



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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University Examinations 2023/2024

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN BIOCHEMISTRY

SHC 3353: BIOCHEMISTRY OF HORMONES

DATE: APRIL 2024

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Describe the effects of prostacyclin and thromboxane (4 marks)
- b) Describe the two groups of corticosteroid and their function (2 marks)
- c) Illustrate the structure of progesterone and function of progesterone and function of progesterone (4 marks)
- d) Name the organ that is not part of endocrine system but produces hormones and its significance (2 marks)
- e) Explain the functions initiated by CAMP (3 marks)
- f) Illustrate the structure of oxytocin and vasopressin (4 marks)
- g) Describe hypopituitarism (3 marks)
- h) Explain why 3,5,3'-triiodothyronine is more potent than thyroxine (2 marks)
- i) Describe the structure of hormone produced by adrenal medulla (4 marks)
- j) Explain the glucagon action (2 marks)

QUESTION TWO (20MARKS)

- a. Discuss in details the eicosanoid hormones (10 marks)
- b. Discuss the peptide hormones related to pregnancy (10 marks)

QUESTION THREE (20MARKS)

- a. Describe the function of parathyroid and ghrelin hormone. (10 marks)
- b. Describe the symptoms of diabetes mellitus (10 marks)

QUESTION FOUR (20 MARKS)

- a. Discuss the role of CAMP in hormone action (10 marks)
- b. Explain pheromones as social hormones. (10 marks)