

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Hons.) (Nutrition and Dietetics) (Sem.-2)

BASIC OF COOKING

Subject Code : BSND/121/18

M.Code : 77755

Date of Examination : 08-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- a) Kitchen attire
- b) Balanced diet
- c) Stewing
- d) Stock
- e) Garnish
- f) Braising
- g) Flavoring agents
- h) Convection
- i) Infrared
- j) Glaze.



SECTION-B

2. What are the effects of cooking on proteins?
3. Explain about various kitchen equipments.
4. Explain combined methods of cookery for different food groups.
5. What are the advantages and disadvantages of pressure cooking?
6. Write about baking procedure for different food groups.

SECTION-C

7. Write in detail about various cooking methods and their principles.
8. Explain about cooking of food-heat and heat transfer methods.
9. Write in detail about sauces, soups and garnishes.

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B.Sc. Hons. (N&D) (Sem.-2)
FOOD PROCESSING AND PRESERVATION

Subject Code : BSND-122-18

M.Code : 77756

Date of Examination : 11-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Explain the following in brief :

- a) Bacteria
- b) Thawing
- c) Blast Freezing
- d) Pasteurization
- e) Dehydration
- f) Non-Perishable Food
- g) Cold Sterilization
- h) Mechanical Drying
- i) Class I Preservatives
- j) Convection.



SECTION-B

2. What is Food preservation? Enumerate the scope and importance of Food Preservation.
3. With examples differentiate between Sun drying and Dehydration .
4. Explain what are the changes that take place during freezing.
5. Explain what are the different types of ionizing radiations uses in Food Production.
6. With the help of a diagram explain the growth curve of microorganism.

SECTION-C

7. What is evaporation? What are the factors that effect evaporation?. Explain about different types of evaporators that are used in food industry.
8. Write a short note on historical development of food processing .
9. In brief explain about the freezing curve and factors that affect freezing.

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B.Sc. (Nutrition and Dietetics) (Sem.-2)

FOOD CHEMISTRY

Subject Code : BSND/123/18

M.Code : 77757

Date of Examiantion : 15-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- i) What is the basic structure of ice?
- ii) What are disaccharides? Give examples.
- iii) What do you understand by term 'fat mimetics'?
- iv) What are epimers and give its examples?
- v) Name different types of essential fatty acids?
- vi) What do you understand by rancidity?
- vii) How much calorie carbohydrate and fats does provide?
- viii) What are hemicelluloses?
- ix) What are the different flavonoids present in citrus fruits?
- x) Enlist the functional properties of proteins.



SECTION-B

2. What are the different factors affecting enzymatic activity?
3. What are polysaccharides? How modified starches are formed?
4. Discuss the water-soluble vitamins and their food sources.
5. Describe major proteins from animal and plant sources.
6. Discuss the different types of food flavors and their role in food industry.

SECTION-C

7. What are the classifications of amino acids? Write its examples with detailed structures?
8.
 - i) What are the functions of carbohydrates in food?
 - ii) Differentiate between amylose and amylopectin.
9. What are essential fatty acids? Discuss their structure and important functions along with suitable examples.

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B.Sc. (Nutrition and Dietetics) (Sem.-2)

FOOD PACKAGING

Subject Code : BSND-124-18

M.Code : 77758

Date of Examination : 18-05-2024

Time : 3 Hrs.

Max. Marks : 60

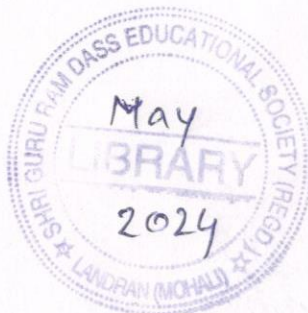
INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Explain the following :

- a. Meaning of packaging in food industry
- b. List the methods of bottle making
- c. Types of paper based materials
- d. Lacquers
- e. Frozen foods
- f. Points to be kept in mind while packaging fresh produce
- g. Explain tensile strength in terms of testing for packaging
- h. Name the regulations governing Food Packaging
- i. Recycling of plastic waste
- j. Cartoning.



SECTION-B

2. Discuss the need or functions of food packaging.
3. Explain blow molding and injection molding techniques.
4. Explain the packaging for dry as well as moisture sensitive foods.
5. Explain any two :
 - a. Thickness
 - b. Puncture strength
 - c. Bursting strength
6. Discuss any two packaging systems.

SECTION-C

7. Discuss in detail glass its composition, properties and methods of bottle making.
8. Discuss the various methods with respect to packaging machinery.
9. Discuss :
 - a. Metal packaging
 - b. Testing procedures for packaged foods.

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Bachelor of Science (Nutrition & Dietetics) (Sem.-2)

ENVIRONMENTAL SCIENCE

Subject Code : EVS-102-18

M.Code : 77762

Date of Examination : 22-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer Briefly :

- a) Define Eco System. Give two examples.
- b) What is Ecological succession?
- c) Define Biodiversity. How is it conserved?
- d) List two endangered and endemic species of India.
- e) What are the environmental effects of soil pollution?
- f) List any four air pollutants due to automobiles.
- g) Differentiate between natural and man-made disasters.
- h) What do you understand by acid rain?
- i) What is meant by population stabilization?
- j) Why is environmental degradation considered as human rights issue?



SECTION-B

2. "Renewable energy sources are considered environmentally benign". Critically comment considering examples.
3. Should we have big dams? Discuss to substantiate your point.
4. Explain the *in-situ* and *ex-situ* conservation of biodiversity.
5. Discuss the energy flow through grassland ecosystem.
6. Discuss the role of religious and cultural value systems in environmental conservation.

SECTION-C

7. What are the principles of sustainable development? How do we achieve it? Discuss using the example of organic farming.
8. Discuss the salient features of any two environmental laws enacted in India. What are the difficulties in enforcing environmental acts in India?
9. **Write notes on :**
 - a) Impact of human population growth on the environment
 - b) Environmental movements in India.

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B.Sc. (Nutrition & Dietetics) (Sem.-2)

BASICS OF COMPUTERS

Subject Code : BSND/128/18

M.Code : 77763

Date of Examination : 25-05-2024

Time : 3 Hrs.

Max. Marks : 30

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying ONE marks each.
2. SECTION-B contains FIVE questions carrying TWO and HALF marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying FIVE marks each and students have to attempt any TWO questions.

SECTION-A

1. Please answer the questions given below in brief :
 - a) What are the benefits of application software?
 - b) Write advantages of Laser Printer.
 - c) Discuss Worms.
 - d) List the features of taskbar.
 - e) What is the difference between compiler and interpreter?
 - f) Explain any five characteristics of computers.
 - g) Explain bit, byte.
 - h) What is OMR? What are its advantages?
 - i) Differentiate between internal and external commands of MS-DOS.
 - j) Explain the anatomy of Windows.



SECTION-B

2. Discuss the role of Operating System. What is its significance?
3. Explain any file internal commands of MS-DOS.
4. What is Microsoft Windows? Explain the control panel in windows.
5. Discuss the use of computer languages in development of software's. What are the advantages of high level languages?
6. Discuss any three input devices.

SECTION-C

7.
 - a) Draw and explain the Block Diagram of Computer,
 - b) Explain the generations of computer.
8. What are various storage devices? Explain each with their relative merits and demerits.
9. Explain the working of the following memories:
 - a) RAM
 - b) Cache memory.

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