

**UNIVERSITY OF SWAZILAND
FIRST SEMESTER FINAL EXAMINATION 2013**

TITLE OF PAPER : Chemotherapy

COURSE NUMBER : C601

TIME : Three Hours

INSTRUCTIONS : Answer any **FOUR Questions**. Each Question carries 25 Marks.

This Paper contains two (2) pages.

You must not open this paper until the Chief Invigilator so has granted permission to do.

Question 1

- (a) Explain the term chemotherapy. (10 marks)
- (b) Comment on the contribution of chemotherapy to drug discovery and development. (15 marks)

Question 2

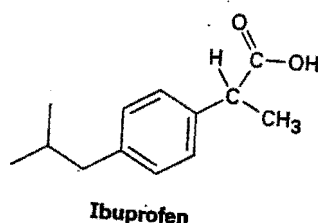
Describe two named 'bench top' bioassays that are used to evaluate natural products for antitumor and antimalarial activities. Comment on merits and demerits of the two methods..

(25 marks)

Question 3

Outline the synthetic scheme normally used for the commercial production of Ibuprofen an NSAID compound. Comment on the main features advantages and benefits of the scheme.

(25 marks)



Question 4

Give a summary of the contributions of vaccines in cancer treatment. (25 marks)

Question 5

Based on your knowledge and understanding of how the anti-retrovirus drugs (ARVs) work, comment on the potential role of chemotherapy in HIV and AIDS management. (25 marks)

Question 6

Explain the mode of action of aspirin and the other non steroidal anti inflammatory drugs (NSAIDs). (25 marks)