



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2015/2016**

**FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE OF MASTER OF SCIENCE IN COMMUNITY  
NUTRITION AND DEVELOPMENT**

**CITY CAMPUS**

**PCN 814: NUTRITION AND BEHAVIOUR**

Date: 27<sup>th</sup> April, 2016

Time: 9.00 - 12.00 noon

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**INSTRUCTIONS:**

This paper consists of 3 sections (A, B & C). Section A consists of multiple choice questions and carries 10 marks and section B consists of short answer questions and carries 20mks.

Section C consists of long answer questions and carries 40mks. Answer ALL questions in section A & B on the question paper & answer booklets respectively as instructed and any 4 questions in section C (40mks) in the answer booklets provided

c) Gaba is an inhibitory neurotransmitter that is often referred to as “nature’s valium like substance”

d) Epinephrine also regulate heart rate and blood pressure.

e) None of the above

**MCQ2.** Obsessive compulsive behavior is a typical symptom of Anorexia Nervosa.

A. True

B. False

**MCQ3.** Identify a factor that is not a cause of obesity.

a) Polycystic ovary syndrome

b) Inadequate sleep

c) Stress

d) Use of steroids & anti-depressants

e) None of the above

**MCQ4.** Arachidonic Acid (AA) from Omega-3 fatty acids make up 8% of the dry weight of the brain.

A. True

B. False

**MCQ5.** Identify a statement that is incorrect about behavior analytic theories of change

a) Behavioural change is determined by environmental, personal & behavioural elements

b) Complex behavior is learned gradually through the modification of simpler behaviours

c) Imitation & reinforcement play important roles in behavior change

d) Rewards are essential in ensuring the repetition of desired behavior

e) None of the above

**SECTION A (10 MARKS)**

**Answer all the questions in this section in the answer sheet provided below**

**ANSWER SHEET FOR MCQ (SINGLE RESPONSE QUESTIONS)**

REG. NO \_\_\_\_\_

COURSE CODE AND TITLE \_\_\_\_\_

SECTION \_\_\_\_\_

	a	b	c	d	e
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

**SECTION A Multiple choice question (10mks). Answer ALL question (Tick in the appropriate boxes)**

**MCQ1.** Which of the following statements is not true about neurotransmitter

a) Epinephrine is an excitatory neurotransmitter that is reflective of stress

b) Dopamine is both excitatory & inhibitory neurotransmitter

**MCQ6.** In behavioural change, self-efficacy is a judgement of one's ability to perform a demanding task

- A. False                      B. True

**MCQ7.** Tick the statement that is not true about Pica.

- a) Pica is sometimes associated with nutritional toxicities.
- b) Amylophagia is the consumption of paint chips
- c) Geophagia is the consumption of earth & clay
- d) Iron deficiency anaemia is a nutritional hazard associated with pica
- e) Amylophagia is the consumption of starch & paste

**MCQ8.** Schizophrenia is caused by impairment of dopamine-containing neurons in the brain.

- A. True                              B. False

**MCQ9.** Identify a statement that is not true about maternal diets and infants

- a) At births babies' heads are much closer to their final size than are their bodies
- b) At birth, the brain reaches 70% size and 25% weight of an adult brain
- c) Brain development starts early in pregnancy and is largely finished by two years after birth
- d) Supplementation and improved diet in toddler stage can reverse brain development impairments
- e) Maternal lack of iodine during pregnancy is associated with varying degrees of brain disabilities of new borns.

**MCQ10.** Classical conditioning is one of the treatment options for obesity and involves bariatric surgery.

- A. True                              B. False

### **SECTION B (10MKS)**

**Answer all the question in the booklet provided**

**SAQ11.** In which **TWO (2)** ways are neurotransmitter levels depleted? (1mk)

**SAQ12.** Explain the Health Belief model outlining the 4 factors that need to take place for a behavior change to occur (3mks)

**SAQ13.** Describe the basic causes of undernutrition (2mks)

**SAQ14.** Outline 2 structural pathology of the brain associated with malnutrition (1mks)

**SAQ15.** Identify **TWO (2)** objectives of nutritional management of obesity (2mks)

**SAQ16.** Describe hyperactive behavior & its association with food intake (1mk)

### **SECTION C (40 MARKS)**

**Answer any FOUR questions**

**LAQ17.** Discuss how environmental factors can influence food choices (10mks)

**LAQ18.** Describe the role of nutrition in neurotransmission (10mks)

**LAQ19.** Describe the stages of change model outlining relevant examples in behavior change (10mks)

**LAQ20.** (a) Discuss the relationship between stunting and poor mental development (6mks)

b) Explain the effects of low birth weights (4mks)

**LAQ21.** (a) Explain factors contributing to current increase in childhood obesity (5mks)

b) Analyze the psychological risk factors of obesity in adulthood (5mks)

**LAQ22.** (a) Discuss ways in which the social learning theory can inform a practicing nutritionist giving relevant examples (6mk)

b) Explain the malnutrition –infection cycle (4mks)