



International Islamic University Chittagong

Department of Pharmacy

B.Pharm (Hons) Program

Final Examination

Spring 2018 Semester

Course Code: Pharm-2309

Course Title: Human Physiology-1

Time: 2 hours 30 minutes

Full Marks: 50

Answer of separate groups should be given in separate script. Figures in right margin indicate marks)

Group A (Answer any two questions from the followings) **Marks: 20**

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|------|----|---|-----|
| I. | a) | Name and discuss the various accessory organs involved in digestion. | 5 |
| | b) | Describe the role of liver and pancreas in the digestion process. | 5 |
| II. | a) | Explain what is metabolism? How do liver act as a storage organ? | 2+2 |
| | b) | Discuss the mechanical and the chemical part of digestion. | 4 |
| | c) | Briefly discuss about the secretory products of the pancreas. | 2 |
| III. | a) | What is peristalsis? Describe the movements involved in persistalsis. | 3 |
| | b) | Discuss mechanism of secretion of HCl. | 4 |
| | c) | Why stomach is not affected by HCl? | 3 |

Group B (Answer any three questions from the followings) **Marks: 30**

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|------|----|---|-----|
| IV. | a) | Discuss the intrinsic conducting system of the heart. Name the tissues involved. | 3+2 |
| | b) | What is blood pressure? Define the systolic and the diastolic blood pressure. | 1+2 |
| | c) | Explain the neural mechanism for the regulation of blood pressure. | 2 |
| V. | a) | Discuss the relation between alveolar perfusion and ventilation? | 3 |
| | b) | Explain the Bohr effect and draw a graphical presentation to demonstrate it. | 4 |
| | c) | Briefly discuss the various types of pressure involved in breathing. | 3 |
| VI. | a) | Briefly discuss the long term regulation of blood pressure | 4 |
| | b) | Draw and label the electrocardiogram wave with the appropriate contents. | 3 |
| | c) | Shortly discuss about the terms cardiac output and strokes volume. | 2+1 |
| VII. | a) | Describe the types and functions of respiration. Name the muscles that are involved in respiration. | 2+2 |
| | b) | Explain the mechanism for expiration involved in breathing. | 4 |
| | c) | Define the words inspiratory reserve volume and residual volume. | 1+1 |