

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc. (Intercal)

Pathology I3: Molecular Virology

COURSE CODE : **PATHI003**

UNIT VALUE : **0.50**

DATE : **02–JUN–04**

TIME : **10.00**

TIME ALLOWED : **3 Hours**

Royal Free and University College Medical School of UCL, Hampstead Site

Intercalated Degree: BSc in Infection 2003-2004

Pathology I3: Molecular Virology Exam Paper

2nd June 2004: 10.00 -13.00

You must answer Question 1 (compulsory) and then 3 further questions.

Please use a separate examination answer book for each question attempted

1. Write short notes on **three** of the following topics:

- a) RNA dependent RNA polymerases
- b) Variant CJD
- c) Influenza neuraminidase inhibitors
- d) Cellular receptors for viral attachment
- e) HHV-8 v-cyclin
- f) Influenza antigenic shift

Answer 3 questions from the following six questions:

- 2. Briefly describe the clinical manifestations of chronic hepatitis C virus infection and the approaches used for treatment.
- 3. Discuss the statement: "A dengue virus vaccine is desirable but unattainable."
- 4. Using specific examples, describe how viruses have evolved to modulate the HLA class I-restricted immune response.
- 5. Write an essay on the potential use of viral vectors in gene therapy.
- 6. Describe the process of reverse transcription and discuss the types of drug available to inhibit this process.
- 7. Compare and contrast traditional and novel molecular approaches used to produce viral vaccines.

End of Paper