

## **B.SC. IN FOOD, NUTRITION AND DIETITICS (FND)**

### **Programme Outcomes (PO)**

**PO1:**The programme provides basic understanding of the correlation between food and health.

**PO2:**Basically this is an inter-disciplinary programme with knowledge of human anatomy, microbiology, biochemistry and their role in relation to food and health.

**PO3:**The programme provides in-depth understanding of the role of food under specific diseased conditions.

**PO4:** Use an extensive knowledge of theories and concepts that underline the understanding of human diseases and their management by diet

**PO5:** Acquire theoretical background of designing and carrying out research in the relevant fields.

### **Program Specific Outcomes (PSO)**

**POS1:** Role of food and nutrition at various stages of life.

**POS2:**Nutrition and its implications under different diseased conditions

**POS3:**Nutrition as an integral part in the development of a community.

**POS4:**Nutrition and lifestyle changes towards a better future society.

**POS5:**Apply a broad based scientific knowledge and understanding of food, nutrition and dietetics

### **SEMESTER: I**

**Course Name: GENERAL PROFICIENCY AND COMMUNICATIVE ENGLISH**

**Course Code: FNDENL103**

**Course outcome:**

CO1-Effective and fluent oral communication.

CO2- Perfect writing skills.

CO3- Creative skills in presenting stories.

**Pedagogy:** Lectures, Assignments, Discussions, Role play and Seminars.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: HINDI**

**Course code: FNDHDL104**

**Course outcome:**

CO1- Enrichment of competence in Hindi

CO2- Development of story writing skill

CO3- Knowledge of different critical terms

**Pedagogy:** chalk and talk method, lectures, assignments, Projects, debate on specific topics, chart work, PPT Presentations, discussions.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: KANNADA**

**Course Code: FNDKAL 104**

**Course Outcomes:**

ಕಾವ್ಯ: ಕಾವ್ಯಭಾಗಗಳನ್ನು, ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಕವನ ರಚಿಸುವ, ಆಸ್ವಾದಿಸುವ ಸಾಮರ್ಥ್ಯಗಳಿಸುವುದು.

ಪಠ್ಯ: ಹಳಗನ್ನಡ ಕಾವ್ಯ ಭಾಗ, ವಚನಸಾಹಿತ್ಯದ ಭಾಗ, ಜನಪದ ಕಾವ್ಯ ಮತ್ತು ಹೊಸಗನ್ನಡದ ಕವನಗಳು.

ಗದ್ಯ: ೧. ಪ್ರಬಂಧಗಳು: ಲೇಖನಗಳನ್ನು ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಸೃಜನಶೀಲವಾಗಿ ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದಕ್ಕೆ ಪೂರಕವಾದ ಲೇಖನಗಳು.

ನಾಟಕ: ನಾಟಕದ ಸ್ವರೂಪದ ಅಧ್ಯಯನ, ನಾಟಕ ಓದಿನ ಆಸ್ವಾದ ಹಾಗೂ ಕನ್ನಡ ರಂಗಭೂಮಿಯ ಪರಿಚಯ. ಜೀವನ ಮೌಲ್ಯಗಳ ಕಲಿಕೆ, ಕಲೆಯ ಮೂಲಕ ಸಾಮಾಜಿಕ ಮೌಲ್ಯಗಳನ್ನು ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದು. - ನಾಟಕ ಅಧ್ಯಯನ

**Pedagogy:** Chalk and talk method, Lectures, Assignments, Discussions, Role play and Seminars

**Course Name: PLANT FOOD SCIENCE**

**Course Code: FNDFNC104**

**Objective:** Understand factors to be considered during selection of commodities RAW and processed and various aspects of their products and distribution

**Course Outcome:**

**CO1:** Know the different food groups and its classification.

**CO2:** Understand the principles underlying changes in food characteristics during cooking.

**CO3:** Be familiar with evaluation of food products for their quality characteristics.

**CO4:** Better understanding of plant origin food products.

**CO5:** Know different cooking and processing methods.

**Pedagogy:** Lectures, group discussions, Case studies

**Evaluation:** Unit Tests and seminars.

**Course Name: PRINCIPLES OF NUTRITION**

**Course Code: FNDFNC105**

**Objective:** Apply the knowledge in maintenance of good health for the individual and the community.

**Course Outcome:**

**CO1:** Understand the functions and sources of nutrients.

**CO2:** Able to relate good nutrition to normal physical development and sound health.

**CO3:** To be familiar with factors affecting availability and requirements of nutrients.

**CO4:** Understands the methods of assessing nutritional status and diet surveys.

**CO5:** Know the RDA of Energy, Carbohydrates, Protein and Fat.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: HUMAN PHYSIOLOGY I**

