

CUET UG 2026 Environmental Science Question Paper 15 May Shift 1

General Instructions

- (i) This question paper contains 50 questions. All questions are compulsory.
- (ii) It comprises 50 single-correct multiple-choice questions.
- (iii) These questions follow the CUET (UG) examination pattern.
- (iv) Each correct answer is awarded +5 marks, with -1 for an incorrect answer.
- (v) The time allotted for this paper is 60 minutes.
- (vi) Attempt every question; detailed solutions are provided in the companion solutions booklet.

1. Match the LIST-I with LIST-II

LIST-I	LIST-II
Sustainable Development Goal number as per UNSDGs-17 List	Objective
A. Ten	I. Life below water
B. Fourteen	II. Life on land
C. Fifteen	III. Reduced Inequalities
D. Sixteen	IV. Peace, justice and strong institutions

Choose the *correct* answer from the options given below:

- (A) A - I, B - II, C - III, D - IV
(B) A - III, B - II, C - I, D - IV
(C) A - III, B - I, C - II, D - IV
(D) A - I, B - III, C - II, D - IV
-

2. Match the LIST-I with LIST-II

LIST-I	LIST-II
A. Stewardship of land	I. Capitalism is the real cause of environmental degradation
B. Shallow Ecology	II. Hierarchical and class system are responsible for environmental degradation.
C. Social Ecology	III. Responsible planning and management of resources.
D. Socialist Ecology	IV. Conserve environment only to meet human needs.

Choose the *correct* answer from the options given below:

- (A) A - I, B - II, C - IV, D - III
(B) A - II, B - III, C - I, D - IV
(C) A - III, B - IV, C - II, D - I
(D) A - IV, B - III, C - II, D - I
-

3. First "Earth Day" was celebrated on .

- (A) April 20, 1970
 - (B) April 22, 1970
 - (C) April 20, 1972
 - (D) April 22, 1972
-

4. Which of the following issue is NOT addressed by Eco-feminism?

- (A) Animal rights
 - (B) Agriculture development
 - (C) Air Pollution
 - (D) Nuclear weapon policies
-

5. Which of the following formula is correct to calculate "the average rate of change in the number of organisms per time, per organisms", in population growth rate ?

Where, N represent the number of organisms and t is the time.

- (A) ΔN
 - (B) $\frac{\Delta N}{N \Delta t}$
 - (C) $\frac{\Delta N}{\Delta t}$
 - (D) $\frac{\Delta t}{N \Delta N}$
-

6. Arrange the following forest types according to latitudinal zonation from equator towards poles

- A. Deciduous Forest
- B. Coniferous Forest
- C. Grassland
- D. Tundra Forest
- E. Tropical rain Forest

Choose the **correct** answer from the options given below:

- (A) C, E, B, A, D
 - (B) C, E, A, B, D
 - (C) E, C, A, B, D
 - (D) E, C, B, A, D
-

7. Arrange the following ecological succession in the lithosphere (rocks) from final to initial succession stage

- A. Moss stage
- B. Foliose - lichens stage
- C. Herbaceous stage
- D. Crustose - lichens Stage
- E. Shrub stage

Choose the **correct** answer from the options given below:

- (A) E, C, D, A, B
 - (B) E, C, B, A, D
 - (C) E, C, A, B, D
 - (D) E, C, A, D, B
-

8. Which of the following ecological pyramid is always inverted?

- (A) Pyramid of Number in Grassland ecosystem
 - (B) Pyramid of Number in Parasitic food chain
 - (C) Pyramid of Biomass in forest ecosystem
 - (D) Pyramid of energy in grassland ecosystem
-

9. Diversity of habitat over the total landscape or geographical area is referred to as

- (A) Genetic diversity
 - (B) Alfa diversity
 - (C) Beta diversity
 - (D) Gamma diversity
-

10. Parasites, that feed on external surface of the host organism are called .

- (A) Endo parasites
 - (B) Brood parasites
 - (C) Ecto parasites
 - (D) Commens parasites
-

11. Commensalism is a kind of population interaction, in which .

- (A) Both the species are benenfitted.
 - (B) One species is benefitted and other is harmed.
 - (C) One species is benefitted and other is unaffected.
 - (D) Both the species are harmed.
-

12. Which of the following are criteria air pollutants under NAAQS in India?

- A. CO
- B. CO₂
- C. NO₂
- D. SO₂
- E. Pb

Choose the **correct** answer from the options given below:

