

*Allied Health Sciences*

UNIVERSITY OF JAFFNA, SRI LANKA  
FACULTY OF ALLIED HEALTH SCIENCES  
First Year First Semester Examination in BPharmHons- 2021  
PHAPP 1163 PHYSIOLOGY FOR PHARMACY I - PAPER II

Date: 12.12.2022

Time: 2 hours

**ANSWER ALL THE SIX QUESTIONS.**

1.
  - 1.1. Describe tissue fluid formation and reabsorption (40 Marks)
  - 1.2. A child is admitted with diarrhoea. Urine output of the child is reduced and the urine is concentrated and the colour is dark.
    - 1.2.1. Explain the basis of reduced urine output. (50 Marks)
    - 1.2.3. Name one suitable fluid for oral therapy and one fluid for intravenous therapy. (10 Marks)
  
2. Briefly describe the basis of giving:
  - 2.1. Erythropoietin to patients with chronic renal failure (30 Marks)
  - 2.2. Streptokinase to patients with myocardial infarction (30 Marks)
  - 2.3. Multiple doses tetanus toxoids to children (40 Marks)
  
3.
  - 3.1. Describe action potential in nerves (50 Marks)
  - 3.2. Explain the basis of increased sweating after giving Paracetamol for fever (50 Marks)
  
4.
  - 4.1. Describe the changes in pleural pressure during quiet breathing. (40 Marks)
  - 4.2. A university student with asthma was admitted with difficulty in breathing. His respiratory rate was 38/minute. He was treated with Salbutamol. Explain the basis of:
    - 4.2.1 The respiratory rate of 38/minute (40 Marks)
    - 4.2.2 Treating with Salbutamol (20 Marks)
  
5.
  - 5.1. Name the phases of cardiac cycle (20 Marks)
  - 5.2. Describe the pressure changes in the left ventricle during a cardiac cycle. (40 Marks)
  - 5.3. Briefly explain the factors affecting cardiac output. (40 Marks)
  
6. Explain the physiological basis of the following:
  - 6.1. Heart rate of 120 / minute in a patient with haemorrhage. (40 Marks)
  - 6.2. Increased pulse pressure in pregnancy (30 Marks)
  - 6.3. Decreased risk of ischaemic heart disease in individuals who are physically active from young age (30 Marks)