PAPER-III
ENVIRONMENTAL SCIENCE

Signature and Name of Invigilator

1. (Signature) _____

 (Name) _____

2. (Signature) _____

 (Name) _____

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Time : 2 ¹/₂ hours]

Number of Pages in this Booklet : 12

OMR Sheet No. : ....

(To be filled by the Candidate)

Roll No. | | | | | | | | |

(In figures as per admission card)

Roll No._____

(In words)

[Maximum Marks : 150

Number of Questions in this Booklet : 75

Instructions for the Candidates	परीक्षार्थियों के लिए निर्देश
1. Write your roll number in the space provided on the top of this page.	1. पहले पृष्ठ के ऊपर नियत स्थान पर अपना रोल नम्बर लिखिए ।
2. This paper consists of seventy five multiple-choice type of questions.	2. इस प्रश्न-पत्र में पचहत्तर बहुविकल्पीय प्रश्न हैं ।
3. 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 :	3. परीक्षा प्रारम्भ होने पर, प्रश्न-पुस्तिका आपको दे दी जायेगी । पहले पाँच मिनट आपको प्रश्न-पुस्तिका खोलने तथा उसकी निम्नलिखित जाँच के लिए दिये जायेंगे, जिसकी जाँच आपको अवश्य करनी है :
(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.	(i) प्रश्न-पुस्तिका खोलने के लिए उसके कवर पेज पर लगी कागज की सील को फाड़ लें । खुली हुई या बिना स्टीकर-सील की पुस्तिका स्वीकार न करें ।
(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.**	(ii) **कवर पृष्ठ पर छपे निर्देशानुसार प्रश्न-पुस्तिका के पृष्ठ तथा प्रश्नों की संख्या को अच्छी तरह चैक कर लें कि ये पूरे हैं । दोषपूर्ण पुस्तिका जिनमें पृष्ठ/प्रश्न कम हों या दुबारा आ गये हों या सीरियल में न हों अर्थात् किसी भी प्रकार की त्रुटिपूर्ण पुस्तिका स्वीकार न करें तथा उसी समय उसे लौटाकर उसके स्थान पर दूसरी सही प्रश्न-पुस्तिका ले लें । इसके लिए आपको पाँच मिनट दिये जायेंगे । उसके बाद न तो आपकी प्रश्न-पुस्तिका वापस ली जायेगी और न ही आपको अतिरिक्त समय दिया जायेगा ।**
(iii) After this verification is over, the OMR Sheet Number should be entered on this Test Booklet.	(iii) इस जाँच के बाद OMR पत्रक की क्रम संख्या इस प्रश्न-पुस्तिका पर अंकित कर दें ।
4. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the circle as indicated below on the correct response against each item. **Example :** (A) (B) ● (D) where (C) is the correct response.	4. प्रत्येक प्रश्न के लिए चार उत्तर विकल्प (A), (B), (C) तथा (D) दिये गये हैं । आपको सही उत्तर के वृत्त को पेन से भरकर काला करना है जैसा कि नीचे दिखाया गया है । **उदाहरण :** (A) (B) ● (D) जबकि (C) सही उत्तर है ।
5. Your responses to the items are to be indicated in the **OMR Sheet given inside the Booklet only.** If you mark at any place other than in the circle in the OMR Sheet, it will not be evaluated.	5. प्रश्नों के उत्तर **केवल प्रश्न पुस्तिका के अन्दर दिये गये OMR पत्रक पर ही** अंकित करने हैं । यदि आप OMR पत्रक पर दिये गये वृत्त के अलावा किसी अन्य स्थान पर उत्तर चिह्नांकित करते हैं, तो उसका मूल्यांकन नहीं होगा ।
6. Read instructions given inside carefully.	6. अन्दर दिये गये निर्देशों को ध्यानपूर्वक पढ़ें ।
7. Rough Work is to be done in the end of this booklet.	7. कच्चा काम (Rough Work) इस पुस्तिका के अन्तिम पृष्ठ पर करें ।
8. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except for the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, you will render yourself liable to disqualification.	8. यदि आप OMR पत्रक पर नियत स्थान के अलावा अपना नाम, रोल नम्बर, फोन नम्बर या कोई भी ऐसा चिह्न जिससे आपकी पहचान हो सके, अंकित करते हैं अथवा अभद्र भाषा का प्रयोग करते हैं, या कोई अन्य अनुचित साधन का प्रयोग करते हैं, तो परीक्षा के लिये अयोग्य घोषित किये जा सकते हैं ।
9. You have to return the test question booklet and Original OMR Sheet to the invigilators at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry duplicate copy of OMR Sheet on conclusion of examination.	9. आपको परीक्षा समाप्त होने पर प्रश्न-पुस्तिका एवं मूल OMR पत्रक निरीक्षक महोदय को लौटाना आवश्यक है और परीक्षा समाप्ति के बाद उसे अपने साथ परीक्षा भवन से बाहर न लेकर जायें । हालांकि आप परीक्षा समाप्ति पर OMR पत्रक की डुप्लीकेट प्रति अपने साथ ले जा सकते हैं ।
10. **Use only Blue/Black Ball point pen.**	10. **केवल नीले/काले बाल प्वाईंट पेन का ही इस्तेमाल करें ।**
11. **Use of any calculator or log table etc., is prohibited.**	11. **किसी भी प्रकार का संगणक (कैलकुलेटर) या लाग टेबल आदि का प्रयोग वर्जित है ।**
12. **There is no negative marks for incorrect answers.**	12. **गलत उत्तरों के लिए कोई अंक काटे नहीं जाएँगे ।**

