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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2017/2018**

COURSE NAME : NUTRITION  
COURSE CODE : BWD 20203  
PROGRAMME CODE : BWD  
EXAMINATION DATE : JUNE/JULY 2018  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

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**Q1** Digestion is the body's ingenious way to break down food into nutrients in preparation of absorption.

- (a) Briefly explain the pathway of cheese sandwich through the digestive system. (6 marks)
- (b) Provide an example of mechanical and chemical digestion (2 marks)
- (c) Nurul takes a medication that will reduce the production of her stomach's mucus. Based on this information, predict and explain briefly on the potential stomach disorder that she is at risk? (6 marks)
- (d) Describe concisely the effect of pancreases removal towards digestive system and process? (6 marks)

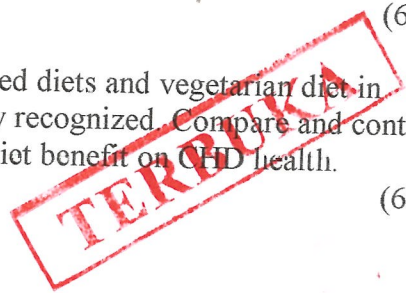
**Q2** A Vitamin is a complex organic compound that regulates certain metabolic process in the body.

- (a) List **THREE (3)** factors that distinguish vitamins from macronutrients? (3 marks)
- (b) One of your friend takes megadoses of vitamin A, C and B-6 because she thinks they help her stay healthy. Hypothesize the setback of this action? (6 marks)
- (c) The following list recognizes that in certain circumstances, these people may need to avoid specific supplements. Predict the outcome if?
  - (i) Men and postmenopausal woman take iron supplement?
  - (ii) Smoker takes beta-carotene supplement?
  - (iii) Postmenopausal woman take Vitamin A?
  - (iv) Surgery patients take Vitamin A?(4 marks)
- (d) Vitamin E is a fat-soluble antioxidant and one of the body's primary defenders against the adverse effect of free radicals. Examine deficiency symptom and effect of excessive intake of Vitamin E in human body. (7 marks)

- Q3** Water, calcium and all the other major minerals support fluid balance and bone health.
- (a) Summarize the after effect of the cell if the body is unable to regulate its water balance?  
(4 marks)
  - (b) Rationalize the effect of excessive water consumption in a short time to our body?  
(6 marks)
  - (c) Discuss how do antidiuretic hormone and aldosterone help maintain fluid balance in the body?  
(6 marks)
  - (d) Identify at least **FOUR (4)** major risk factors for osteoporosis.  
(4 marks)

**Q4** Cardiovascular disease (CVD), a group of disorders involves heart and blood vessel. The most common form of CVD is coronary heart disease (CHD), which is usually caused by atherosclerosis in the coronary arteries.

- (a) Discuss **FOUR (4)** factors that contribute to atherosclerosis development.  
(8 marks)
- (b) Evaluate dietary strategies that can reduce CHD risk or prevent future heart attack.  
(6 marks)
- (c) The potentially beneficial role of plant-based diets and vegetarian diet in cardiovascular health has been increasingly recognized. Compare and contrast between plant-based diets and vegetarian diet benefit on CHD health.  
(6 marks)



- Q5** BMI is an estimate of body fat and a good measure of your patients' risk for diseases that can occur with overweight and obesity
- (a) Explain why it is usually difficult to pinpoint a cause of obesity?  
(4 marks)
- (b) Justify why do most people who lose weight are not able to maintain their lower body weight over time?  
(4 marks)
- (c) Discuss briefly both the advantages and setbacks of having BMI within the overweight or obese range. Propose a lifestyle changes that could be employ towards losing weight.  
(6 marks)
- (d) South beach diet and atkin diet are commonly practice for losing weight. Compare and contrast between both diet plans.  
(6 marks)

**- END OF QUESTIONS -**

**TERBUK!**