62502

First Basic B.Sc. Nursing Examination, May/June 2008
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A + B + C = 3 Hours Section B & C Marks: 60

SECTION – B & SECTION – C

*Instructions: 1) **All** questions are **compulsory**.*
*2) The number to the **right** indicates **full** marks.*
*3) **Draw** diagrams wherever **necessary**.*
*4) Do not write anything on the **blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.*

SECTION – B
(Nutrition)

35 Marks

2. Answer the following (**any four** out of five) : **(4×5=20)**
   a) Functions and sources of carbohydrates.
   b) Prevention of Lathyrism.
   c) Integrated child development services (ICDS).
   d) Household methods of preservation and storage of food.
   e) Methods of cooking.

3. Long answer question : **(1×7=7)**
   Write the various classification of foods and its sources.

4. Long answer question : **(1×8=8)**
   What is malnutrition ? What are the causes of malnutrition in India ? Differentiate between marasmus and kwashiorkar.

SECTION – C
(Biochemistry)

5. Answer the following (**any three** out of four) : **(3×5=15)**
   a) Nitrogen Balance.
   b) Diagnostic importance of enzymes.
   c) Sources, absorption, transport and storage of iron.
   d) Enumerate water soluble vitamins and state their coenzyme forms.

6. Long answer question : **(1×10=10)**
   a) β oxidation with reference to palmitic acid with energetics.

   OR

   b) Describe citric acid cycle with energetics. Why this cycle is called amphibolic ?

62502

First Basic B.Sc. Nursing Examination, May/June 2011
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A + B + C = 3 Hours | Section B & C Marks: 60

SECTION – B & SECTION – C

Instructions: *1) **All** questions are **compulsory**.*
*2) The number to the **right** indicates **full** marks.*
*3) **Draw** diagrams wherever **necessary**.*
*4) Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*

SECTION – B
(Nutrition)

35 Marks

2. Answer the following (**any four** out of five) : **(4×5=20)**

a) Classification of lipids.

b) Principles of weaning.

c) National Iodine Deficiency Disorder Programme.

d) Different methods of food preparation.

e) Factors affecting iron absorption.

3. Long Answer Question : **(1×7=7)**

Define malnutrition and describe clinical features of severe protein energy malnutrition.

4. Long Answer Question : **(1×8=8)**

Discuss the dietary management of a patient with diabetes mellitus.

SECTION – C
(Biochemistry)

5. Answer the following (**any three** out of four) : **(3×5=15)**

   a) Nitrogen balance.

   b) Factors regulating plasma calcium level.

   c) Digestion and absorption of lipids.

   d) Describe the sources, requirements and functions of Vitamin 'A'.

6. Long Answer Question : **(1×10=10)**

   a) Describe tricarboxylic acid cycle with energetics. Explain the amphibolic nature of same.

   OR

   b) Define protein, write classification of protein in detail with examples.

62502

First Basic B.Sc. Nursing Examination, Summer 2012
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A + B + C = 3 Hours | Section B & C Marks: 60

SECTION – B & SECTION – C

Instructions:
1) ***All** questions are **compulsory**.*
2) *The number to the **right** indicates **full** marks.*
3) ***Draw** diagrams wherever **necessary**.*
4) *Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*

SECTION – B

Nutrition

2. Answer the following (**any four** out of five) : **(4×5=20)**
   a) Factors affecting food and nutrition.
   b) Classification of protein with its example.
   c) Basal metabolic rate.
   d) Deficiencies of vitamin C.
   e) Principles of cooking.
3. Define carbohydrate its classification with example and functions in detail. **(1×7=7)**
4. Enlist the nutritional programmes and role of nurse in nutritional programmes in detail. **(1×8=8)**

SECTION – C

Biochemistry

5. Answer the following (**any three** out of four) : **(3×5=15)**
   a) Write notes on any two specialized proteins from the following-collagen, keratin, elastin and myosin.
   b) Write a note on biochemical role of vitamin D.
   c) Classify enzymes.
   d) Write a note on transport mechanisms in the cell.
6. Long answer question : **(1×10=10)**
   a) How is blood glucose regulated in the body ?

   OR

   b) Write a note on the urea cycle.

