

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Semester 2 Examinations 2010

Module Title: Fundamentals of Microbiology II

Module Code: BIOM6006

School: School of Science

Programme Title: Bachelor of Science in Applied Biosciences Year 2

Programme Code: SBIOS_7_Y2

External Examiner(s): Prof. G. Walsh

Internal Examiner(s): Dr. D. Gilroy

Instructions: Answer **THREE** questions.
All questions carry equal marks.

Duration: 2 hours

Sitting: Autumn 2010

Requirements for this examination:

Note to Candidates: Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper.

If in doubt please contact an Invigilator.

- Q1. (i) Draw and label the structure of an *Aspergillus* species. (5 marks)
- (ii) Describe the life cycle of *Phytophthora infestans*. (15 marks)
- (iii) On what type of culture media do fungi like to grow? (5 marks)
- Q2. Describe characteristics associated with endospore-producing genera of bacteria. (25 marks)
- Q3. Write short notes on **two** of the following genera:
- Pseudomonas*
- Streptococcus*
- Staphylococcus* (25 marks)
- Q4. (i) How is *Escherichia coli* distinguished from *Enterobacter aerogenes* in the laboratory? (7 marks)
- (ii) Describe the **seven** stages of viral replication and explain what occurs at each stage. (14 marks)
- (iii) List **four** possible effects that animal viruses can have on the cells they infect. (4 marks)
- Q5. Write concise notes on **two** of the following topics:
- The influenza virus
- Cryptosporoidiosis
- Legionnaires' disease
- (25 marks)