B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Nutrition and Dietetics

FOOD SCIENCE

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define Nutrients
- 2. Explain Appetite
- 3. What is mean by parboiling of rice?
- 4. Write about the fortification of cereals.
- 5. What are the process in ripening of fruit?
- 6. What are the botanical classifications of vegetable?
- 7. Define dry milk
- 8. What is mean by tenderness of meat?
- 9. Explain winterization.
- 10. Write the example of crystallization.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) What is mean by balance diet?

Or

- (b) Explain the different types of cooking method.
- 12. (a) Write about the structure and nutritive value of rice and wheat.

Or

- (b) What are the enrichment and fortification of batters?
- 13. (a) What are the steps involved in enzymatic browning?

Or

- (b) What is the difference between fat soluble and water soluble pigments?
- 14. (a) Mention briefly in the roles of egg in cookery.

Or

- (b) Write about the composition and classification of poultry.
- 15. (a) What are the different types of spices uses in Indian cookery?

Or

(b) Write about the hydrogenation.

C-4948

2

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) What are the nutritional classification of foods.

Or

- (b) What are the germination process and its advantage?
- 17. (a) What are the process in cooking vegetable?

Or

- (b) What are the different types of milk and pasteurization of milk?
- 18. (a) Write about the structure, composition and nutritive value of fish.

Or

(b) What are the nutritive values of sugar and sugar related product?

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Nutrition and Dietetics

FOOD MICROBIOLOGY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is microbiology and its importance?
- 2. Who are the major contributors to microbiology?
- 3. What are the four uses of microscopes?
- 4. How do you plot a bacterial growth curve?
- 5. How do you create a bacterial culture?
- 6. What are types of culture media?
- 7. What is food spoilage in microbiology?
- 8. What are the characteristics of poultry?
- 9. What are examples of non perishable food items?
- 10. What are the benefits of eating fermented foods

Part B $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Elaborate the general morphology of Fungi.

Or

- (b) Explain in detail about Bacteriophage.
- 12. (a) Write the factors affecting bacterial growth curve.

Or

- (b) Discuss about antimicrobial barrier
- 13. (a) Give an account of hazards and pathogenic bacteria that causes food poisoning.

Or

- (b) What are the main nutrients in poultry?
- 14. (a) What are the products and applications of milk?

Or

- (b) What vitamins does meat give? Discuss about it.
- 15. (a) How do microorganisms impact our lives?

Or

(b) How is sauerkraut made? What are the benefits of eating sauerkraut?

2

Answer all questions.

16. (a) Write the principle, procedure and applications of Electron Microscopy.

Or

- (b) (b) Explain in detail about Redox Potential.
- 17. (a) What are the beneficial and harmful effects of microorganisms?

Or

- (b) Describe about batch and continuous culture.
- 18. (a) Elaborate the spoilage and preservation of sugar and sugar products?

Or

(b) Discus about microbial biomass.

96315

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Nutrition and Dietetics

FOOD CHEMISTRY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is meant by sols in foods?
- 2. Why is moisture content important in food?
- 3. What are the ingredients of candy?
- 4. Define the term syneresis.
- 5. What is the function of a protein in milk?
- 6. What are animal proteins?
- 7. What is the cause of rancidity?
- 8. What are the different types of fats?
- 9. What are the health benefits of pectin?
- 10. Mention the name of pigments present in vegetables.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write a brief note on gels and foams.

Or

- (b) Explain the importance of moisture content determination in food.
- 12. (a) Discuss briefly the chemistry of milk sugar.

Or

- (b) Explain the applications of enzymes in the food and beverage industries.
- 13. (a) Write a note on the chemistry of milk protein.

Or

- (b) Explain the importance of gluten. What are foods contain high gluten?
- 14. (a) Explain the factors influencing fat absorption in foods.

Or

- (b) Explain the effect of fats and oil on heating.
- 15. (a) Explain the applications of plant pigments in the food industry. Mention its types.

Or

(b) Discuss in detail about the properties of spices and condiments.

2

Answer all the questions.

16. (a) Discuss in detail about emulsions and colloids.

Or

- (b) Write a detailed note on the effect of alkali, fat, sugar, surface-active agents on starch.
- 17. (a) Explain the role of alkali, acid on animal and vegetable proteins.

