

**POST BASIC
BACHELOR OF SCIENCE (NURSING)**

Term-End Examination,

June, 2011

**BNS-102 : APPLIED SCIENCE (BIOCHEMISTRY,
BIOPHYSICS, MICROBIOLOGY, NUTRITION
AND DIETETICS)**

Time : 3 hours

Maximum Marks : 70

Instructions :

1. *Applied Science Course comprises of the following four parts :*

Part A : Biochemistry - 18 marks

Part B : Biophysics - 17 marks

Part C : Microbiology - 18 marks

Part D : Nutrition and Dietetics - 17 marks

2. *Students appearing for Applied Science Course Examination should follow the relevant instructions given below :*

(a) *For those appearing for the first time for the examination of Applied Science Course : The students should answer the questions of all the four parts in separate answer sheets provided. On the top of each answer sheet the student should enter the Enrolment No., Course Code, Course Title and Parts.*

(b) *For those who are reappearing for the examination of Applied Science Course : The students need to answer only those parts, on separate answer sheets, which have not been successfully completed.*

PART-A Biochemistry

- *Answer all the questions. Choice wherever is indicated in the question itself.*
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1. (a) Define denaturation of protein. **1+1+1=3**
(b) Give two examples of denaturation of proteins.
(c) Write any two effects of denaturation of proteins.
2. Name any two disaccharides of physiological significance and give hydrolysis product of any one disaccharides. **1+1=2**
3. Differentiate between the following : **1x3=3**
(a) Nucleoside and Nucleotide
(b) Fats and Waxes
(c) Glycosidic bond and peptide bond.
4. (a) Define osmosis and give one example of Practical application of osmosis. **1+2=3**
(b) Differentiate between hypertonic and hypotonic solutions.
5. (a) Define the terms enzymes and Co-enzymes
(b) Enumerate any four characteristic features of enzymes. **1+1+2=4**

OR