- (A) A, B, C and D only
- (B) B, C, D and E only
- (C) A, C, D and E only
- (D) A, C and E only

13. Arrange the following in increasing order of their sand content

- A. Sandy soil
- B. Silty Soil
- C. Clayey soil
- D. Loamy soil

Choose the **correct** answer from the options given below:

- (A) C, D, B, A
 - (B) C, B, D, A
 - (C) A, D, B, C
 - (D) B, C, D, A
-

14. Which of the following soil horizon of a typical soil profile will have the highest abundance of organic matter?

- (A) C horizon
 - (B) A horizon
 - (C) B horizon
 - (D) R horizon
-

15. Which of the following can directly cause eutrophication in lakes?

- A. Sewage waste
- B. Acidic precipitation
- C. Agriculture runoff
- D. Sulfur rich effluent from thermal power plant
- E. Municipal waste water

Choose the **correct** answer from the options given below:

- (A) A, C and D only
 - (B) B, D and E only
 - (C) B, C and D only
 - (D) A, C and E only
-

16. Choose the correct statement about water pollution?

- A. Dissolved oxygen is inversely proportional to BOD in waste water.
- B. Dissolved ion increases turbidity of water.
- C. Turbidity is a measure of transparency of water.
- D. Alkalinity is caused by carbonate, bicarbonate and hydroxides.
- E. Alkalinity is base neutralising capacity of water.

Choose the **correct** answer from the options given below:

- (A) A, B, C and D Only
 - (B) A, B, C and E Only
 - (C) A, C and D Only
 - (D) A, C, D and E Only
-

17. Which of the following is NOT an air pollution control measure/technique?

- (A) Bag houses
 - (B) Electrostatic Precipitators
 - (C) High Volume Air Sampler
 - (D) Cyclone Chambers
-

18. Arrange the following steps involved in the sewage treatment in correct order from initial to the last.

- A. Coagulation and Flocculation
- B. Chemical disinfection
- C. Screening
- D. Distribution of treated water
- E. Sediment and filtration

Choose the **correct** answer from the options given below:

- (A) E, C, B, A, D
 - (B) C, E, B, A, D
 - (C) C, E, A, B, D
 - (D) C, A, B, E, D
-

19. Gandhiji's concept of development is Sarvodaya which can be achieved through .

- (A) Navodaya
 - (B) Suryaodaya
 - (C) Antyodaya
 - (D) Sampuranodaya
-

20. Which of the following is not considered as a typical case of migration?

- (A) Forceful migration due to terrorism.
 - (B) Nomadic movements without any intent.
 - (C) Migration to urban areas for search of jobs.
 - (D) Voluntary migration within one's region or country.
-

21. Which of the following species is also called as the "Terror of Bengal"?

- (A) *Clarias gariepinus*
 - (B) *Tectona grandis*
 - (C) *Eichhornia crassipes*
 - (D) *Tamarix dioica*
-

22. Which of the following process of safe disposal of waste will require least amount of energy input?

- (A) Incineration
 - (B) Pyrolysis
 - (C) Composting
 - (D) Plasma Arc
-

23. Choose the correct statements about natural and organic farming

- A. Natural farming is an example of closed system of farming
- B. No human supplied artificial inputs are used in natural farming
- C. Traditional farming promotes polyculture
- D. Organic farming combines scientific knowledge with traditional farming practices
- E. Organic farming relies on growing multiple crops on same space

Choose the **correct** answer from the options given below:

- (A) A, B, C, D and E
 - (B) B, C, D and E only
 - (C) A, B, C and E only
 - (D) A, B, D and E only
-

24. Which of the following does not apply to High Yielding Varieties (HYVs) of crops?

- (A) They are semi-dwarf and are protected from strong winds.
 - (B) They mature early and save time for raising other crops in same field.
 - (C) They are disease resistant and does not require pesticides.
 - (D) They require better input like water and fertilisers.
-

25. Match the LIST-I with LIST-II

LIST-I	LIST-II
Water harvesting method	State/UT in which its popularly used
A. Nadis	I. Jammu and Kashmir
B. Bandharas	II. Rajasthan
C. Ponds	III. Maharashtra
D. Eris	IV. Tamil Nadu

Choose the **correct** answer from the options given below:

- (A) A - I, B - II, C - III, D - IV
 - (B) A - II, B - III, C - I, D - IV
 - (C) A - I, B - III, C - II, D - IV
 - (D) A - IV, B - III, C - I, D - II
-

26. Which of the following is NOT true for mixed farming?

- (A) It helps in maintaining soil fertility.
 - (B) It reduces soil erosion.
 - (C) It improves production level and give higher production than monoculture.
 - (D) It provides suitable habitat for birds.
-

27. The measure of number of different food groups consumed over a specific reference period (24 hr/ 8hr/ 7 days) is known as .

