

Test Paper : II

Test Subject : ENVIRONMENTAL SCIENCE

Test Subject Code : K-2913

Test Booklet Serial No. : \_\_\_\_\_

OMR Sheet No. : \_\_\_\_\_

Roll No.

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(Figures as per admission card)

Name & Signature of Invigilator/s

Signature: \_\_\_\_\_

Signature : \_\_\_\_\_

Name : \_\_\_\_\_

Name : \_\_\_\_\_

Paper : II

Subject : ENVIRONMENTAL SCIENCE

Time : 1 Hour 15 Minutes

Maximum Marks : 100

Number of Pages in this Booklet : 8

Number of Questions in this Booklet : 50

ಅಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು

- ಈ ಪುಟದ ಮೇಲ್ಭಾಗದಲ್ಲಿ ಒದಗಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ನಿಮ್ಮ ರೋಲ್ ನಂಬರನ್ನು ಬರೆಯಿರಿ.
- ಈ ಪತ್ರಿಕೆಯು ಬಹು ಆಯ್ಕೆ ವಿಧದ ಐವತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಒಳಗೊಂಡಿದೆ.
- ಪರೀಕ್ಷೆಯ ಪ್ರಾರಂಭದಲ್ಲಿ ಪ್ರಶ್ನೆಪುಸ್ತಕವನ್ನು ನಿಮಗೇ ನೀಡಲಾಗುವುದು. ಮೊದಲ 5 ನಿಮಿಷಗಳಲ್ಲಿ ನೀವು ಪುಸ್ತಕವನ್ನು ತೆರೆಯಲು ಮತ್ತು ಕೆಳಗಿನಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಪರೀಕ್ಷಿಸಲು ಕೋರಲಾಗಿದೆ.  
(i) ಪ್ರಶ್ನೆಪುಸ್ತಕದ ಪ್ರವೇಶಾಂತರವನ್ನು, ಈ ಹೊದಿಕೆ ಪುಟದ ಅಂಚಿನ ಮೇಲಿರುವ ಪೇಪರ್ ಸೀಲನ್ನು ಹರಿಯಿರಿ. ಸ್ಕ್ರಾಪ್ ಸೀಲ್ ಇಲ್ಲದ ಪ್ರಶ್ನೆಪುಸ್ತಕ ಸ್ವೀಕರಿಸಬೇಡಿ. ತೆರೆದ ಪ್ರಶ್ನೆಪುಸ್ತಕವನ್ನು ಸ್ವೀಕರಿಸಬೇಡಿ.  
(ii) ಪುಸ್ತಕಿಯಲ್ಲಿನ ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ ಮತ್ತು ಪುಟಗಳ ಸಂಖ್ಯೆಯನ್ನು ಮುಖಪುಟದ ಮೇಲೆ ಮುದ್ರಿಸಿದ ಮಾಹಿತಿಯೊಂದಿಗೆ ತಾಳೆ ನೋಡಿರಿ. ಪುಟಗಳು/ಪ್ರಶ್ನೆಗಳು ಕಾಣೆಯಾದ, ಅಥವಾ ದ್ವಿಪ್ರತಿ ಅಥವಾ ಅನುಕ್ರಮವಾಗಿಲ್ಲದ ಅಥವಾ ಇತರ ಯಾವುದೇ ವ್ಯತ್ಯಾಸದ ದೋಷಪೂರಿತ ಪುಸ್ತಕಿಯನ್ನು ಕೂಡಲೇ 5 ನಿಮಿಷದ ಅವಧಿ ಒಳಗೆ, ಸಂವಿಕ್ಷೇಪಕರಿಂದ ಸರಿ ಇರುವ ಪ್ರಶ್ನೆಗಳ ಬದಲಾಯಿಸಿಕೊಳ್ಳಬೇಕು. ಆ ಬಳಿಕ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಬದಲಾಯಿಸಲಾಗುವುದಿಲ್ಲ, ಯಾವುದೇ ಹೆಚ್ಚು ಸಮಯವನ್ನೂ ಕೊಡಲಾಗುವುದಿಲ್ಲ.
- ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ (A), (B), (C) ಮತ್ತು (D) ಎಂದು ಗುರುತಿಸಿದ ನಾಲ್ಕು ಪರ್ಯಾಯ ಉತ್ತರಗಳಿವೆ. ನೀವು ಪ್ರಶ್ನೆಯ ಎದುರು ಸರಿಯಾದ ಉತ್ತರದ ಮೇಲೆ, ಕೆಳಗೆ ಕಾಣಿಸಿದಂತೆ ಅಂಡಾಕೃತಿಯನ್ನು ಕಪ್ಪಾಗಿಸಬೇಕು.  
ಉದಾಹರಣೆ : (A) (B) (C) (D)  
(C) ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದಾಗ.
- ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ರಲ್ಲಿ ಕೊಟ್ಟಿರುವ OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ I ಮತ್ತು ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ II ರಲ್ಲಿ ಇರುವ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ಸೂಚಿಸತಕ್ಕದ್ದು. OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಅಂಡಾಕೃತಿಯಿಲ್ಲದ ಬೇರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಉತ್ತರವನ್ನು ಗುರುತಿಸಿದರೆ, ಅದರ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲಾಗುವುದಿಲ್ಲ.
- OMR ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಕೊಟ್ಟ ಸೂಚನೆಗಳನ್ನು ಜಾಗರೂಕತೆಯಿಂದ ಓದಿರಿ.
- ಎಲ್ಲಾ ಕರಡು ಕೆಲಸವನ್ನು ಪುಸ್ತಕಿಯ ಕೊನೆಯಲ್ಲಿ ಮಾಡತಕ್ಕದ್ದು.
- ನಿಮ್ಮ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸಬಹುದಾದ ನಿಮ್ಮ ಹೆಸರು ಅಥವಾ ಯಾವುದೇ ಚಿಹ್ನೆಯನ್ನು ಸಂಗತವಾದ ಸ್ಥಳ ಹೊರತು ಪಡಿಸಿ, OMR ಉತ್ತರ ಹಾಳೆಯ ಯಾವುದೇ ಭಾಗದಲ್ಲಿ ಬರೆದರೆ, ನೀವು ಅನರ್ಹತೆಗೆ ಬಾಧ್ಯರಾಗಿರುತ್ತೀರಿ.
- ಪರೀಕ್ಷೆಯು ಮುಗಿದನಂತರ, ಕಡ್ಡಾಯವಾಗಿ OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ಸಂವಿಕ್ಷೇಪಕರಿಗೆ ನೀವು ಹಿಂತಿರುಗಿಸಬೇಕು ಮತ್ತು ಪರೀಕ್ಷಾ ಕೊಠಡಿಯ ಹೊರಗೆ OMR ನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ಕೊಂಡೊಯ್ಯ ಕೂಡದು.
- ಪರೀಕ್ಷೆಯ ನಂತರ, ಪರೀಕ್ಷಾ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯನ್ನು ಮತ್ತು ನಕಲು OMR ಉತ್ತರ ಹಾಳೆಯನ್ನು ನಿಮ್ಮೊಂದಿಗೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು.
- ನೀಲಿ/ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರವೇ ಉಪಯೋಗಿಸಿರಿ.
- ಕ್ಯಾಲ್ಕುಲೇಟರ್ ಅಥವಾ ಲಾಕ್ ಟೇಬಲ್ ಇತ್ಯಾದಿಯ ಉಪಯೋಗವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ.
- ಸರಿ ಅಲ್ಲದ ಉತ್ತರಗಳಿಗೆ ಋಣ ಅಂಕ ಇರುವುದಿಲ್ಲ.

