

MS-014-1041001 Seat No. _____

M. P. M. (Sem. I) (CBCS) Examination

January - 2018

Human Anatomy & Physiology – I (BP-101 T)

Faculty Code: 014 Subject Code: 1041001

Time: 3 Hours] [Total Marks: 75

Instructions:

- (1) Figure to the right indicates full marks.
- (2) Draw neat and clean diagram wherever required.
- 1 Answer the following questions:

 $10 \times 02 = 20$

- a) Define: A. Mitosis B. Meiosis
- b) Differentiate Somatic and Reproductive Cell Division.
- c) Explain 'Referred Pain'.
- d) Draw neat and labelled diagram of lymphatic vessel.
- e) Write structural composition of lipid bilayer of cell membrane.
- f) Enumerate organs which constitute the lymphatic system.
- g) Differentiate between : Active transport and Passive transport.
- h) Give functions of RBCs.
- i) What is CCF?
- j) Name three smallest bones in human body.

- 2 Answer any two out of the following: $02\times10=20$
 - a) Draw neat and labeled diagram of Heart. Explain in detail about Cardiac Cycle and Pulmonary Circulation.
 - b) Describe the structure of cell membrane with appropriate diagram. Give functions of mitochondria and nucleus.
 - c) Describe in detail about basic life process of human being.
- 3 Answer any seven out of the following: 07×05=35
 - a) Explain in brief about cell cycle.
 - b) Enumerate different cranial nerves. Give significance of any two.
 - c) Draw neat and labeled diagram of internal anatomy of ear.
 - d) Define feedback system. Write a short note on negative feedback system.
 - e) Explain in detail about blood clotting mechanism.
 - f) Classify tissues. Draw neat and labeled diagram of a neuron.
 - g) Explain in detail about levels of structural organization of human body.
 - h) Enumerate various bones of the skull, lower limbs and vertebra.
 - i) Write a short note on synovial joints.