Sub. Code 96313

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### First Semester

# **Nutrition and Dietetics**

# FOOD SCIENCE

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Energy yielding
- 2. Hollow hunger
- 3. Batter
- 4. Enrichment
- 5. Pigment
- 6. Nutrition loss
- 7. Dry milk
- 8. Nutritive value
- 9. Smoking
- 10. Condiments.

Answer all questions.

11. (a) Write a note on malnutrition.

Or

- (b) Explain hollow hunger.
- 12. (a) Write about the advantages of consuming germinated grains.

Or

- (b) Briefly explain the nutritional importance of bajra and ragi.
- 13. (a) Describe the effect of cooking on nutrition loss of vegetables.

Or

- (b) Explain about enzymatic browning of fruits.
- 14. (a) Write a brief note on composition and nutritive value of milk.

Or

- (b) Explain fish selecting criteria.
- 15. (a) Write an account on hydrogenation of oils.

Or

2

(b) Give the method of identifying adulterants in milk.

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

Answer all questions.

16. (a) Explain in detail the nutritional classification of foods.

Or

- (b) Write an account on moist and dry heat methods of cooking and its merits.
- 17. (a) Discuss on factors affecting quality of pulses.

Or

- (b) Explain the steps involved in pasteurization of milk and its application.
- 18. (a) Explain in detail about the concept of food as medicine.

Or

(b) Describe the importance of food enrichment and fortification.

Sub. Code 96314

# B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

# First Semester

# **Nutrition and Dietetics**

# FOOD MICROBIOLOGY

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Louis Pasteur.
- 2. Saccharomyces cerevisiae.
- 3. Batch culture.
- 4. Exponential phase.
- 5. Contaminant.
- 6. Perishable foods.
- 7. Mycotoxins.
- 8. Aspergillus sp.
- 9. Acetobacter.
- 10. Lactobacillus.

Answer all questions.

11. (a) Write short notes on the history of food microbiology.

Or

- (b) Give an account on application of microscopy in food microbiology.
- 12. (a) Explain briefly about microbial growth curve.

Or

- (b) Write about media formulation for bacterial culture.
- 13. (a) Explain briefly about preservation of vegetable and fruits.

Or

- (b) Write about the spoilage organisms of meat and its toxins.
- 14. (a) Write a short notes on preservation of cereals by physical method.

Or

- (b) Briefly explain the microbiological profile of sugarcane.
- 15. (a) Write an account on cheese production.

Or

(b) Write short notes on soy based products.

CP-9516

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

#### Answer all questions.

16. (a) Give an account on morphology of beneficial algae and yeast.

Or

- (b) Explain in detail about the intrinsic factors affecting microbial growth.
- 17. (a) Write about spoilage organisms of meat and preservation methods.

Or

- (b) Explain spoilage and preservation of cereals products.
- 18. (a) Write an account on fermented foods.

Or

(b) Elaborate the beneficial effects of microbes in value addition and preservation of foods.

Sub. Code 96315

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### First Semester

# **Nutrition and Dietetics**

# FOOD CHEMISTRY

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Define water activity.
- 2. Foaming.
- 3. Surface active agents.
- 4. Acid hydrolysis.
- 5. Chemistry of milk protein.
- 6. Fermentation.
- 7. Shortening power of fat.
- 8. Winterization.
- 9. Enzymatic browning.
- 10. Essential oils.

Answer all questions.

11. (a) Write a note on the factors affecting food quality.

Or

- (b) Explain food dispersion.
- 12. (a) Differentiate crystalline and noncrystalline candies.

Or

- (b) Write a brief note on chemistry of milk sugar.
- 13. (a) What is gluten and why is it so important?

Or

- (b) Explain the effects of alkali on vegetable proteins.
- 14. (a) Give an account on decomposition of triglycerides with example.

Or

- (b) Explain the factors affecting fat absorption in food.
- 15. (a) Write short notes on phenolic compounds of fruits and vegetables.

Or

(b) Discuss the types of pigments and its industrial applications.

2

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

Answer all questions.

16. (a) Write in detail about the water activity and moisture content of foods.

Or

- (b) Explain in detail about gels, foam, colloid and emulsion.
- 17. (a) Describe the effect of soaking, fermentation and germination on pulse protein.

Or

- (b) Explain hydrogenation, winterization and rancidity.
- 18. (a) Discuss the types of enzymes and its importance in food and beverage industries.