62502

First Basic B.Sc. Nursing Examination, Summer 2013
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A + B + C = 3 Hours | Section B & C Marks: 60

SECTION – B & SECTION – C

Instructions: *1)* ***All*** *questions are* ***compulsory****.*
2) The number to the ***right*** *indicates* ***full*** *marks.*
3) Draw diagrams ***wherever*** *necessary.*
4) ***Do not*** *write anything on the* ***blank portion of the question paper****. If written anything, such type of act will be considered as an attempt to resort to unfair means.*

SECTION – B

Nutrition

2. Answer the following (**any four** out of five) : **(4×5=20)**
   a) Factors affecting food and nutrition.
   b) Methods of cooking.
   c) Protein energy malnutrition.
   d) Functions of fat.
   e) Basal metabolic rate.

LAQ's

3. Define lipids its classification and function in detail. **(1×7=7)**

4. Enlist the nutritional programmes and role of nurse in nutritional programmes in detail. **(1×8=8)**

SECTION – C

Biochemistry

5. Answer the following (**any 3** out of 4) : **(3×5=15)**
   a) What are lipoproteins ? Classify them and give their functions.
   b) Metabolic changes in diabetes mellitus.
   c) Protein-energy malnutrition.
   d) Principle and applications of electrophoresis.

6. Long answer question. **(1×10=10)**

   a) What are blood buffers ? Describe the factors maintaining acid-base balance in the body.

   OR

   b) Define enzymes. Classify enzymes and give one example of each class. Add a note on isoenzymes giving their clinical applications.

62502

First Basic B.Sc. Nursing Examination, Summer 2014
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A + B + C = 3 Hours | Section B & C Marks: 60

SECTION – B & SECTION – C

Instructions : 1) *Use **blue/black** ball point pen only.*
2) *Do not write anything on the **blank portion of the question paper**. If written anything such type of act will be considered as an attempt to resort to unfair means.*
3) ***All** questions are **compulsory**.*
4) *The number to the **right** indicates **full** marks.*
5) *Draw diagrams **wherever** necessary.*
6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*
7) ***Use** a common answer book for **all** Sections.*

SECTION – B

(35 Marks)

Nutrition

2. Answer the following (**any four** out of five) : **(4x5=20)**
   a) Mid day meal programme
   b) Functions and deficiency of Vitamin C
   c) Protein energy malnutrition
   d) Food preservation
   e) Basal Metabolic Rate.

3. Explain the classification, sources and functions of carbohydrates. **(1x7=7)**

4. Explain the role of nurse in nutritional programmes. **(1x8=8)**

P.T.O.

SECTION – C (25 Marks)

Biochemistry

5. Answer the following (**any three** out of four) : **(3x5=15)**

   a) Write any five functions of vitamin C.

   b) Write five factors affecting rate of enzyme catalysed reaction.

   c) Describe the fluid mosaic structure of cell membrane.

   d) Write functional classification of proteins with suitable example for each class.

6. a) Write a note on aerobic glycolysis and its energetics. **(1x10=10)**

   OR

   b) Describe the urea cycle. Explain its importance. **(1x10=10)**

62502

First Basic B.Sc. (Nursing) Examination, Summer 2015
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A + B = 3 Hours | Total Marks : 75

SECTION – A & SECTION – B

Instructions : *1) Use **blue/black** ball point pen only.*

*2) Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*

*3) **All** questions are **compulsory**.*

*4) The number to the **right** indicates **full** marks.*

*5) **Draw** diagrams **wherever** necessary.*

*6) Distribution of syllabus in Question Paper is **only** meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*

*7) **Use** a common answer book for **all** Section.*

SECTION – A **(45 Marks)**

Nutrition

1. Short answer questions (**any five** out of six) : **(5×5=25)**

   a) Write the factors interfering in absorption of calcium.

   b) Methods of food preservation and storage.

   c) Describe the effect of deficiency of water and its management.

   d) Describe the effect of deficiency and excess of fat in diet.

   e) Classify minerals and write some general functions of minerals.

   f) Define food and classify.

P.T.O.

2. Long answer questions (**any two** out of three) : **(2×5=10)**

   a) Write the sources, deficiency manifestation of vitamin A.

   b) Discuss the effect of deficiency of protein and its preventive measures.

   c) Define basal metabolic rate and factors affecting basal metabolic rate.

3. Short answer questions (**any two** out of three) : **(2×5=10)**

   a) Describe the classification of carbohydrate.

   b) Food fortification.

   c) List the uses of recommended dietary allowances.

