

Second Year B.Sc., Degree Examinations

August/September 2011

Directorate of Distance Education

ZOOLOGY**Paper II : Histology, Comparative Anatomy, Biochemistry, Biotechnology and Physiology**

Time: 3 hrs.]

[Max.Marks:75/85

Instructions 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 question should be answered in first two pages of the answer book.
4. Draw neat labelled diagrams wherever necessary.
5. All Questions are compulsory.
6. Question No. V is compulsory for 85 marks scheme.

I. Simple answer questions :

1 X 10= 10Marks

Answer in a word, a phrase or a sentence.

1. What are Endocrine glands?
2. What are Plasmids?
3. What are Disaccharides?
4. What are Osmoconformers?
5. Name the Upper arm bone.
6. What is Hypotension?
7. What is Graffian follicle?
8. What are Conjugated Proteins?
9. What are Vitamins?
10. Expand FSH.

II. Short Answer Questions.*Write any FIVE of the following.*

5X 3= 15Marks

11. Classify Proteins with examples.
12. Write a note on Transgenic animals.

Contd...2

13. What is a Myogenic heart ? Give an example.
14. Explain the process of Osmoregulation in Camel.
15. Draw a neat labelled diagram of T.S. of Liver.
16. What are respiratory pigments? Mention any four properties.
17. What are Endotherms and Heterotherms? Give examples.

III. Medium answer questions.

Answer any FIVE of the following.

5X6= 30 Marks

18. Write the biological importance of Enzymes.
19. Explain the mechanism of muscle contraction.
20. Explain T.S. of Thyroid gland.
21. Describe the structure of Neuron
22. Explain the Oxygen transport mechanism in man.
23. Write a note on Cloning vehicles.
24. Explain the Ornithine Cycle.

IV. Long answer questions :

2X10=20 Marks

Answer any TWO of the following.

25. Explain the DNA Finger printing technique.
26. Explain the source, structure, functions and deficiency diseases of Vitamin A.
27. Describe the histology of Ovary with diagram.
28. Explain the composition of human blood.

V. Compulsory Question for 85 Marks Scheme only

Long answer questions :

1X10=10 Marks

Answer any ONE of the following question.

29. Explain the mechanism of origin and conduction of nerve impulse.
30. Describe the evolutionary trends in the hearts of vertebrates.
