Chattogram Veterinary and Animal Sciences University Department of Anatomy and Histology

MS in Anatomy (January-June) Final Examination, 2023

Course Title: Cell Biology & Veterinary Histology

Course Code: CVH-601

Full Marks-40

Answer any eight (8) questions. Each question has equal marks. $(5 \times 8 = 40)$

- 1. Describe the molecular structures of a mitochondrion with a brief function of electron transport chain.
- 2. Briefly describe the processes and ultrastructure of the organelles involved in protein synthesis.
- 3. How to form a corpus luteum? Explain the histology of it.
- 4. Draw and label the juxtraglomerular apparatus. How do histological structures allow filtration in the glomerulous? expain it.
- 5. Note the histology of a pancreas with figures.
- 6. Enumerated the histological strictures which are involved in "blood air barrier", "blood brain barrier" and "blood testis barrier" formation of with diagrams.
- 7. Describe histology of the spleen and compare it with other major lymphatic organs.
- 8. How do you identify nerve cell body under microscope? Briefly describe the histology of the nerve.
- 9. Draw and label the histology of testis and epididymis.
- 10. Why smooth muscle has no striation and how muscle cells are arranged in different patterns in different organs, explain with example?

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MS in Anatomy (January-June) Final examination, 2023

Course Title: Anatomy of Immune System (AIS-601)

Full Marks 40

Time 2 hours

Answer 8 (eight) questions from the followings:

 $Marks (5 \times 8) = 40$

| 1) | Sketch out the lymphatic system of mammals and birds? | 5 |
|----|---|---|
| 2) | Briefly describe the basic structures of immunoglobulin with diagram. | 5 |
| 3) | Describe the macro and microanatomy of thymus concisely in birds and animals. | 5 |
| 4) | Describe the Mucosa-associated lymphoid tissue (MALT). | 5 |
| 5) | Describe the structure of M cell with its importance in immune system. | 5 |
| 6) | Explain the reticuloendothelial (RE) system of birds and mammals. | 5 |
| 7) | What is complement system? Describe the classical pathway of complement system. | 5 |
| 8) | Discuss the B-cell maturation in mammals? | 5 |
| 9) | What is lymphocenter? Note down the different lymphocenter in ruminant. | 5 |

Good Luck

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MS in Anatomy (January-June) Final examination, 2023

Course Title: Developmental Anatomy (DAN-601)

Full Marks 40

Time 2 hours

| Answer 8 (eight) questions from the following. Marks | | $s(5 \times 8) = 40$ |
|---|--|----------------------|
| 1 | Draw and label a Blastocyst | 5 |
| 2 | What is the mechanism of the formation of dizygotic twins? | 5 |
| 3 | Epiblast forms all three germ layers- justify this statement | 5 |
| 4 | Draw and label the fetal circulation indicating the major changes after birth. | 5 |
| 5 | Briefly describe the development of the Respiratory system | 5 |
| 6 | What is coelom? How does the coelom develop? | 5 |
| 7 | What leads to the development of female reproductive structures during fetal | 5 |
| | development? | |
| 8 | How is the placenta formed after implantation of the embryo? | 5 |
| 9 | How do hermaphrodites evolve? | 5 |