Or

- (b) Write a note on fermentation and germination process. Explain its importance in foods.
- 18. (a) Discuss in detail about the physical and chemical properties of fats and oils.

Or

(b) Explain volatile compounds in cooked vegetables.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Nutrition and Dietetics

FUNDAMENTALS OF BIOCHEMISTRY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What are the characteristics of biomolecules?
- 2. Why do we need a digestive system?
- 3. What are benefits of carbohydrates?
- 4. What are lipids made of?
- 5. Which food has most protein?
- 6. What is nucleic acid and its function?
- 7. What are the two main types of lipoproteins?
- 8. How many amino acids do humans need?
- 9. What is the difference between fats and fatty acids?
- 10. What exactly are enzymes?

Or

(b) What is the difference between an acid and a base? Give examples.

12. (a) Describe about sucrose and lactose.

Or

- (b) How many types of oligosaccharides are there?
- 13. (a) Write the general aspects of amino acids.

Or

- (b) Describe about simple lipids and compound lipids.
- 14. (a) Write the elemental composition of proteins.

Or

- (b) What are the three types of nucleic acids?
- 15. (a) What is the purpose of enzyme kinetics?

Or

(b) What is the mechanism of enzyme action?

2

Answer all questions, choosing either (a) or (b).

16. (a) Discuss about Hydrogen bond Vanderwalls's forces and ionic bond.

Or

- (b) Write the basic structure, classifications and properties of Disaccharides.
- 17. (a) Elaborate the catabolism of triglycerides.

Or

- (b) Describe about Lock and key and induced fit hypothesis.
- 18. (a) Write the double helical structure of DNA and its functions.

Or

(b) Describe about Michaelis-menten and Lineweaver - Burk equations.

C-2016

Sub. Code 96323

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Second Semester

Nutrition and Dietetics

PRINCIPLES OF NUTRITION

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

Answer all questions.

Define the following:

- 1. RDAs
- 2. Bioavailability
- 3. Non-essential amino acids
- 4. Carbon source
- 5. Carbohydrate food
- 6. Green Leafy vegetables
- 7. Energy source
- 8. Vitamin A
- 9. ATP
- 10. Water-soluble vitamins

Part B $(5 \times 5 = 25)$ Answer all questions.

11. (a) Write the Nutrient allowances for infants.

Or

(b) Describe about Homeostasis.

12. (a) Give the nutritional classifications of proteins.

Or

- (b) Write the structure and classification of lipids.
- 13. (a) Discuss about direct and indirect calorimetry.

Or

- (b) Explain in brief about physiological energy value.
- 14. (a) Write the Classifications of minerals.

Or

- (b) Give the energy requirements for Physical activity.
- 15. (a) Mention briefly about Niacin and Ascorbic acid.

Or

(b) Write the functions and effects of deficiency of Vitamin B12.

Part C
$$(3 \times 10 = 30)$$

Answer all questions.

16. (a) Discuss about the Nutritional and Medicinal benefits of millets.

Or

2

(b) Write the signs and symptoms of protein deficiency.

17. (a) Comment on Determinations and factors affecting $$\operatorname{BMR}.$$

Or

- (b) List out the trace minerals (microminerals) required by people in minute amounts.
- 18. (a) Explain in detail about the functions, excretion and deficiency of Zinc.

Or

(b) Explain in detail about fat soluble vitamins.

C-2017

Sub. Code 96324

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Second Semester

Nutrition and Dietetics

NUTRITION FOR WOMEN

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

Answer all questions.

Define the following:

- 1. Macronutrient
- 2. Carbohydrate
- 3. Gestational Diabetes
- 4. Ectopic pregnancy
- 5. Progesterone
- 6. Placenta
- 7. Vitamin C.
- 8. Chronic obstructive pulmonary disease
- 9. Anaemia
- 10. Anorexia

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) What are the eight types of vegetables in a food group?

Or

- (b) What are the six categories of fruit that we eat?
- 12. (a) Describe about the nutrition important during pregnancy?

Or

- (b) What should be the pregnancy women eat in first three months of pregnancy?
- 13. (a) What causes lactation in females when not pregnant?

