

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.A.

MES P110: Problems of Social Explanation

COURSE CODE : MESTP110

UNIT VALUE : 0.50

DATE : 16-MAY-05

TIME : 14.30

TIME ALLOWED : 2 Hours

MESTP110 PROBLEMS OF SOCIAL EXPLANATION

- Answer **TWO** questions.
- Do **NOT** answer a question on the topic of your *assessed* essay.
- Do **NOT** draw substantially on the same material for more than one question.

1. To what extent can social explanation be modelled on natural scientific explanation?
2. ‘The explanation of social phenomena consists in nothing more than grasping the meanings of social practices.’ Discuss.
3. Are social phenomena functions of individual rational choice?
4. Can social phenomena be explained in the same way as the organs of a natural organism?
5. Can values play a legitimate role in social explanation?
6. Do social wholes exist independently of the individuals that compose them?
7. ‘The data of anthropology force us to recognise that other cultures have their own standards of rationality.’ Discuss.
8. What distinguishes historical explanation from chronology?

END OF PAPER

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

Intercalated Degree: BSc in Infection 2004-2005

Pathology I2: Clinical Microbiology Exam Paper

Tuesday 31st May 2005: 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) Extended spectrum beta lactamases - ESBL
- b) Quorum sensing
- c) Mycoplasma infections in immuno-deficiency
- d) *Vibrio cholera*
- e) Type III secretory systems
- f) Fungal virulence factors

Answer 3 questions from the following six questions:

2. Host damage during infection results primarily from immune over-responsiveness. Discuss.
3. Describe FOUR clinical scenarios where you would consider using combined antimicrobial chemotherapy and explain why.
4. Describe epidemiological tools used to study a named bacterial pathogen and discuss how relevant they are in a clinical setting.
5. Current antibiotics will be useless in the future. Discuss.
6. Describe host defence mechanisms against bacterial pathogens and the role of immunization.
7. Discuss diphtheria toxin and its gene regulation.

End of Paper

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

Intercalated Degree: BSc in Infection 2004-2005

Pathology I3: Molecular Virology Exam Paper

Wednesday 1st June 2005: 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) Protease inhibitors
 - b) Hepatitis B e antigen
 - c) Ribavirin
 - d) Viral replication dynamics in the human host
 - e) Retroviral vectors for gene therapy
 - f) Class I HLA presentation pathway

Answer 3 questions from the following six questions:

2. Why is avian influenza a threat to the human population? What approaches might be used to contain a pandemic and limit mortality?
3. Describe the lifecycle of a typical herpes virus indicating stages amenable to antiviral chemotherapy.
4. Using named examples, compare and contrast living versus non-living viral vaccines.
5. Describe the prion hypothesis and discuss how the host genotype influences the epidemiology of variant CJD.
6. Discuss the pathological consequences of virus infections occurring in T-cell immunocompromised hosts.
7. Describe the mechanisms used by viruses to manipulate the cell cycle.

End of Paper

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

Intercalated Degree: BSc in Infection 2004-2005

Pathology I6: Molecular Approaches to Understanding Infection Exam Paper

Friday 27th May 2005: 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) Ligating DNA molecules
 - b) Translation of messenger RNA
 - c) DNA restriction endonucleases
 - d) DNA transfection
 - e) Generating a recombinant poxvirus
 - f) Structure of a typical eukaryotic promoter

Answer 3 questions from the following six questions:

2. Describe the molecular approaches that could be used to produce a vaccine against the SARS coronavirus.
3. Describe the methods that are available for quantifying viral load in blood. Illustrate your answer with specific examples.
4. Discuss the strategies for the development of a malaria vaccine.
5. Discuss the role of DNA-based methods for determining antibiotic resistance and their impact on clinical management.
6. Discuss the statement "rational drug design offers the best approach for the development of new antiviral therapeutics".
7. Compare and contrast eukaryotic and prokaryotic expression systems.

End of Paper