

**B. PHARM.  
FIRST SEMESTER  
HUMAN ANATOMY & PHYSIOLOGY  
BP101T [REPEAT]  
[USE OMR FOR OBJECTIVE PART]**

**SET  
A**

Duration : 3 hrs.

Full Marks : 75

**( PART-A: Objective )**

Time : 30 min.

Marks : 20

1×20=20

*Choose the correct answer from the following:*

- The passage of solvent across a selectively permeable membrane from an area of higher to lower solvent concentration is
  - Osmosis
  - Diffusion
  - Active transport
  - Facilitated diffusion
- Which is not the characteristic of skeletal muscle
  - Multinucleated in nature
  - Presence of striations
  - Involuntary in nature
  - Helps in movement of skeleton
- The name of most numerous, large, flat cells with branching processes found in connective tissue is
  - Fibroblast
  - Plasma cell
  - Adipocyte
  - Mast cell
- The reason why the Sino Atrial node is the natural pacemaker of heart
  - Only part of the conducting system generating impulse
  - Generates the highest number of action potentials in the conducting system
  - Located in the right atrium
  - None of the above
- Haemopoiesis means formation of
  - Erythrocyte
  - Platelet
  - Leukocyte
  - All of the above
- Which of the following nerve transmits sensory information to the brain regarding smell
  - Optic nerve
  - Olfactory nerve
  - Trigeminal nerve
  - Oculomotor nerve
- Each hemoglobin contains \_\_\_\_\_ molecules of iron
  - 4
  - 2
  - 6
  - 5
- In human cell, which organelle stores  $Ca^{2+}$ ?
  - Mitochondria
  - Nucleus
  - Sarcoplasmic reticulum
  - Golgi complex
- What is the main function of rods in the eyes?
  - Depth perception
  - Color vision
  - Vision in dim light
  - Accommodation for near vision



**PART-B: Descriptive**

Time : 2 hrs. 30 min.

Marks : 35

*[ Answer any seven (7) questions ]*

1. Write the structure and functions of skin? 5
2. Name the three major types of blood vessels and write the structure and functions of blood vessel? 5
3. Write the structural and functional classification of joints. 5
4. Write a note on spinal nerves. 5
5. Explain the structure, function and location of epithelial tissue. 5
6. Describe the basic life processes. 5
7. Write a short note on Lymphatic system. 5
8. Write the anatomy and diseases of eye. 5
9. Name the bones of Axial and Appendicular skeleton. 5

**PART-C : Long type questions**

*[ Answer any two (2) questions ]*

1. Explain the mechanism of blood coagulation. 10
2. Describe the anatomy of heart. Enumerate the pulmonary circulation. 10
3. What is blood? Describe its composition. 10