TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF TECHNOLOGY IN MICROBIOLOGY AND BIOTECHNOLOGY

AAB 4305: BASIC METABOLISM III

END OF SEMESTER EXAMINATION

SERIES: Select seriesPickyear

TIME: 2HOURS

DATE: Pick DateSelect MonthPick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. AttemptChoose instruction.

Do not write on the question paper.

Question ONE

a)(i) Outline different sources of amino acids in the body **(3 marks)**

(ii) State the different fates of amino acids in the body **(5 marks)**

b) (i)Name five (5) inhibitors of Pyrimethamine nucleotide synthesis and their uses. **(5 marks)**

(ii) State the compounds contributing to different atoms of purine rings. **(2 marks)**

c) Describe the fate of amino acid nitrogen. **(5 marks)**

d) Describe the fate of carbon skeleton of amino acids. **(6 marks)**

e) Describe three reactions involved in the formation of ammonia. **(4 marks)**

Question TWO

(i) Explain how the anticancer drugs block the synthesis of DNA. **(10 marks)**

(ii) Define Gout and state the cure/ treatment of gout. **(10 marks)**

Question THREE

Describe the degradation of Pyrimidine nucleotide and disorders involving degradation of purine nucleotide.**(20 marks)**

Question FOUR

Describe the metabolism of branched chain amino acids including disorders of their catabolism.

(20 marks)

Question FIVE

Discuss the metabolism of Sulfur containing, Methionine amino acids and its associated disorders.

(20 marks)