Or

(b) List out the spices and condiments usually utilized in cooking and explain the concept of food as medicine.

CP-9517

Sub. Code

96316

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# First Semester

# **Nutrition and Dietetics**

# FUNDAMENTALS OF BIOCHEMISTRY

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Hydrogen bond.
- 2. Buffer.
- 3. Glycoproteins.
- 4. Triglycerides.
- 5. Peptide bond.
- 6. Central Dogma.
- 7. RNA polymerase.
- 8. Purines and pyrimidines.
- 9. Enzymes.
- 10. Cellulase.

Ws19

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

Answer all questions.

11. (a) Write a short notes on Bloor's classification of lipids.

Or

- (b) Define pH and write a note on acids and bases.
- 12. (a) Give an account on Disaccharides.

Or

- (b) Explain fatty acids and its functions
- 13. (a) Write a note on essential Amino acids.

Or

- (b) Explain the functions of proteins in brief.
- 14. (a) Write a short notes on Nucleotides.

Or

- (b) Explain Watson and Crick's model of double helical structure of DNA.
- 15. (a) Briefly explain the "Lock and Key "hypothesis.

Or

(b) Derive Lineweaver- Burk equation.

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

Answer all questions.

16. (a) Write a detail note on Buffers and derive Henderson Hasselbalch equation.

Or

(b) Write in detail about the classification of carbohydrates.

CP-9518

17. (a) Explain in detail about the structural classification of proteins.

Or

- (b) Explain the mechanism of DNA replication in prokaryotes.
- 18. (a) Derive Michaelis-Menten equation and explain its significance.

Or

(b) Write detailed notes on application of enzymes in food industries.

Sub. Code

96323

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Second Semester

# **Nutrition and Dietetics**

# PRINCIPLES OF NUTRITION

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Uses of RDA
- 2. Role of fibre
- 3. BV
- 4. NPU
- 5. Calorimetry
- 6. Factorial method
- 7. Calcium
- 8. Iron
- 9. Thiamine
- 10. Folic acid.

Answer all questions.

11. (a) Give an account on general principles of deriving RDA.

Or

- (b) Explain in detail about the regulation of blood sugar level.
- 12. (a) Write a short note on functions of proteins and amino acids.

Or

- (b) Explain in briefly about the definition and functions of lipids.
- 13. (a) Write short note on physiological energy value of foods.

Or

- (b) Give an account on Energy requirement for physical activity.
- 14. (a) Comment on Macrominerals.

Or

- (b) Give an account on sources and effects of deficiency.
- 15. (a) Explain in briefly about water soluble vitamins.

Or

(b) Write a detailed note on vitamin B6 and B12.

**CP-9519** 

Ws9

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

Answer all questions.

16. (a) Give a detailed note on definition and classification of dietary fibre.

Or

- (b) Give an account on sources and Requirements of aminoacids.
- 17. (a) Comment of definitions, determinations and factors affecting BMR.

Or

- (b) Explain briefly about the classification and general functions of minerals.
- 18. (a) Give an account on sources and effects of deficiency of vitamin B6 and B12.

Or

(b) Differentiate between fat soluble and water soluble vitamins with suitable examples.

Sub. Code

96324

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# Second Semester

# **Nutrition and Dietetics**

# NUTRITION FOR WOMEN

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Nutrition
- 2. Balanced diet
- 3. Nutrition during pregnancy
- 4. Nutritional requirement
- 5. Lactation
- 6. Colostrums
- 7. BMR
- 8. Weaning
- 9. Adolescents
- 10. Growth

Answer all questions.

11. (a) Give an account on principles of Nutrition.

Or

- (b) Write a detailed note on malnutrition.
- 12. (a) Give a brief note on physiological changes during pregnancy.

Or

- (b) Elaborate the food and Nutritional requirements during pregnancy.
- 13. (a) Give an account on Nutrition during lactation.

Or

- (b) Illustrate about the Nutritional requirements of a nursing mother.
- 14. (a) Write a detailed notes on Nutritional care of infants.

Or

- (b) Give a brief note on advantages of breast feeding.
- 15. (a) Give an account on Nutrition for adolescent.

Or

2

(b) Elaborate food habits during Adolescents.

Ws2

Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Give a detailed note on Balanced diet.

Or

- (b) Explain in detail about complications in pregnancy.
- 17. (a) Discuss in detail about hormonal control during lactation.