- (A) Household food insecurity scale
 - (B) Household dietary diversity scale
 - (C) Household hunger scale
 - (D) Coping strategies index
-

28. Which of the following is an example of Kharif Crop?

- (A) Wheat
 - (B) Gram
 - (C) Paddy
 - (D) Mustard
-

29. Which of the following state in India first adopted Green Revolution ?

- (A) Haryana
 - (B) Punjab
 - (C) Uttar Pradesh
 - (D) Madhya Pradesh
-

30. Match the LIST-I with LIST-II

LIST-I (Ecosystem services)

LIST-II (explanation or example)

A. Provisioning Services

I. All services which are necessary for production of all ecosystem services.

B. Regulating Services

II. Ecosystem is a store house of formal and informal education.

C. Cultural Services

III. Soil erosion is reduced by plants by binding soil particles.

D. Supporting Services

IV. Genetic resources including crop improvement and health care.

Choose the *correct* answer from the options given below:

- (A) A - II, B - III, C - IV, D - I
 - (B) A - IV, B - III, C - II, D - I
 - (C) A - III, B - II, C - IV, D - I
 - (D) A - IV, B - I, C - II, D - III
-

31. Resources that have been surveyed but cannot used by humans due to lack of technology are known as .

- (A) Potential resources
 - (B) Actual resources
 - (C) Reserve resources
 - (D) Stock resources
-

32. Match the LIST-I with LIST-II

LIST-I (Type of externality)	LIST-II (Example)
A. Negative production externality	I. A good attractive house increases value of that area.
B. Negative consumption externality	II. Development of an airport will benefit trade and business due to increased accessibility.
C. Positive production externality	III. Increased risk of accidents due to many vehicles.
D. Positive consumption externality	IV. Industrial effluents contaminating rivers and streams.

Choose the *correct* answer from the options given below:

- (A) A - III, B - II, C - IV, D - I
- (B) A - IV, B - III, C - II, D - I
- (C) A - III, B - IV, C - II, D - I
- (D) A - I, B - III, C - II, D - IV

33. Which of the following is the correct relationship between Gross Domestic product (GDP), Gross National Product (GNP), Net Income Receipt (X), and Net Outflow to the foreign Assets (Y)?

- (A) $GNP = GDP - X + Y$
 - (B) $GNP = GDP + X - Y$
 - (C) $GDP - X = GNP + Y$
 - (D) $GDP + Y = GNP - X$
-

34. Ecological Foot Print (EFP) does not measure-

- (A) Amount of waste generated by human population
 - (B) Consumption of natural resources by human population
 - (C) Income generated by human population
 - (D) Demand of human from ecosystems
-

35. Agreement between two or more nations to reduce or eliminate tariff and non-tariff barrier on trade is known as:-

- (A) Free trade agreements
 - (B) Foreign trade agreements
 - (C) Free tariff treaty
 - (D) Custom trade agreements
-

36. An international effort “REDD+” was proposed in the year 2005 by developing countries for .

- (A) Reducing CFCs emissions for recovery of ozone layer
 - (B) Reducing deforestation to combat global warming
 - (C) Conserving wetlands for water management
 - (D) Conserving fossil fuel for next generation
-

37. Which of the following are important cycles of catalytic destruction of ozone in stratosphere ?

- A. CO / CO₂
- B. HO / HO₂
- C. NO / NO₂
- D. Cl / ClO
- E. SO / SO₂

Choose the **correct** answer from the options given below:

- (A) A and D only
 - (B) B, C and D only
 - (C) A, C and D only
 - (D) A, D and E only
-

38. Which of the following gas is both a green house gas and a criteria air pollutants?

- (A) Nitrous oxide
 - (B) Carbon dioxide
 - (C) Ozone
 - (D) Sulphur hexafluoride
-

39. Arrange the following international events in a chronological order starting from old to recent as per their year of enactment.

