[LF 6253] **AUGUST 2014 Sub. Code: 6253**

FIRST YEAR BPT EXAM PAPER III – PHYSIOLOGY AND APPLIED PHYSIOLOGY

Q.P. Code: 746253

Time: Three hours Maximum: 100 marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define hemostasis. Discuss in detail the two pathways of coagulation. Add a note on hemophilia.

2. Explain the molecular mechanism of contraction in skeletal muscle with a suitable diagram. Add a note on myasthenia gravis.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Function of saliva.
- 2. Oxygen-hemoglobin dissociation curve (ODC).
- 3. Methods to estimate cardiac output.
- 4. Actions of insulin.
- 5. Reflex arc.

6. Passive transport across the cell membrane.7. Erythroblastosis foetalis.8. Neuroglia.Short Answers: **III. Short Answers:** $(10 \times 2 = 20)$

- 1. Name the agranulocytes of white blood corpuscles (WBC).
- 2. What is succus entericus? Name one enzyme present in it.
- 3. What is surfactant? What is it's function?
- 4. Name the normal pace-maker of heart. What is the normal heart rate?
- 5. What are the hormones involved in calcium metabolism?
- 6. Name the fat soluble vitamins.
- 7. What are the layers of glomerular filtering membrane?
- 8. Name any two inhibitory neurotransmitters.
- 9. Write any four properties of cardiac muscle.
- 10. Draw a net diagram of a synapse and label the parts.
