

UNIVERSITY OF BOLTON
SCHOOL OF SPORT AND BIOLOGICAL SCIENCES
BSC (HONS) MEDICAL BIOLOGY
SEMESTER ONE EXAMINATION 2019/2020
BIOLOGICAL BASIS OF DISEASE AND
THERAPEUTICS
MODULE NO: BIO6011

Date: Monday 13th January 2020 Time: 10.00 am – 12.00 pm

INSTRUCTIONS TO CANDIDATES:

Candidates are advised that the examiners attach importance to legibility of writing and clarity of expression.

YOU ARE STRONGLY ADVISED TO PLAN YOUR ANSWERS

There are FIVE questions.

Answer ANY TWO questions.

All questions carry equal marks.

This examination is TWO hours long.

This examination paper carries a total of 100 marks.

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Answer ANY TWO questions; each question is worth 50 marks

1. Critically evaluate the effectiveness of current antibiotics for the treatment of bacterial infections. In your answer, you should describe in detail how antibiotics function, and mechanisms by which bacteria may develop resistance.
50 marks

2. Compare and contrast traditional and modern cancer therapeutic strategies. In your answer, you should outline the genetic and cellular changes that take place during the onset of cancer.
50 marks

3. Describe the symptoms and causes of acute coronary syndrome (ACS) and discuss the range of drugs available to treat this condition. You should justify the use of each of the drugs by describing their mechanism of action and explaining how their effects are relevant to ACS treatment.
50 marks

4. Discuss the strategies used to treat medical conditions related to the gastrointestinal tract, and appraise the effectiveness of these strategies.
50 marks

5. Explain the mechanisms by which viruses such as HIV-1 cause disease and describe, with justification, the range of techniques and therapeutic strategies used to diagnose and treat viral infections.
50 marks

END OF QUESTIONS