CS/B.PHARM/SEM-2/PT-205/2013

2013

PHYSIOLOGY

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words

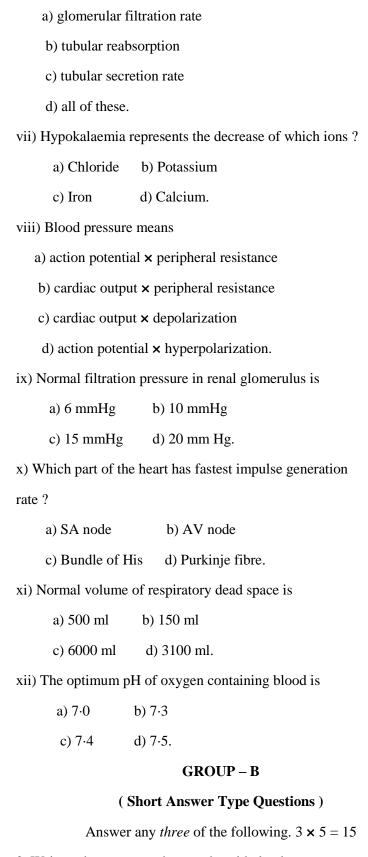
as far as practicable.

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any ten of the following:

- $10 \times 1 = 10$ i) Glucose reabsorption takes place in the a) Bowman's capsule b) first half of the proximal tubule c) distal tubule d) none of these. ii) Meltonin is secreted by
 - - a) thyroid gland
- b) adrenal gland
- c) peneal gland
- d) parathyroid gland.
- iii) The pulmonary gas exchange takes place by
 - a) active transport
- b) filtration
- c) diffusion
- d) osmosis.
- iv) Which of the following substances is inactivated by the lungs?
 - a) Serotonin
- b) Noradrenaline
- c) Angiotensin I
- d) Bradykinin.
- v) Non-nucleated blood cells are
 - a) mature RBC
- b) immature RBC
- c) WBC
- d) both (a) and (b).
- vi) Urinary excretion rate depends on



- 2. Write a short note on the parathyroid gland.
- 3. Describe the extrinsic prothrombin activation pathway of clotting with the help of flow chart.

- 4. What is E.C.G. ? What do you mean by PQRST ?
- 5. Describe briefly the structure of nephron.
- 6. Write a note on the conducting tissues of the heart.

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

- 7. What are the organs of digestive system? Write down the mechanism of gastric acid secretion. What are the functions of liver and stomach? 3+7+5
- 8. Write in detail about the hormones secreted from anterior pituitary gland and posterior pituitary gland.
- 9. Define tidal volume, vital capacity, inspiratory reserve volume, expiratory reserve volume, residual volume with their normal value. What are the factors affecting pulmonary and systemic gas exchange? Write briefly about oxygenhaemoglobin dissociation curve. 1+1+1+1+1+5+5
- 10. Write about various stages of Erythropoiesis. What is the fate of haemoglobin? What is anemia? 7 + 7 + 1
- 11. a) Define blood pressure. What do you mean by arterial pressure and pulse pressure? What is the normal blood pressure? What do you mean by hypertension?
- b) How do insulin and glucagon regulate blood glucose

level? (1+4+1+2)+7