Or

- (b) Write the composition of colostrums and breast milk.
- 14. (a) What are the dietary requirements of babies from birth to around six months?

Or

- (b) Write the advantages of breast feeding.
- 15. (a) What are the nutritional needs of an adolescent?

Or

(b) What are the major problems faced by adolescence?

C-2017

2

Answer all questions.

16. (a) Describe about over nutrition, under nutrition and malnutrition.

Or

- (b) What are the complications in pregnancy? Describe about the food and nutritional requirements.
- 17. (a) Discuss about the physiology and pyschology of lactation.

Or

- (b) Explain in detail about the vaccines for baby. Why do babies get fever after vaccination?
- 18. (a) Describe about the food habits and influencing food intake for adolescents.

Or

(b) Mention briefly about the weaning and supplementary foods for infants.

C-2018

Sub. Code 96325

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Second Semester

Nutrition and Dietetics

NUTRITION THROUGH LIFE CYCLE

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define RDA.
- 2. Mention the chief planning for pregnant Women.
- 3. Define nursing mother.
- 4. What is breast milk?
- 5. Define human milk.
- 6. Mention diet planning for the preschool school.
- 7. Define feeding problems.
- 8. What is puberty?
- 9. Define planning diet.
- 10. Define Nutrition in elderly age.

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Give an account on stages of pregnancy

Or

- (b) Write a brief note on factors influencing the outcome of pregnancy.
- 12. (a) Write a brief note on physiology and psychology of lactation.

Or

- (b) Give an account on nutritional requirements of a nursing mother.
- 13. (a) Explain briefly about the process of breast feeding. Or
 - (b) Write short notes on Nutrition related problems in childhood.
- 14. (a) Write a brief note on diet plan for the school children.

Or

- (b) Give an account on Malnutrition due to early marriage.
- 15. (a) Explain briefly about the nutritional requirements of an adult man and women.

Or

(b) Give an account on Modification of diet in old.

C-2018

2

Answer all questions.

16. (a) Write short note on Nutritional requirements and diet planning for pregnant women.

Or

- (b) Give an account on hormonal control for lactating women.
- 17. (a) Explain in briefly about the weaning and supplementary foods.

Or

- (b) Comment on packed lunch.
- 18. (a) Write a brief note on reference man and women in adulthood.

Or

(b) Give an account on changes in body composition in elderly age.

96332

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Nutrition and Dietetics

HUMAN PHYSIOLOGY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What are the functions of ABO blood group?
- 2. Define endothelial system.
- 3. Explain the different types of enzymes takes place during digestion.
- 4. What is mean by bolus?
- 5. What produce bile juice?
- 6. Write the structure of respiratory system.
- 7. Draw the neat diagram of female reproductive organ.
- 8. Define parathyroid.
- 9. Explain cutaneous sensation.
- 10. Write about the use of medulla oblongata.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write about the structure of hemoglobin.

Or

- (b) What are the properties of cardiac muscle?
- 12. (a) Explain the movement of the intestine.

Or

- (b) Give a brief notes on small intestine.
- 13. (a) Explain about the chemistry of respiration.

Or

- (b) Write about the function of skin.
- 14. (a) Describe the establishment of menstrual cycle.

Or

- (b) Write down the anatomy of the male reproductive organ.
- 15. (a) Draw the structure of spin cord and its function.

Or

(b) Write about the structure and function of cerebrum.

2

Answer all questions.

16. (a) Give detailed account on blood composition and function.

Or

- (b) Write about the structure of heart and blood vessels.
- 17. (a) Explain the structure, function and role of liver and pancreas.

Or

- (b) Write about the structure of nephron and formation of urine.
- 18. (a) Write about the development of embryo and pregnancy.

Or

(b) Explain the general classification nervous system.

96333

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Nutrition and Dietetics

BASIC FOOD PROCESSING AND PRESERVATION

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Food
- 2. Spoilage
- 3. Oats
- 4. Cereals
- 5. Cheese
- 6. Probiotic
- 7. Refrigeration
- 8. Pasteurization
- 9. Fermentation
- 10. Preservatives.

Part B

 $(5 \times 5 = 25)$

Answer all the questions.

11. (a) Write about types of spoilage.

