UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

M.Sc.

Inf Science GS.0: General Computer Studies

COURSE CODE   :   **INSTGS.0**

DATE   :   **02-JUN-03**

TIME   :   **10.00**

TIME ALLOWED   :   **3 Hours**

TURN OVER

S.0: General computing studies

Answer **THREE** questions.

1. What do you understand by the terms 'data representation' and 'data structure'? Why are they important for information retrieval?

2. You have been asked to create a website for a library, archive or record centre with which you are familiar. Discuss the design considerations involved. What might be the important factors in designing a 'good' website?

3. How effective are today's Internet search tools? What are the reasons for their relative success/failure? Discuss.

4. What is Optical Character Recognition? Explain briefly the mechanisms used to implement OCR, and how the technique might be used to provide retrieval from a database of scanned textual documents. Compare the advantages/disadvantages of OCR for this purpose with a human indexer providing terms for such a collection.

5. Lister's model of an operating system identifies six layers of function on top of hardware. Explain briefly the role of each of these layers. In a modern operating system, is any one layer more important than another?

6. Identify and briefly explain the functioning of **three** mechanisms employed in expert systems.

END OF PAPER