



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972 – 60200, Meru – Kenya.

Tel. 020-2069349, 061-2309217, 064-30320. Cell phone:+254 712524293, +254 789151411

Fax: 064-30321

Website: [www.mucst.ac.ke](http://www.mucst.ac.ke) Email: [info@mucst.ac.ke](mailto:info@mucst.ac.ke)

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## University Examinations 2013/2014

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR  
OF SCIENCE IN FOOD SCIENCE AND NUTRITION

### AFN 2204: NUTRITION ASSESSMENT

DATE: DECEMBER 2013

TIME: 2 HOURS

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

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#### QUESTION ONE (30 MARKS)

- a) Define the following terms: (12 Marks)
- Nutrition assessment
  - Anthropometry
  - Malnutrition
  - Body mass index
  - Stunting
  - Wasting
- b) Describe the following dietary assessment methods as used in nutritional assessment.
- 24 hour dietary recall (5 Marks)
  - Food frequency questionnaire (5 Marks)
  - Weighed and estimated food records (4 Marks)
- c) What nutrient deficiency do the following clinical signs and symptoms indicate? (4 Marks)
- Bitot's spots
  - Swelling at front of neck
  - Spoon-shaped nails
  - Bowed legs or knock knees

#### QUESTION TWO (20 MARKS)

- a) Differentiate between the following: (8 Marks)
- Primary and secondary malnutrition

- ii. Under nutrition and over nutrition
- b) Discuss protein-energy malnutrition (12 marks)

**QUESTION THREE (20 MARKS)**

- a) List 5 methods for measuring body composition. (5 Marks)
- b) Write short notes on the following; (15Marks)
  - i. Body mass index
  - ii. Waist circumference
  - iii. Waist – to – hip ratio

**QUESTION FOUR (20 MARKS)**

Discuss the biochemical nutrition assessment method. (20 Marks)