



MAS-003-038101

Seat No. _____

**B. Voc. (Medical Laboratory & Molecular
Diagnostic Technology) (Sem. I) (CBCS) Examination
October / November – 2016
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 : **20**

- (1) Explain Term : Plasma
- (2) What is blood?
- (3) Write the types of WBC in the blood.
- (4) Enlist the types of tissues in human body
- (5) Which organs are present in abdominal cavity?
- (6) What is multilayer epithelial tissue known as?
- (7) Which muscle tissue is multinucleate, voluntary and bears striations?
- (8) Instrument used for blood pressure measurement is known as _____
- (9) The exchange of gases and nutrients between blood and tissues is a major function of _____
- (10) Valve located between the right atrium and right ventricle is _____
- (11) Define Cardiac Output.
- (12) What are the accessory digestive organs?
- (13) What is peristaltic movement?
- (14) The cluster of blood capillaries found in each nephron is called as _____
- (15) Give one example of neurotransmitter.

- (16) Which hormone is responsible for formation of corpus luteum in the ovary ?
- (17) Where is fertilization most likely to occur?
- (18) The smallest bones in the ear are collectively known as the?
- (19) Albumin, globulins, and fibrinogen are examples of _____ proteins.
- (20) The trachea divides into two smaller tubes called _____.
- (21) Which part of a neuron contains the nucleus ?

2 (a) Answer in brief : (any 3) **3×2=6**

- (1) Enlist the types of epithelial tissues.
- (2) Enlist major function of Blood.
- (3) Write about Natural Pacemaker of Heart.
- (4) Enlist organs and functions of respiratory system.
- (5) Enlist the enzymes and hormones produced by stomach.
- (6) Differentiate Arteries and Veins.

(b) Answer in brief : (any 3) **3×3=9**

- (1) Differentiate Cardiac muscles and Skeletal muscles.
- (2) Write in brief about types of WBCs.
- (3) Explain the stages of cardiac cycle.
- (4) Describe types of respiration and gases transport.
- (5) Write the types of salivary gland in the mouth and its composition.
- (6) Note on Spermatogenesis.

(c) Answer in detail : (any 2) **2×5=10**

- (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 in brief : (any 3) **3×2=6**
- (1) Write the functions of endometrium.
 - (2) Write the comparison of skeletal and cardiac muscle.
 - (3) Write a short note on neuromuscular junction.
 - (4) Write down various functions of skin.
 - (5) Write the functions of middle ear in brief.
 - (6) State the function of spinal cord.
- (b) Answer in brief : (any 3) **3×3=9**
- (1) Draw a labeled diagram of multipolar myelinated neuron.
 - (2) Enlist the hormones of anterior pituitary gland.
 - (3) Write the functions of pancreas.
 - (4) Describe role of prostate gland in male reproductive system,
 - (5) Draw the labeled structure of nephron.
 - (6) Define hormone. Distinguish between endocrine and exocrine glands.
- (c) Answer in detail : (any 2) **2×5=10**
- (1) Describe the mechanism of synapse.
 - (2) Explain the regulation of water input and water output. Explain the importance of water and electrolyte balance.
 - (3) Describe about External Genitalia in female and associated structures.
 - (4) Explain mechanism of muscle contraction.
 - (5) Explain the process of urine formation.
-