Instructions for the Candidates

- Write your roll number in the space provided on the top of this page.
- This paper consists of fifty multiple-choice type of questions.
- At the commencement of examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and compulsorily examine it as below :  
(i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page. Do not accept a booklet without sticker-seal and do not accept an open booklet.  
(ii) Tally the number of pages and number of questions in the booklet with the information printed on the cover page. Faulty booklets due to pages/questions missing or duplicate or not in serial order or any other discrepancy should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
- Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the oval as indicated below on the correct response against each item.  
Example : (A) (B) (C) (D)  
where (C) is the correct response.
- Your responses to the questions are to be indicated in the OMR Sheet kept inside the Paper I Booklet only. If you mark at any place other than in the ovals in the Answer Sheet, it will not be evaluated.
- Read the instructions given in OMR carefully.
- Rough Work is to be done in the end of this booklet.
- If you write your name or put any mark on any part of the OMR Answer Sheet, except for the space allotted for the relevant entries, which may disclose your identity, you will render yourself liable to disqualification.
- You have to return the test OMR Answer Sheet to the invigilators at the end of the examination compulsorily and must NOT carry it with you outside the Examination Hall.
- You can take away question booklet and carbon copy of OMR Answer Sheet soon after the examination.
- Use only Blue/Black Ball point pen.
- Use of any calculator or log table etc., is prohibited.
- There is no negative marks for incorrect answers.

K-2913

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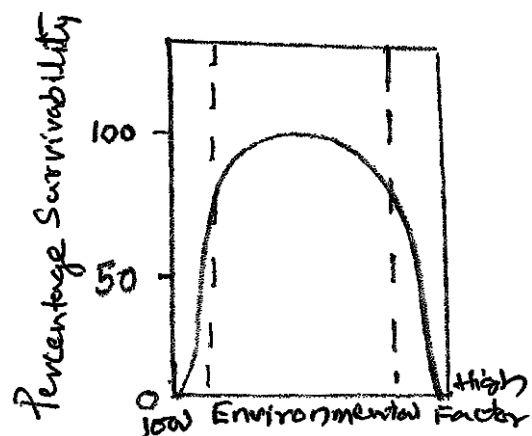
## ENVIRONMENTAL SCIENCE

### Paper – II

**Note :** This paper contains **fifty (50)** objective type questions. **Each** question carries **two (2)** marks. **All** questions are **compulsory**.

- Ozone day, World Environmental Day and National Pollution Preservation day are celebrated on
  - June 5, Sept. 16 Oct. 21
  - June 5, Sept. 16, Dec. 2
  - Sept. 16, June 5, Dec. 2
  - Sept. 16, Dec. 2, June 5
- When chloro fluorocarbon splits to release chlorine, one atom of chlorine converts how many molecules of ozone into oxygen ?
  - 1 Lakh
  - 2 Lakh
  - 40 Lakh
  - 1 Million
- Among the following which gas is found in maximum concentration in the atmosphere
  - Xe
  - Rh
  - Ar
  - Kr
- What material is generally used as coolant in Breeder reactors ?
  - Liquid sodium
  - Biofuel
  - LPG
  - Diesel

- In this conceptual model, the broad middle sectors of this gradient represents which zone among the following



- Zone of tolerance
  - Biokenetic zone
  - Zone of resistance
  - Both (A) and (B)
- Who coined the term "Smog" in 1905 ?
    - Des Voeux
    - Hult
    - Cannon
    - Le Chatellier



