UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualifications:-

B.Sc. *B.Sc. (Intercal)*

Immunology C319: Neoplasia and its Treatment

COURSE CODE	:	**IMMNC319**
UNIT VALUE	:	**0.50**
DATE	:	**19-MAY-06**
TIME	:	**10.00**
TIME ALLOWED	:	**3 Hours**

TURN OVER

IMMNC319 NEOPLASIA AND ITS TREATMENT

You should take approximately **60 minutes for each essay** and approximately **20 minutes for each short note**.

Please answer **each question in a separate book and write the question number clearly on each front page.**

The fraction of the marks allocated to each section is as follows:

Section A: 120/180
Section B: 60/180

The in-course assessment constituted 15% of the final mark.

TURN OVER

IMMNC319 NEOPLASIA AND ITS TREATMENT

SECTION A:

Choose **TWO** essays from the list below:

1. Discuss the molecular events that have been identified in the genesis of colorectal cancer.

2. Discuss the sequence of events involved in metastatic spread of tumours. Speculate, giving examples, on the mechanisms accounting for the different patterns that are seen in specific tumours.

3. Discuss the significance of the epidermal growth factor receptor (EGFR) family in cancer biology and treatment.

4. Describe the procedures that could be used to identify and characterise human embryonic stem cells. Explain how these cells illuminate our understanding of stem cell potency, using specific cell types to illustrate the different stages between totipotent and oligopotent cells.

5. Describe the laboratory techniques for demonstrating gene rearrangements in lymphoproliferative disorders, and discuss the impact these have had on diagnosis and management.

6. Are immunosuppressed patients more susceptible to all kinds of cancer? If not, why not? What are the implications of your answers for treatment?

SECTION B:

Write short notes on **THREE** of the following:

1. The steps involved in nucleotide excision repair.

2. The types of tumour protein recognised by patient cytotoxic T lymphocytes (CTL).

3. Advantages of gene therapy in treatment of cancer.

4. Cellular responses to DNA damage produced by alkylating agents.

5. Role of retinoblastoma protein family abnormalities in malignancy.

6. How do cancer cells override cell cycle regulation in the G1 phase?

END OF PAPER