The Open University of Sri Lanka
Bachelor of Medical Laboratory Sciences (B.MLS)
MLU3242- Cell Biology and Basic Biochemistry
Semester 02- Academic year 2015/2016
No Book Test 02
Return your question paper with the answer sheet

Date: 30.03.2016	**Duration 1 1/2 hours**
Time: 10.00 a.m. – 11.30 a.m.	**Registration No.....**

Please read the following instructions carefully before you answer the paper.
(100 marks)

Part – A

There are 10 multiple choice questions in this part, each question with four responses. Select the **most suitable response** and mark the answer in the paper itself.

Part - B

You are given 10 statements in this part, state weather each statement is "**True**" or "**False**" by **underlining** the correct response, given in front of each statement.

Part C

You are given 2 short answer questions. Each question contains four parts. Answer all the questions.

Part – D

There is one structured essay question. Answer the question.

Good Luck!

Registration No.....

Part B – 10 True/ False (10 marks)

State whether the following statements are **True**" or "**False**" by **underlining** the correct response, given in front of each statement.

01 Transamination reaction needs pyridoxal phosphate as the coenzyme. (True/ False)

02 All purines are synthesized through the salvage pathway. (True/ False)

03 The heme group found in hemoglobin contains a centrally bound Fe(II) atom. (True/ False)

04 Denaturation of proteins changes the primary structure. (True/ False)

05 Histamine is a non protein amino acid. (True/ False)

06 Carbamoyl phosphate is required for the synthesis of pyrimidine (True/ False)

07 Arginie is a basic amino acid. (True/ False)

08 Glycine is used for the biosynthesis of Glutathione. (True/ False)

09 Normal serum levels of α-2-globulin is 6-12%. (True/ False)

10 Myoadenylate deaminase deficiency is a disorder of purine metabolism (True/ False)

Part C – Short Answer Questions (50 marks)

1.

1.1 List three (03) ways by which amino acids can be classified.

1.2 List four (04) forces stabilizing tertiary level of organization of proteins.

1.3. How does glutathione protects red blood cells form free radicals?

1.4. List two (02) functions of epinephrine.

2.

2.1. What is enterohepatic circulation of urobilinogen?

2.2. List two (02) unusual structures of DNA.

2.3. Outline how allopurinol can reduce the production of uric acid?

2.4. How do you estimate direct and indirect bilirubin levels in the laboratory?

Part – D (20 marks)

1 Compare DNA double helix and the α helix of proteins