

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc. (Intercal)

Immunology C319: Neoplasia and its Treatment

COURSE CODE : IMMNC319

UNIT VALUE : 0.50

DATE : 20–MAY–05

TIME : 10.00

TIME ALLOWED : 3 Hours

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. Describe how the metabolism of carcinogens can lead to the generation of chemically reactive, mutagenic metabolites. To what extent can this explain the phenomenon of chemical carcinogenesis?
2. What factors contribute to the lack of an effective immune response against most cancers? Suggest possible ways that these may be overcome by novel treatment strategies.
3. "Leukaemias have been used as a model for the development of cancer, and our understanding of this has led to novel forms of treatment". Discuss.
4. What has our understanding of oncogenic viruses in animals taught us about human cancer?

SECTION B:

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

1. What sorts of evidence would one require to demonstrate causality in cancer? Illustrate your answer with a particular example.
2. Discuss the role of tamoxifen and aromatase inhibitors in the treatment and prevention of breast cancer. Why should tamoxifen and aromatase inhibitors not be used together?
3. What gene defects are associated with the development of colon carcinoma?
4. Role of tumour markers in diagnosis of cancer.
5. Mechanisms involved in tumour invasion and metastasis.
6. How do cancer cells override cell cycle regulation in the G1 phase?
7. "Adult stem cells are more flexible than was previously thought". Comment on this statement.

END OF PAPER