Or

- (b) Give a note on fluid and visco elastic behavior of food.
- 12. (a) Shortly explain about by products of wheat.

Or

- (b) Explain processed foods.
- 13. (a) List out different types of milk.

Or

- (b) Highlight indigenous milk products.
- 14. (a) Give a brief account on advantages of freezing.

Or

- (b) Sun Drying-explain.
- 15. (a) Write about role of preservatives.

Or

(b) Illustrate principles of gel formation.

2

C - 4953

Answer all questions.

16. (a) Write an essay on importance and principles of food preservation.

Or

- (b) Explain different types of fermentation.
- 17. (a) Enumerate preservation by the use of low and high temperatures.

Or

- (b) Describe about pasteurization.
- 18. (a) Discuss in detail about permitted preservatives.

Or

(b) Mention briefly about common fermented foods.

96334

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Nutrition and Dietetics

NUTRITION FOR HEALTH AND FITNESS

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is balancing exercise?
- 2. Comment on flexibility work out.
- 3. What is personalized approach?
- 4. What are the functions of pulmonary?
- 5. Define My pyramid.
- 6. What is ergometer?
- 7. What is hypertension.
- 8. Define stress and stress management.
- 9. What is yogic practice?
- 10. Define meditation.

Part B $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Elucidate strength exercises.

Or

- (b) Explain the challenges in fitness training.
- 12. (a) Give details on Hydration for health.

Or

- (b) Describe the role of iron in health.
- 13. (a) Explain elliptical bicycle.

Or

- (b) Illustrate the factors influencing cardiovascular diseases.
- 14. (a) Explain pulmonary rehabilitation.

Or

- (b) Give short note on different yoga for respiratory troubles.
- 15. (a) Explain exercise at high altitudes.

Or

 $\begin{array}{ll} \hbox{(b)} & \hbox{Comment on gadgets for measuring PA-motorized} \\ & \hbox{treadmill.} \end{array}$

2

Answer all questions.

16. (a) Give a detailed note endocrines and exercises.

Or

- (b) Describe the importance health and fitness.
- 17. (a) Write a detailed note on anaerobic training and its health benefits.

Or

- (b) Describe the adverse effects of physical inactivity on health.
- 18. (a) Give a detailed note on clinical exercise physiology for cancer.

Or

(b) Comment on "yoga for healthy life".

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Third Semester

Nutrition and Dietetics

FOOD STANDARDS AND QUALITY CONTROL

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Toxins.
- 2. Enzymes.
- 3. Food Quality.
- 4. Tinned Foods.
- 5. Beverages.
- 6. Food Additives.
- 7. Mycotoxins.
- 8. Lathyrogens.
- 9. BIS.
- 10. HACCP.

Part B

 $(5 \times 5 = 25)$

Answer all the questions, choosing either (a) or (b).

11. (a) Write about physio-chemical changes in food.

Or

- (b) Give a note on proteins in food.
- 12. (a) Shortly explain about Starchy foods.

Or

- (b) Explain food colors.
- 13. (a) List out types of sensory tests.

Or

- (b) Highlight the instruments used for objective evaluation.
- 14. (a) Give a brief account on Sea foods.

Or

- (b) Food standards Explain.
- 15. (a) Write about tests for detecting food adulterants.

Or

(b) Illustrates effect of food adulteration and contamination.

2

Answer all questions, choosing either (a) or (b).

16. (a) Write an essay on simple techniques of quality checking of raw food materials.

Or

- (b) Explain different types of Milk.
- 17. (a) Enumerate role, purpose and defects in sensory evaluation.

Or

- (b) Describe essential qualities of a panel member.
- 18. (a) Discuss prevention of food adulteration Act.

Or

(b) Write an essay on centers for sensory evolution in India and their role.

C-2023

Sub. Code 96342

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Fourth Semester

Nutrition and Dietetics

DIETETICS - I

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Discuss any two goals of diet therapy.
- 2. State the use of low residue diets.
- 3. Define jejunostomy.
- 4. Define Nyctalopia.
- 5. List any two risk factors of obesity.
- 6. What is the use of ORS?
- 7. State liver abscess.
- 8. Define fatty liver.
- 9. How do you find a person with 21-Trisomy?
- 10. Define cerebral palsy.

