

ESE-2019 PRELIMS TEST SERIES

Date: 06<sup>th</sup> October, 2018

**GS PAPER-I (TEST-01) OBJECTIVE SOLUTION...** 

**ANSWERS**

1. (c)	18. (d)	35. (a)	52. (c)	69. (b)	86. (d)
2. (d)	19. (c)	36. (d)	53. (a)	70. (a)	87. (d)
3. (a)	20. (b)	37. (c)	54. (b)	71. (d)	88. (d)
4. (d)	21. (a)	38. (d)	55. (b)	72. (c)	89. (d)
5. (c)	22. (b)	39. (c)	56. (d)	73. (a)	90. (a)
6. (a)	23. (d)	40. (c)	57. (d)	74. (b)	91. (b)
7. (d)	24. (d)	41. (c)	58. (d)	75. (d)	92. (d)
8. (a)	25. (a)	42. (a)	59. (c)	76. (b)	93. (a)
9. (c)	26. (d)	43. (d)	60. (b)	77. (c)	94. (a)
10. (c)	27. (c)	44. (b)	61. (b)	78. (a)	95. (d)
11. (d)	28. (b)	45. (c)	62. (d)	79. (c)	96. (d)
12. (a)	29. (a)	46. (d)	63. (c)	80. (d)	97. (b)
13. (a)	30. (b)	47. (c)	64. (c)	81. (d)	98. (c)
14. (a)	31. (d)	48. (c)	65. (d)	82. (d)	99. (d)
15. (d)	32. (b)	49. (b)	66. (d)	83. (a)	100. (b)
16. (c)	33. (d)	50. (b)	67. (c)	84. (c)	
17. (c)	34. (c)	51. (a)	68. (c)	85. (d)	

1. (c)  
The important processes for nitrogen cycle are: nitrogen fixation, nitrification, assimilation, ammonification, de-nitrification.
2. (d)
3. (a)
4. (d)
5. (c)
6. (a)
7. (d)
8. (a)  
Tehri Dam Hydro Electric project is the highest Hydro project in India commissioned in 2006. Its construction started in 1978 with the technical collaboration from the USSR.  
Sri-sailem Dam is constructed on the Krishna River in the border districts between Andhra Pradesh and Telangana districts Kurnool and Mahabub nagar districts respectively. It is the second largest working hydro electric power project in India.  
The Nathpa-Jhakri dam is concrete gravity dam constructed across Satluj River in Himachal Pradesh.  
The Sardar Sarovar Dam is the largest dam of Narmada Valley Project, is a concrete gravity dam on the Narmada River near Navagam in Gujarat.
9. (c)  
Steam reforming is used to produce hydrogen, carbon mono-oxide and other useful products from hydrocarbon fuels such as natural gas.
10. (c)  
The calorific value of liquid fuels are more than solid fuels because, it provides large amount of energy on burning and does not leaves any solid residue like ash (produces very less air pollution) as compared to solid fuels.
11. (d)
12. (a)  
The South Asian river dolphin is a freshwater or river dolphin found in India, Bangladesh, Nepal and Pakistan which is split into two subspecies, the Ganges river dolphin and the Indus river dolphin.
13. (a)
14. (a)
15. (d)  
Animal Welfare Board of India was established in 1962 under Section 4 of The Prevention of Cruelty to Animals Act, 1960.
16. (c)
17. (c)  
The sources of energy that are available at some price are referred to as commercial energy. Examples are: coal, petroleum, natural gas and electricity.
18. (d)  
The 'flexible mechanisms' of the Kyoto Protocol were included for the first time in the COP-6, held Bonn, Germany. Flexible mechanisms or Kyoto Mechanisms, refer to Emissions Trading, the Clean Development Mechanism and Joint Implementation.
1. Emissions trading (ET)- The Emissions Trading-mechanism allows parties to the Kyoto Protocol to buy 'Kyoto units'(emission permits for greenhouse gas) from other countries to help meet their domestic emission reduction targets.
  2. Joint Implementation (JI)- Through the Joint Implementation, any Annex I country can invest in emission reduction projects (referred to as "Joint Implementation Projects") in any other Annex I country as an alternative to reducing emissions domestically.
  3. Clean Development Mechanism (CDM)- Through the CDM, countries can meet their domestic emission reduction targets by buying greenhouse gas reduction units from (projects in) non Annex I countries to the Kyoto protocol (mostly developing countries).
- Non-Annex I countries have no GHG emission restrictions, but have financial incentives to develop GHG emission reduction projects to receive Certified Emission Reductions that can then be sold to Annex I countries, encouraging sustainable development.
19. (c)  
Cadmium (Cd) is a toxic and hazardous product of our industrialized society, manifested itself among inhabitants of the Jinzu River basin in Toyama Prefecture, Japan, in the 1950s, in the form of Itai-Itai disease. It remains the most severe example of chronic Cd poisoning caused

