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Name.....75.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2015

(UG—CCSS)

Core Course—Zoology

ZO 5B 09—ENVIRONMENTAL BIOLOGY, WILDLIFE CONSERVATION AND TOXICOLOGY

(2013 Admissions)

Time : Three Hours

Maximum : 30 Weightage

Answers may be written either in English or in Malayalam.

I. Answer all *twelve* questions. Each question carries 0.25 weightage.

Multiple choice questions :

1 Who coined the term Ecology ?

- (a) Carl Linnaeus. (b) Charles Darwin.
(c) Ernst Haeckel. (d) Alfred Wallace.

2 The complete counting of animals of a specific area at a specific period of time :

- (a) Sample census. (b) Census index.
(c) Census estimate. (d) Census.

3 Barrier traps used to trap diurnal flying insects :

- (a) Malaise traps. (b) Light traps.
(c) Ultraviolet lamps. (d) Mercury vapour lamps.

4 Which one of the following is extinct ?

- (a) Indian Rhinoceros. (b) Arabian camel.
(c) Passenger pigeon. (d) American Bison.

Name the following :

- 5 The branch of ecology that deals with the biological relationship between an individual organism or an individual species and its environment.
6 The standard marking method ideal for large-eared mammals.
7 The ratio of live births in an area to the population of that area.
8 The neurological disease caused by severe mercury poisoning.

Turn over

Fill in the blanks

- 9 The total species diversity of a landscape is called
- 10 _____ is the maximum reproductive capacity of an organism under optimum environmental conditions.
- 11 _____ is the gradual process by which ecosystems change and develop over time.
- 12 _____ is the movement of individuals of a species from one place to another.

(12 × 0.25 = 3 weightage)

II. Short answer questions (Answer *all nine* questions).

- 13 Define Synecology.
- 14 What is biological magnification ?
- 15 What is commensalism ?
- 16 What is carrying capacity ?
- 17 What is botulism ?
- 18 Define ecological niche.
- 19 What is edge effect ?
- 20 What is remote sensing ?
- 21 What is red data book ?

(9 × 1 = 9 weightage)

III. Short answer questions (Answer any *five* questions).

- 22 Explain UNEP and its strategies.
- 23 Explain the levels of toxicity.
- 24 What is Leybig's law of minimum ?
- 25 Briefly explain carbon cycle.
- 26 Explain population growth curves.
- 27 What is germplasm ? Explain the methods for its conservation.
- 28 How is the home range of animals determined ?

(5 × 2 = 10 weightage)

IV. Essay questions (Answer any *two* questions).

- 29 Write an essay on the consequences of habitat destruction.
- 30 Describe the different types of population interactions.
- 31 Write an essay on the threats to biodiversity.

(2 × 4 = 8 weightage)