

**2021
(JUNE)
ZOOLOGY
HONOURS
ZOO-308
EIGHT PAPER
(Animal Physiology, Endocrinology & Immunology)
Theory**

Full Marks: 50

*The figures in the margin indicates full marks for the questions
Answer all the questions*

1. Describe the process of Digestion of food containing Proteins and Fats in different parts of the alimentary canal. 5+5=10

Or

What hormones does the placenta produce? Explain their functions. 10

2. What is blood coagulation? Write the mechanism of blood coagulation. 5+5=10

Or

Explain the Sliding Filament theory of Muscle contraction with diagrams. 10

3. What is blood pressure? Write the methods for determining blood pressure. 2+8=10

Or

As a general rule Rh-positive blood should never be transfused into an Rh-negative recipient. Give reason. What causes Erythroblastosis foetalis? Explain. 5+5=10

4. What is Micturition? Write about the two phases of Micturition. 5+5=10

Or

Choose **any one** of the following: 7+3=10

a) Explain the mechanism of Cori cycle along with diagram.

b) Describe the physiology of hearing with its diagram.

5. Define the different classes of Ig along with molecular formulas & structures. 5+5=10

Or

What are Type I and Type II Diabetes? Write the functions of Insulin and Glucagon hormones. 5+5=10

**2021
(JUNE)**

**ZOOLOGY
HONOURS**

ZOO-309

NINTH PAPER

(Developmental Biology, Histology and Biochemistry)

Theory

Full Marks: 50

The figures in the margin indicates full marks for the questions

Answer all the questions

1. Explain the phenomenon of Spermatogenesis in Mammals. 10

Or

Discuss the overall process of Fertilization in Mammals. 10

2. State the different types of animal eggs. 10

Or

Elucidate the various types animal placenta with examples. 10

3. Describe the various steps in the Organogenesis of heart in vertebrate animals. 10

Or

Define how the hormonal regulation is carried out in the metamorphosis of Insects and Anura. 10

4. Draw and discuss the histological structure of Liver in Man. 10

Or

Draw and discuss the histological structure of Kidney in Man with relevant diagrams. 10

5. Define the turnover number of an enzyme. Describe Enzyme kinetics. 2+8=10

Or

Describe citric acid cycle and its energetics. 10

2.