

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Autumn Examinations 2008/09

Module Title: Fundamentals of Microbiology 1

Module Code: BIOM 6007

School: Science

Programme Title: Bachelor of Science in Applied Biosciences – Year 2

Programme Code: SBIOS_7_Y2

External Examiner(s): Dr Don Faller
Internal Examiner(s): Dr Roy Sleator

Instructions: Answer 4 questions. Each question carries equal marks.

Duration: 2 Hours

Sitting: Autumn 2009

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.

1. Write brief notes on each of the following:
 - (a) The spontaneous generation controversy
 - (b) Koch's postulates
 - (c) Organisms are divided into 5 kingdoms; describe them

2. Describe with aid of detailed diagrams the structure of a Gram positive bacterial cell wall.

3. Write notes on each of the following with respect to bacterial accumulation of nutrients
 - (a) Passive diffusion
 - (b) Active transport
 - (c) Group translocation

4. Write brief notes on each of the following
 - (a) Conjugation
 - (b) Transformation
 - (c) Transduction

5. Write brief notes on each of the following:
 - (a) DNA replication
 - (b) Transcription
 - (c) Translation