



NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16, Ahmadu Bello Way, Victoria Island

SCHOOL OF SCIENCE AND TECHNOLOGY
October, 2013 Examination

Course Code: CHM 318

Course Title: Natural Products Chemistry I

INSTRUCTION: Answer any 4 questions. 2 HOURS

1. (a) Write a short note on Steroids (7½ marks).
(b) Explain Steroid Biosynthesis (10 marks).
2. (a) What are terpenes. (3 marks).
(b) Discuss 5 major classes of terpenes (10 marks).
(c) Draw the structure of a named terpene (4.5 marks).
3. (a) Write a short note on Alkaloids? (5 marks).
(b) Explain concisely the applications of Alkaloids in Medicine (12½ marks).
4. (a) With the aid of a well-labeled diagram, describe the MEVALONATE Pathway? (14½ marks).
(b) Name 2 drugs that target the Mevalonate Pathway (3 marks).
5. (a) Discuss the properties of Alkaloids (11½ marks).
(b) Draw the structures of 2 named Alkaloids (6 marks).
6. (a) Discuss five examples of dimeric alkaloids (12½ marks).
(b) What do you understand by the term steroidogenesis? (5 marks).