**Course Code: FNDFNC106**

**Objective:** Understand the physiological processes and functions applicable to human nutrition.

**Course Outcome:**

**CO1:** To understand the homeostatic status of the human body.

**CO2:** To understand the control mechanism of the body.

**CO3:** Describe and explain the normal functions of cells, tissues, organs, organ systems of human body.

**CO4:** Use correct terminologies to communicate physiological processes

**CO5:** Effectively evaluate case studies in physiology.

**Pedagogy:** Lectures, group discussions, Case studies

**Evaluation:** Unit Tests and seminars.

**Subject: CONSTITUTION OF INDIA**

**Subject code: FNDCIF102**

**Objective:** To educate students on Indian constitution and bring in them a sense of social concern towards the country.

**Course outcomes:**

CO1- The History and formation of IC is studied in detailed.

CO2- To understand the various aspects of Indian constitution, specially the articles

CO 3- To educate on important articles which have to be known by everyone

CO 4- To educate the students on how various elections are carried on in India

CO 5- Knowledge regarding various issues and matters of Parliament is learnt in the particular subject

**Pedagogy:** lectures, assignments, discussions, case studies

**Evaluation method:** Two internal test , one final semester exam

## **SEMESTER: II**

**Course Name: GENERAL PROFICIENCY AND COMMUNICATIVE ENGLISH**

**Course Code: FN DENL152**

**Course outcome:**

CO1- Effective reading, writing, speaking and listening skills.

CO2- Better conversation skills to communicate in real life situations.

CO3- Improved skills in role play and enactment of a situation.

**Pedagogy:** Lectures, Assignments, Discussions, Role play and Seminars.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: HINDI**

**Course code: FNDHDL154**

Course outcome:

CO1- Development of conversation, text organization, presupposition and implicature

CO2- Introduction of clauses and phrases

**Pedagogy:** chalk and talk method, lectures, assignments, Projects, debate on specific topics, chart work, PPT Presentations, discussions.

**Evaluation method:** Two internal test, one final semester exam.

**Course Name: KANNADA**

**Course Code: FNDKAL154**

**Course Outcomes:**

ಕಾವ್ಯ: ಕಾವ್ಯಭಾಗಗಳನ್ನು, ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಕವನ ರಚಿಸುವ, ಆಸ್ವಾದಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದು.

ಪಠ್ಯ: ವಚನಸಾಹಿತ್ಯದ ಭಾಗ, ನಡುಗನ್ನಡ ಕಾವ್ಯದ ಭಾಗ ಮತ್ತು ಹೊಸಗನ್ನಡದ ಕವನಗಳು.

ಗದ್ಯ: ೧. ಪ್ರಬಂಧಗಳು: ಲೇಖನಗಳನ್ನು ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಸೃಜನಶೀಲವಾಗಿ ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದಕ್ಕೆ ಪೂರಕವಾದ ಲೇಖನಗಳು.

ಗದ್ಯ: ೨. ಸಣ್ಣಕಥೆಗಳು: ಓದಿನ ಆಸ್ವಾದ ಗಳಿಸುವುದು, ಜೀವನ ಮೌಲ್ಯಗಳಿಗೆ ಸ್ಪಂದಿಸುವುದು, ಅನುಭವಗಳನ್ನು ಕಲೆಯಾಗಿ ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಶಕ್ತಿಗಳಿಸುವುದು - ಹೊಸಗನ್ನಡದ ಕಥೆಗಳು

ಕ್ರಿಯಾತ್ಮಕ ಕನ್ನಡ: ಕನ್ನಡದ ತಾಂತ್ರಿಕ ವ್ಯವಹಾರ ಜ್ಞಾನ ಗಳಿಕೆಗಾಗಿ.

**Pedagogy:** Chalk and talk method, Lectures, Assignments, Discussions, Role play and Seminars

**Course Name: ANIMAL FOOD SCIENCE**

**Course Code: FNDFNC155**

**Objective:** Understand factors to be considered during selection of commodities RAW and processed and various aspects of their products and distribution

