



Final Exam

Department: Zoology

Major: Molecular
Biology

Course Title: Animal Physiology

Code number: 201Z
Time: 2hrs.

Mark: 90 Marks

Date: 22/1/2026

Question one (30 marks)

-What are the different functions of the following:

- Immune system.
- T helper cells

-What are the general characters of the immune system.

Question Two: (20marks)

A-Compare between :

- a- Neurons and other cells.
- b- Dendrites and axon.
- c- Spinal and Cranial nerves.
- d- Serum and vaccine.
- e- Sympathetic and parasympathetic.

Question Three: (10 marks)

- What is the function of :

- Ranvier nodes.
- Brain cavities.

Question Four: (30 marks)

- 1- Classify the acquired immunity.
- 2- What are the sites of the biological regions of the antibody
- 3- Write short notes on the stages of the acquired immunity.
- 4- Components of natural immunity.
- 5- What is happened if the immune system failed to differentiate between self and non self structures.

With Best Wishes

Prof. Dr. Kadry El-Bakry

Head of Department: *Prof. Dr. Aymn M. Hyder*