



**University of Ruhuna - Faculty of Medicine**

**Allied Health Sciences Degree Programme**

**B.Sc. Nursing Degree Programme**

**1<sup>st</sup> End Semester Examination**

**NBI 1125- Biochemistry**

**SEQ paper**

**July 2015**

**Duration: One (1) hour**

**Index Number .....**

1.

1.1.

1.1.1. List five (5) functions of a cell.

**(10 marks)**

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1.1.2. Mention the structural components of the cell membrane.

**(10 marks)**

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**1.2**

**1.2.1.** List four (4) functions of proteins in the body

(4 marks)

**1.2.2.** Describe the different structural organizations of proteins.

(10 marks)

**1.3.** Write short notes on following,

**1.3.1.** Mitochondria

(8 marks)

### 1.3.2. Competitive inhibition of enzymes

(8 marks)

i.4 Explain the biochemical basis of following.

#### **1.4.1 Atorvastatin is used as a treatment of hypercholesterolemia**

(15 marks)

#### **1.4.2. Actinomycin D is used as an anticancer drug**

(15 marks)

#### **1.4.3 Development of severe hemolysis following administration of Primaquin in a malaria**

(20 marks)

2. Ms Sumana 45 year women was newly diagnosed as having type II Diabetes Mellitus. She is interested to know information regarding her disease conditions.

2.1

### 2.1.1 List three other carbohydrate metabolism disorders

(5 marks)