**Sylhet Women’s Medical College**

**1st Term supplementary examination**

**Subject: Biochemistry**

**SWMC-10 (SAQ)**

**Full marks -80 Time – 2hrs 40 min Date- 25.05.15**

(Answer any eight questions from each group. All questions carry equal marks.)

**GROUP –A**

1. Mention Handerson –Hasselbalch equation. Give it’s importances. 1+4
2. Give IUB classification of enzymes with example. What are the factors affecting enzyme activities? 3+2
3. Define isomerism. Mention the isomers of glucose. What is Chiral carbon? 1+3+1
4. What are the structural organizations of protein? What is denaturation of protein? 3+2
5. Define and classify lipid. Mention the functions of Phospholipid and cholesterol. 3+2
6. Define pH and buffer. How blood pH is maintained? 2+3
7. Name the essential fatty acids with their importance and deficiency manifestation. What is omega carbon? 4+1

8) What do you mean by reference sugar, invert sugar, Isotope, Km value, enzyme inhibition. 5

1. Define and classify polysaccharides. Give functions of mucopolysaccharides 3+2

**GROUP –B**

1. Define and classify nutrients. Name the energy releasing nutrients with their caloric value. 3+2
2. Define balanced diet.Calculate the balanced diet chart of a female medical student of 60 kg weight. 1+4
3. What is BMR? Mention the factors affecting BMR. Write the ways of energy expenditure in basal condition. 1+2+2
4. Define dietary fiber. Give its RDA, Source and functions. 1+4
5. Classify B complex vitamins. Mention their active form and deficiency features. 1.5+3.5
6. Name the toxic vitamins? Give sources, RDA, functions and deficiency features of vitamin A.1+4
7. Name the antioxidant vitamins. Write down sources, function and deficiency features of vitamin C? 1+4
8. Define macro and microminerals? State the functions of iron, iodine, zine. 2+3
9. What are the common nutritional problems in Bangladesh? State the difference between kwashiorkor and marasmus. 3+2