

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

M.B., B.S.

BMS Part II: Functional and Chemical Changes in Disease

COURSE CODE : **BMSCNP2I**

DATE : **13-MAY-02**

TIME : **10.00**

TIME ALLOWED : **3 hours**

02-N0016-3-30

© 2002 *University of London*

TURN OVER

FUNCTIONAL AND CHEMICAL CHANGE IN DISEASE

May, 2002. Duration: three hours.

Section B: Answer **THREE** of the following essays.

Make sure that you write each answer in a separate book.

Suggested time for Section B: 2¼hours (45 mins per essay).

Allocated Marks for Section B: 75%

1. Write an essay on respiratory failure. Explain carefully what you mean by this term and describe some likely causes and consequences of the problem.
2. How is plasma calcium concentration regulated? What are the consequences of failure to maintain plasma calcium levels?
3. Explain the changes that occur in diabetic ketoacidosis. What features of this condition might require that it is treated as a medical emergency?
4. Outline the normal flow of the cardiac impulse through the heart and illustrate this with an annotated diagram of a typical ECG trace. Explain, with two examples, how this process can go wrong, causing cardiac arrhythmias. Illustrate your answer with diagrams to show how the changes are reflected in the ECG.
5. Compare the roles of ADH, aldosterone and atrial natriuretic factor in the control of body water and sodium content (include some discussion of the consequences of impaired function).
6. Write short notes on *ALL* of the following (include some consideration for each of the consequences of malfunction):
 - a). Peristalsis.
 - b). Intrinsic factor.
 - c). Bile Salts.
 - d). Bilirubin.

END OF SECTION B