**Course Outcome:**

**CO1:** Understand the principles underlying changes in food characteristics during cooking.

**CO2:** Be familiar with evaluation of food products for their quality characteristics.

**CO3:** To know the various animal products available in the market.

**CO4:** To understand the nutritive value of various animal products.

**CO5:** To know the various processing and storage methods used.

**CO6:** To learn the shelf life of products.

**Pedagogy:** Lectures, group discussions, Case studies

**EVALUATION:** Unit Tests and seminars.

**Course Name: HUMAN PHYSIOLOGY II**

**Course Code: FNDFNC156**

**Objective:** Understand the physiological processes and functions an applicable to human nutrition.

**Course Outcome:**

**CO1:** To understand the homeostatic status of the human body.

**CO2:** To understand the control mechanism of the body.

**CO3:** Describe and explain the normal functions of cells, tissues, organs, organ systems of human body.

**CO4:** Use correct terminologies to communicate physiological processes

**CO5:** Effectively evaluate case studies in physiology.

**Pedagogy:** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: HUMAN NUTRITION II**

**Course Code: FNDFNC157**

**Objective:** Apply the knowledge in maintenance of good health for the individual and the community

**Course Outcome:**

**CO1:** Understand the functions and sources of nutrients.

**CO2:** To be familiar with factors affecting availability and requirements of nutrients.

**CO3:** Able to understand importance of micronutrients to the body.

**CO4:** Understands the importance of water and fibre.

**CO5:** Know the RDA of Vitamins and Minerals.

**Pedagogy:** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Subject: HUMAN RIGHTS, GENDER EQUITY & ENVIRONMENTAL STUDIES**

**Subject code: FNDHGF152**

**Objective:** To bring out a sense of gender equity to the students

**Pedagogy:** lectures, assignments, discussions, case studies

**Course outcomes:**

CO 1- To understand the Economic development and economic growth.

CO2 –Concept of poverty, population and unemployment are made aware of.

CO3- Describe about the small scale, large scale and cottage industries.

CO4 - Understand about the 1 to 12<sup>th</sup> Five Year Planning in India.

CO 5 – To study the different Rights and its significance.

**Evaluation method:**

Two internal test, one final semester exam

## SEMESTER III

**Course Name: GENERAL PROFICIENCY AND COMMUNICATIVE ENGLISH**

**Course Code: FNDENL203**

**Course outcome:**

CO1- Better creative and critical reading skills.

CO2-Ability to read a text from different angles and perspectives.

CO3- Improved skills in analyzing texts.

**Pedagogy:** Lectures, Assignments, Discussions, Role play and Seminars.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: HINDI**

**Course code: FNDHDL204**

**Course outcome:**

CO1- Development of poetry writing skill

CO2- Development of story writing skill.

**Pedagogy:** chalk and talk method, lectures, assignments, Projects, debate on specific topics, chart work, PPT Presentations, discussions.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: KANNADA**

**Course Code: FNDKAL 204**

**Course Outcomes:**

ಕಾವ್ಯ: ಕಾವ್ಯಭಾಗಗಳನ್ನು, ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಕವನ ರಚಿಸುವ, ಆಸ್ವಾದಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದು.

ಪಠ್ಯ: ಹಳಗನ್ನಡ ಕಾವ್ಯ ಭಾಗ, ವಚನ ಸಾಹಿತ್ಯದ ಭಾಗ, ಜನಪದ ಕಾವ್ಯ ಮತ್ತು ಹೊಸಗನ್ನಡದ ಕವನಗಳು

ಗದ್ಯ: ೧. ಪ್ರಬಂಧಗಳು: ಲೇಖನಗಳನ್ನು ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಸೃಜನಶೀಲವಾಗಿ ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಸಾಮರ್ಥ್ಯಗಳಿಸುವುದಕ್ಕೆ ಪೂರಕವಾದ ಲೇಖನಗಳು.

ಗದ್ಯ ೨. ದೀರ್ಘಗದ್ಯ: ಭಾಗ್ಯ ಚಿಂತನೆ, ಅಭಿವ್ಯಕ್ತಿಯ ಕೌಶಲ ಗಳಿಕೆ ಹಾಗೂ ಹೊಸಗನ್ನಡ ಸಾಹಿತ್ಯ ಪರಂಪರೆಯನ್ನು ಅರಿತುಕೊಂಡು ಸೃಜನಶೀಲತೆಯನ್ನು ಮೈಗೂಡಿಸಿಕೊಳ್ಳುವುದಕ್ಕಾಗಿ ಹಾಗೂ ಓದಿನ ಆಸ್ವಾದದ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದಕ್ಕಾಗಿ ದೀರ್ಘಗದ್ಯ ಅಭ್ಯಾಸ ಮಾಡುವುದು. ಕಾದಂಬರಿ / ಆತ್ಮಕಥನ / ಅನುಭವ ಕಥನ – ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಕಾರದ ಅಧ್ಯಯನ

**Pedagogy:** Chalk and talk method, Lectures, Assignments, Discussions, Role play and Seminars

**Course Name: LIFE SPAN NUTRITION**

**Course Code: FNDFNC204**

**Objective:** Understand the process of growth and development from birth till adolescent.

**Course Outcome:**

CO1: Familiarize with the nutritional needs at different stages of growth.