Or

- (b) Write an account on Growth and development during infants.
- 18. (a) Give an account on nutritional problems during adolescents.

Or

(b) Differentiate between Nutrition during pregnancy and Lactation.

Sub. Code 96325

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### **Second Semester**

#### **Nutrition and Dietetics**

#### NUTRITION THROUGH LIFE CYCLE

#### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is a principle of meal planning?
- 2. Give the RDA for a pre-school child.
- 3. What is colostrum?
- 4. List out four advantages of breast feeding.
- 5. Write two objective of school lunch program.
- 6. Mention protein requirement for different age groups.
- 7. State and explain puberty.
- 8. Define gerontology.
- 9. What is Anorexia Nervusa?
- 10. Name the nutritional disorders that occur during old age.

Answer all questions.

11. (a) State and explain two infant feeding options during the first six months of life.

Or

- (b) Discuss the physical and physiological changes occurring during pregnancy.
- 12. (a) Explain the maintenance and importance of growth charts and supplementary foods for children.

Or

- (b) Discuss in detail the advantages of breast feeding.
- 13. (a) Enumerate the points to be considered in introducing weaning food to the infant.

Or

- (b) Point out the factors affecting food intake of preschool child.
- 14. (a) Describe about the changes in physiological.

Or

- (b) What characteristics contribute to malnutrition in older people?
- 15. (a) Point out the factors affecting food intake of elderly people.

Or

(b) Write down the physiology of lactation and the factors influencing lactation.

**CP-9521** 

Part C

 $(3 \times 10 = 30)$ 

#### Answer all questions.

16. (a) Write short notes on complication during pregnancy. Explain the daily nutritional requirements of a pregnant women.

Or

- (b) Write short notes on protein energy malnutrition. Explain the effect of under nutrition and infection on the growth and development of child.
- 17. (a) Discuss the role of hormone in secretion of human milk.

Or

- (b) (i) Explain in detail about breast milk and formulae milk.
  - (ii) Differentiate human milk and cow's milk.
- 18. (a) Explain in detail the dietry guidelines for old people.

Or

(b) Describe various factors affecting the accuracy of dietry assessment.

Sub. Code 96332

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### **Third Semester**

#### **Nutrition and Dietetics**

# **HUMAN PHYSIOLOGY**

#### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Define blood clotting factors.
- 2. What is Rh factor?
- 3. What are digestive enzymes?
- 4. What is the level and role of pH in stomach?
- 5. Define inspiration.
- 6. What are homeotherms?
- 7. What is fertilizin?
- 8. List any two functions of Thyroid gland.
- 9. Define Reflex action.
- 10. What are rods and cones?

Answer all questions.

11. (a) Explain the different factors involved in blood coagulation.

Or

- (b) Explain the measurement of arterial blood pressure.
- 12. (a) The enzymes involved in the digestion of fat Justify.

Or

- (b) Describe the structure and functions of pancreas.
- 13. (a) Explain the structure of Nephron.

Or

- (b) Explain the structure and functions of skin.
- 14. (a) Discuss the various steps involved in fertilization.

Or

- (b) Elaborate the functions of pituitary gland.
- 15. (a) Explain the structure of Brain with a neat labled diagram.

Or

(b) Eyes are photoreceptors – Discuss.

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

Answer all questions.

16. (a) Give a detailed account on composition of blood.

Or

2

(b) What is blood grouping? Explain the blood group inheritance in man.

17. (a) Discuss the physiology of digestion in man.

Or

- (b) Describe the mechanism of urine formation.
- 18. (a) List out the various phases of menstrual cycle.

Or

(b) Explain the structure of ear with a neat labled diagram.

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Sub. Code 96333

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Third Semester

# **Nutrition and Dietetics**

# BASIC FOOD PROCESSING AND PRESERVATION

#### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. How to preserve the food?
- 2. Define Fluid.
- 3. What is blended flour?
- 4. Define processed foods.
- 5. Define indigenous milk products
- 6. How to prepare cream?
- 7. Define Refrigeration.
- 8. Use of Low temperature.
- 9. Define principles of gel formation.
- 10. What is meant FPO specification?

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

#### Answer all questions.

11. (a) Explain in detail about principles of different food processing.

Or

- (b) Write a detailed note on Visco elastic behavior of foods.
- 12. (a) Write a detailed note on barley and oats.

