

B.Sc. 3rd Semester (Honours) Examination, 2019

NUTRITION

Course ID : 32312

Course Code : SH/NUT/302/C-6

Course Title : Food Commodities

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any five* questions of the following: 2×5=10
- (a) Write the name of essential amino acids which are absent in rice and Bengal gram.
 - (b) Difference between white meat and red meat.
 - (c) Name two whey proteins.
 - (d) What are vegetarian eggs?
 - (e) Write the composition of 'Double Toned' milk.
 - (f) Name the preservatives used in fruit squashes and tomato sauce.
 - (g) What are cathepsins?
 - (h) What is A.R.F.?
2. Answer *any four* questions: 5×4=20
- (a) Write down the advantages and disadvantages of parboiled rice. Compare brown rice and white rice from nutritional point of view. 3+2=5
 - (b) What do you mean by germination? Explain the effect of germination on pulses. 1+4=5
 - (c) Define pasteurization. Explain the different methods of pasteurization. 1+4=5
 - (d) Briefly discuss the spoilage of meat and fish. 2½+2½=5
 - (e) Write short notes on rancidity of fats and oils. 5
 - (f) What are molasses? Explain the factors affecting crystallization of sugar. 2+3=5
3. Answer *any one* question of the following: 10×1=10
- (a) Classify cheese with example of each class. Write the nutritive value of cheese. 6+4=10
 - (b) Write in detail about the processing of black tea. Write the Composition of coffee. 7+3=10
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B.Sc. 3rd Semester (Honours) Examination, 2019

NUTRITION

Course ID : 32313

Course Code : SH/NUT/303/C-7

Course Title : Human Nutrition

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full 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) What is colostrum?
 - (b) Define 'joule'.
 - (c) What do you mean by ACU?
 - (d) Write two symptoms of anorexia nervosa.
 - (e) Who are the beneficiaries of 'school lunch programme'?
 - (f) What do you mean by 'exclusive breast feeding'?
 - (g) What is eclampsia?
 - (h) What is SDA of food?
2. Answer *any two* out of the following questions: 5×2=10
- (a) What are the factors that affect the volume and composition of breast milk? What is let down reflex? 4+1=5
 - (b) Write the different features of growth and development during infancy. 5
 - (c) Why do energy and protein requirement increase during pregnancy? What is morning sickness? 1½×1½+2=5
 - (d) Write about three nutrition related problems during old age. 5
3. Answer *any one* out of the following questions: 10×1=10
- (a) What is BMR? Mention different factors affecting BMR. Describe the determination of energy value of food by bomb calorimeter. 2+4+4=10
 - (b) Why anemia is more common during pregnancy? The requirement of iron and folic acid are increased during pregnancy—explain with reason. What is pica? 2+6+2=10
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SH-III/Nutrition-304/GE-3/19

B.Sc. 3rd Semester (Honours) Examination, 2019

NUTRITION

Course ID : 32314

Course Code : SH/NUT/304/GE-3

Course Title: Community Nutrition

Time: 1 Hour 15 Minutes

Full Marks: 25

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

*দক্ষিণ প্রান্তস্থ সংখ্যাগুলি প্রশ্নের পূর্ণমানের নির্দেশক।
পরীক্ষার্থীদের যথাসম্ভব নিজের ভাষায় উত্তর দিতে হবে।*

1. Answer any five out of the following:

1×5=5

যে কোনো পাঁচটি প্রশ্নের উত্তর দাও :

(a) What do you mean by community?

জনগোষ্ঠী বলতে কী বোঝো?

(b) What is nuclear family?

পৃথক পরিবার কী?

(c) What is Nutritional Anthropometry?

পুষ্টিগত অ্যানথ্রোপোমেট্রি কী?

(d) Write the full form of NIN and ICMR?

ICMR এবং NIN-এর সম্পূর্ণ নাম লেখো।

(e) Which micronutrient deficiency lead to endemic goitre?

কোন স্বল্পমাত্রিক পরিপোষকের অভাবে গয়টার পরিলক্ষিত হয়?

(f) Write any two objectives of Mid-Day-Meal programme.

মিড-ডে মিল প্রকল্পের দুটি উদ্দেশ্য লেখো।

(g) Distinguish between Kwashiorkor and Marasmus.

কোয়াশিওরকর এবং ম্যারাসমাসের মধ্যে পার্থক্য লেখো।

(h) What is nutritional anaemia?

পুষ্টিজনিত রক্তাল্পতা বলতে কী বোঝো?

