



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE AND APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF TECHNOLOGY IN APPLIED CHEMISTRY (INDUSTRIAL
OPTION)

BTAC 12S SEPT 2012

ACH 4405

Industrial Pharmaceutics

END OF SEMESTER EXAMINATION

SERIES: MAY 2016

TIME: 2 HOURS

DATE:

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Attempt Question one compulsory and any other two question

Do not write on the question paper.

Paper Two

QUESTION ONE

- | | |
|---|----------------|
| A. Differentiate between :- | |
| i. Emulsion and suspension | 4 marks |
| ii. hard and soft capsules | 4 |
| | marks |
| B. Define mechanism of wetting agents | 3 |
| | marks |
| C. Outline different reason for coating tablets | 4 |
| | marks |
| D. Explain autoclave process as a Sterilization method | 4 |
| | marks |
| E. Explain briefly how you will determine intergranule bond strength in tablet | 4 marks |
| F. Outline different Mode of Action of preservatives as used in pharmaceuticals | 3 marks |

- G. Differentiate between:-
- i. flocculated and deflocculated suspension 2 marks
 - ii. Rheopectic and Thixotropic fluid 2 marks

QUESTION TWO

- A. State Characteristic of potential flow 5 marks
- B. Explain briefly Sterilization by filtration 5 marks
- C. Describe the working principle of Capillary Viscometer 5 marks
- D. Explain briefly how you will determine rate of tablet friability 5 Marks

QUESTION THREE

- A. Define (i) Effervescent tablet (ii) Colloids 4 Marks
- B. State advantage of moist granulation over dry granulation 4 marks
- C. Define different Mechanism of size reduction 3 marks
- D. Differentiate between the various types of ointment bases 5 Marks
- E. State pharmaceutical importance of Agitation 4 marks

QUESTION FOUR

- A. Discuss
 - i. Stability of Emulsion 4 marks
 - ii. Different factors which affect Penetration of liquid in tablets 4 marks
- B. Define Gargles 2 marks
- C. List the Advantages of Hard Gelatin Capsules 6 marks
- D. State different properties suspension 4 marks

QUESTION FIVE

- A. Differentiate between Surfactant and Hydrophilic colloids as Emulsion Stabilizers 6 Marks
 - B. state Importance of size reduction 4 marks
 - C. Define
 - i. Parental preparations 2 marks
 - ii. Aerosols 2 marks
 - iii. different types of Otic Solutions 2 marks
- Explain tyndallisation process 4
- MARKS