



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2015/2016**

COURSE NAME : HUMAN STRUCTURE AND  
FUNCTIONS

COURSE CODE : DAS26303

PROGRAMMECODE : 2 DAU

EXAMINATION DATE : JUNE / JULY2016

DURATION : 3HOURS

INSTRUCTION : **SECTION A: ANSWER ALL QUESTION**  
**SECTION B: ANSWER ANY TWO (2)**  
QUESTIONS

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

**SECTION A**

- Q1** (a) (i) List all three (3) major parts of a neuron structure.  
(i) State the function of each parts of neuron structure. (6 marks)
- (b) (i) List all three (3) types of neuron.  
(ii) Draw all three (3) type of neuron to show sensory transmit due to respond of hand touching a hot surface. Locate arrows to show the signal transmission movement. (9 marks)
- Q2** (a) (i) Define hormone.  
(ii) State the structure that secrete hormone.  
(iii) State how does hormone been carried throughout the whole body. (3 marks)
- (b) (i) Explain how a specific cell can respond to a hormone.  
(ii) State two (2) types of hormone and explain the action of each type. (6 marks)
- (c) List three (3) hormones secreted by anterior pituitary gland and give the function of each hormone. (6 marks)
- Q3** (a) (i) Define sensory receptor.  
(ii) List two (2) type of sensory receptor. Give the location and function of each sensory receptor. (7 marks)
- (b) State the type of receptor and the action of each to interpret the stimulation in  
(i) Human tongue.  
(ii) Human nose.  
(iii) Human eye.  
(iv) Human ear. (8 marks)
- Q4** (a) (i) Give the specific name of the reproductive organ for male and female.  
(ii) State the main function of the gonad. (3 marks)
- (b) (i) Draw and label a structure of sperm.  
(ii) Give the function of each parts of the sperm's structure. (6 marks)
- (c) Explain the function of three (3) hormones in female reproduction system. (6 marks)

**SECTION B**

- Q5** (a) (i) State the special element in muscle tissue that give characteristics to muscle tissue.  
 (ii) List all type of muscle tissue and give the location of each type.  
 (iii) Draw the structure of each type of muscle tissue. (10 marks)

- (b) (i) State two (2) main structures in a human body that are made up from squamous epithelial tissue.  
 (ii) Explain one (1) of the special characteristics of epithelial tissue.  
 (iii) Draw structure of stratified cuboidal epithelium tissue. Give the location and specific function of this type of tissue. (6 marks)

- (c) Copy and complete the **Table 1** below in your answering booklet.

**Table 1:** Function and location of connective tissue

<b>Connective tissue</b>	<b>Location</b>	<b>Function</b>
Dense connective tissue		
Fluid connective tissue		

(4 marks)

- Q6** (a) (i) Give three (3) functions of human skeletal.  
 (ii) List two (2) types of tissue in human skeletal and their function.  
 (ii) Human skeletal is divided into two major parts. List all parts and give the main function of each type. (11 marks)

- (b) List the functions of the vertebrae listed below:  
 (i) Axis.  
 (ii) Atlas.  
 (iii) Lumbar vertebrae.  
 (iv) Sacral vertebrae.  
 (v) Thoracic vertebrae. (5 marks)

- (c) (i) Give two (2) major function of ribcage.  
 (ii) State the type of connective tissue that can be found in the ribcage structure. (4 marks)

- Q7** (a) (i) Explain four (4) major function of cardiovascular system.  
(ii) Name the major circuit of cardiovascular system. (10 marks)
- (b) Explain the characteristics of blood capillary that permits gasses and minerals exchange. (2 marks)
- (c) (i) Give three (3) functions of blood.  
(ii) State the proteins in blood that carry oxygen.  
(iii) Copy and complete the **Table 2** below in your answering booklet.

**Table 2:** Antibody and antigen of blood

<b>Blood type</b>	<b>AB</b>	<b>O</b>
Antigen		
Antibody		

(8 marks)

- Q8** (a) (i) Give the main function of respiratory system.  
(ii) Explain what happens to the inhalation air before entering lungs.  
(iii) Copy and complete the **Table 3** below in your answering booklet.

**Table 3:** Inhalation and exhalation process

<b>Process</b>	<b>Ribcage</b>	<b>Diaphragm</b>	<b>Air pressure in lungs</b>
Inhalation			
Exhalation			

(11 marks)

- (b) (i) State two (2) functions of urinary system.  
(ii) State the functional unit of kidney.  
(ii) Explain each steps in urine formation. (9 marks)

**-END OF QUESTIONS -**