D-89-12   1   **P.T.O.**

Note : This paper contains **seventy five (75)** objective type questions of **two (2)** marks each.
All questions are compulsory.

1. In a multiple regression model, the f-ratio is used to test the
   (A) Variance of the data
   (B) Standard error of mean
   (C) R^2 value
   (D) Overall goodness of fit of the model.

2. If the mean of a sample is 20, the standard error of mean is 1 and the t-statistic for 95% level of confidence is 2.5, the population mean will be in the range
   (A) 17.5 to 22.5
   (B) 15 to 25
   (C) 20 to 25
   (D) 15 to 20

3. The third moment about the mean of a distribution of a set of observations is a measure of
   (A) Mode
   (B) Skewness
   (C) Kurtosis
   (D) Variance

4. Consider an air shed over a city in the form of a rectangular box. The wind velocity is 5 m/sec normal to left face of the box. The length of the box along the direction of wind is 10 km and mixing height is 1 km. Assuming rapid mixing of the pollutants which are conservative in nature, the concentration of the pollutants in the city would reach 63% of its final value in
   (A) 2,000 sec
   (B) 5,000 sec
   (C) 10,000 sec
   (D) 1,000 sec

5. Which one of the following states of mercury is volatile ?
   (A) Organic
   (B) Ionic
   (C) Atomic
   (D) All of the above

6. Molar extinction coefficient of H_2O_2 at 240 nm is 0.04 M^{-1} cm^{-1}. The concentration of H_2O_2 in a solution which has absorbance of 0.6 in a 3 cm curette will be
   (A) 5 M
   (B) 10 M
   (C) 15 M
   (D) 20 M

7. A reference solution is to be prepared with 5 PPM parabenzopyrene (molecular weight = 252). The quantity of parabenzopyrene required for preparing one litre 5 PPM solution is
   (A) 252 mg
   (B) 25.2 mg
   (C) 5 mg
   (D) 252 µg

8. Which one of the following is a peroxyl radical ?
   (A) $OH°$
   (B) $R°$
   (C) $RO°$
   (D) $ROO°$

9. Depending upon the amount of net primary productivity the various ecosystems can be arranged in a decreasing sequence of yield.
(A) Tropical seasonal forest – Tropical rain forest – Temperate Grassland – Woodland and Shrubland.
(B) Tropical seasonal forest – Tropical rain forest – Woodland and Shrubland – Temperate Grassland
(C) Tropical rain forest – Temperate Grassland – Woodland and Shrubland – Tropical seasonal forest.
(D) Tropical rain forest – Tropical seasonal forest – Woodland and Shrubland – Temperate Grassland.

