D) Many animal and vegetal groups made their first appearance
- 19 \_\_\_\_\_ started from 245 million years ago to 65 million years ago.  
 (A) Neozoic or Quaternary  
 (B) Palaeozoic or Primary,  
 (C) Mesozoic or Secondary,  
 (D) Cainozoic or Tertiary,
- 20 Some green-blue autotrophic algae appeared in :  
 (A) Cainozoic or Tertiary  
 (B) Archaeozoic or Precambrian  
 (C) Palaeozoic or Primary  
 (D) Mesozoic or Secondary

- 21 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) Residual Mountain
  - (B) Fold Mountain
  - (C) Block Mountain
  - (D) Volcanic Mountain
- 22 \_\_\_\_ are bordered on one side by mountains and on the other by a plain or sea.
- (A) Volcanic plateaus
  - (B) Intermontane plateaus
  - (C) Piedmont plateaus
  - (D) Continental plateaus
- 23 \_\_\_\_ is example of intermontane plateau.
- (A) None
  - (B) Tibetan Plateau
  - (C) Patagonian Plateau
  - (D) Columbian Plateau
- 24 What is the maximum number of lunar eclipses that can occur during a calendar year ?
- (A) None
  - (B) 2
  - (C) 3
  - (D) 4
- 25 The red colour visible during a lunar eclipse is due to,
- (A) None
  - (B) Dust in moon's atmosphere
  - (C) Dust in earth's atmosphere
  - (D) Dust in space
- 26 The length of the latitudes :
- (A) all the latitudes have same length
  - (B) becomes longer towards the poles.
  - (C) is longest at the equator
  - (D) is longest at the poles
- 27 The largest intrusion are called :
- (A) Sills
  - (B) Batholiths
  - (C) Plutons
  - (D) Dikes

- 28 According to the different proportions of sand, silt & clay \_\_\_\_\_ main textural classes are observed.
- (A) 13
  - (B) 10
  - (C) 11
  - (D) 12
- 29 \_\_\_\_\_ soil has a low percolation rate.
- (A) None
  - (B) Sandy
  - (C) Silt
  - (D) Clay
- 30 Organic matter decomposition is rapid in :
- (A) All
  - (B) Clay
  - (C) Silt
  - (D) Sand
- 31 The soil materials dominated by oxides of Fe & Al is known as
- (A) Podzol
  - (B) Black cotton soil
  - (C) Prairie soil
  - (D) Laterite
- 32 \_\_\_\_\_ mostly help to store nutrients & bind particles together into aggregates.
- (A) Gravels
  - (B) Sand
  - (C) Silt
  - (D) Clay
- 33 Which processes were involved in podzolization ?
- (A) Leaching and translocation
  - (B) Addition and leaching
  - (C) Translocation and addition
  - (D) Transformation and translocation
- 34 Laterization is a process of accumulation in soil
- (A) Iron and aluminium oxides
  - (B) Silica
  - (C)  $\text{CaCO}_3$
  - (D)  $\text{CaSO}_4$

- 35 If voids of soil mass are full of air only , term as  
(A) Dehydrated soil  
(B) Air entrained soil  
(C) Partially saturated soil  
(D) Dry soil
- 36 Decomposing matter is referred to as :  
(A) Minerals  
(B) Humus  
(C) Litter  
(D) Soil Biomass
- 37 Thickness of Asthenosphere :  
(A) 700 km  
(B) 1380 km  
(C) 180 km  
(D) 350-700 km
- 38 Crystallization of molten rock is known as :  
(A) None  
(B) Igneous rock  
(C) Sedimentary rock  
(D) Metamorphic rock
- 39 Sedimentary rocks may be chemically altered in form by heat, pressure or chemically active fluids, known as \_\_\_\_\_.  
(A) None  
(B) Igneous rock  
(C) Sedimentary rock  
(D) Metamorphic rock
- 40 'Igneous' comes from the Latin language is for :  
(A) None  
(B) Fire  
(C) Flame  
(D) Burn

- 41 Granite is composed of :  
 (A) Amphibole  
 (B) Potassium rich feldspar  
 (C) Sodium rich feldspar  
 (D) Biotite
- 42 Which are included in cation ?  
 (A) Hydroxide (B) Nitrate  
 (C) Sulphate (D) Calcium
- 43 The small pore retained water against the gravity force known as :  
 (A) Permanent wilting point  
 (B) Saturation water  
 (C) Capillary water  
 (D) Gravitational water
- 44 The water retained in soil between the states of field capacity & wilting point known as :  
 (A) All  
 (B) Hygroscopic water  
 (C) Available water  
 (D) Field capacity
- 45 The removal of solid or dissolved material from one horizon is known as :  
 (A) All (B) Illuviation  
 (C) Eluviation (D) Enrichment
- 46 E horizon are commonly occur in :  
 (A) Grassland area  
 (B) Highrainfall area  
 (C) Desert area  
 (D) Low rainfall area
- 47 The unweathered bedrock is known as :  
 (A) D horizon (B) A horizon  
 (C) B horizon (D) C horizon
- 48 Intermediate grade metamorphic rock known as \_\_\_\_\_.  
 (A) None (B) Slate  
 (C) Schist (D) Gneiss
- 49 High temperature-low pressure metamorphism is characteristics of \_\_\_\_\_.  
 (A) None  
 (B) Regional metamorphism  
 (C) Contact metamorphism  
 (D) Subduction metamorphism
- 50 What is the general term for periods of mountain-building that include folding, faulting, magmatism and metamorphism ?  
 (A) Sedimentation  
 (B) Rejuvenation  
 (C) Convergence  
 (D) Orogeny