- by prolonged oral Cd ingestion.
20. (b) Suspended particulate matter (SPM) is finely divided solids or liquids that may be dispersed through the air from combustion processes, industrial activities or natural sources.
21. (a) Global-warming potential (GWP) is a relative measure of how much heat a greenhouse gas traps in the atmosphere. It compares the amount of heat trapped by a certain mass of the gas in question to the amount of heat trapped by a similar mass of carbon dioxide.
22. (b) Reactions that take place on polar stratospheric clouds (PSCs) play an important role in enhancing ozone depletion. PSCs form more readily in the extreme cold of the Arctic and Antarctic stratosphere. This is why ozone holes first formed, and are deeper, over Antarctica.
23. (d)
24. (d)
25. (a) The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POPs). POPs are chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of living organisms and are toxic to humans and wildlife.
26. (d)
27. (c)
28. (b)
29. (a)
30. (b)
31. (d) The Union Ministry of Environment, Forests and Climate Change (MoEFCC) on 17 October 2014 launched the National Air Quality Index (AQI) in New Delhi. The National Air Quality Index is an initiative under Swachh Bharat Mission envisioned by Prime Minister Narendra Modi to introduce the culture of cleanliness.
- AQI will act as a One Number- One Colour-One
32. (b) Description to judge the Air Quality for Common Man. The earlier measuring index was limited to three indicators, while this index has been made quite comprehensive by the addition of five additional parameters.
33. (d) The proposed AQI will consider eight parameters (PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb) for which short-term National Ambient Air Quality Standards are prescribed.
34. (c)
35. (a)
36. (d) Classical Smog is mainly formed in winters.
37. (c) The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, usually known simply as the Basel Convention, is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries (LDCs). It does not, however, address the movement of radioactive waste.
38. (d) Black carbon consists of pure carbon, which originates from incomplete combustion of fossil fuels.
39. (c) Carbon Offsets are quantified and sold in metric tonnes of Carbon dioxide Equivalent.
40. (c) Unlike brown and black carbon that contributes to atmospheric greenhouse gases, green and blue carbon sequesters the atmospheric greenhouse gases.
41. (c) Green Building refers to both a structure and application of processes that are environmentally responsible and resource efficient throughout a building's life cycle from planning to design, construction, operation, maintenance, renovation and demolition.

42. (a)

43. (d)

In June 1992 representatives from 172 nations convened in Rio de Janeiro, Brazil, for the United Nations Conference on Environment and Development (UNCED), known as the Earth Summit.

At the Earth Summit, world leaders devised plans and policies to protect the environment by involving national and local governments and NGOs.

Earth Summit 1992 produced the Rio Declaration on Environment and Development, the Statement of Forest Principles, and Agenda 21. It also led to the establishment of the Convention on Biological Diversity, and the United Nations Framework Convention on Climate Change.

The Earth Summit was not the first international conference to address environmental issues. In 1972 the United Nations convened the United Nations Conference on the Human Environment in Stockholm, Sweden. This conference, often called the Stockholm Conference, was the first international conference to address environmental problems directly.

44. (b)

Vienna convention signed in 1985 was for the protection of ozone layer.

45. (c)

Ocean Acidification is ongoing decrease in pH of the earth's ocean, caused by the uptake of carbon dioxide from the atmosphere. Ocean alkalinity is not changed by the process, or may increase over long time periods due to carbonate dissolution.

46. (d)

47. (c)

REDD and REDD+ are global endeavor to create an incentive for developing countries to protect, better manage and save their forest resources, thus contributing to the global fight against climate change.

48. (c)

49. (b)

Leadership in energy and environmental design includes a set of rating system for the design construction, operation and maintenance of a green building, homes and neighborhoods that

aims to help building owners and operators be environmentally responsible and use resources efficiently.

50. (b)

Aerosols are minute particles that suspended in the atmosphere. Most aerosols are brighter in colour and they reflect sunlight back to space. Thus, they help in cooling the Earth.

51. (a)

The EIA requires that the public must be informed and consulted on a proposed development after the completion of EIA report.

Any one likely to be affected by the proposed project is entitled to have access to Executive Summary of the EIA. The affected persons include: a. Bonafide Local residents, b. Local Associations, c. Environmental groups, active in the area, d. any other located at project site

52. (c)

Only Comprehensive and rapid EIA require inclusion/coverage of all significant environmental impacts and their mitigation.

53. (a)

54. (b)

Project Proponent decides the type of project.

Environmental Consultant should be conversant with the existing legal and procedural requirements of obtaining environmental clearance for proposed project.

55. (b)

56. (d)

57. (d)

58. (d)

Under Stockholm convention, 26 principles related to environment and development have been proclaimed.

59. (c)

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

The trade in wild animals and plants crosses borders between countries; the effort to regulate

it requires international cooperation to safeguard certain species from over-exploitation.