10. Which of the following is a correct sequence of secondary seral vegetation development on any habitat ?
(A) Ecesis – Invasion – Aggregation – Stabilization
(B) Ecesis – Aggregation – Invasion – Stabilization
(C) Aggregation – Invasion – Ecesis – Stabilization
(D) Invasion – Ecesis – Aggregation – Stabilization

11. What is common feature among the following ?
Abies delavayi
Aconitum diennorrhzum
Adinandra griffthii
Aglaia perviridis
(A) All have been extinct.
(B) All are gymnosperms.
(C) All are identified as endangered species.
(D) All are angiosperms.

12. Raunkiaer's normal biological spectrum for phanerogamic flora of the world exhibits one of the following sequence of occurrence (%) of different life forms.
(A) Phanerophytes, Hemicryptophytes, Therophytes, Cryptophytes, Chaemophytes.
(B) Phanerophytes, Hemicryptophytes, Therophytes, Chaemophytes, Cryptophytes.
(C) Phanerophytes, Hemicryptophytes, Cryptophytes, Chaemophytes, Therophytes.
(D) Phanerophytes, Chaemophytes, Hemicryptophytes, Cryptophytes, Therophytes.

13. One of the following categories of earthworms is most suitable for wasteland reclamation.
(A) Epigeic
(B) Anecic
(C) Endogeic
(D) None of the above

14. How many mega-bio-diverse countries have been identified in the world ?
(A) 2
(B) 12
(C) 17
(D) 35

15. Which one of the following is an Ex-situ method of biodiversity conservation ?
(A) Seed storage
(B) DNA Bank
(C) Tissue culture
(D) All the above

16. Which one of the following is a methyl isocyanate (MIC) based pesticide ?

(A) Sevin (Carbaryl)

(B) Temix (Aldicarb)

(C) Furadon (Carbofuran)

(D) All the above

17. The sequence of fossil fuels in the order of higher to lower heating value is as follows :

(A) Coal, Petroleum, Natural Gas, Hydrogen.

(B) Hydrogen, Natural Gas, Petroleum, Coal.

(C) Hydrogen, Coal, Natural Gas, Petroleum.

(D) Natural Gas, Petroleum, Coal, Hydrogen.

18. Natural ore of radioactive materials does not contain which one of the following isotope ?

(A) U^{235}

(B) Pu^{239}

(C) U^{238}

(D) Th^{232}

19. The process of splitting bigger hydro-carbon into smaller hydrocarbon molecules is called

(A) Pyrolysis

(B) Thermal decomposition

(C) Cracking

(D) Combustion

20. Which one of the following is a complex in organic fertilizer ?

(A) Urea

(B) Super phosphate

(C) Potash

(D) NPK

21. The sequence of ease of decomposition of organic compounds in soil is

(A) Lignin – Hemicellulose – Starch – Crude protein – Fat

(B) Crude protein – Starch – Fat – Lignin – Hemicellulose

(C) Starch – Crude protein – Hemicellulose – Fat – Lignin

(D) Fat – Starch – Lignin – Hemicellulose – Crude protein

22. Which one of the following radio-nuclides has the lowest half life period ?

(A) C^{14}

(B) Sr^{90}

(C) I^{131}

(D) Cs^{137}

23. Match the rules mentioned in Column – I with year of enforcement mentioned in Column – II.

Column – I	Column – II
a. Hazardous Wastes (Management and Handling) Rules	1. 2000
b. Biomedical Solid Wastes (Management and Handling) Rules.	2. 1978
c. Municipal Solid Wastes (Management and Handling) Rules	3. 1989
d. The Water (Prevention and Control of Pollution) Cess Rules	4. 1998

Choose the correct code :

Codes :

	a	b	c	d
(A)	3	4	1	2
(B)	4	1	2	3
(C)	2	4	3	1
(D)	1	3	4	2

24. Average composition of biodegradable waste in Municipal Solid Waste (MSW) of India is

(A) 30 – 35%

(B) 40 – 45%

(C) 55 – 65%

(D) 60 – 70%

25. The treatment method recommended for the human anatomical waste generated from hospitals is

(A) Chemical disinfection

(B) Autoclaving

(C) Incineration

(D) All the above

26. Match the waste class mentioned in Column – I with Color Code of the Collection Container mentioned in Column – II.

Column – I	Column – II
a. Human Anatomical Waste	1. Blue
b. Waste Scrap	2. Green
c. Discarded glass ware	3. Red
d. Disposable plastics	4. White

Choose the correct code :

Codes :

	a	b	c	d
(A)	2	3	1	4
(B)	4	2	3	1
(C)	1	2	3	4
(D)	3	1	4	2

27. Which of the following is true when frequency of occurrence of risk is remote but possible ?

(A) Risk is acceptable.

