

(Theory Paper)

Paper : ZOO 403 (W)

(Applied Wildlife Science)

Full Marks – 80

Pass Marks – 32

Time – Three hours

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

- 1. Multiple choice questions (*All six questions are compulsory*) :** **1×6=6**

(a) Vector data are represented by

- (i) Pixels**
- (ii) Points**
- (iii) Polygon**
- (iv) Both (ii) and (iii)**

(b) Tiger is a

- (i) Flagship animal**
- (ii) Keystone animal**
- (iii) Both (i) and (ii)**
- (iv) None of these**

- (c) Which among the following is not a criterion to be qualified for IBA ?
- (i) Sites having globally threatened bird species
 - (ii) Sites having restricted range bird species
 - (iii) Sites having large congregations of birds
 - (iv) Sites having large avian diversity
- (d) What is the primary purpose of an Environmental Impact Assessment (EIA) ?
- (i) To determine the economic viability of a project
 - (ii) To evaluate the potential environmental impacts of a project
 - (iii) To assess the social impacts of a project
 - (iv) To evaluate the technical feasibility of a project
- (e) What is the primary objective of BNHS ?
- (i) To promote wildlife tourism in India
 - (ii) To conserve and study biodiversity in India
 - (iii) To provide veterinary services to animals
 - (iv) To train personnel for the Indian Forest Service.

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- (f) What stands for PTT ?
- (i) Platform Terminal Transmitter
 - (ii) Platform Terminal Tracker
 - (iii) Platform Temporal Transmitter
 - (iv) Platform Telemetry Transmitter.

2. Very short type of questions (All *five* questions are compulsory) 2×5=10

- (a) What do you mean by Morphometry ?
- (b) What is the difference between endangered and a critically endangered criteria of IUCN ?
- (c) Differentiate between GIS and GPS.
- (d) Write two criteria for the qualification of Community Conserved Area.
- (e) Give two suggestions to mitigate human-monkey conflict.

3. Short type questions (any *six* out of nine questions) 5×6=30

- (a) What do you understand by inbreeding depression in Conservation Biology ?

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(b) Write a short note on the Tiger Reserves in India.

(c) Write briefly about the TRAFFIC.

(d) Describe how DNA sequencing help in species identification.

(e) Write importance of home garden in conservation of biodiversity.

(f) Write prospects of wildlife tourism in Bodoland Territorial Region.

(g) How does EIA affect wildlife conservation ?

(h) How does feather analysis help in bird identification ?

(i) What is the role of molecular marker in Wildlife Forensics ?

4. Descriptive type questions (any two) : $10 \times 2 = 20$

(a) Describe the IUCN Red List and its role in global conservation efforts. In your answer, discuss the criteria used to assess the conservation status of species. $3+7=10$

(b) Explain the Wildlife Protection Act of 1972 and its significance in the conservation of wildlife in India. Discuss the key provisions of the Act. $3+7=10$

(c) Write about the Bander's code of ethics. Why is bird banding important ? $5+5=10$

5. Advanced answer type questions (any one) :

$14 \times 1 = 14$

(a) How does poaching constitute wildlife crime ? How does it specifically threaten rhinos in North East India ? What measures can be implemented to reduce poaching of rhino ? $3+7+4=14$

(b) What is camera trapping ? Explain the statistical frameworks used in camera trapping method. $4+10=14$