Or

- (b) Give an account on bakery products and pasta products.
- 13. (a) Write a brief note on manufacture of different types of milk.

Or

- (b) Explain about the importance of probiotic milk products.
- 14. (a) Discuss about the preservation by the use of Low temperature.

Or

- (b) List out the importance of preservation by the use of refrigeration.
- 15. (a) Illustrate about the preservation by using sugar concentrates.

Or

(b) Write a note on the spray drying with suitable diagrams.

CP-9523

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

Answer all questions.

16. (a) Explain about the different ways of food processing and preservation.

Or

- (b) Write a detailed note on processing of cereals with suitable examples and diagrams.
- 17. (a) Discuss about the processing of milk products with suitable illustrations.

Or

- (b) Write brief note on preservation by the use of high temperature with suitable diagrams.
- 18. (a) Give an account on the Pasteurization and sterilization.

Or

(b) List out the preservatives used for the fermentation.

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Sub. Code

96334

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### **Third Semester**

#### **Nutrition and Dietetics**

# NUTRITION FOR HEALTH AND FITNESS

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Best tips for everyday fitness.
- 2. What do you mean by adequate diet?
- 3. What are micronutrients?
- 4. Use of Vitamin D in physical activity.
- 5. Write a note on My Pyramid.
- 6. Define Multi Gym.
- 7. Explain CV.
- 8. List out Non communicable disease in human.
- 9. Explain Anaemia.
- 10. Hypertension.

Answer all questions.

11. (a) Explain the personalised approach during physical fitness training.

Or

- (b) Explain the roles of macro and micro nutrients in health.
- 12. (a) List out the benefits of fitness training.

Or

- (b) Write a note on hydration for health.
- 13. (a) Discuss the risk factors and exercise for people who are overweight.

Or

- (b) Give a brief account on cardiovascular regulation during exercise.
- 14. (a) Highlight the diseases due to faulty food habits.

Or

- (b) Write a brief note on aerobic fitness.
- 15. (a) Emphasise on fluid rower for physical activity.

Or

(b) Illustrate stress assessment and management techniques.

2

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

Answer all questions.

16. (a) Discuss in detail about the qualifications, qualities and professional ethics of fitness trainer.

Or

- (b) Give a detailed account on pulmonary structure and function.
- 17. (a) Discuss in detail about the Cancer.

Or

- (b) Write an essay on gadgets for measuring PA.
- 18. (a) Enumerate the various types of life style related disease.

Or

(b) Give a detailed account on yoga.

Sub. Code 96335

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Third Semester

#### **Nutrition and Dietetics**

# FOOD STANDARDS AND QUALITY CONTROL

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Define food additives.
- 2. Which food contains mycotoxins?
- 3. Write note on preservatives.
- 4. Define food specifications.
- 5. Explain aflatoxins.
- 6. Mushroom poisoning.
- 7. Food adulteration act.
- 8. List out the inorganic compounds in food.
- 9. Expand FSSAI and HACCP.
- 10. Define food standards.

Answer all questions.

11. (a) Explain in detail about the duties of quality council.

Or

- (b) How can quality be quantified?
- 12. (a) Write important measures to control food adulteration.

Or

- (b) Explain in detail on sea food toxins.
- 13. (a) Give a brief account on codex alimentarious.

Or

- (b) Discuss the importance of color, texture and flavour of food products.
- 14. (a) Highlight the roles of AGMARK and BIS.

Or

- (b) Write a brief note on tests for detecting food adulterants.
- 15. (a) Emphasise on toxic minerals and other inorganic compounds in food.

Or

(b) Discuss on instruments used for objective evaluation.

CP-9525

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

Answer all questions.

16. (a) Discuss in detail about the food standards and food laws.

Or

- (b) Give a detailed account on pesticides and insecticides.
- 17. (a) Discuss in detail about food contaminants and adulterants.

Or

- (b) Write an essay on subjective evaluation.
- 18. (a) Enumerate the various types of toxins and enzymes in foods.

Or

(b) Describe in briefly on food additive s and their specifications.

Sub. Code 96342

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Fourth Semester

#### **Nutrition and Dietetics**

#### **DIETETICS - I**

#### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Define Dietetics.
- 2. What are the routine hospital diets?
- 3. What is gastrostomy?
- 4. Define PEM.
- 5. What are the causes for overweight?
- 6. Mention the diet for dysentery.
- 7. Define inborn errors of metabolism.
- 8. What are symptoms of fatty liver?
- 9. What is Autism?
- 10. What are the symptoms of Down's syndrome?