SECTION – B **(30 marks)**

Biochemistry

4. Long answer questions (**any four** out of five) : **(4×5=20)**

   a) Define proteins, classify them giving suitable examples.

   b) Outline the pathway of glycolysis with its energetics.

   c) Classify lipoproteins with their functions.

   d) Describe competitive and non-competitive inhibition of enzymes with their examples.

   e) Functions and deficiency manifestations of calcium.

5. Long answer questions (**any one** out of two) : **(1×10=10)**

   a) Describe sources, recommended daily allowance, biological functions and deficiency manifestations of vitamin D .

   b) Define oxidative and non-oxidative deamination. Describe urea cycle with its metabolic disorders.

First BASIC B.Sc. NURSING, Winter 2015

Nutrition and Biochemistry

Total Duration: Section A+B = 3 Hours

Total Marks : 75

Section - A & Section - B

Instructions:

1) Use **blue/black** ball point pen only.
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3) **All** questions are **compulsory.**
4) The number to the right indicates **full** marks.
5) **Draw** diagrams **wherever** necessary.
6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
7) Use a common answer book for **all** Sections.

Section-A (45 marks)

Nutrition

1. Short answer questions (**any five** out of six) : **(5x5=25)**
   a) Discuss food adulteration.
   b) Explain Mid day meal programme.
   c) Discuss Micro and Macro nutrients.
   d) Classification of Carbohydrate.
   e) Explain factors affecting Basal Metabolic Rate.
   f) Explain the functions of Vitamin D.

2. Long answer questions (**any two** out of three) : **(2x5=10)**
   a) Discuss principles of Menu planning.
   b) Describe the effect of cooking on carbohydrates.
   c) Explain the deficiency disorders of Vitamin A.

3. Short answer questions (**any two** out of three) : **(2x5=10)**
   a) Explain the factors to be considered while serving food to the patient.
   b) Explain factors affecting nutrition.
   c) Discuss the use of heat for food preservation.

P.T.O.

Section-B (30 marks)
Biochemistry

4. Short answer questions (**any four** out of five) : **(4 x5=20)**

   a) Write diagnostic significance of enzymes.

   b) Write a note on essential fatty acids.

   c) Describe Cori's cycle.

   d) Enumerate fat soluble vitamins. Give an account of biochemical functions of Vitamin A.

   e) What are immunoglobulins? Give their types along with functions.

5. Long answer questions (**any one** out of two) : **(1x10=10)**

   a) Describe oxidation of fatty acids with its energetics.

   b) Give sources and functions of calcium. Describe serum calcium regulation.

62502

First Basic B.Sc. Nursing Examination, Summer 2016
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A+B = 3 Hours | Total Marks : 75

SECTION – A & SECTION – B

Instructions: 1) *Use **blue/black** ball point pen only.*
2) ***Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*
3) ***All** questions are **compulsory**.*
4) *The number to the **right** indicates **full** marks.*
5) *Draw diagrams **wherever** necessary.*
6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*
7) ***Use** a common answerbook for **all** Sections.*

SECTION – A **(45 Marks)**

(Nutrition)

1. Short answer question (**any five** out of six) : **(5×5=25)**
   a) Role of nutrition in maintaining health of geriatric client.
   b) Classification of foods.
   c) Difference between kwashoirkar and marasmus.
   d) Deficiency diseases of Iron and its rich dietary sources.
   e) Integrated Child Development Scheme (ICDS).
   f) Therapeutic purposes of Naturopathy - Diet.

2. Long answer question (**any two** out of three) : **(2×5=10)**
   a) Nutritional problems in India.
   b) Absorption, synthesis and metabolism of minerals.
   c) Principles of weaning and foods included.

P.T.O.

3. Short answer question (**any two** out of three) : **(2×5=10)**
   a) Safe food preparation practices.
   b) Role of nurse in nutritional education.
   c) Food additives and its principles.

SECTION – B **(30 Marks)**

(Biochemistry)

4. Short answer question (**any four** out of five) : **(4×5=20)**
   a) Classify carbohydrates with suitable example.
   b) Functions of proteins.
   c) Digestion and absorption of Lipids.
   d) Classify enzymes with suitable examples.
   e) Factors affecting calcium absorption.

5. Long answer question (**any one** out of two) : **(1×10=10)**
   a) Describe sources, biochemical functions and deficiency manifestation of Vitamin A.
   b) Explain in detail different types of buffers and role of buffers in maintaining acid base balance.