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Outline the types of dietitian.

Or

- (b) Differentiate between high protein and low protein diet.
- 12. (a) Give a brief account on different methods of enteral nutrition.

Or

- (b) Enumerate dietary modification, diet planning and preventive measures for PEM.
- 13. (a) Discuss the risk factors and diet planning for people who are under weight.

Or

- (b) Give a brief account on Peptic ulcer.
- 14. (a) Highlight the nutritional support given for the patients with inborn error of metabolism.

Or

- (b) Give a brief account on Gall bladder diseases.
- 15. (a) Highlight the nutritional care for the children with special needs.

Or

(b) "Mongoloid idiocy"- justify the statement in detail.

2

Wk 10

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Give a detailed account on Routine hospital diets.

Or

- (b) Outline the various types of infusion and add a note on TPN formula for adults.
- 17. (a) Explain in detail about the planning and counselling measures for febrile conditions.

Or

- (b) Write an essay on Gastritis and Haemorrhoids.
- 18. (a) Discuss in detail about the diseases with respect to the liver and add a note on its dietary modifications and planning.

Or

(b) Describe an overview of the food and the nutritional needs for patients affected with autism and cerebral palsy.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Fourth Semester

Nutrition And Dietetics

FOOD SERVICE MANAGEMENT - I

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is commercial / profit oriented food service?
- 2. Give some examples for service oriented food service.
- 3. Define management.
- 4. Classify different types of organization.
- 5. What do you mean by cost concepts?
- 6. List out some labour laws governing to food service establishment.
- 7. What is fuel?
- 8. Name some fuels, which are used in Kitchen.
- 9. What is personal Hygiene?
- 10. Define environmental Hygiene.

 $(5 \times 5 = 25)$

Answer all questions

11. (a) Draw the chart of catering establishment and give some examples.

Or

- (b) Write about public health facility oriented programmes in the country.
- 12. (a) Qualities of good leaders styles of leadership Explain.

Or

- (b) Differentiate between management and organisation.
- 13. (a) Write short notes on; (i) personnel orientation. (ii) Motivation (iii) Training (iv) Supervision (v) Performance appraisal.

Or

- (b) Explain Balance sheets and Inventory Budgetary control.
- 14. (a) What are the advantages of fuel in relation to economy in Quantity cookery?

Or

(b) Mention various safety procedures to avoid accidents in food service establishments.

C-2024

15. (a) Write about the importance of pest and rodent control in food services.

Or

(b) Distinguish between Environmental Hygiene and personal Hygiene.

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Explain – process of organization, principles of organization and types of organization.

Or

- (b) Briefly explain about sources of personnel and its selection criteria.
- 17. (a) Describe Financial management and applications of management accounts of catering operators.

Or

- (b) Write about the role and legal responsibilities of food service manager.
- 18. (a) Classify various types of Fuels and give some details and their uses.

Or

(b) State detailed notes on safety in food procurement, storage, handling, preparation and control of spoilage.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Fourth Semester

Nutrition And Dietetics

BAKERY AND CONFECTIONARY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Give some examples of bakery products prepared in bakery units.
- 2. List out different types of flour used in bakery and confectionary.
- 3. What is Kneading?
- 4. What is WAP?
- 5. Define Proofing
- 6. Write different types of cakes available in confectionary.
- 7. Define wheat.
- 8. What do you mean by Fermentation?
- 9. Mention different types of tools and equipments used in bakery and confectionary.
- 10. What is Icing?

 $(5 \times 5 = 25)$

Answer all questions

11. (a) Write about steps and by products of wheat milling.

Or

- (b) Role of Ingredients, in bakery preparations Explain.
- 12. (a) Distinguish between Biscuit and cookies Explain.

Or

- (b) Describe Facts and remedies in cake making.
- 13. (a) Write about roles and functions of flour and yeast.

Or

- (b) List out different types of ovens available in markets for bakery units.
- 14. (a) Explain Principles of Baking.

Or

- (b) Write short notes on; (i) yeast (ii) Flavouring agent (iii) Puff pastry (iv) Baking Powder (v) Shortening.
- 15. (a) Write a preparation method of toffee and its methods.

Or

2

(b) Describe Frosting and Fillings.

