

Master Copy

POSTGRADUATE INSTITUTE OF MEDICINE  
UNIVERSITY OF COLOMBO

POSTGRADUATE DIPLOMA IN CHEMICAL PATHOLOGY  
EXAMINATION – JUNE 2017

Date :- 5<sup>th</sup> June 2017

Time :- 9.30 a.m. – 11.30 a.m.

ESSAY PAPER

All four (04) questions to be answered.  
Use a separate book for each question.  
Write legibly.

1. Discuss the **clinical significance** of any three (03) of the following.  
(Each component carries equal marks)
  - 1.1. IGF-1
  - 1.2. Fractional excretion of calcium
  - 1.3. hs-troponin I
  - 1.4. Prostate specific antigen (PSA) (100 marks)
  
2. Describe **one (01) method** for the measurement of **any three (03)** of the following, including analytical principle, calibration and interfering substances. (Each component carries equal marks)
  - 2.1. Alkaline phosphatase (ALP)
  - 2.2. Serum potassium
  - 2.3. Free T4
  - 2.4. HbA1c (100 marks)
  
3. Describe the metabolism of HDL-cholesterol. Briefly discuss the pathogenesis of conditions with low serum HDL-cholesterol concentration. (100 marks)
  
4. You are given the task of outlining a programme to reduce pre-analytical errors in a District General Hospital which has medicine, surgical, maternity and paediatric units. Discuss the factors you consider. (100 marks)