

UNIVERSITI SAINS MALAYSIA

Second Semester Examination
Academic Session 2005/2006

April/May 2006

IMK 104 – Nutrition
[Pemakanan]

Duration: 3 hours
[Masa: 3 jam]

Please check that the examination paper consists of FIVE pages of printed material before you begin this examination.

Answer FIVE questions. Questions can be answered in Bahasa Malaysia OR English.

[Sila pastikan bahawa kertas peperiksaan ini mengandungi LIMA mukasurat yang bercetak sebelum anda memulakan peperiksaan ini.]

[Jawab LIMA soalan. Soalan boleh dijawab dalam Bahasa Malaysia ATAU Bahasa Inggeris.]

1. Write short notes on the following:
 - (a) Nutrition scorecard (5 marks)
 - (b) Index of Nutritional Quality - INQ (5 marks)
 - (c) Milk and milk products according to the daily food guide based on the Malaysian Food Pyramid (5 marks)
 - (d) Iodine deficiency in Malaysia (5 marks)
2. Discuss Clinical Assessment and Dietary Assessment in Nutritional Status Assessment. (20 marks)
3. Answer both parts of the questions
 - (a) Mother's nutrition during lactation (10 marks)
 - (b) Relationship between diet and cardiovascular diseases (5 marks)
 - (c) Importance of Body Mass Index (5 marks)
4. Write short notes on the following:
 - (a) Peristalsis process in digestion (5 marks)
 - (b) Function of bile (5 marks)
 - (c) Function of pancreatic juice (5 marks)
 - (d) Lymph system (5 marks)

5. Answer both parts of this question.
- (a) Briefly explain 4 main theories of ageing. (10 marks)
 - (b) Explain how nutrition will influence ageing. (10 marks)
6. With help of diagrams, explain the mobilization of macronutrients between hepatic tissue, adipose tissue, muscle and brain during well fed state, 2 - 4 hours after ingestion of a normal meal. (20 marks)
7. Answer both parts of this question.
- (a) Define what are essential amino acid and essential fatty acid and give their example. Explain their roles in diet. (12 marks)
 - (b) Briefly explain what are HDL (High Density Lipoprotein) and LDL (Low Density Lipoprotein) and their influence on health. (8 marks)

1. *Tuliskan catatan-catatan ringkas mengenai perkara-perkara di bawah:*
 - (a) *Kadskor pemakanan* (5 markah)
 - (b) *Indeks Kualiti Pemakanan* (5 markah)
 - (c) *Kumpulan susu dan produk susu mengikut Panduan Makanan Harian yang berdasarkan Piramid Makanan Malaysia* (5 markah)
 - (d) *Kedefisienan iodin di Malaysia* (5 markah)
2. *Bincangkan Penilaian Klinikal dan Dietari dalam Penilaian Status Pemakanan.* (20 markah)
3. *Jawab kedua-dua bahagian dari soalan ini.*
 - (a) *Pemakanan ibu semasa laktasi* (10 markah)
 - (b) *Hubungkait antara diet dan penyakit kardiovaskular* (5 markah)
 - (c) *Kepentingan Indeks Jisim Tubuh* (5 markah)
4. *Tuliskan nota ringkas mengenai perkara-perkara berikut:*
 - (a) *Proses peristalsis dalam pencernaan* (5 markah)
 - (b) *Fungsi hempedu* (5 markah)
 - (c) *Fungsi jus pankreatik* (5 markah)
 - (d) *Sistem limfa* (5 markah)

5. *Jawab kedua-dua bahagian soalan ini.*
- (a) *Secara ringkas jelaskan empat (4) teori penuaan yang utama.* (10 markah)
- (b) *Huraikan bagaimana pemakanan mempengaruhi penuaan.* (10 markah)
6. *Dengan bantuan gambarajah, jelaskan mobilisasi makronutrien di antara organ-organ atau tisu-tisu hepa, tisu adipos, otot dan otak, 2 hingga 4 jam selepas mengambil hidangan normal.* (20 markah)
7. *Jawab kedua-dua bahagian soalan ini.*
- (a) *Takrifkan asid amino perlu dan asid lemak perlu dan sertakan contoh-contohnya. Jelaskan kepentingan kedua-duanya dalam diet.* (12 markah)
- (b) *Jelaskan dengan ringkas High Density Lipoprotein (HDL) dan Low Density Lipoprotein (LDL) dan kaitannya dengan kesihatan.* (8 markah)