

C 30332

(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2017

(CUCBCSS—UG)

Zoology

ZOL 5B 06—ENVIRONMENTAL BIOLOGY, WILDLIFE CONSERVATION AND
TOXICOLOGY

Time : Three Hours

Maximum : 80 Marks

A. Answer *all* questions. Each carries 1 mark :

- 1 What is biological magnification ?
- 2 What are xenobiotics ?
- 3 What is Kyoto Agreement ?
- 4 What is beta diversity ?
- 5 Mention *two* National parks in Kerala.
- 6 What is an endangered species ?
- 7 State 'Gauses' Principle.
- 8 What is natality ?
- 9 Define ecological niche.
- 10 What is a home range ?

(10 × 1 = 10 marks)

B. Answer any *ten* questions in two or three sentences each. Each carries 2 marks :

- 11 Comment on Poison Act.
- 12 What is acute toxicity ? How is it commonly expressed ?
- 13 Write briefly on the public health hazards of heavy metal toxicity.
- 14 What is Simpsons' Dominance Index ?
- 15 What is Biodiversity Act ?
- 16 Explain the concept of biosphere reserves.
- 17 Explain sustainable development.
- 18 Explain the concept of biodiversity hot spots. Mention the hot spots in the Indian Region.

Turn over

- 19 Explain the applications of remote sensing in ecological studies.
- 20 Explain chemosynthetic energy production.
- 21 Comment on age pyramids.
- 22 Write on ecological impacts of tourism.

(10 × 2 = 20 marks)

C. Answer any *five* questions in not more than a paragraph each. Each carries 6 marks :

- 23 Explain different methods of conservation of biodiversity.
- 24 Explain different population growth forms and growth curves.
- 25 Explain various threats to biodiversity.
- 26 Comment on energy flow and energetics of ecosystem.
- 27 Explain various negative interspecific interactions.
- 28 Write briefly on different sampling methods of animal populations.
- 29 Explain various types of symbiotic associations.
- 30 Write briefly on destruction of various habitats and their consequences.

(5 × 6 = 30 marks)

D. Write essays on any *two* of the following. Each carries 10 marks :

- 31 Explain the characteristics of community.
- 32 Explain nitrogen cycle.
- 33 Elaborate on the various concepts of limiting factors.
- 34 Write on the various conservation projects undertaken in India.

(2 × 10 = 20 marks)