



HCU-003-038101

Seat No. _____

**B. Voc. (Medical Laboratory & Molecular
Diagnostic Technology) (Sem. I)
(CBCS) Examination**

October / November - 2017

**MLMDT - 1.1 : Fundamentals of Anatomy &
Physiology**

Faculty Code : 003

Subject Code : 038101

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions : (1) All questions are compulsory.

(2) Figures on right indicate marks.

1 Answer the following Questions : 20

- (1) Give examples of Plasma Protein.
- (2) Name Natural Pacemaker.
- (3) Define : Plasma.
- (4) Valve located between the right atrium and right ventricle is _____.
- (5) Give one example of neurotransmitter.
- (6) Which hormone is responsible for formation of corpus luteum in the ovary.
- (7) The trachea divides into two smaller tubes called _____.
- (8) Instrument used for blood pressure measurement is known as _____.
- (9) Enlist Types of WBCs.
- (10) Which organs are present in abdominal cavity ?

- (11) Fertilization takes place at _____.
- (12) The trachea divides into two smaller tubes called _____.
- (13) Define : Peristalsis.
- (14) Define : Vital Capacity.
- (15) Enlist the types of tissues in human body.
- (16) Which part of a neuron contains the nucleus ?
- (17) The cluster of blood capillaries found in each nephron is called as _____.
- (18) Enlist accessory digestive organs.
- (19) The smallest bones in the ear are collectively known as the ?
- (20) Which muscle tissue is multinucleate, voluntary, and bears striations ?

2 (A) Answer the following Questions : (any 3 out of 6) **6**

- (1) Enlist Functions of Respiratory System.
- (2) Give functions of Blood.
- (3) Enlist the enzymes and hormones produced by stomach.
- (4) Enlist types of respiration.
- (5) Differentiate Arteries and Veins.
- (6) Enlist the types of epithelial tissues.

(B) Answer the following Questions in Brief : **9**
(any 3 out of 6)

- (1) Draw a labeled diagram of Heart.
- (2) Explain the stages of cardiac cycle.
- (3) Note on Salivary Gland.
- (4) Note on Spermatogenesis.
- (5) Write in brief about types of WBCs.
- (6) Note on Heart Valves.

- (C) Answer the following Questions in Detail : 10
(any 2 out of 5)
- (1) Describe about different circulations of Heart.
 - (2) Explain Respiratory Cycle.
 - (3) Describe Respiration Cycle and Breathing.
 - (4) Role of accessory organs in digestion of food.
 - (5) Describe composition of Plasma.
- 3** (A) Answer the following Questions : (any 3 out of 6) 6
- (1) Write of Function of Skin.
 - (2) Differentiate Smooth muscle and Skeletal muscle.
 - (3) Write the functions of middle ear in brief.
 - (4) Write the functions of endometrium.
 - (5) State the function of spinal cord.
 - (6) Note on neuromuscular junction.
- (B) Answer the following Questions in Brief : 9
(any 3 out of 6)
- (1) Describe role of prostate gland in male reproductive system.
 - (2) Define hormone. Distinguish between endocrine and exocrine glands.
 - (3) Draw the labeled structure of nephron.
 - (4) Enlist the hormones of anterior pituitary gland.
 - (5) Write the functions of pancreas.
 - (6) Draw a labeled diagram of multipolar myelinated neuron.
- (C) Answer the following Questions in Detail : 10
(any 2 out of 5)
- (1) Explain mechanisms of muscle contraction.
 - (2) Describe the mechanism of synapse.
 - (3) Explain the regulation of water input and water output. Explain the importance of water and electrolyte balance.
 - (4) Note on process of Urine Formation.
 - (5) Describe about External Genitalia in female and associated structures.