(B) Risk reduction measures should be implemented.

(C) Risk is unacceptable.

(D) Both (A) and (B) are true.

28. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Indirect impacts are more difficult to measure, but can ultimately be more important.

Reason (R) : In areas where wildlife is plentiful, such as Africa, new roads often lead to the rapid depletion of animals.

Choose the correct answer.

Codes :

(A) Both (A) and (R) are true and (R) is the correct explanation.

(B) Both (A) and (R) are true, but (R) is not the correct explanation.

(C) (A) is true, but (R) is false.

(D) (A) is false, but (R) is true.

29. An earthquake measuring over 8 on Richter Scale is rated as

(A) Destructive

(B) Major

(C) Great

(D) Damaging

30. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : It is difficult to judge how changes in localized gas samples represent more general conditions in the Volcano.

Reason (R) : The composition of the juvenile gases emitted from volcanic vents offen show considerable variation over short periods and distances.

Choose the correct answer.

Codes :

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).

(C) (A) is true, but (R) is false.

(D) (A) is false, but (R) is true.

31. In a false – color set, human visual perception is limited to how many independent coordinates ?

(A) Three

(B) Four

(C) One

(D) Five

32. If D = Detector Dimension, F = Focal Length, H = Flying Height, then Ground Resolution Element (GRE) is equal to

(A) (D/F) × H

(B) D/F

(C) H/F

(D) D/H

33. Darkest level of the associated color (RGB) would have brightness value equal to

(A) 0

(B) 256

(C) 255

(D) 2047

34. The efficiency of a MHD power generator for applied electric field $\vec{E}$, magnetic field $\vec{B}$ and velocity of hot ionized gas $\vec{U}$ is

(A) $\dfrac{|\vec{E}|}{|\vec{U}|\,|\vec{B}|}$

(B) $\dfrac{|\vec{U}|\,|\vec{B}|}{|\vec{E}|}$

(C) $\dfrac{|\vec{E}|^2}{|\vec{U}|\,|\vec{B}|}$

(D) $\dfrac{|\vec{E}|^2}{|\vec{U}|\,|\vec{B}|^2}$

35. Match the List – I with List – II and choose the correct answer from the codes given below :

List – I (Constituents of Particulate matter)	List – II (Sources)
a. Si	1. Natural Resources
b. PAH	2. Incomplete combustion of fossil fuels.
c. SO_4^{2-}	3. Elements largely introduced by Human Activities.
d. Pb	4. Reactions of a gas in atmosphere.

Choose the correct code :

Codes :

	a	b	c	d
(A)	1	2	4	3
(B)	2	3	4	1
(C)	2	4	1	3
(D)	3	4	2	1

36. For aerosol particles having sizes $> 1\ \mu m$, the terminal settling velocity (V_T) of an aerosol particle varies with its diameter (D) as

(A) $V_T \propto D$

(B) $V_T \propto D^2$

(C) $V_T \propto D^3$

(D) $V_T \propto D^{3/2}$

37. Scale lengths associated with synoptic scale phenomenon in atmosphere are typically in the range

(A) $10 - 100$ km

(B) $200 - 40,000$ km

(C) $10,000 - 100,000$ km

(D) $1 - 10$ km

38. Assume that the atmosphere is isothermal at 25 °C and the estimated maximum daily surface temperature is 35 °C, the mixing height is (take adiabatic lapse rate to be 1 °C per 100 m)