7. Population density is expressed by
- (A)  $D = N + S$
  - (B)  $D = N \times S$
  - (C)  $D = N/S$
  - (D)  $D = N - S$
8. Biological elastic resistance is a measure of the organisms ability to reduce or prevent elastic strain when exposed to a particular type of stress, this elastic strain is
- (A) Completely reversible strain
  - (B) Irreversible strain
  - (C) Partially reversible strain
  - (D) Neutral strain
9. Which type of forest cover maximum area in our country ?
- (A) Tropical rain forest
  - (B) Tropical moist Deciduous forest
  - (C) Tropical dry Deciduous forest
  - (D) Tropical dry ever green forest
10. During the past 100 yrs mean global annual temperature has
- (A) Decreased by  $5^{\circ}\text{C}$
  - (B) Increased by  $5^{\circ}\text{C}$
  - (C) Decreased by  $0.5^{\circ}\text{C}$
  - (D) Increased by  $0.5^{\circ}\text{C}$
11. The theory of natural selection was proposed by ?
- (A) Alexander
  - (B) Charl's Darwin
  - (C) Gregor J. Meadel
  - (D) Sir C. V. Raman
12. Which of the following forest is more diversified ?
- (A) Coniferous
  - (B) Tropical rain forest
  - (C) Sub tropical forest
  - (D) Deciduous forest
13. Relationship between different organism can best be studied by
- (A) Food WEB
  - (B) Pyramid of mass
  - (C) Pyramid of energy
  - (D) Eltonian pyramid
14. Valley of flowers is found in
- (A) North Western Himalayas
  - (B) Niligiri hills
  - (C) North Eastern Himalayas
  - (D) Sathpura hills
15. When Co-efficient of skewness is zero the distribution is
- (A) J-shaped
  - (B) U-shaped
  - (C) Symetrical
  - (D) L-shaped



16. The co-efficient of correlation
- (A) Has no limits
  - (B) Can be less than one
  - (C) Can be more than one
  - (D) Varies between  $\pm 1$
17. Stenothermal are the organisms that can tolerate
- (A) Wide range of tolerance of temperature
  - (B) Narrow range of thermal tolerance
  - (C) Do not tolerate slight change in temperature
  - (D) Both (A) and (C)
18. Organisms required minimum quality of a particular nutrients for proper growth this is called law of minimum from the following who developed the concept of law of minimum
- (A) Blackman (1905)
  - (B) O' Neill (1967)
  - (C) Justus Von Liebig (1840)
  - (D) John Teal (1957)
19. Which of the following is radio active element ?
- (A) Platinum
  - (B) Palladium
  - (C) Plutonium
  - (D) Iridium
20. All Alkaline earth elements have an oxidation number of
- (A) - 1
  - (B) + 1
  - (C) - 2
  - (D) + 2
21. The average thickness of the earth's crust under the ocean floor
- (A) 33 Km
  - (B) 23 Km
  - (C) 13 Km
  - (D) 7 Km
22. Mangroves are highly productive ecosystem but they are rich in Avian diversity because
- (A) Lack of structured diversity
  - (B) Rich in food diversity
  - (C) Less number of water holes
  - (D) A, B and C
23. Silent valley exists in
- (A) Karnataka
  - (B) Tamilnadu
  - (C) Kerala
  - (D) Andhrapradesh
24. Rain water harvesting improves
- (A) Soil quality
  - (B) Structure of the soil
  - (C) Ground water table
  - (D) Decrease soil pollutants



25. "Shifting cultivation" practiced by  
(A) Land lords  
(B) Agriculturist  
(C) Labourers  
(D) Tribals
26. Sea birds play an important role in  
(A) Nitrogen cycle  
(B) Phosphorus cycle  
(C) Sulphur cycle  
(D) Carbon cycle
27. Which of the following equation expresses the first law of thermo dynamics  
(A)  $Q = \Delta E - W$   
(B)  $\Delta E = Q - W$   
(C)  $\Delta E = Q + W$   
(D)  $\Delta E = Q + P \Delta V$
28. Certain bacteria living in human large intestine helps to produce vitamin K this relationship is an example of  
(A) Animal parasitism  
(B) Plant parasitism  
(C) Commensalism  
(D) Mutualism
29. The mathematical statement of Gibb's phase rule is  
(A)  $F = C - P + 2$   
(B)  $C = F + P + 2$   
(C)  $C - F = P + 1$   
(D)  $P = C + F + 2$
30. The term Kyoto protocol extended upto  
(A) 2017  
(B) 2020  
(C) 2022  
(D) 2025
31. Micro evolution is  
(A) A minor change in morphology  
(B) A major morphological change  
(C) A change in populations gene pool over time  
(D) A change restricted to both at morphological and gene level
32. The favorable points of CNG over LPG is/are  
(I) Erring is stored at high pressure were LPG is stored  
(II) Liquidation of LPG makes this fuel more complex to store were as storage and distribution of CNG easy  
(III) CNG is less expensive than LPG  
(IV) LPG is less expensive than CNG  
(A) I, II, and III are correct  
(B) I, III and IV are correct  
(C) I, II and IV are correct  
(D) II, III and IV are correct
33. The standard deviation of binomial distribution is  
(A)  $\sqrt{npq}$   
(B)  $npq$   
(C)  $n^2 p^2 q^2$   
(D)  $np$



