

GS Foundation Program 2026

Learning Outcome Test (LOT) #01 / Test Code: 9411128

Subject: ENVIRONMENT

Name:	
ForumIAS Roll No:	
Cohort:	
Date:	

Instructions: Write your Name, Roll No., Cohort No., Date, on the front page of this answer booklet. The LOT shall be graded only when it is submitted within 24 hours. Printed copy of LOT and answer key shall only be given to students present in that class.

TOTAL MARKS: 20

Fill in the Blanks:

(1*5 = 5 Marks)

1. A group of individuals of the same species living in an area, interacting, and sharing a genetic makeup is known as a _____.
2. While a habitat can be described as an organism's "address," its ecological _____ is described as its "profession."
3. _____ species are those whose presence, absence, or abundance reflects certain environmental conditions, acting as a natural early warning system.
4. The collapse of the vulture population in India was primarily caused by the veterinary anti-inflammatory drug _____, which caused kidney failure in the birds.
5. In an ecosystem, _____ forests are underwater areas found in temperate and polar regions that serve as a source of iodine and a barrier to fast-moving winds.

True and False:

(1*5 = 5 Marks)

1. An ecosystem consists only of biotic (living) components and excludes abiotic (non-living) components. (True/False)
2. Humans are considered a keystone species because of their massive impact on the environment. (True/False)
3. A specific ecological niche cannot be shared by different species; it is unique to a specific species. (True/False)
4. Frogs are considered sentinel species because their porous skin absorbs chemicals, making them highly sensitive to pollution. (True/False)
5. A community is defined as a group of organisms of the same species living in a specific area. (True/False)

MCQs:**(2*5 = 10 Marks)**

Q.1) Consider the following statements regarding "Ecological Niche":

1. It represents the physical address where an organism lives.
2. It represents the functional role and "profession" of a species within an ecosystem.
3. Two different species can occupy the exact same niche simultaneously without conflict.

Which of the statements given above is/are correct?

- ☐ a) 1 only
- ☐ b) 2 only
- ☐ c) 1 and 3 only
- ☐ d) 2 and 3 only

Q.2) Which of the following best defines a "Keystone Species"?

- ☐ a) A species that is most abundant in an ecosystem.
- ☐ b) A species that is at the bottom of the food chain.
- ☐ c) A species having a disproportionately large effect on its environment relative to its abundance.
- ☐ d) A species that acts as an indicator of air pollution.

Q.3) Arrange the following levels of ecological organization in ascending order (from smallest to largest):

1. Community
2. Population
3. Biome
4. Ecosystem
5. Biosphere

Select the correct answer using the code given below:

- ☐ a) 2 - 1 - 4 - 3 - 5
- ☐ b) 1 - 2 - 4 - 5 - 3
- ☐ c) 2 - 1 - 3 - 4 - 5
- ☐ d) 1 - 2 - 3 - 4 - 5

Q.4) Why are "Kelp Forests" considered important to the marine ecosystem?

1. They act as a source of Iodine.
2. They serve as a barrier to fast-moving winds.
3. They are the primary food source for Sea Otters.

Select the correct answer using the code given below:

- ☐ a) 1 only
- ☐ b) 1 and 2 only
- ☐ c) 2 and 3 only
- ☐ d) 1, 2, and 3

Q.5) The decline of the vulture population led to which of the following public health concerns in India?

- ☐ a) Increase in malaria cases.
- ☐ b) Increase in zoonotic diseases like Rabies
- ☐ c) Contamination of groundwater.
- ☐ d) Reduction in crop yields.