CITES was conceived in the spirit of such cooperation. Today, it accords varying degrees of protection to more than 35,000 species of animals and plants, whether they are traded as live specimens, fur coats or dried herbs.

60. (b)

1. Johannesburg Declaration
  2. Rio Declaration
  3. Montreaux Record
  4. Bonn Convention
- A. Sustainable development
  - B. Environment and development
  - C. Wetlands
  - D. Migratory species

61. (b)

62. (d)

The Paris Agreement, Paris climate accord or Paris climate agreement is an agreement within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020.

63. (c)

The Aichi Targets are a set of 20, time-bound, measureable targets for the conservation of biodiversity. The targets were agreed by the Parties to the Convention on Biological Diversity in Nagoya, Japan, in October 2010.

Achievement of the targets will contribute to reducing, and eventually halting, the loss of biodiversity at a global level by the middle of the twenty-first century.

64. (c)

65. (d)

The UN India Partnership fund was set up as partnership between India and the United Nations Office for South-South Cooperation (UNOSSC) in June 2017 i.e. on occasion of the World Ocean Day.

It is managed by UNOSSC and aims to support Southern-owned and led, demand-driven and transformational sustainable development projects

across developing world.

Recently, India has pledged additional US \$100 million towards UN-India Partnership Fund to significantly scale up its support to sustainable development project across developing world.

66. (d)

The Montreal Protocol is a protocol to the Vienna Convention for the protection of Ozone Layer.

67. (c)

CAMPA was formed under the Compensatory Afforestation Fund Act, 2016. Director General of Forests and Special Secretary, MoEFCC is the ex officio Chairperson.

The Act also establishes the National and State CAMPA to manage the National and State Funds. The National Fund will receive 10% of these funds, and the State Funds will receive the remaining 90%.

68. (c)

Madhya Pradesh has the maximum number of tiger reserves

69. (b)

West Bengal has the maximum percentage of mangroves in India, followed by Gujarat & Andaman and Nicobar.

70. (a)

Contour strip cropping involves employing a crop rotation system down a slope in order to minimize runoff and rain velocity. It is used mainly on gentle slope gradients. The width of protective strips is often higher than that of the row crop strips so that they may effectively intercept runoff.

Contour farming is growing crops on the level across or perpendicular to a slope rather than up and down the slope. The rows running across the slope are designed to be as level as possible to facilitate tillage and planting operations on the contour.

71. (d)

72. (c)

Eichhornia crassipes, commonly known as Common Water Hyacinth, is an aquatic plant native to the Amazon basin, and is often considered a highly problematic invasive species outside its native range.

The plant was introduced by Belgian colonists to Rwanda to beautify their holdings and then



advanced by natural means to Lake Victoria where it was first sighted in 1988.

73. (a)

74. (b)

75. (d)

76. (b)

77. (c)

The dodo is an extinct flightless bird that was endemic to the island of Mauritius, east of Madagascar in the Indian Ocean.

78. (a)

79. (c)

Man and the Biosphere Programme (MAB) is an Intergovernmental Scientific Programme, launched by United Nations Educational, Scientific and Cultural Organization (UNESCO) that aims to establish a scientific basis for the improvement of relationships between people and their environments.

80. (d)

81. (d)

82. (d)

83. (a)

84. (c)

The most favoured habitat of a plant is called 'Microhabitat'.

85. (d)

86. (d)

The primary objective of India's Forest Policy is sustainable management of the forests and forest lands to meet the environmental, socio-economic and cultural needs of the present and the future generations.

87. (d)

Benefits of EIA are:

1. Improve project performance
2. Avoided treatment/clean up costs
3. Cost saving modifications
4. Reduced cost and time of project implementation
5. Increased Project acceptance

6. Avoided impacts and violation of laws and regulations

88. (d)

The Chipko Movement was primarily a forest conservation movement in India that began in 1973 and went on to become a rallying point for many future environmental movements all over the world it created a precedent for starting of nonviolent protest in India. It was started by Sunderlal Bahuguna.

89. (d)

90. (a)

91. (b)

Water vapour also accounts for the largest percentage of the greenhouse effect, between 36% and 66% for clear sky conditions and between 66% and 85% when including clouds.

92. (d)

Dachigam National Park is located 22 kilometers from Srinagar, Jammu and Kashmir. It covers an area of 141 square kilometers. The main animal species that Dachigam is most famous for is the Hangul, or the Kashmir Stag.

93. (a)

94. (a)

95. (d)

In mined areas ecological equilibrium can be maintained by developing a vegetative cover.

96. (d)

When during cutting only one tenth of forest is selected for use and rotational system is followed for protection, this technique is called sustainable yield.

97. (b)

The collection and transfer of rainwater from the catchment area to place of storage and use it is known as rainwater harvesting.

98. (c)

Primary Stage removes suspended solid materials. In secondary stage colloidal and soluble organic matter are removed.

99. (d)

100. (b)