

**C****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.

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

Name of the Subject :
ENVIRONMENTAL SCIENCE : PAPER - 2

Subject Code No. : 2 9 3 7 Section No. (1, 2,.....) : 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.

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

- 11** How old is the Earth ?
- (A) 4.6 billion years
 - (B) 400000 years
 - (C) 2.3 billion years
 - (D) 4.6 million years
- 12** The hot rock under the earth's surface is called :
- (A) Dormant
 - (B) None
 - (C) Lava
 - (D) Magma
- 13** _____ consist great masses of folded sedimentary rocks.
- (A) Volcanic mountain
 - (B) Residual mountain
 - (C) Block mountain
 - (D) Fold mountains
- 14** 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) Both I and II
 - (B) None
 - (C) I only
 - (D) II only
- 15** 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) III
 - (B) I, II, III
 - (C) I and II
 - (D) I and III only

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

- 21 1st trace of life on land – plant
 (A) Cainozoic or Tertiary,
 (B) Neozoic or Quaternary
 (C) Palaeozoic or Primary,
 (D) Mesozoic or Secondary,
- 22 Major event in Cainozoic era :
 I. early Human Ancestor
 II. Rats-mice
 III. Marine invertebrate
 (A) II and III (B) All
 (C) I and II (D) I and III
- 23 The value of the prime meridian is :
 (A) 60° (B) None
 (C) 90° (D) 0°
- 24 The Antarctic circle is located in :
 (A) Eastern hemisphere
 (B) Western hemisphere
 (C) Northern hemisphere
 (D) Southern hemisphere
- 25 Days and nights are equal throughout the globe when the sun is above :
 (A) Tropic of Cancer
 (B) Tropic of Capricorn
 (C) Poles
 (D) Equator
- 26 Which of the following latitude forms a great circle ?
 (A) 66.5 (B) 90
 (C) 0 (D) 23.5
- 27 _____ era started 4.6 billion years ago and ended 530 million years ago.
 (A) Mesozoic or Secondary
 (B) Cainozoic or Tertiary
 (C) Archaeozoic or Precambrian
 (D) Palaeozoic or Primary
- 28 Characteristics of *Palaeozoic age* :
 (A) Many animal and vegetal groups made their first appearance
 (B) All
 (C) called as "manifest life"
 (D) life spans across 285 million years
- 29 _____ started from 245 million years ago to 65 million years ago.
 (A) Cainozoic or Tertiary
 (B) Neozoic or Quaternary
 (C) Palaeozoic or Primary
 (D) Mesozoic or Secondary
- 30 Some green-blue autotrophic algae appeared in :
 (A) Mesozoic or Secondary
 (B) Cainozoic or Tertiary
 (C) Archaeozoic or Precambrian
 (D) Palaeozoic or Primary

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

- 38 According to the different proportion of sand, silt & clay _____ main textural class are observed.
- (A) 12
 - (B) 13
 - (C) 10
 - (D) 11
- 39 _____ soil have low percolation rate.
- (A) Clay
 - (B) None
 - (C) Sandy
 - (D) Silt
- 40 Organic matter decomposition is rapid in :
- (A) Sand
 - (B) All
 - (C) Clay
 - (D) Silt
- 41 The soil materials dominated by oxides of Fe & Al is known as
- (A) Laterite
 - (B) Podzol
 - (C) Black cotton soil
 - (D) Prairie soil
- 42 _____ mostly help to store nutrient & bind particles together into aggregates.
- (A) Clay
 - (B) Gravels
 - (C) Sand
 - (D) Silt
- 43 Which processes were involved in podzolization ?
- (A) Transformation and translocation
 - (B) Leaching and translocation
 - (C) Addition and leaching
 - (D) Translocation and addition
- 44 Laterization is a process of accumulation in soil
- (A) CaSO_4
 - (B) Iron and aluminium oxides
 - (C) Silica
 - (D) CaCO_3

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