First Year B.Sc., Degree Examinations December 2017

(Directorate of Distance Education)

ZOOLOGY

DSA310: Paper I: Non-Chordata, Chordata, Palaeontology and Zoogeography

Time: 3 hrs.] [Max.Marks:75/85

Instruction to the Candidates:

- 1. Students who have attended 25 Marks IA scheme will have to answer for total of 75 marks.
- 2. Students who have attended 15 Marks IA scheme will have to answer for total of 85 marks.
- 3. One mark questions should be answered in first two pages of the answer book.
- 4. Draw neat diagram wherever necessary.
- 5. All questions are compulsory.
- **6.** Q.No. V is compulsory for 85 marks scheme.

I. Simple answer questions:

10 X 1 = 10 Marks

Answer in a word, or a phrase or a sentence.

- 1. Define metagenesis.
- **2.** Mention the function of tube feet.
- **3.** Define homeotherms.
- **4.** What is synsacrum?
- **5.** Give an example for Prototheria.
- **6.** Define sexual dimorphism.
- 7. Mention the function of hirudin.
- **8.** What are gemmules?
- **9.** What is mould?
- **10.** Define Zoogeography.

II. Short answer questions:

Answer any FIVE of the following.

5X 3 = 15 Marks

- 11. Distinguish between male and female Ascaris.
- **12.** Explain three important characters of Porifera.

- **13.** Write a note on significance of fossils.
- **14.** Mention the orders of Reptelia with examples.
- **15.** Write a note on barriers of dispersal.
- **16.** Mention the distinctive characters of Herdmania.
- 17. Assign the following animals to their respective class
 - a) Euglena
 - b) Sacculina
 - c) Hydra.

III. Medium answer questions:

Answer any FIVE of the following.

5X6 = 30 Marks

- **18.** Explain the 'Golgi cycle' of *Plasmodium vivax*.
- **19.** Explain male and female reproductive system in Prawn.
- **20.** Mention salient features of phylum Mollusca and classify.
- **21.** Describe the female urinogenital system of frog.
- **22.** Bring out the differences between Chondrichthyes and Osteichthyes. Give examples for each.
- **23.** Explain discontinuous animal distribution with example.
- **24.** What are Dinosaurs? Explain about Ichthyosaurus and Brontosaurus.

IV. Long answer questions:

2X10=20 Marks

Answer any TWO of the following.

- 25. With neat labeled diagram explain.
 - a) Bipinnaria larva
 - b) Glochidium larva
- **26.** Mention the general characters of Echinodermata. Classify with examples.
- 27. Describe the digestive system of Rabbit with the help of neat labeled diagram.
- **28.** Write short notes on
 - a) Primates
 - b) Zoogeographical realms

V. Compulsory question for 85 marks scheme only. Long answer questions.

Answer any ONE of the following.

1X10=10 Marks

- **29.** Describe the nervous system of the following
 - a) Penaeus
 - b) Hirudinaria granulosa
- **30.** Write the distinctive characters of the following
 - 1. Ornithorhynchus
 - 2. Loris
 - 3. Ambystoma
 - 4. Amphioxus

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