6871

Your Roll No

M.Sc. BIOMEDICAL SCIENCES / II Sem. J

Paper · MBS-205— HUMAN PHYSIOLOGY - I (Admissions of 2009 and onwards)

Time 3 hours

Maximum Marks 70

(Wrue your Roll No on the top immediately on receipt of this question paper)

Attempt all questions

- 1 Give the composition of blood Discuss the physiology of blood clotting 10
- 2 Define arterial blood pressure (ABP) and its components Describe in detail the regulation of ABP.

10

- 3. Write short notes on
 - Non-respiratory functions of lung
 - (11) Glomerular filteration rate
 - (iii) Functions of saliva
 - (1v) Neural regulation of respiration
 - (v) Properties of cardiac muscle

 $5 \times 4 = 20$

4 Differentiate.

- (1) Myelinated and Unmyelinated nerves
- (u) Secondary active transport and Facilitated diffusion
- (111) Anelectrotonic and Cathelectrotonic potentials.

 $4 \times 3 = 12$

5 Draw well labelled diagrams

- (1) Mechanism of HCl secretion
- (u) Neuromuscular junction.

4×2=8

6 Give reasons:

- (i) Why can heart muscle not be tetanised?
- (ii) Why do skeletal muscles develop maximum tension at optimal length? $2.5 \times 2=5$

7 Define:

- (1) Cardiac output
- (11) Anemia
- (uu) Action potential
- (iv) Dead space
- (v) Homeostasis.

 $1 \times 5 = 5$