(A) 3.5 km

(B) 2.5 km

(C) 1.5 km

(D) 1 km

39. The wavelengths of UV-A radiations are in the range

(A) $200 - 240$ nm

(B) $240 - 280$ nm

(C) $280 - 320$ nm

(D) $320 - 400$ nm

40. Two sounds of 80 dB and 85 dB superimpose at a location. What is the resultant sound at that location ?

(A) ~ 82 dB

(B) ~ 87 dB

(C) ~ 91 dB

(D) ~ 165 dB

41. The coefficient of performance of a wind turbine for maximum power output is

(A) 13/18

(B) 5/8

(C) 16/27

(D) 11/17

42. Which of the following does not have a direct role in climate change ?

(A) Sulphate and nitrate aerosols

(B) Black carbon aerosols

(C) Surface ozone

(D) Nitric oxide

43. Which method is used to separate molecules on the basis of their sizes ?

(A) Ion exchange chromatography

(B) Molecular exclusion chromatography

(C) Adsorption chromatography

(D) Thin layer chromatography

44. Which type of support media is used in different types of electrophoresis ?

(A) Agarose gel

(B) Polyacrylamide gel

(C) Sodium dedecyl sulphate polyacrylamide gel

(D) All the above

45. Which of the following categories of plants get benefitted more due to elevation of CO_2 level ?

(A) C_3 plants

(B) C_4 plants

(C) CAM plants

(D) All of the above

46. Aquifers that extend continuously from the land surface through material of high permeability are

(A) Aquitards

(B) Auicludes

(C) Confined aquifers

(D) Unconfined aquifers

47. Which one of the following is used to determine ambient concentration of suspended particulate matter ?

(A) Cascade impactor

(B) Kjeldahl's Flask

(C) Sacchi Disk

(D) Folin-Wu method

48. Which of the following laws states that the solubility of a gas in a liquid is proportional to the partial pressure of that gas in contact with liquid ?

(A) Hick's law

(B) Henry's law

(C) Hardy-Weinburg law of equilibrium

(D) 2nd Law of Newton

49. Maximum C_aO is found in

(A) Bauxite

(B) Limonite

(C) Lime Stone

(D) Siderite

50. The sequence of chemical constituents in order of their abundance in a majority of sedimentary rocks is

(A) $SiO_2 > TiO_2 > Al_2O_3 > Fe_2O_3$

(B) $SiO_2 > Al_2O_3 > Fe_2O_3 > TiO_2$

(C) $SiO_2 > Fe_2O_3 > Al_2O_3 > TiO_2$

(D) $SiO_2 > Fe_2O_3 > TiO_2 > Al_2O_3$

51. The primary producers in the marine ecosystem are

(A) Eubacteria and Algae

(B) Cyanobacteria and Algae

(C) Algae and Protozoans

(D) All of the above

52. Mycorrhizae can be used as biofertilizers because they

(A) fix nitrogen

(B) fix CO_2

(C) solubilise phosphate

(D) kill pathogens

53. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Some plants with mycorrhizal fungi are able to occupy habitats that otherwise could not inhabit.

Reason (R) : The importance of mycorrhizal plant interaction is attested by the fact that 95% of all plants have mycorrhizae.

Choose the correct answer :

Codes :

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true, but (R) is false.

(D) (A) is false, but (R) is true.

54. An interactive association between two populations in which one population benefits from the association, while the other is not affected, is

(A) Mutualism

(B) Neutralism

(C) Commensalism

(D) Symbiosis

55. The method for downstreaming of ethanol from fermentation broth is

(A) Filtration

(B) Flow cytometry

(C) Distillation

(D) Flame Photometry

56. The country which uses maximum nuclear power is

(A) U.S.A.