Answer all the questions.

11. (a) Briefly explain the importance of diet therapy.

Or

- (b) Explain in detail the principles of therapeutic diet.
- 12. (a) What are the risk factors leading to protein energy and malnutrition in children?

Or

- (b) Give the diet chart for iron deficiency anemia and the preventive measures.
- 13. (a) How will you counsel a patient suffering from severe peptic ulcer?

Or

- (b) Give an account on causes and pathogenesis of dysentery.
- 14. (a) Write down the RDA and dietary guidelines for pancreatitis.

Or

- (b) Briefly explain the symptoms and recommended diet for galactosemia.
- 15. (a) Write short notes on attention deficit hyperactivity disorder.

Or

(b) Give an overview of disabilities and diet modification for cerebral palsy.

CP-9526

Wk ser

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

Answer all the questions.

16. (a) Give a detailed account on specially modified therapeutic diet.

Or

- (b) Discuss in detail the various eternal feeding methods and its disadvantages.
- 17. (a) Explain in detail the clinical symptoms and deficiency of Vitamin A and dietary preventive measures to overcome the deficiency.

Or

- (b) Give an account on causes, symptoms and detailed diet plan for atonic constipation. patient.
- 18. (a) Discuss in detail the prognosis, symptoms and recommended dietary management for Phenylketonuria.

Or

(b) Give an overview on nutritional needs and modification for children with special needs.

Sub. Code 96343

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Fourth Semester

#### **Nutrition and Dietetics**

# FOOD SERVICE MANAGEMENT — I

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is Food Service Management?
- 2. List out various types of food services.
- 3. Difference between Personnel Management and Financial Management.
- 4. List out few food service institutions in Tamil Nadu.
- 5. What is organization?
- 6. List out the types of organisation.
- 7. What are the different theories of organisation?
- 8. Define Personnel Management.
- 9. What is Performance appraisal?
- 10. Define Environmental Hygiene.

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

Answer all questions.

11. (a) List out and explain the principles of management.

 $O_1$ 

- (b) What are the legal aspects of catering? Explain.
- 12. (a) Explain the importance of sanitation and hygiene.

Or

- (b) List out and explain different types of institutional food service operations
- 13. (a) What are the principles and techniques of management? Explain.

Or

- (b) List out the different tools of management.
- 14. (a) Explain labour policies and legislation.

Or

- (b) What are the sources of personnel?
- 15. (a) List out and explain different types of fuel.

Or

(b) What are the safety procedures followed in food service establishments?

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

Answer all questions.

16. (a) Explain different theories and types of management.

Or

(b) Discuss the importance of good human relations.

**CP-9527** 

17. (a) What are the legal responsibilities of Food Service Manager?

Or

- (b) Discuss the importance of pest and rodent control in food services.
- 18. (a) Explain the advantages of fuel in relation to economy in quantity cookery.

Or

(b) What are the safety procedure, training and education given in food service establishments?

Sub. Code 96344

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Fourth Semester

# **Nutrition and Dietetics**

# **BAKERY AND CONFECTIONARY**

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. Differentiate between Bakery and Confectionary.
- 2. What is batters?
- 3. Differentiate between Flour and Bread.
- 4. What is Baked foods?
- 5. List out different types of Icing
- 6. What is Frosting and Fillings?
- 7. Classify different types of ovens.
- 8. What is Cake Judging?
- 9. List out different types of Raw Materials.
- 10. What are Hard Boiled Candies?

Wk ser

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

Answer all questions.

11. (a) Classify Baked Foods.

Or

- (b) List out the principles of Baking.
- 12. (a) Brief about Leavening agents.

Or

- (b) What are the equipments required to start a small bakery unit? Explain its uses.
- 13. (a) Brief about Cake Faults and Bread Faults.

Or

- (b) What are the qualities of Good loaf?
- 14. (a) Write short notes on objective methods.

Or

- (b) Explain Subjective methods.
- 15. (a) Write short notes on Icing and its Techniques.

Or

(b) What is Frosting and Fillings? Explain.

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

Answer all questions.

16. (a) Draw the Layout of Bakery section in star hotel and draw the organisation structure of Bakery section.

Or

(b) Discuss Bakery industry in India.

