

This question paper contains 3 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 1474

Unique Paper Code : 2231301

F-7

Name of the Paper : Diversity and Distribution of Chordata

Name of the Course : B.Sc. (Hons.) Zoology (FYUP)

Semester : III

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt Five questions in all including Question No. 1 which is compulsory.

Draw suitable diagrams wherever required.

1. (a) Define the following :

6

(i) Osmoconformer

(ii) Protostomes

(iii) Zoogeography

(iv) Adaptive radiation

(v) Neoteny

(vi) Ratitae.

(b) Differentiate between the following pairs of terms :

8

(i) Amniotes and Anamniotes

P.T.O.

- (ii) Altitudinal and Latitudinal migration
- (iii) Anapsid and Diapsid skull
- (iv) Homocercal and Heterocercal tail.
- (c) Classify the following upto orders : 5
 - (i) Rat fish
 - (ii) Flying dragon
 - (iii) Squirrel
 - (iv) Lamprey
 - (v) Midwife toad.
- (d) Give exact location of the following : 4
 - (i) Wheel organ
 - (ii) Endostyle
 - (iii) Chloride cells
 - (iv) Spiracle.
- (e) Assign the following animals to their Zoogeographical regions : 4
 - (i) *Tuatara*
 - (ii) *Protopterus*
 - (iii) *Macropus*
 - (iv) *Pavo*.
- 2. (a) Describe distinctive features of class Mammalia. 6
- (b) Discuss the affinities of *Sphenodon*. 6

3. Give a detailed account of evolution of terrestrial ectotherms. 12
4. Describe salient features of aerial adaptation in birds, with the help of well labelled diagrams. 12
5. Give an account of migration in fishes and write its significance. 12
6. (a) Comment upon *Archaeopteryx* as a connecting link between Reptiles and Aves. 7
(b) Discuss the general characteristic features of Agnatha. 5
7. Write short notes on any *three* of the following : 4,4,4
 - (a) Fauna of oriental region
 - (b) Fangs in snake
 - (c) Parental Care in Fishes
 - (d) Dipleurula theory of Chordata origin.