CO2: Understand the concepts of growth promotion

CO3: Study the various nutritional requirements of different age groups.

CO4: Planning diets according to the RDA for various age groups.

**CO5:** Know the factors responsible for diet planning.

**CO6:** Know the dietary guidelines in meal planning.

**Pedagogy :** Lectures, group discussions, Case studies

**Evaluation:** Unit Tests and presentation.

**Course Name: COMPUTER APPLICATIONS-I**

**Course Code: FNDFNC204**

**Objective:** To acquire basic working knowledge of the operations of a computer system and some computer applications software.

**Course outcome:**

Students are able to

- **CO1-** Students will be able to understand the various components of Computer System
- **CO2-** Students will be able to gain the working knowledge of MS Word, MS Excel
- **CO3-** Students will be able to understand the various applications of computer
- **CO4-** Students will be able to understand the usage of data and information efficiently
- **CO5-** Students will acquire knowledge about computer graphics

**Pedagogy:** Lectures, Seminars, Assignments, lab demonstrations

**Evaluation Method:** Two internal examinations and one end-semester examination

**Course Name: DIETETICS**

**Course Code: FNDFNC205**

**Objective:** Understand the role of dietician.

**Course Outcome:**

**CO1:** Know the principles of diet therapy.

**CO2:** Understand the modification of normal diet for therapeutic purpose.

**CO3:** Perform and plan diets for conditions like Obesity, Underweight and Febrile conditions.

**CO4:** Knowledge on routine hospital diets.

**CO5:** Know the scope of dietetics, Role of dietician.

**Pedagogy:** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: CHEMISTRY I**

**Course Code: FNDFNC206**

**Objective:** Expose the students to the rapid development and enormous expansion of every phase of chemistry.

**Course Outcome:**

**CO1:** Enrich the knowledge about the basic principles, fundamental concepts and unique mechanistic steps involved in chemical and biochemical reactions.

**CO2:** Provide an introduction to key concepts of modern analytical methods and to equip the students to handle modern analytical instruments.

**CO3:** To learn the laboratory skills and interpret chemical research.

**CO4:** Students will have firm foundation in the fundamentals and application of current chemical and scientific theories including those in analytical, inorganic, organic and physical chemistry.

**CO5:** Students will be able to carry out experiments as well as accurately record and analyze the results of such experiments.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

## SEMESTER IV

**Course Name: GENERAL PROFICIENCY AND COMMUNICATIVE ENGLISH**

**Course Code: FNDENL252**

**Course outcome:**

CO1- Ability to read and review literary works.

CO2- Distinguished skills in reading and enacting plays.

CO3- Improved language skills, and management of affective matters.

**Pedagogy:** Lectures, Assignments, Discussions, Role play and Seminars.

**Evaluation method:** Two internal test, one final semester exam

**Pedagogy:** Chalk and talk method, Lectures, Assignments, Discussions, Role play and Seminars

**Course Name: HINDI**

**Course code: FNDHDL 254**

**Course outcome:**

CO1- Development of letter writing skill Knowledge regarding the usage of Hindi language.

**Pedagogy:** chalk and talk method, lectures, assignments, Projects, debate on specific topics, chart work, PPT Presentations, discussions.

**Evaluation method:** Two internal test, one final semester exam

**Course Name: KANNADA**

**Course Code: FNDKAL 254**

**Course Outcomes:**

ಕಾವ್ಯ: ಕಾವ್ಯಭಾಗಗಳನ್ನು, ಓದಿ ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವ, ಕವನ ರಚಿಸುವ, ಆಸ್ವಾದಿಸುವ ಸಾಮರ್ಥ್ಯ ಗಳಿಸುವುದು.

ಪಠ್ಯ: ಹಳಗನ್ನಡ ಕಾವ್ಯ, ವಚನ ಸಾಹಿತ್ಯ, ಹೊಸಗನ್ನಡ ಕಾವ್ಯ.