**CP-9528** 

17. (a) Classify major and minor equipments used in Bakery and explain it uses.

Or

- (b) How will you maintain major and minor equipment and tools? Explain in detail.
- 18. (a) Explain the processing of Raw Material.

Or

(b) List out and explain different varieties of Hard Boiled Candies.

Sub. Code 96346

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# Fourth Semester

#### **Nutrition and Dietetics**

# FOOD PRODUCT DEVELOPMENT AND MARKETING STRATEGY

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. List out the basic principles of food product development.
- 2. What is food habit alteration?
- 3. Define standardization.
- 4. What is market demand?
- 5. Differentiate portion size and portion control.
- 6. Define nutritive value.
- 7. What is storage stability evaluation?
- 8. Define therapeutic diet.
- 9. What is market integration?
- 10. Define global market status.

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

Answer all questions.

11. (a) Write short note on concept of food product development.

Or

- (b) What are the factors involved in food habit alteration? Explain.
- 12. (a) Explain standardization method involved in product development.

Or

- (b) Write short notes on shelf life and storage stability.
- 13. (a) Explain about score card development.

Or

- (b) Write short notes on analysis of data.
- 14. (a) What is the role of advertisement towards food product development?

Or

- (b) Explain the concept of market and marketing.
- 15. (a) Write short notes on agricultural marketing.

Or

(b) Explain about storage and sanitation.

**CP-9529** 

Wk 4

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

# Answer all questions.

16. (a) Explain the cultural approach to development of dietary pattern of various group.

Or

- (b) What are the important and role of different research and development departments in food production industry.
- 17. (a) Explain the steps in product development.

Or

- (b) What are the methods involved in product development? Explain.
- 18. (a) Explain market promotion and positioning of food products.

Or

(b) Discuss the economic feasibility of new products.

Sub. Code

96351

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# Fifth Semester

# **Nutrition and Dietetics**

# **DIETETICS – II**

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is Atheroscelorsis?
- 2. What is CVD?
- 3. What is acute and chronic cardiac diseases?
- 4. Define the term Nutraceuticals.
- 5. Point out the causes for Osteoporosis.
- 6. Define the term dental caries.
- 7. Mention the causes for CVD.
- 8. Expand the acronym of IDDM. NIDDM.
- 9. Point out the causes for Osteoporosis.
- 10. What is diet counseling?

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

Answer all questions.

11. (a) Explain the dietary system for Cardiovascular disease patients.

Or

- (b) Explain the dietary system for Renal disease patients.
- 12. (a) Describe the methods of nutritional care for patients in surgery.

Or

- (b) Elaborate the techniques used in diet counselling.
- 13. (a) Mention the differences between food allergy and food intolerance.

Or

- (b) Describe the nutritional risks in patients With Rheumatoid Arthritis.
- 14. (a) Briefly explain the types of cancer.

Or

- (b) Write down the nutritional requirements for cancer patients.
- 15. (a) Describe the symptoms and stages of HIV infection.

Or

(b) Mention the health issues of women affected by HIV.

CP-9530

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

# Answer all questions.

16. (a) Discuss about the diet planning for Nephritis and Nephrosis.

Or

- (b) Write the role of nutraceuticals in human health.
- 17. (a) Elaborate the role of nutritional care for arthritis and oesteoporosis.

Or

- (b) Discuss about the uses of Nutraceuticals in the prevention and treatment of cardiovascular diseases.
- 18. (a) Explain the causes, symptoms and nutritional modification for Nephrosis.

Or

(b) Explain the Nutritional management system with examples for HIV infected persons.

CP-9530

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96352

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

#### Fifth Semester

#### **Nutrition and Dietetics**

# FOOD SERVICE MANAGEMENT - II

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is Commissary System?
- 2. Define Waiter Service.
- 3. Define Types of menu.
- 4. Brief Quality standards and control.
- 5. What are the different record uses in store?
- 6. What is left over food?
- 7. Define Principles of food cost control.
- 8. Define Classification of equipment.
- 9. Brief Purchase specification of equipments.
- 10. Define Optimum working height.

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

Answer all questions.

11. (a) List out different types of food service system.

Or

- (b) Briefly explain style of service in hotel industry.
- 12. (a) Discuss about quantity food purchase and storage process.

Or

- (b) Write detailed establish a good cost control.
- 13. (a) Briefly explain about elements of cost-food cost.

