

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: B.PHARM  
BRANCH: PHARMACY**

**SEMESTER: I  
SESSION: MO/2022**

**SUBJECT: BP101T HUMAN ANATOMY AND PHYSIOLOGY I**

**TIME: 3.00 Hours**

**FULL MARK: 75**

**INSTRUCTIONS:**

1. The missing data, if any, may be assumed suitably.
  2. Before attempting the question paper, be sure that you have got the correct question paper.
  3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
  4. This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.
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**PART-I**

**Objective type questions (Instruction: Answer all questions)**

- Q1. (10 x 2 = 20 Marks)
- A. Differentiate active and passive transport.
  - B. Define Homeostasis.
  - C. Write the names and numbers of cranial bones.
  - D. Differentiate tendon and ligament.
  - E. Define agglutination.
  - F. Differentiate Blood, Plasma and Lymph.
  - G. Mention the number and types of spinal nerves.
  - H. Write the names and shape of ear ossicles.
  - I. In which artery BP is measured and Why?
  - J. Define cardiac output.

**PART-II**

**Short Answers**

**(Instruction: Answer seven out of nine questions)**

(7 x 5 = 35 Marks)

- Q2. Describe the structure, location and functions of epithelial tissue and nervous tissue.
- Q3. Describe different forms of intercellular signaling pathways.
- Q4. Explain the structure of Synovial joint. Describe different types of synovial joints.
- Q5. Draw the structure of skeletal muscle. Explain the physiology of muscle contraction.
- Q6. Explain the intrinsic and extrinsic pathways of Blood coagulation.
- Q7. Describe the structure and function of a Lymph Node.
- Q8. Differentiate Sympathetic and Parasympathetic nervous system and explain their effects on digestive and cardiovascular systems.
- Q9. Describe the anatomy and physiology of Eye.
- Q10. Write short notes on Cardiac Cycle and Heart sounds.

**PART-III**

**Long Answers**

**(Instruction: Answer two out of three questions)**

(2 x 10 = 20 marks)

- Q11. Explain the classification of nervous system. Describe cranial nerves in detail.
- Q12. Describe the structure and functions of the heart. Explain the blood circulation pathways in the body.
- Q13. Describe the structure and functions of the bones present in upper extremities.

:15/03/2023:M