



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
INSTITUTIONAL BASED PROGRAMME (IBP) – DECEMBER SESSION
EXAMINATION FOR POSTGRADUATE DIPLOMA IN FOODS, NUTRITION & DIETETICS

HFN 708: NUTRITION BIOCHEMISTRY

DATE: Wednesday 2nd May 2012

TIME: 9.00a.m – 12.00p.m

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTIONS A AND B

SECTION A:

1. Explain the following terms in nutrition biochemistry.
 - a) Glycolysis [2marks]
 - b) Biological value [2marks]
 - c) Sphingolipids [2marks]
 - d) Poly-unsaturated fats [2marks]
 - e) Pro-vitamin A [2marks]
2. Briefly describe the metabolism of the following nutrients.
 - a) Carbohydrates. [5marks]
 - b) Proteins [5marks]

SECTION B:

3. Discuss the biochemical functions of tocopherols on the body. [10marks]
4.
 - a) Describe the role of Parathyroid Hormone (PTH) in calcium metabolism. [5marks]
 - b) Explain five factors which inhibit the absorption of calcium in the body. [5marks]
5. Describe five metabolic functions of vitamin A in regulation of the body activities. [10marks]
6. Discuss the manifestations of the following nutritional diseases.
 - a) Microcytic hypochromic anaemia. [5marks]
 - b) Cretinism [5marks]