



## **FACULTY OF HEALTH SCIENCES**

## BSC. (HONS) COSMETIC SCIENCES BCS 3253 – COSMECEUTICAL TECHNOLOGY III

MID SEMESTER EXAMINATION SEQ -3<sup>RD</sup> YEAR 2<sup>ND</sup> SEMESTER- 5<sup>TH</sup> BATCH

Date: 5th March 2024

Time: 09.00 a.m. - 10.00 a.m. (One Hour)

## INSTRUCTIONS TO CANDIDATES

- This question paper consists of TWO questions.
- · Answer ALL questions.
- You should write legibly in black or blue ink.

**Question 01** 

(100 marks)

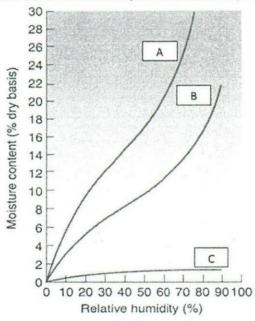
1.1 State five (05) factors that affect the drying.

(20 marks)

1.2 Describe four (04) applications of drying in the pharmaceutical industry.

(30 marks)

1.3 Typical equilibrium moisture content of kaolin, fibrous material, and starch are shown in the below graph.



1.3.1 Identify A, B, and C materials.

(30 marks)

1.3.2 Briefly describe how the equilibrium moisture content changes each material from 20% to 80% relative humidity at 20°C. (20 marks)

## Question 02

(100 marks)

2.1 Name two (02) size reduction equipment used in industry.

(10 marks)

2.2 Briefly describe the influence of material 'stickiness' on size reduction.

(35 marks)

2.3 State three (03) different methods of heat transfer.

(15 marks)

2.4 Discuss the construction and uses of heat-jacketed vessels in manufacturing.

(40 marks)