

**BASIC B.SC (NURSING) – 1<sup>st</sup> Year, JUNE 2016**  
**(NUTRITION & BIOCHEMISTRY, Paper Code: 0401102)**

**Time: 03 Hours****Max. Marks: 75****Instructions:**

1. Write Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with the correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exam. No Complaint will be entertained thereafter.
3. Draw the diagram wherever required.
4. Question paper consists of two parts-part-A and part- B. Max. Marks for Part- A are 45 and Part – B are 30.  
Use separate answer book for each part. Any lapse in this regard shall be at the risk and responsibility of the examinee and no complaint in this regard will be entertained after the exam.

**PART – A (NUTRITION)**

- Q1. Answer any one of the following: (1x10=10)**
- a- Design a table showing function, RDA, food sources for any five vitamins.
  - b- Explain the functions and food sources of Calcium, Iron, Iodine and their RDA.
- Q2. Answer any five of the following: (5x5=25)**
- a- Write down medicinal value of corn, oats, soybean, carrot, mushroom, grapes, apple, cinnamon, fenugreek seed and onion.
  - b- Describe the functions and metabolism of lipid in brief.
  - c- Design a table showing energy requirement for Indians (all groups) by ICMR.
  - d- Write short notes on electrolyte balance and dehydration.
  - e- Describe the functions of protein and factors affecting the requirements of protein.
  - f- Explain carbohydrate digestion and absorption in human body.
- Q3. Answer all questions (Write Briefly): (2x5=10)**
- a- Define macro nutrients and micro nutrients.
  - b- What do you understand by ICDS?
  - c- What are the advantages of cooking foods?
  - d- What is the difference between food group and food pyramid?
  - e- What do you mean by meal planning and RDA?

**PART – B (BIOCHEMISTRY)**

- Q1. Answer any three of the following questions: (3x5=15)**
- a- Write the structure and functions of cell membrane.
  - b- How is blood glucose regulated?
  - c- Mention the types of Lipoproteins and write their functions.
  - d- Classify enzymes with suitable examples.
  - e- Define electrophoresis. What are the uses of serum protein electrophoresis?
- Q2. Write short notes on any three of the following: (3x5=15)**
- a- Fat soluble vitamins.
  - b- Iron its functions and deficiency states.
  - c- Structure of collagen.
  - d- Structure of Immunoglobulin.
  - e- Reactions of urea cycle.

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