

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

**CLASS: BPHARM  
BRANCH: PHARMACY**

**SEMESTER: I/BACKLOG  
SESSION: MO 2018**

**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 types questions (Instruction: Answer all questions)**

Q1. (10 x 02 = 20 marks)

- A. Melanin in skin is derived from-----
- B. Intracellular fluid accounts for what % of body weight-----
- C. Cadherins are cell adhesion which are dependent on-----
- D. How much red blood cells are there in human body-----
- E. Hormone erythropoietin regulating RBC production is produced in-----
- F. One third of platelets are stored in-----
- G. The level of which cell goes up in infection/ malignancy-----
- H. In a resting heart the cardiac output per minute is-----
- I. The pulmonary pressure should be less than-----mm of mercury.
- J. Elastic tissue is present in which layer of arteries-----

**PART-II**

**Short Answers**

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

(7 x 5 = 35 marks)

- Q2. Give different modes of transport across cell membrane.
- Q3. Describe and classify muscular tissue.
- Q4. Give different types of cell junctions.
- Q5. What functions are performed by the skin?
- Q6. Discuss vertebral column and it's functions.
- Q7. Describe cardiac cycle and conducting system of the heart.
- Q8. Discuss the effects of autonomic stimulation on cardiovascular system and respiratory system.
- Q9. Give the structure and functions of different parts of eye.
- Q10. Show cranial nerves and it's functions using a diagram.

**PTO**

**PART-III**  
**Long Answers**  
**(Instruction: Answer two out of three questions)**

(2 x 10 = 20 marks)

- Q11. Describe and classify connective tissue and the type of cells found in the connective tissue.
- Q12. Discuss blood pressure, cardiac output and factors effecting heart rate.
- Q13. Give the structure of ear write down the physiology of hearing and balance.

:::03/12/2018:::M