

**D****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 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) 60°
 - (C) None
 - (D) 90°
- 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

- 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 to the different proportions of sand, silt & clay _____ main textural classes are observed.
- (A) 11
 - (B) 12
 - (C) 13
 - (D) 10
- 19 _____ soil has a 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 nutrients & 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) CaCO_3
 - (B) CaSO_4
 - (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

- 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 quater moon
 - (C) None
 - (D) Full moon