Or

- (b) What are the factors responsible for losses in food service Industry?
- 14. (a) What are the factor involved in selection of equipments?

Or

- (b) Explain about various arrangement of equipments in selection of equipments in work centre.
- 15. (a) What are the principles involves in menu planning?

Or

(b) What are the techniques in writing menu card?

CP-9531

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

Answer all questions.

16. (a) Briefly explain about different types of menus and Indian western menu planner.

Or

- (b) Describe the roll of purchasing procedure, selection of suppliers and methods of purchasing.
- 17. (a) Explain in detail methods of controlling food costs leading to profit costing of dishes, means and events.

Or

- (b) Answer in detail materials used for manufacture of dinning room furnishings.
- 18. (a) Write in detail characteristics of a typical food service layout.

Or

(b) Explain in detail storing and issuing, objectives, types of store records and store issues.

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# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# Fifth Semester

# **Nutrition and Dietetics**

# **COMMUNITY NUTRITION**

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is National nutritional problem?
- 2. Write the importance of Nutrition education.
- 3. Write three goals of community nutrition.
- 4. What is Ecology of malnutrition?
- 5. Write the Abbreviations: IMR, NMR, MMR, IDD.
- 6. What is food fortification and enrichment?
- 7. Write the nutrition intervention programmes in India.
- 8. What is Food Technology?
- 9. Expand ICMR, NIN.
- 10. Define Elearning.

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

Answer all questions.

11. (a) Explain the Vitamin A deficiency diseases.

Or

- (b) Explain the Iodine Deficiency Disorders.
- 12. (a) Describe the Nutrition garden.

Or

- (b) Discuss about measures to overcome malnutrition.
- 13. (a) Briefly explain about National food security.

Or

- (b) Explain the objectives of Chief Minister's Nutritional Meal Programmes for children (CMNMP).
- 14. (a) Write the functions of UNICEF.

Or

- (b) Brief on mission and objectives of FAO.
- 15. (a) Discuss about the nature and importance of Nutrition education to the community.

Or

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(b) Discuss about the problems of Nutrition Education Programmes.

**CP-9532** 

Part C

Answer all questions.

16. (a) Briefly explain the Ecological factors due to malnutrition.

Or

- (b) Discuss about Environmental sanitation and Health.
- 17. (a) Describe the Nutrition intervention programmes for vulnerable groups.

Or

- (b) Explain the National Organisation concerned with food and nutrition.
- 18. (a) Describe about the methods of education in nutrition programmes.

Or

(b) Discuss about the impact of National Nutrition policy.

 $(3 \times 10 = 30)$ 

Sub. Code

96354

# **B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

# Fifth Semester

#### **Nutrition and Dietetics**

# TRADITIONAL HERBS IN FOOD SCIENCE

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

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

- 1. What is Herbalsim?
- 2. What is plant Taxonomy?
- 3. What is Pharmacognosy?
- 4. Write down any four endomorphic characters of herbal plants.
- 5. What is palynology?
- 6. What are glycosides and alkaloids?
- 7. Point out any four preservation techniques adopted in herbs.
- 8. Mention the name of herbs used in colouring the food.
- 9. Elucidate the Vegetative and Non-vegetative methods in cultivation of herbs.
- 10. Write down the health benefits of having Traditional herbal medicine.

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

Answer all questions.

11. (a) Describe the different kinds of herbal preparation.

Or

- (b) Explain the significance of Herbal nutraceuticals.
- 12. (a) Mention the scope of Herbal plants.

Or

- (b) Elucidate the Exomorphic characters of herbal plants.
- 13. (a) Illustrate the extraction methods in herbals plants.

Or

- (b) Explain the detection methods of Alkaloids and glycosides.
- 14. (a) Explain the Vegetative methods in cultivation of herbs.

Or

- (b) Describe the preservation methods in herbals plants.
- 15. (a) Explain the taxonomic evidences of herbal plants.

Or

(b) Write down the importance of pharmacognosy.

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

Answer all questions.

16. (a) Explain the modern trends in plant taxonomy.

Or

- (b) Describe the Historical background of Herbal medicines.
- 17. (a) Describe the standardization of cultivation protocols of any five herbs.

Or

- (b) Illustrate the role of Traditional herbs in food science
- 18. (a) Explain the process involved in Kombucha.

Or

(b) Describe the difficulties in the process of herbal extraction.