- A. Basel Convention
- B. Bamako Convention
- C. Paris Agreement on Climate Change
- D. Kigali Amendment
- E. Kyoto Protocol

Choose the **correct** answer from the options given below:

- (A) A, E, C, D, B
 - (B) D, C, B, A, E
 - (C) A, E, B, C, D
 - (D) E, B, A, C, D
-

40. Total columnar ozone in the atmosphere is measured in Dobson units. One Dobson unit corresponds to _____

- (A) $\frac{1}{10}$ of mm
 - (B) $\frac{1}{100}$ of mm
 - (C) $\frac{1}{1000}$ of mm
 - (D) $\frac{1}{100}$ of cm
-

41.

For any ecosystem, a constant input of energy is the basic requirement for its functioning and sustenance. The productivity of an ecosystem is calculated as the rate of biomass production expressed as gram/square meter/year ($\text{g. m}^{-2} \cdot \text{yr}^{-1}$). The rate of production of organic matter during photosynthesis is called gross primary productivity (GPP). A considerable portion of GPP is consumed and utilized by plants during respiration. Therefore, the biomass available for heterotrophs is known as net primary productivity (NPP). The rate of formation of new organic matter by consumers is known as secondary productivity (SP).

Primary productivity depends on the plants species inhabiting a particular area, availability of nutrients, photosynthetic capacity of plants, and other environmental factors. The annual NPP of whole biosphere is approximately 170 billion tons, out of which, productivity of oceans is around 55 billions tons. In soil, the dead organic matter is converted to humus through humification. Humus undergoes slow degradation and is a reservoir of soil nutrients. Over a period of time, humus is further degraded by microbes and release nutrients by a process called mineralization.

Annual NPP of land area on the earth is _____

- (A) < 55 billion tons
- (B) between 55 to 100 billion tons
- (C) About 115 billion tons
- (D) 225 billion tons

42.

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Which of the following is not associated with photosynthetic plants?

- (A) Net primary productivity
- (B) Gross primary productivity
- (C) Primary productivity
- (D) Seconday productivity

43.

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Choose the correct statement.

- (A) Annual NPP of land area is higher than oceans.
- (B) NPP is greater than GPP in terrestrial ecosystems.
- (C) Secondary productivity is always higher than Primary productivity in Oceanic ecosystem.
- (D) Primary productivity is unaffected by environmental factors.

44.

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Inorganic nutrients are released into the soil by the decomposition of dead organic matter through a process called as _____

- (A) Photosynthesis
- (B) Mineralization
- (C) Purification
- (D) Respiration

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Which of the following units can be appropriately used in the expression of Primary Productivity of an ecosystem?

- (A) $\text{g m}^2/\text{yr}$
- (B) $\text{Kg/Km}^2/\text{yr}$
- (C) g/yr
- (D) g/m/yr

46.

Smog, a term coined 50 years ago, from the words "Smoke" and "fog" is a dirty yellow-brown cloudy formation in lower portion of troposphere near the ground. Smog, we are most familiar with are Los Angeles and London smog. Former is a example of photochemical smog, and later is a classical smog which contained sulphur dioxide, sulphur trioxide, sulphuric acid, heavy suspended particles, and water vapours. Los Angeles smog was formed by photochemical reactions among nitrogen oxides and volatile hydrocarbons in presence of sunlight. This type of smog contains ozone, PAN, formaldehyde, and causes eye irritation, impairs pulmonary functions and damage plants and crops.

Choose the incorrect statement

- (A) Smog is formed near the ground in the troposphere.
- (B) Nitrogen oxides impart yellow-brown colour to smog.
- (C) Photochemical smog formation is maximum when sun is overhead in the day.
- (D) Photochemical smog formation is maximum in winter compared to summer season.

47.

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Smog clouds of sulphur dioxide, water droplets and sulphuric acid droplets can be referred to as _____.

- (A) Photochemical smog
 - (B) Oxidising smog
 - (C) Los Angeles smog
 - (D) Reducing smog
-

48.

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Which of the following is not essentially required for photochemical smog formation?

- (A) Nitrogen oxides
 - (B) Sunlight
 - (C) Water Vapour
 - (D) Volatile hydrocarbons
-

49.

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Which of the following is not formed during Photochemical smog formation?

- (A) Ozone
- (B) Aldehydes
- (C) Peroxy acetyl nitrate
- (D) Sulphuric Acid

50.

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Choose the correct statement

- (A) Ozone formed during photochemical smog protects us from UV radiations.
- (B) Increase in tropospheric ozone can reduce food production.
- (C) Photochemical smog formation is maximum in morning and evening due to heavy traffic hours.
- (D) Vehicular exhaust does not contain any precursors of ozone formation in the troposphere.