62502

First Basic B.Sc. (Nursing) Examination, Winter 2016
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A+B = 3 Hours | Total Marks : 75

SECTION – A & SECTION – B

Instructions : 1) *Use **blue/black** ball point pen **only**.*
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3) ***All** questions are **compulsory**.*
4) *The number to the **right** indicates **full** marks.*
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7) ***Use** a common answerbook for **all** Sections.*

SECTION – A **(45 Marks)**
(Nutrition)

1. Short answer question (**any five** out of six) : **(5×5=25)**
   a) Functional classification of proteins and write functions of proteins.
   b) Factors affecting food and nutrition.
   c) Principles and methods of cooking.
   d) Mid-day meal programme.
   e) Digestion of fat.
   f) Role of Nurse in Nutrition education.

2. Long answer question (**any two** out of three) : **(2×5=10)**
   a) Explain balance diet its important.
   b) State importance of vitamins in diet.
   c) Prepare a menu plan for diabetic patient.

P.T.O.

3. Short answer question (**any two** out of three) : **(2×5=10)**

   a) Food Adulteration Act.

   b) Protein energy malnutrition.

   c) Electrolyte imbalances and its effect.

SECTION – B **(30 Marks)**
(Biochemistry)

4. Short answer question (**any four** out of five) : **(4×5=20)**

   a) Describe Urea cycle.

   b) Write any four factors affecting enzyme activity.

   c) Diagrammatic representation of immunoglobulins and state functions of IgG and IgM.

   d) Enumerate various transport mechanisms. Add note on active transport.

   e) Write five biochemical functions of calcium.

5. Long answer question (**any one** out of two) : **(1×10=10)**

   a) Describe aerobic and anaerobic glycolysis with its energetics.

   b) Describe beta-oxidation of palmitic acids with its energetics.

62502

First Basic B.Sc. Nursing Examination, Summer 2017
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A + B = 3 Hours | Total Marks : 75

SECTION – A and SECTION – B

Instructions: *1) Use **blue/black** ball point pen only.*
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*4) The number to the **right** indicates **full** marks.*
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*7) **Use** a common answerbook for **all** Sections.*

SECTION – A (**45** Marks)

(Nutrition)

1. Short answer questions (**any five** out of six) : **(5×5=25)**
   a) Describe the deficiency diseases of vitamin D.
   b) Factors affecting food and nutrition.
   c) Composition of body fluids.
   d) Describe the functions of protein.
   e) Methods of cooking and effect of cooking on food constituents.
   f) Integrated Child Development Scheme.

2. Long answer questions (**any two** out of three) : **(2×5=10)**
   a) Define and classify fat.
   b) Write the sources and effect of deficiency of iron.
   c) List sources of thiamine and effect of its deficiency.

P.T.O.

3. Short answer questions (**any two** out of three) : **(2×5=10)**

   a) Prevention of Food Adulteration Act, 1954.

   b) Define balanced diet and write the steps in planning balanced diet.

   c) Define BMR and write the factors affecting energy requirement.

SECTION – B (**30** Marks)

(Biochemistry)

4. Short answer questions (**any four** out of five) : **(4×5=20)**

   a) Write any five functions of cholesterol.

   b) Draw urea cycle mentioning enzymes, coenzymes, substrate and product formed in the cycle.

   c) Factors regulating blood calcium level.

   d) Diagnostic and clinical significance of enzymes.

   e) What are blood buffers ? Explain their role in maintaining blood pH.

5. Long answer questions (**any one** out of two) : **(1×10=10)**

   a) Define and classify vitamins. Write sources, daily requirement, functions and deficiency manifestation of vitamin A.

   b) Define carbohydrate. Explain glycolysis in detail with its energetics.

62502

First Basic B.Sc. Nursing Examination, Winter 2017
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A + B = 3 Hours | Total Marks : 75

SECTION – A & SECTION – B

Instructions : 1) *Use **blue/black** ball point pen only.*
2) ***Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*
3) ***All** questions are **compulsory**.*
4) *The number to the **right** indicates **full** marks.*
5) *Draw diagrams **wherever** necessary.*
6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*
7) ***Use** a common answer book for **all** Sections.*

SECTION – A **(45 Marks)**

Nutrition

1. Short answer question (**any five** out of six) : **(5×5=25)**
   a) Integrated Child Development Scheme.(ICDS).
   b) Classification of fats.
   c) Discuss principles of cooking.
   d) Factors affecting iron absorption.
   e) Weaning.
   f) National Iodine Deficiency Disorder Programme.