C-2025

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) List out various bread making methods in bakery unit.

Or

- (b) Briefly explain about Baked products storage.
- 17. (a) Classify various major and minor equipments and tools used in bakery and confectionary units.

Or

- (b) Types of Icing and its preparations Explain.
- 18. (a) Write about causes and faults in bread making process

Or

(b) What are the points to be considered, while setting up of bakery units.

B.Sc DEGREE EXAMINATION, NOVEMBER 2021

Fourth Semester

Nutrition And Dietetics

FOOD PRODUCT DEVELOPMENT AND MARKETING STRATEGY

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Who is linguistic?
- 2. Define marketing strategy.
- 3. What do you mean by portion control?
- 4. What is market demand?
- 5. Define economic feasibility.
- 6. What is Marketing structure?
- 7. What do you mean by market efficiency?
- 8. Define market promotion.
- 9. What is sanitation?
- 10. What is Global Market status?

 $(5 \times 5 = 25)$

Answer all questions

11. (a) Write short notes on Basic principles and concept of food product development.

Or

- (b) What are the factors involved in food habit alteration?
- 12. (a) Write short notes on calculative of nutritive value of cost of production.

Or

- (b) Write notes on storage stability reevaluation procedure to developed food products.
- 13. (a) Answer in detail development of score card and Analysis of data.

Or

- (b) Explain the importance and role of advertisement and technologies in promotion of new products.
- 14. (a) Briefly explain about approaches of study marketing function.

Or

- (b) Role of government agricultural Marketing explain.
- 15. (a) Answer in detail about condition for sale, license and identification and quality processing.

Or

(b) Role of export promoting agencies – Explain.

C-2026

 2

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Briefly explain about importance and role of different research and development in food production industry.

Or

- (b) Briefly explain about steps in product development material based on market demand.
- 17. (a) Briefly explain about uses of therapeutic diet.

Or

- (b) List out the steps involved in selection and training of Judges.
- 18. (a) Brief notes on storage and sanitation.

Or

(b) Answer in detail about formulation of new food products of infants, preschool children & adoles pregnant peoples.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Nutrition and Dietetics

DIETETICS – II

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What are the metabolic diseases?
- 2. Write the Symptoms for renal diseases.
- 3. Hypoglycaemia.
- 4. Difference between acute and chronic disease.
- 5. What are nutritional imbalanced diseases?
- 6. Allergies.
- 7. What is nutritional care for patients with cancer?
- 8. Aetiology
- 9. Obesity
- 10. Dietary counselling.

 $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Explain the cardiovascular disease

Or

- (b) Give short note on cancer therapy.
- 12. (a) Explain the types of endocrine pancreas.

Or

- (b) Brief note on NIDDM.
- 13. (a) Write the diet planning for urinary calculi.

Or

- (b) Explain the acute renal failure.
- 14. (a) Write down the types, causes, and symptoms for NIDDM patients.

Or

- (b) Write a short note on role of neutraceutical in the prevention of cancer.
- 15. (a) Mention about the Nutritional care in HIV and its infection.

Or

(b) Write down the dietary counselling process and counselling guidelines steps.

 2

C - 4956

Part C $(3 \times 10 = 30)$

Answer all questions.

16. (a) Write the Role of metabolic disease and cardiovascular disease dietary modification.

Or

- (b) Describe the role of neutraceuticals in the prevention of diabetes mellitus and obesity.
- 17. (a) Explain the nutritional management system with example for opportunistic infected persons.

Or

- (b) Write the role of neutraceuticals human health.
- 18. (a) Discuss nutritional care in disease of the musculoskeletal system in osteoporosis.

Or

(b) Explain the causes, symptoms and nutritional modification of urinary calculi.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Nutrition and Dietetics

FOOD SERVICE MANAGEMENT - II

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Food self service
- 2. Commissary system
- 3. Interior decoration
- 4. Store record
- 5. Costing of dishes
- 6. Pricing
- 7. Base material
- 8. Dining room furnishing
- 9. Food service layout
- 10. Dish wash area

Part B $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Describe the western menu planner.

Or

- (b) Explain about the styles of food services.
- 12. (a) Briefly write about the creating good ambiance decoration.

Or

- (b) Write about the receiving procedure forms.
- 13. (a) Explain the elements of cost-food coast and labour coast.