34. Raisonde is used to study  
(A) Earth's albedo at surface  
(B) Estimate pollution in air  
(C) Atmospheric moisture content  
(D) Upper atmosphere's condition

35. The elements which loves silicates are called  
(A) Siderophile  
(B) Lithophile  
(C) Chalcophile  
(D) Atomophile

36. Match the List I with List II

List – I	List – II
a) Wind	i) Barometer
b) Atmospheric pressure	ii) Anemometer
c) Light	iii) Lux meter
d) Humidity	iv) Wet and dry bulb thermometer

- (A) a – ii, b – i, c – iii, d – iv  
(B) a – i, b – ii, c – iii, d – iv  
(C) a – iii, b – ii, c – iv, d – i  
(D) a – iv, b – iii, c – ii, d – i

37. Match the following

List – I	List – II
a) Mw	I) Chalcopyrite
b) Pb	II) Sphalerite
c) Zn	III) Galena
d) Cu	IV) Pyralusite

- (A) a (I), b (II), c (III), d (IV)  
(B) a (II), b (I), c (IV), d (III)  
(C) a (IV), b (III), c (II), d (I)  
(D) a (III), b (IV), c (I), d (II)

38. Which of the following is a Ramsarsite in India ?

- (A) Piechola lake  
(B) Ansupa lake  
(C) Dal lake  
(D) Dimma

39. Psammo sere

- (A) Ecological succession on parent rock  
(B) Ecological succession on saline area  
(C) Ecological succession on dry sand  
(D) Ecological succession in water

40. Fastest seismic wave is

- (A) P wave  
(B) S wave  
(C) Q wave  
(D) Wave

41. Volcanic ashes are associated with

- (A) Erosion of soil  
(B) Biological activities  
(C) Formation of andisols  
(D) Formation of permafrost

42. Molting of teeth is due to presence of an element in drinking water

- (A) Mercury  
(B) Fluorine  
(C) Boron  
(D) Chlorine



43. The response of insects to environment rhythms to light and darkness is known as
- (A) Phototropism
  - (B) Photoperiodism
  - (C) Phototropic
  - (D) (A) and (B)
44. Which type of experiment has a maximum spatial scale ?
- (A) Natural experiment
  - (B) Laboratory experiment
  - (C) Field experiment
  - (D) Theoretical experiment
45. What is eco-freeze ?
- (A) Halting ecological degradation
  - (B) Stopping ecological disaster
  - (C) Planning an ecological balance
  - (D) Stopping manufacture of environment modification weapons
46. A life table is composed of
- (A) Mortality records based on age
  - (B) Records of reproductive events in a life time
  - (C) List of current ages of individuals in a population
  - (D) Collection of pedigree from society
47. White lung disease is common among
- (A) Coal miners
  - (B) Farmers
  - (C) Traffic police
  - (D) Textile workers
48. Ginkgo biloba is an example of which type of endomism
- (A) Progressive endemism
  - (B) Relic endemism
  - (C) Retrogressive endemism
  - (D) Local endemism
49. CITES is an international law concerned with
- (A) Bio-resource
  - (B) Endangered species
  - (C) Genetic resources
  - (D) Hot spots
50. Up to what decible of noise are safe to human beings
- (A) 100 decibles
  - (B) 80 decibles
  - (C) 110 decibles
  - (D) 120 decibles



Total Number of Pages : 8

ಚಿತ್ತು ಬರಹಕ್ಕಾಗಿ ಸ್ಥಳ  
Space for Rough Work