

D 11190

(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2016

(CUCBCSS-UG)

Zoology

ZOL 5B 07—ETHOLOGY, EVOLUTION AND ZOOGEOGRAPHY

Time : Three Hours

Maximum : 80 Marks

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

- 1 Mention the theory of abiogenesis.
- 2 What is biostatigraphy ?
- 3 What is phylogenetic tree ?
- 4 What is anagenesis ?
- 5 What is sibling species ?
- 6 What is instinctive behaviour ?
- 7 What is holarctic region ?
- 8 What is insular fauna ?
- 9 Which zoogeographical realm is lowest in distribution ?
- 10 What is meant by topographical barriers to distribution ?

(10 × 1 = 10 marks)

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

- 11 Write the faunal characteristics of Australian region.
- 12 Distinguish between Continental and Oceanic islands.
- 13 Write briefly on the barriers to animal distribution.
- 14 Distinguish between taxes and kineses.
- 15 Write briefly on the Himalayan biogeographic zones of India.
- 16 Write on Neo-Lamarckism.
- 17 Explain geological time scale.
- 18 Write a note on industrial melanism.
- 19 Explain sympatric speciation.
- 20 Explain the characteristics of Neanderthal man.
- 21 Explain pre-adaptation, giving an example.
- 22 Citing an example, explain convergent evolution.

(10 × 2 = 20 marks)

Turn over

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

- 23 Explain different species concepts.
- 24 Explain major postulates and criticisms of Lamarckism.
- 25 Explain Urey-Miller experiment for biochemical evolution of life.
- 26 Explain different methods of fossilisation.
- 27 Explain different kinds of rhythms met within organisms.
- 28 Write on the social organisation of termites.
- 29 Write an account on the history of ethology.
- 30 Explain different patterns of animal distribution.

(5 × 6 = 30 marks)

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

- 31 Explain different kinds of isolating mechanisms.
- 32 Explain the modern concepts of evolutionary processes.
- 33 Elaborate on the various evidences of organic evolution.
- 34 Explain different types of learned behaviour.

(2 × 10 = 20 marks)