Or

- (b) Discuss about the utilization of left over foods.
- 14. (a) Write about the factors involved selection of equipments.

Or

- (b) Write a brief note on base material used in dining room furnishing.
- 15. (a) Explain the optimum working heights.

Or

(b) Write about the layout of plants-space allocations.

2

C-4957

Part C $(3 \times 10 = 30)$

Answer **all** questions, by choosing either (a) or (b).

16. (a) Write detailed notes on techniques in writing menu card.

Or

- (b) Write the classification of food service.
- 17. (a) Explain in detailed about the informal and formal service styles.

Or

- (b) Describe about quantity food production and service.
- 18. (a) Discuss about the principles of food cost control.

Or

(b) Write the methods of pricing items of foods.

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Nutrition And Dietetics

COMMUNITY NUTRITION

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is Fallacies?
- 2. Write the Dietary pattern.
- 3. What is the Size of families?
- 4. What is Anemia?
- 5. What are the common nutritional problems?
- 6. Define ICMR.
- 7. What are Customs food fads?
- 8. CFTRI.
- 9. Describe the National food security.
- 10. WHO.

 $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Write about Food fortification and enrichment.

Or

- (b) Explain the National nutritional problems and their implications.
- 12. (a) Discuss about the Ignorance and other factors synergism between malnutrition and infection.

Or

- (b) Briefly explain NMR, MMR and prevalence of common nutritional problems.
- 13. (a) Describe the Cost of wastage due to malnutrition in pregnancy.

Or

- (b) Determination of Environmental sanitation and health.
- 14. (a) Explain the National Nutritional Anaemia Prophylaxis Programme.

Or

- (b) Impact of national nutrition policy.
- 15. (a) Write the International organization concerned with food and nutrition FAO, World bank.

Or

(b) What are the Problems of nutrition education programmes?

2

C-4958

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Discuss about Appreciate the national and international contribution towards nutrition improvement in India.

Or

- (b) Discuss about Iodine Deficiency Disorders and Fluorosis Ecological factors leading to malnutrition such as income.
- 17. (a) Explain the Increase agricultural production and animal husbandry with emphasis on nutritious foods and nutrition gardens

Or

- (b) How to develop skills in organizing and evaluating nutrition projects in the community?
- 18. (a) Write the Methods of education use of audio visual aids use of computers to impart nutrition education.

Or

(b) Discuss about Vitamin A Deficiency disease.

96354

B.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Nutrition and Dietetics

TRADITIONAL HERBS IN FOOD SCIENCE

(2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. How the nutraceutical food sources are categorized?
- 2. Expand FSSAI Act.
- 3. What are the different forms of herbal preparations?
- 4. What is pharmacognosy?
- 5. What is the principle of TLC? What is Rf value?
- 6. Name the mobile phases used in TLC to separate tannins.
- 7. Short note is shade farming.
- 8. Account on steeping.
- 9. What is rejuvelac?
- 10. Name any five natural color herbs.

Part B $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) Describe the common bioactive components in foods.

Or

- (b) Explain the history and prospects of herbal nutraceuticals.
- 12. (a) Detailed note on palynological evidences in identifying medicinal herbs.

Or

- (b) Illustrate the difficulties identifying medicinal herbs.
- 13. (a) Discuss the method used to extract glycosides.

Or

- (b) Give an account on application of TLC in pharma.
- 14. (a) Elaborate on green house cultivation of herbs.

Or

- (b) Discuss the different reproductive method of herb cultivation.
- 15. (a) Explain the significant role of natural brewages in maintaining human health.

Or

(b) Comment on spices as flavors.

C - 4959

2

Part C $(3 \times 10 = 30)$

Answer all questions, choosing either (a) or (b).

16. (a) Illustrate the beneficial role of herbs in protecting human from diseases.

Or

- (b) Detailed note on the various herbal preparations.
- 17. (a) Discuss in detail about the detection methods of various bioactive components of herbs.

Or

- (b) List and elaborate the methods to identify the photochemicals by color test.
- 18. (a) Discuss merits and demerits of different methods of herbal preservation.

Or

(b) Illustrate in detail about preparation and beneficial role of Kombucha.
