

UNIVERSITY OF BIRMINGHAM

MSc in Clinical Biochemistry (5602)

West Midlands Training Course in Clinical Biochemistry &
The University of Birmingham - College of Medical and Dental Sciences

1st & 2nd Year Essay Paper: 3rd July 2009

Enter your name and student ID number on all answer booklets.

Please answer one question from each module.

You will need to pass each module

Time allowed: 3 hours (0930 – 1230)

Module 3

1. Describe the classification, biochemical consequences and laboratory investigation of renal tubular acidosis.
2. Critically evaluate the analytical methods for the measurement of creatinine in serum and urine.

Module 7

1. Discuss the principles and applications of Capillary Zone Electrophoresis.
2. Write short notes on the biochemical findings, clinical features and laboratory investigations of **THREE** of the following:
 - a. Medium Chain Acyl-CoA Dehydrogenase Deficiency (MCADD)
 - b. Phenylketonuria (PKU)
 - c. Galactosaemia
 - d. Homocystinuria

Module 8

1. Critically discuss the use of tumour markers in the diagnosis and management of patients with cancer.
2. Describe the essential features of a Pathology Quality Management System.

Module 9

1. Describe the principle components of the acute phase response to inflammation. How can the acute phase response affect the interpretation of biochemistry results?
2. Discuss the laboratory services that are required to support an obstetric department in the management of pregnancy.