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University Examinations 2022/2023
SPECIAL/SUPPLEMENTARY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN ANIMAL HEALTH

SHV 3250: ANIMAL METABOLISM AND ENZYMOLOGY

DATE: AUGUST 2023

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Describe lipid transport in an animal (5 marks)
- b) Differentiate glucogenic and ketogenic amino acids (4 marks)
- c) Explain the fate of pyruvate after glycolysis (3 marks)
- d) Explain the following terms: (6 marks)
 - (i) Glycogenesis
 - (ii) Lipogenesis
 - (iii) Gluconeogenesis
- e) Outline the factors that influence plasma cholesterol levels (3 marks)
- f) Explain energy metabolism during the fed state (5 marks)
- g) List the protein involved in electron transport chain (4 marks)

QUESTION TWO (20 MARKS)

Discuss the glycolysis pathway



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QUESTION THREE (20 MARKS)

- a) Discuss the classification of enzymes (10 marks)
- b) Discuss the application of enzymes in animal health (10 marks)

QUESTION FOUR (20 MARKS)

Discuss amino acid catabolism that results in formation of urea