2. Long answer question (**any two** out of three) : **(2×5=10)**
   a) Define malnutrition. Describe the clinical features of severe protein energy malnutrition.
   b) Describe the Classification and functions of fats.
   c) Write classification of vitamins, functions and deficiency of vitamin C.

P.T.O.

3. Short answer questions (**any two** out of three) : **(2×5=10)**
   a) Food adulteration and its prevention.
   b) Therapeutic diet for a patient with hypertension.
   c) Dietary management of patient with dehydration.

SECTION – B **(30 marks)**

Biochemistry

4. Short answer question (**any four** out of five) : **(4×5=20)**
   a) Structure and functions of Mitochondria.
   b) Functions and deficiency manifestations of Vitamin A.
   c) Transamination reactions.
   d) Classification of Enzymes with suitable examples.
   e) Functions of Iron.

5. Long answer question (**any one** out of two) : **(1×10=10)**
   a) Describe regulation of Blood Sugar levels.
   b) Describe steps in beta oxidation of fatty acids.

62502

First Basic B.Sc. Nursing Examination, Summer 2018
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A + B = 3 Hours | Total Marks : 75

SECTION – A & SECTION – B

Instructions : *1) Use **blue/black** ball point pen only.*
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*3) **All** questions are **compulsory**.*
*4) The number to the **right** indicates **full** marks.*
*5) Draw diagrams **wherever** necessary.*
6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
*7) **Use** a common answerbook for **all** Sections.*

SECTION – A **(45 Marks)**

(Nutrition)

1. Short answer question (**any five** out of six) : **(5×5=25)**
   a) Factors affecting calcium absorption.
   b) Factors affecting Basal metabolic rate.
   c) Assessment of nutritional status in children.
   d) Classification of Carbohydrates.
   e) Balanced diet.
   f) Food Adulteration.

2. Long answer question (**any two** out of three) : **(2×5=10)**
   a) Role of nurse in nutritional program.
   b) Malnutrition.
   c) Functions of Proteins.

P.T.O.

3. Short answer question (**any two** out of three) : **(2×5=10)**
   a) Functions of Vitamin D.
   b) Regulations of water metabolism.
   c) Methods of Cooking.

SECTION – B **(30 Marks)**
(Biochemistry)

4. Short answer question (**any four** out of five) : **(4×5=20)**
   a) Factors affecting absorption of Calcium.
   b) Structure and functions of cell membrane.
   c) Write a note on transamination and deamination reactions in protein metabolism.
   d) Functions and deficiency manifestations of Vitamin C.
   e) Factors regulating blood sugar level.

5. Long answer question (**any one** out of two) : **(1×10=10)**
   a) Describe in detail about beta oxidation of fatty acid. Add a note on its energetics.
   b) Define enzymes. Explain in detail factors affecting enzyme action.

62502

First Basic B.Sc. Nursing Examination, Winter 2018
NUTRITION AND BIOCHEMISTRY

Total Duration: Section A+B = 3 Hours Total Marks : 75

SECTION – A and SECTION – B

Instructions : *1) Use **blue/black** ball point pen **only**.*
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*3) **All** questions are **compulsory**.*
*4) The number to the **right** indicates **full** marks.*
*5) Draw diagrams **wherever** necessary.*
6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
*7) **Use** a common answerbook for **all** Sections.*

SECTION – A **(45 marks)**
(Nutrition)

1. Short answer questions (**any five** out of six) : **(5×5=25)**
   a) Functions and absorption of fats.
   b) Principles of serving food.
   c) Body Mass Index.
   d) Kwashiorkor.
   e) Fluid Diet.
   f) Over hydration.

2. Long answer questions (**any two** out of three) : **(2×5=10)**
   a) Vitamin 'A' deficiency program.
   b) Write in brief about Energy.
   c) Importance of protein in children.

P.T.O.

3. Short answer questions (**any two** out of three) : **(2×5=10)**
   a) Functions and deficiencies of Vitamin 'C'.
   b) Role of nurse in nutrition education.
   c) Digestion, absorption, storage and metabolism of carbohydrates.

SECTION – B **(30 marks)**
(Biochemistry)

4. Short answer questions (**any four** out of five) : **(4×5=20)**
   a) Structure and functions of Cell Membrane.
   b) Functions and deficiency manifestations of Vitamin D.
   c) Role of buffers in maintaining acid base balance.
   d) Functions of cholesterol.
   e) Competitive inhibition of enzymes.

