



UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

**THIRD YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF BIOMEDICAL SCIENCE AND
TECHNOLOGY**

BMED 326: DRUG DELIVERY SYSTEMS

STREAM: R

TIME: 2 HRS

DAY: TUESDAY[8.30A.M – 10.30A.M]

DATE: 09/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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INSTRUCTIONS: ANSWER ALL THE QUESTIONS IN SECTION A AND TWO IN SECTION B**SECTION A : (40 MARKS)****QUESTION ONE**

State the factors which one needs to take into consideration for an effective controlled drug delivery system (4 Marks)

QUESTION TWO

Explain the disadvantages of the first generation controlled drug delivery systems. (4 Marks)

QUESTION THREE

Explain the two most important aspects in drug delivery (4 Marks)

QUESTION FOUR

List any four drug targeting techniques used in drug delivery. (4 Marks)

QUESTION FIVE

State the features which make small scale systems most attractive in drug delivery (4 Marks)

QUESTION SIX

State the different criteria that should be taken into account to evaluate the possibility of delivering a drug using the liposomal carrier: (4 Marks)

QUESTION SEVEN

List the requirements of a drug delivery system (4mks)

QUESTION EIGHT

Define the term drug delivery system and state three traditional ways of drug delivery (4 Marks)

QUESTION NINE

Explain the basic need which the traditional drug delivery systems lacked. (4 Marks)

QUESTION TEN

Explain how one can improve on the therapeutic efficacy of a drug (4 Marks)



SECTION B: ANSWER TWO QUESTIONS ONLY (30MARKS)

QUESTION ELEVEN

Discuss the different Approaches for Controlled Drug Delivery **(15 Marks)**

QUESTION TWELVE

Discuss the advantages and disadvantages of drug delivery systems **(15 Marks)**

QUESTION THIRTEEN

Discuss the main problems associated with the current drug delivery Methods **(15 Marks)**

