

2026

Zoology (Core)

Paper Code : ZL-CE-6314

Paper Name : Wildlife Conservation and Management

Time : 2 hours

Full Marks : 50

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer : 1×4=4
- a) Which ancient Indian text classifies forests into categories such as Mahavana, Tapovana and Shrivana, reflecting early concepts of wildlife habitat management ?
- i) Rigveda
 - ii) Arthashastra
 - iii) Manusmriti
 - iv) Mahabharata
- b) The Hoolock gibbon found in northeast India is best described by which of the following characteristics ?
- i) It is a terrestrial primate adapted for running on forest floors
 - ii) It is a nocturnal primate with large forward-facing eyes
 - iii) It is an arboreal, brachiating primate that lacks a tail
 - iv) It is a semi-aquatic primate inhabiting riverine grasslands
- c) Which modern wildlife population estimation technique uses photographic identification and statistical models to estimate population size without physically capturing animals ?
- i) Direct census method
 - ii) Quadrat sampling
 - iii) Capture-recapture using camera traps

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- iv) Opportunistic sighting method
- d) Which of the following is a key component of an effective management plan for a protected area ?
 - i) Complete exclusion of local communities from the area
 - ii) Focus only on tourism development
 - iii) Zonation of the area into core, buffer and transition zones based on conservation priorities
 - iv) Allowing unrestricted resource extraction

2. Answer the following questions : 2×3=6

- a) Mention any two morphological or behavioural adaptations of the Gangetic Dolphin that help it to survive in turbid riverine habitats.
- b) State any two legal implications or penalties associated with illegal wildlife trade under national laws and international agreements such as CITES.
- c) What is the Red Data Book? Name the organization responsible for publishing it.

3. Answer the following questions (*any two*) : 5×2=10

- a) Discuss the role of advocacy studies in drafting effective wildlife conservation policies.
- b) What are the major analytical tools used in wildlife studies for assessing population size, habitat use and conservation status.
- c) Explain the concept of wildlife content writing. Discuss its importance in the backdrop of conservation awareness, education and advocacy.
- d) Discuss the importance of training in delivering effective wildlife talks.

4. Answer the following questions (*any three*) : $10 \times 3 = 30$

- a) Describe the biology, habitat preference, conservation status, and major threats of the Indian One-horned Rhinoceros. Also discuss the key conservation measures undertaken in India for protection. $6+4=10$
- b) Describe the distribution, habitat, ecological significance and conservation status of the White-winged Wood Duck. Discuss the major threats faced by the species in India. $7+3=10$
- c) Discuss the conservation status and evaluate the role of conservation initiatives and management strategies adopted in India for the recovery of the Pigmy hog. 10
- d) What are the unique behavioural characteristics of the Golden langur ? Give an account on its habitat, distribution and feeding patterns. $3+7=10$
- e) Discuss the basic concepts of wildlife conservation and management in Ancient India. 10
- f) Emphasize the ecological importance of the Hoolock Gibbon as an arboreal ape and the need for habitat protection and corridor conservation in its natural range. $4+6=10$

