KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

Marks Scored:

Level : B.Sc.
Year : III
Course : ENVS 328
Semester: I

Exam Roll No.: Time: 30 mins. F.M. : 20

Registration No.: Date : MAR 16 2018

SECTION "A"
[20 Q.×0.5=10 marks]

1. Etorphine hydrochloride used for immobilizing wild animals is
[ ] M_{99} [ ] M_{96} [ ] M_{85} [ ] M_{90}

2. Mistnet sampling is related with census operations for
[ ] Deer [ ] Elephant [ ] Crocodile [ ] Birds

3. Droppings of carnivores are called
[ ] Bolus [ ] Scats [ ] Dung [ ] Pellets

4. In wildlife survey, Range finder is used to estimate
[ ] Distance [ ] Sighting angle [ ] Pugmark [ ] Transect length

5. Record of stride is related with
[ ] Auditory census [ ] Pellet count [ ] Block census [ ] Pugmark census

6. Which one of the following method is Population Estimation by Indirect observation?
[ ] Roadside Count [ ] Drive Count
[ ] Aerial Survey [ ] Camera trapping

7. Large regions within which ecosystem share broadly similar biota
[ ] Realms [ ] Biomes [ ] Eco-regions [ ] Community

8. Complete count of animals over a specified interval of time at specified point in an area
[ ] Census [ ] Index [ ] Estimator [ ] Sample census

9. The pugmark shape of male tiger is
[ ] Square [ ] Rectangle [ ] Circle [ ] Triangle

10. Which group of vertebrates comprises the highest number of endangered animals?
[ ] Mammals [ ] Fishes [ ] Reptiles [ ] Birds

11. United nations Conference on Biodiversity was held in
[ ] Vienna [ ] Montreal [ ] Stockholm [ ] Rio De Zenero

12. What factors are most threatening to biodiversity?
[ ] Habitat loss and degradation [ ] Pollution
[ ] Invasive species [ ] Overexploitation

13. With 0.1% of global land area, Nepal's share of global ornitho-diversity is
[ ] 9.3 [ ] 4.5 [ ] 1.0 [ ] 2.7

14. Nepal has established breeding center for
[ ] Ghadiyal [ ] Eagle [ ] Black Buck [ ] Arna

15. Species which helps preserve habitat of many other species
[ ] Super species [ ] Dominant species
[ ] Umbrella species [ ] Catalyst species

16. Toe clipping is an example of
[ ] Marking methods [ ] Counting methods
[ ] Trapping methods [ ] Indexing methods

17. Among the IUCN categories of protected areas, Category I refers to
[ ] National Park [ ] Nature Reserve
[ ] Natural monument [ ] Protected landscape

18. Central Zoo is currently managed by
[ ] DNPWC [ ] WWF [ ] NTNC [ ] IUCN

19. Nepal consists of
[ ] 6 ecosystems [ ] 82 ecosystems [ ] 118 ecosystems [ ] 132 ecosystems

20. Total Mammalian species reported from Nepal is
[ ] 204 [ ] 185 [ ] 156 [ ] 244

SECTION "B"

[10 Q.×1=10 marks]

Fill in the blanks:

1. Drugs used in immobilization of animals depends on _____ of the animals.

2. Halliday formula for determining density of riverine bird species is _____.

3. Main characteristic of footprint is _____ and _____.

4. The number of individuals of each species observed divided by the number of man hours spent in searching is _____.

5. If the extinction rate and immigration rate are similar, species will be in _____ in an island.

6. Biodiversity hot spots are regions of high _____.

7. Exotic species are specially threatening to _____ecosystems.

8. The earth is currently facing _____ mass extinction of species.

9. The newest National park of Nepal is _____ NP

10. Genetic drift is a _____ process.

KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

Level : B.Sc.
Year : III
Time : 2 hrs. 30 mins.

Course : ENVS 328
Semester: I
F.M. : 55

SECTION "C"
[7 Q.×3=21 marks]

A. Long answer questions- Any *THREE*.

1. Define species discovery curve. Describe the field methods of data collection and data analysis for estimating birds density in fresh water(river) habitat.

2. Describe the major causes of biodiversity losses in modern times.

3. What is the ecological meaning "Conservation"? What are the major paradigms sift in biological conservation. Elaborate with suitable examples from Nepal.

4. Define landscape conservation. How do you characterize landscape approach of conservation and its advantages? How TAL has contributed to biodiversity conservation in Nepal?

SECTION "D"

5. Short answer questions- Any *TWO*. [2 Q.×2.5=5]
   a. What could have triggered mass extinction of species in the past?
   b. Why genetic variation is important for conservation?
   c. Why estimating optimum width of transect in wildlife census requires complex mathematics.

6. Differentiate between- Any *TWO*. [4 Q.×2=8]
   a. Closed population and Open population
   b. Density and Abundance
   c. Ecological methods and Genetic methods of conservation

7. Define the followings- Any *FIVE*. [5 Q.×1=5]
   a. Man and Biosphere
   b. Non-invasive methods of sampling
   c. Industrial food chain
   d. Reclamation
   e. Provisioning
   f. Population viability analysis

8. Write notes on: Any *FOUR*. [4 Q.×4=16]
   a. Major conservation related conventions
   b. Conservation Biology as "crisis discipline"
   c. Island Biogeography Theory
   d. Vehicle based count method
   e. Field protocol for national tiger and prey base survey