5. Long answer questions (**any one** out of two) : **(1×10=10)**
   a) Describe Pentose Phosphate Pathway of Glucose oxidation. What is its Significance ?
   b) Describe steps of Urea cycle.

[Total No. of Pages : 2

62502

First Basic B.Sc. Nursing Examination, Summer (Phase - II) 2019
NUTRITION AND BIOCHEMISTRY

Total Duration : 3 Hours | Total Marks : 75

Instructions : *1) Use **blue/black** ball point pen only.*
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*3) **All** questions are **compulsory.***
*4) The number to the **right** indicates **full** marks.*
*5) Draw diagrams **wherever** necessary.*
6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
7) Use a common answerbook for all sections.

SECTION - A (45 Marks)
(Nutrition)

1. Short answer questions (**any five** out of six) : **[5 × 5 = 25]**
a) Describe the factors affecting nutrition.
b) Discuss classification of carbohydrates.
c) Explain the role of dietary fibers in human body.
d) Note on Kwashiorkor & its prevention.
e) Enlist essential amino acids.
f) Enlist sources and functions of potassium.

2. Long answer questions (**any two** out of three) : **[2 × 5 = 10]**
a) Explain the various methods of cooking.
b) Explain the deficiency disease associated with vitamin B1 (Thiamine).
c) Discuss role of nutrition in maintaining health of geriatric people.

3. Short answer questions (**any two** out of three) : **[2 × 5 = 10]**
a) Define dehydration and water intoxication.
b) Enlist the factors affecting iron absorption.
c) Enlist the functions of fat.

SECTION - B (30 Marks)

(Biochemistry)

4. Short answer questions (**any four** out of five) : **[4 × 5 = 20]**

a) Write Structure and Functions of Cell Membrane.

b) Give classification of Enzymes.

c) Discuss Acid Base Balance.

d) Give Types and Functions of Lipoproteins.

e) Write Functions and deficiency manifestations of Vitamin A.

5. Long answer questions (**any one** out of two) : **[1 × 10 = 10]**

a) Describe the steps of Tricarboxylic acid (TCA) cycle

b) Describe the various steps of Urea Cycle and its importance.

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[Total No. of Pages : 2

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First BASIC B.Sc. Nursing Examination, Winter (Phase - III All Other Remaining UG/PG Course) - 2019
NUTRITION AND BIOCHEMISTRY

Total Duration : Section A + B = 3 Hours

Total Marks : 75

SECTION - A & SECTION - B

Instructions : 1) *Use **blue/black** ball point pen only.*

2) Do not *write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*

3) ***All** questions are **compulsory.***

4) *The number to the **right** indicates **full** marks.*

5) *Draw diagrams **wherever** necessary.*

6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*

7) *Use a common answer book for all sections.*

SECTION - "A" (45 Marks)

(Nutrition)

1. Short answer questions (any five out of six) : **[5 × 5 = 25]**

a) Functions of food.

b) Vitamin A deficiency programme.

c) Assessment of nutritional status of pre-schooler.

d) Factors influencing food selection.

e) Principles of cooking.

f) Prevention of food adulteration Act (PFA).

2. Long answer questions (any two out of three) : [2 × 5 = 10]
   a) Deficiencies of vitamin D and its Dietary sources.
   b) Dietary sources and Functions of carbohydrates.
   c) Factors affecting basal metabolic rate.

3. Short answer questions (any two out of three) : [2 × 5 = 10]
   a) National iodine deficiency disorders (IDD).
   b) Nutrition education and role of nurse in adolescent Anemia.
   c) Maintenance of fluid and electrolyte balance for toddler with Diarrhea.

SECTION - "B" (30 Marks)
(Biochemistry)

4. Short answer questions (any four out of five) : [4 × 5 = 20]
   a) Transamination reactions.
   b) Functions and Deficiency manifestations of Vitamin C.
   c) Structure and Functions of Cell membrane.
   d) Classification of Enzymes with suitable examples.
   e) Functions and Deficiency manifestations of Iron.

5. Long answer questions (any one out of two): [1 × 10 = 10]
   a) Describe various steps of Glycolysis. Add a note on its Energetics.
   b) Describe steps of Beta-oxidation of Fatty acids. Add a note on its energetics.