(B) Japan

(C) France

(D) Germany

57. Which bacteria removes copper from low grade copper ore ?

(A) <u>Thiobacillus</u> sp

(B) <u>Bacillus thuringiensis</u>

(C) <u>Rhizobium</u> sp

(D) All of the above

58. Which of the following is <u>not</u> a part of Geographic Information System (GIS) ?

(A) Projection

(B) Overlay

(C) Reclassification

(D) Measuring distance and connectivity

59. Ultrafiltration can remove

(A) Suspended solids

(B) Bacteria

(C) Protozoa

(D) All the above

60. A good automobile fuel, in addition to having high calorific value, should have

(A) High ignition temperature

(B) High viscosity

(C) Low ignition temperature

(D) Moderate ignition temperature

61. Reserve food material in algae is

(A) Starch

(B) Cellulose

(C) Protein

(D) None of the above

62. The biodegradability of xenobiotics can be characterized by

(A) Rate of CO_2 formation

(B) Rate of O_2 consumption

(C) Ratio of BOD to COD

(D) All of the above

63. The soil borne plant pathogens could be controlled by

(A) Lowering pH

(B) Increasing pH

(C) Adding lime

(D) All of the above

64. A selective Lignin degrading fungus belongs to

(A) Soft – rot

(B) Brown – rot

(C) White – rot

(D) Red – rot

65. The drastic reduction in the number of intestinal pathogens during activated sludge process is the overall result of

(A) Competition

(B) Competition and adsorption

(C) Predation, competition and adsorption

(D) Competition, adsorption, predation and settling

66. Which of the following disinfection method does not result in synthesis of organochlorine ?

(A) Chlorination

(B) Chloroamination

(C) Ozonation

(D) None of the above

67. An organism's niche is

(A) the way the organism uses the range of physical and biological conditions in which it lives.

(B) all the biological and physical factors in the organism's environment.

(C) the function role played by the organism where it lives.

(D) the range of temperature that the organism needs to live.

68. The pyramid of biomass is invented in

(A) Forest ecosystem

(B) Greenland ecosystem

(C) Aquatic ecosystem

(D) All of the above

69. Which of the following chemicals of anthropogenic origin mimics the effect of estrogen in animals ?

(A) Alkyl phenol

(B) Polychlorinated biphenyl

(C) O, p' - DDT

(D) All the above

70. "Black Foot" disease in human beings caused due to use of water contaminated with

(A) Mercury

(B) Cadmium

(C) Silver

(D) Arsenic

71. Largest amount of fresh water is present in

(A) Lakes

(B) Rivers

(C) Glaciers

(D) Polar Ice

72. A threatened species is

(A) only endangered species

(B) only vulnerable species

(C) only rare species

(D) all of the above

73. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Animals adopt various strategies to survive in hostile environment.

Reason (R) : Praying mantis is green in color which emerges with plant foliage.

Choose the correct code :

Codes :

(A) Both (A) and (R) are true, with (R) being the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not correct explanation of (A).

(C) (A) is true, but (R) is false.

(D) Both (A) and (R) are false.

74. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).

Assertion (A) : Increasing temperature in the environment influences gonadal growth in fish.

Reason (R) : Increase in day length causes increase in environmental temperature in summer.

Choose the correct code :

Codes :

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).

(C) (A) is true, and (R) is wrong.

(D) (A) and (R) are wrong.

75. Match Column – I with Column – II :

Column – I	Column – II
a. The Rio Summit	1. 1997
b. Johannesburg Earth Summit	2. 1972
c. Kyoto Protocol	3. 1992
d. The Stockholm Conference	4. 2002

Codes :

	a	b	c	d
(A)	3	4	1	2
(B)	1	2	3	4
(C)	4	3	2	1
(D)	2	1	4	3

UGC - NET DECEMBER 2012

ANSWER KEYS (PAPER III)

SUBJECT : (89) ENVIRONMENTAL SCIENCES

Q.No.	SC89
Q01	D
Q02	A
Q03	B
Q04	A
Q05	C
Q06	A
Q07	C
Q08	D
Q09	D
Q10	B
Q11	C
Q12	B
Q13	C
Q14	C
Q15	D
Q16	D
Q17	B
Q18	B
Q19	C
Q20	D
Q21	C
Q22	C
Q23	A
Q24	B
Q25	C
Q26	D
Q27	A
Q28	B
Q29	C
Q30	A
Q31	A
Q32	A
Q33	A
Q34	A
Q35	A
Q36	B
Q37	B
Q38	D
Q39	D
Q40	A
Q41	C
Q42	D
Q43	B
Q44	D
Q45	A

Q46	D
Q47	A
Q48	B
Q49	C
Q50	B
Q51	B
Q52	C
Q53	A
Q54	C
Q55	C
Q56	C
Q57	A
Q58	A
Q59	D
Q60	D
Q61	A
Q62	D
Q63	A
Q64	C
Q65	D
Q66	C
Q67	C
Q68	C
Q69	D
Q70	D
Q71	D
Q72	D
Q73	C
Q74	A
Q75	A