

Summer Examinations, 1998

B.Sc. (General) and Third Science Examination

PHYSIOLOGY (SI311, SI312)
FIRST PAPER,

Professor N.G. McHale
Professor M.T. Kane
Dr. D.S. Colbert
Dr. A.C. Hynes

Time Allowed: **Three** hours.

Answer **three** questions from each section

Please use a separate Answer Book for each Section

SECTION A

1. Draw a cross section of the eye. Label the parts and give clearly the functions of two of the following:- rods, ciliary body, macula lutea
2. Write an essay on the cerebral cortex in the control of movement
3. Write an essay on the autonomic nervous system
4. Write short notes on **two** of the following:
 - (a) EPSP
 - (b) IPSP
 - (c) glutamate as a neurotransmitter
 - (d) glycine as a neurotransmitter

SECTION B

1. Describe the cycle of iodine in the body
2. Write an essay on the actions of aldosterone
3. Describe the processes involved in oogenesis
4. Write short notes on 3 of the following
 - (a) Diabetes mellitus
 - (b) Mechanisms of hormone action
 - (c) Testosterone function
 - (d) The role of binding proteins in the endocrine system