SH-III/Nutrition/301C-5(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19
NUTRITION

Course ID: 32311   **Course Code: SHNUT-301C-5(T)**

Course Title: Nutritional Biochemistry-I

Time: 2 Hours   **Full Marks: 40**

The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.

1. Answer *any five* out of the following: 2×5=10

    (a) Define deamination.

    (b) What are lipoproteins?

    (c) Define Km.

    (d) What are holoenzyme and apoenzyme?

    (e) Name two essential amino acids with structural formula.

    (f) Write the structures of the co-enzyme forms of pyridoxine necessary for transamination.

    (g) How many ATPs are produced after one turn of glycolysis?

    (h) What are ketone bodies?

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

    (a) Briefly describe the urea cycle.   5

    (b) Write down the properties of enzymes.   5

    (c) What is 'glycogenolysis'? Describe the process.   1+4=5

    (d) What do you mean by substrate level phosphorylation? Explain with example.   3+2=5

    (e) Describe how pyruvic acid enter into the TCA cycle.   5

    (f) Write a short note on the mitochondrial electron transport chain.   5

3. Answer *any one* out of the following: 10×1=10

    (a) What are trans fatty acids? What is carnitine transport system? Give the reaction sequence of the β-oxidation pathway of a saturated fatty acid with 16 carbon atoms. 2+4+4=10

    (b) What is gluconeogenesis? Write down the irreversible steps of the glycolytic pathway. How many ATPs are produced if one glucose molecule enter into TCA cycle — Enumerate.
    2+4+4=10

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SH-III/Nutrition/302C-6(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19
NUTRITION

Course ID: 32312   **Course Code: SHNUT-302C-6(T)**

Course Title: Food Commodities

Time: 2 Hours   **Full Marks: 40**

The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.

1. Answer *any five* out of the following questions: 2×5=10

   (a) What is oolong tea?

   (b) What is lathyrism?

   (c) Write the utility of food guide pyramid.

   (d) Mention medicinal uses of turmeric.

   (e) What is iodized salt?

   (f) Write the importance of food exchange list.

   (g) Mention two factors which affect crystallisation of sugar.

   (h) Write the nutritional importance of seed oils.

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

   (a) What do you mean by beverage? Classify beverage according to function.   1+4=5

   (b) Write the nutritional importance of fruits.   5

   (c) Write the advantages of germination of pulses. Mention the uses of pulses as dry seeds.
   3+2=5

   (d) Classify fish based on fat content. Mention the causes of fish spoilage.   3+2=5

   (e) Write the nutritive value of egg. Mention an antivitamin present in egg.   4+1=5

   (f) State the effect of tea on human health. Mention the important components of coffee.
   3+2=5

3. Answer *any one* out of the following questions: 10×1=10

   (a) What is parboiling of rice? Mention its advantages. Write the nutritional importance of
   Oat. What are breakfast cereals?   2+2+4+2=10

   (b) What do you mean by pasteurization of milk? Mention different methods of pasteurization.
   Write the composition of Milk. What is hard cheese?   1+3+5+1=10

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SH-III/Nutrition/303C-7(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19
NUTRITION

Course ID: 32313   **Course Code: SHNUT-303C-7(T)**

Course Title: Human Nutrition

Time: 1 Hours 15 minute   **Full Marks: 25**

The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.

1. Answer *any five* out of the following questions: 1×5=5

   (a) Write the RDA of iron and folic acid of a pregnant woman.

   (b) Write two important difference between kwashiorkor and marasmus.

   (c) What is lactogogue?

   (d) Write the full form of FIT and PIH.

   (e) What do you mean by gestational diabetes?

   (f) Write down the principle of direct calorimetry.

   (g) Distinguish between growth and development.

   (h) Write two objectives of school lunch programme.

2. Answer *any two* out of the following questions: 5×2=10

   (a) Write the free radical theory of ageing. Which type of dietary modification should be adopted during old age?   2+3=5

   (b) Distinguish between physiological fuel value and gross fuel value. What are the factors that effect the thernic effect of food? What is REE?   2+2+1=5

   (c) What do you mean by anorexia nervosa and bulimia nervosa? Write two important causes of anaemia among teenagers.   4+1=5

   (d) Why do energy and protein requirement increase during lactation period? Write the impact of folic acid deficiency on the outcome of pregnancy.   3+2=5

3. Answer *any one* out of the following questions: 10×1=10

   (a) Write the nutritional and immunological benefits of breast feeding. Write the difference between fore milk and hind milk. What do you mean by weaning?   6+2+2=10

   (b) (i) What are the nutrition-related complications during pregnancy?

        (ii) What are the disadvantages and advantages of artificial feeding?   5+5=10

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SH-III/Nutrition/305/SEC-1(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19
NUTRITION

Course ID: 32325   **Course Code: SHNUT-305-SEC-1(P)**

Course Title: SEC 1 Food Adulteration

Time: 5 Hours   **Full Marks: 40**

The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.

Answer *all* questions.

1. Detect the presence of adulterants in the supplied samples. Write the testing procedure.

    (3+3)×5=30

   - Vanaspati in ghee.
   - Khesari flour in besan.
   - Metanil yellow in turmeric powder.
   - Argemone oil in mustard oil.
   - Foreign matter in tea.

2. Viva voce   5

3. Laboratory note book.   5

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SH-III/Nutrition/303C-7(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2028-19
NUTRITION

Course ID: 32323   **Course Code: SHNUT-303C-7(P)**

Course Title: Human Nutrition

Time: 2 Hours   **Full Marks: 15**

The figures in the right hand side margin indicate marks.
Candidates are required to give their answers in their own words
as far as practicable.

Answer *all* questions.

1. Prepare a diet(as specified on the supplied lottery slip).Calculate the amount of nutrients in the prepared diet as indicated in the lottery slip. Write the nutritional significance of the diet.
   6+3+1=10

2. Viva-voce   3

3. Laboratory note book.   2

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