



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN NUTRITION AND DIETETICS WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

PMT 212: HUMAN PHYSIOLOGY II

Date: 22nd February, 2018

Time: 3.30 - 6.30 pm

INSTRUCTIONS:

- This paper is made up of three (3) sections, A, B, and C.
- Section A has 20 marks and is composed of multiple choice questions (MCQs)
- Section B has 20 marks and is composed of short answer questions (SAQs)
- Section C has 30 marks and is composed of Long Answer Questions (LAQs)
- Answer ALL questions in SECTION A and B in the spaces provided in the question paper.
- Answer any TWO (2) questions in SECTION C in the answer booklet provided.



SECTION A (20 MARKS)
ANSWER SHEET FOR (TRUE/FALSE) QUESTIONS

REG. NO _____
COURSE CODE AND TITLE _____
SECTION _____

	T	F
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

ANSWER ALL QUESTIONS IN THIS SECTION

Indicate with letters " T " or " F " Whether the following statements are true/ false respectively (10 marks)

MCQ1. Tympanic membrane is a thin membrane that forms boundary between outer and middle ear.

MCQ2. Nerve cell is the basic structural unit of the nervous system

MCQ3. Cerebrum is the smallest section of the brain.

MCQ4. Central nervous system is composed of the brain alone.

MCQ5. Tinea is a skin infection caused by fungi

MCQ6. Nasal septum is the medial wall of the nose

MCQ7. Nose is both a sensory and a respiratory organ

MCQ8. Cornea reflects light in the eyeball.

MCQ9. The ear Auricle reflects sound

MCQ10. Skin is the largest organ in the body.

ANSWER SHEET FOR MCQ QUESTIONS

REG. NO _____
COURSE CODE AND TITLE _____
SECTION _____

	a	b	c	d	e
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Choose the correct answer(s) that apply to each of the following questions (10 marks)

MCQ11. The following are functions of cerebrospinal fluid except?

- a. Shock absorbing medium
- b. Provides an optimum and stable environment for generating nerve impulses
- c. Provides a medium for the exchange of nutrients
- d. Provides a medium for wastes between blood and nervous tissue
- e. Helps in body balance

MCQ12. Which of the following parts of the ear Equalizes” air pressure in middle ear?

- a. Tympanic membrane.
- b. Cochlea.
- c. Eustachian tube.
- d. Stapedius muscle.
- e. Ear lobe.

MCQ13. Accessory structures of the skin include the following except?

- a. Hair and nails
- b. Glands
- c. Blood vessels,
- d. Muscles and nerves Arteries
- e. Heart

MCQ14. The following are functions of aqueous humor of the eye except

- a. maintains intraocular pressure;
- b. maintains shape of eyeball

- c. acts as refractory medium;
- d. supplies nutrition
- e. maintains the body pH

MCQ15. Which one of the following is the main function of cerebrospinal fluid

- a. Serves as shock absorber to protect brain and spinal cord
- b. Helps in body balance
- c. Maintains body temperature
- d. Provides mechanical barrier to the spinal cord
- e. Make the spinal cord flexible

MCQ16. Which of the following is not a layer of the retina?

- a. pigmented layer
- b. layer of rods and cones
- c. outer limiting membrane
- d. outer nuclear layer
- e. Permeating layer

MCQ17. Which one of the following is not a paranasal sinus

- a. Maxillary sinus
- b. Ethmoid sinus
- c. Frontal sinus
- d. Sphenoid sinus
- e. Parietal sinus

MCQ18. Which of the following parts of the brain is mainly responsible for the endocrine function

- a. Hypothalamus
- b. Medulla oblongata
- c. Brain stem
- d. Thalamus
- e. Cerebellum

MCQ19. Which part of the ear converts mechanical energy to electrical energy

- a. Eustachian tube
- b. Cochlea
- c. Stapedius muscle
- d. External auditory system
- e. Internal auditory system

MCQ20. Which of the following is not a main component of hearing mechanism

- a. Tympanic membrane

- b. Outer Ear
- c. Middle Ear
- d. Inner Ear
- e. Central Auditory Nervous System

SECTION B (20 Marks)
ANSWER ALL QUESTIONS IN THIS SECTION

SAQ21. Define the following terms:

- i. Visual acuity (2marks)
- ii. Field of vision (2 marks)

SAQ22. List **THREE (3)** infections of the skin. (3marks)

SAQ23. Briefly describe the light and dark adaptation of the eye. (5 marks)

SAQ24. Name three hormones produced by thyroid gland. (3 marks)

SAQ25. List 4 Mechanisms of Disease – Skin Disorders. (4 marks)

SAQ26. What is the role of motor output as function of the nervous system?
 (1 mark)

SECTION C (30 MARKS)

Each question in this section carries FIFTEEN (15) MARKS. Answer any TWO (2) questions in the answer booklet provided.

LAQ27. Describe the function of major components of brain (15 marks)

LAQ28. Discuss 5 major functions of the skin. (15 marks)

LAQ29. Discuss the function of the following parts of the nose

- i. Nasal cavity
- ii. Mucosa membrane and cilia
- iii. Nasal ridge
- iv. Septum
- v. External nares

(15 marks)

LAQ30. Using an illustration discuss the optical system of the eye ball. (15 marks)