

I Year B.Sc. (Nursing - Basic) Degree Examination – Feb / Mar 2012

**Time: Three Hours**  
**Marks**

**Max. Marks: 80**

## PHYSIOLOGY & BIOCHEMISTRY - (Revised Scheme)

**Q.P. CODE: 1677 & 1678**

Four answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

**Use separate answer books for section A and section B**

### **Q.P. Code: 1677 – Section A – PHYSIOLOGY (40 Marks)**

#### **LONG ESSAYS (Answer any One)**

**1 x 10 = 10 Marks**

1. Describe the visual pathway with a diagram
2. Describe the formation of urine

#### **SHORT ESSAYS (Answer any Four)**

**4 x 5 = 20 Marks**

3. Describe the extrinsic pathway for clotting
4. Define and give normal values of a) Expiratory reserve volume b) Vital capacity
5. Describe the functions of progesterone
6. Describe the oxygen dissociation curve
7. Draw and label the conducting system of the heart

#### **SHORT ANSWERS**

**5 x 2 = 10 Marks**

8. Define motor unit
9. Name four gastro intestinal hormones
10. Name the centres for neural regulation of respiration
11. Define cardiac output
12. Name the sensations carried by dorsal column

### **Q.P. Code: 1678 – Section B – BIOCHEMISTRY (40 Marks)**

**Use separate answer book**

#### **LONG ESSAYS (Answer any One)**

**1 x 10 = 10 Marks**

1. Describe E.M. pathway of glycolysis & discuss how much ATPs are formed during aerobic and anaerobic pathways
2. Discuss the sources, functions, daily requirements & deficiency manifestations of vitamin A

#### **SHORT ESSAYS (Answer any Four)**

**4 x 5 = 20 Marks**

3. Lipoproteins – classification & functions
4. Structure & functions of Insulin
5. Formation & fate of ketone bodies
6. Cori's cycle & its significance
7. Metabolic acidosis

#### **SHORT ANSWERS**

**5 x 2 = 10 Marks**

8. Beri Beri
9. Anion gap
10. Organic constituents present in urine
11. Iso electric pH
12. Essential fatty acids

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