ಗದ್ಯ : ಪ್ರವಾಸ ಸಾಹಿತ್ಯದ / ಜೀವನ ಚರಿತ್ರೆಯ ಓದಿನ ಮೂಲಕ ಓದಿನಲ್ಲಿ ಆಸಕ್ತಿ ಗಳಿಸುವುದು, ವಿವಿಧ ಪ್ರದೇಶಗಳ ಸಂಸ್ಕೃತಿ ಅಭ್ಯಾಸ / ವಿವಿಧ ವ್ಯಕ್ತಿತ್ವಗಳ ಪರಿಚಯ ಮಾಡುವುದು. ಗಳಿಸಿದ ಅನುಭವಗಳನ್ನು ಸೃಜನಶೀಲವಾಗಿ ಅಭಿವ್ಯಕ್ತಿಗೊಳಿಸುವ ಕೌಶಲವೃದ್ಧಿ.

ಗದ್ಯ ೧. ಕನ್ನಡ ಸಾಹಿತ್ಯದಲ್ಲಿ ಆಸಕ್ತಿಮೂಡಿಸುವುದಕ್ಕಾಗಿ ಸ್ವಾರಸ್ಯಕರವಾಗಿ ಸರಳವಾಗಿರುವ ಕಥನ ಸಾಹಿತ್ಯದ ಅಧ್ಯಯನ: ಪರಿಸರ ಕುರಿತು ಚಿಂತಿಸುವ, ಕಾಳಜಿ ವ್ಯಕ್ತಪಡಿಸುವ ಆ ಕುರಿತ ಅಭಿವ್ಯಕ್ತಿ ಸಾಮರ್ಥ್ಯ ಗಳಿಕೆಗಾಗಿ ಪರಿಸರ ಕಥೆಗಳನ್ನು ಅಭ್ಯಾಸ ಮಾಡುವುದು. ಕಾದಂಬರಿ / ಆತ್ಮಕಥನ / ಅನುಭವ ಕಥನ – ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಕಾರದ ಅಧ್ಯಯನ

**Pedagogy:** Chalk and talk method, Lectures, Assignments, Discussions, Role play and Seminars



**Course Name: COMPUTER APPLICATIONS-II**

**Course Code: FNDFNC254**

**Objective:** To acquire basic knowledge in Computer Networks and internet security system

**Course outcome:**

- **CO1-** Students will be able to understand about computer networking
- **CO2-** Student will be able to understand about various methods to secure system data
- **CO3-** Students will be able to acquire knowledge about various data transmissions modes
- **CO4-** Students will be able to acquire knowledge about various transmission devices
- **CO5-** Students will be able to gain working knowledge of MS Power Point and MS Access

**Pedagogy:** Laboratory demonstrations.

**Evaluation Method:** Two internal examinations and One end-semester examination

**Course Name: NUTRITION THROUGH LIFE CYCLE II**

**Course Code: FNDFNC256**

**Objective:** Understand the process of growth, development and concept of growth promotion

**Course Outcome:**

**CO1:** Get familiar with nutritional needs at different stages of growth.

**CO2:** Study the various nutritional requirements during special cases.

**CO3:** Planning diets according to the RDA for various age groups.

**CO4:** Know the factors responsible for diet planning.

**CO5:** Know the dietary guidelines in meal planning.

**Pedagogy:** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: DIET THERAPY**

**Course Code: FNDFNC257**

**Objective:** Understand the role of dietician.

**Course Outcome:**

**CO1:** Know the principles of diet therapy.

**CO2:** Understand the modification of normal diet for therapeutic purpose.

**CO3:** Perform and plan diets for conditions like Obesity, Underweight and Febrile conditions.

**CO4:** Plan diets for conditions like Disease of gastro-intestinal tract, Nutritional deficiency disease and Nutritional anemia.

**CO5:** Know the Food allergy and its Dietetic treatment.

**Pedagogy :** Lectures, group discussions, Case studies

**Evaluation:** Unit Tests and presentation.

**Course Name: CHEMISTRY II**

**Course Code: FNDFNC258**

**Objective:** Expose the students to the rapid development and enormous expansion of every phase of chemistry.

**Course Outcome:**

**CO1:** Enrich the knowledge about the basic principles, fundamental concepts and unique mechanistic steps involved in chemical and biochemical reactions.

**CO2:** Provide an introduction to key concepts of modern analytical methods and to equip the students to handle modern analytical instruments.

**CO3:** Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems.

**CO4:** Students will have firm foundation in the fundamentals and application of current chemical and scientific theories including those in analytical, inorganic, organic and physical chemistry.

**CO5:** Students will be able to carry out experiments as well as accurately record and analyze the results of such experiments.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

## **SEMESTER V**

**Course Name: FOOD MICROBIOLOGY**

**Course Code: FNDFNC310**

**Objective:** To study the diversity and activity in micro-organism.

**Course Outcome:**

**CO1:** