

Roll No. ....

**V - 4681**

**B. Pharmacy (First Semester)**  
**EXAMINATION, Nov./Dec., 2019**

**HUMAN ANATOMY AND  
PHYSIOLOGY-I**

*Time : Three Hours*

**Maximum Marks : 75**

**Note-** Attempt any five questions. All questions carry equal marks.

1. (a) Draw a neat labelled diagram of cell and describe structure and functioning of mitochondria.  
(b) Explain general principles of cell communication.
2. (a) Classify different types of tissue.  
(b) Enlist the function of epithelial and connective tissues.
3. (a) Classify joints and explain various types of joint movements.  
(b) Discuss the physiology of skeletal muscle contraction.

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4. (a) Write functional classification of bone and type of joints movements.  
(b) Explain Lymph circulation and function of Lymphatic system.
5. (a) Explain generation of action potential in Nerves.  
(b) Differentiate between sympathetic and parasympathetic Nervous system.
6. (a) Explain anatomy of heart and cardiac cycle.  
(b) Write conduction system of heart and electrocardiogram.
7. (a) Give a note on structure, function and disorder of eye.  
(b) Discuss composition, function and Hemopoiesis of blood.
8. Write notes on (any three)-  
(a) Blood groups  
(b) Neuro muscular Junction  
(c) Homeostasis  
(d) Structure of Ear.

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**100**