2. Answer any two out of the following:

2×5=10

যে কোনো দুটি প্রশ্নের উত্তর দাও :

(a) What is Body Mass Index (BMI)? Mention the WHO classification of BMI for an Indian. 1+4=5

দেহভর সূচক বলতে কী বোঝায়? WHO-এর নির্দেশিকা অনুসারে একজন ভারতীয় নাগরিকের BMI শ্রেণীবিভাগ করো।

(b) What do you mean by 'ABCD' analysis in nutritional status assessment? Write any three advantages of nutritional anthropometry. 2+3=5

পুষ্টিগত অবস্থা পরিমাপের ক্ষেত্রে 'ABCD' বিশ্লেষণ বলতে কী বোঝায়? অ্যানথ্রোপোমেট্রি পরিমাপের দ্বারা পুষ্টিগত অবস্থা মূল্যায়নের যে কোনো তিনটি সুবিধা উল্লেখ করো।

(c) Write a short note on ICDS. 5

টীকা লেখো-ICDS।

(d) What do you mean by PEM? Discuss the different causes of PEM. 1+4=5

প্রোটিন শক্তিজনিত অপুষ্টি বলতে কী বোঝায়? প্রোটিনশক্তি জনিত অপুষ্টির বিভিন্ন কারণ বর্ণনা করো।

3. Answer any one out of the following:

10×1=10

যে কোনো একটি প্রশ্নের উত্তর দাও :

(a) What is MUAC? How is it measured? Write the importance of MUAC measurement. Discuss any two methods of diet survey with their advantage and disadvantage. 1+2+1+6=10

MUAC কী? ইহা কীভাবে পরিমাপ করা হয়? MUAC-এর গুরুত্ব আলোচনা করো। খাদ্য সমীক্ষার যে কোনো দুইটি পদ্ধতি সম্বন্ধে আলোচনা করো এবং তাদের সুবিধা ও অসুবিধা লেখো।

(b) What is MMR? Discuss the different causes of MMR (Maternal Mortality Ratio). How it can be controlled? 2+4+4=10

মাতৃমৃত্যু অনুপাত বলতে কী বোঝায়? ইহার বিভিন্ন কারণ সম্বন্ধে আলোচনা করো। মাতৃমৃত্যুর অনুপাত কীভাবে নিয়ন্ত্রণ করা সম্ভব?

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

B.Sc. 3rd Semester (Honours) Practical Examination, 2019

NUTRITION

Course ID : 32323

Course Code : SH/NUT/303/C-7(P)

Course Title : Human Nutrition

Time: 2 Hours

Full Marks: 15

The figures in the margin indicate full marks.

1. Prepare a dish as specified on the supplied lottery slip. Calculate the amount of two nutrients in the prepared dish as indicated in the lottery slip. Write the nutritional significance of the dish .

(Preparation – 5, Presentation – 2, Calculation – 1+1, Significance – 1)

5+2+1+1+1=10

2. Viva voce 3
3. Laboratory notebook. 2

SH-III/Nutrition-304GE-3(P)/19

B.Sc. 3rd Semester (Honours) Practical Examination, 2019

NUTRITION

Course ID : 32324

Course Code : SH/NUT/304/GE-3(P)

Course Title : Community Nutrition

Time: 2 Hours

Full Marks: 15

The figures in the margin indicate full marks.

1. Measure height and weight of a subject. Compute BMI. Interpret your result. 4+1+1=6
 2. Write two clinical signs of a nutritional deficiency disorder. (See the supplied card for specific deficiency disorder). 2
 3. Submission of diet survey report. 2
 4. Viva voce. 3
 5. Laboratory notebook. 2
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SH-III/Nutrition-305/SEC-1(P)/19

B.Sc. 3rd Semester (Honours) Practical Examination, 2019

NUTRITION

Course ID : 32325

Course Code : SH/NUT/305/SEC-1(P)

Course Title : Food Adulteration

Time: 5 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Detect the presence of adulterants in the supplied samples. Write the test procedure with proper interpretation. (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 notebook. 5
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B.Sc. 3rd Semester (Honours) Examination, 2019

NUTRITION

Course ID : 32311

Course Code : SH/NUT/301/C-5

Course Title : Nutritional Biochemistry-I

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any five* questions of the following: 2×5=10
- (a) Define deamination.
 - (b) What do you mean by glycogenolysis?
 - (c) What are lipoproteins?
 - (d) What do you mean by K_m ?
 - (e) What are MUFA and PUFA?
 - (f) What is glycolysis?
 - (g) What is Q_{10} ?
 - (h) Define holoenzyme
2. Answer *any four* questions of the following: 5×4=20
- (a) How can you classify enzymes according to the internationally accepted standards? Cite proper examples for each class. 5
 - (b) What are the end products of transamination? What is the significance of transamination? 2+3=5
 - (c) Classify lipoproteins. 5
 - (d) What do you mean by enzyme inhibition? Describe competitive inhibition. 2+3=5
 - (e) Derive the “Double reciprocal plot” from the Michaelis-Menten Equation. Why is it named so? 4+1=5
 - (f) Give a schematic diagram of the flow of electrons through the ETC. 5

3. Answer *any one* question of the following:

10×1=10

(a) What are ketone bodies? How are ketone bodies produced in the body? What is ketosis?

2+6+2=10

(b) Why Kreb's cycle is also called as TCA cycle? Describe this cycle mentioning eight steps involved therein.

2+8=10
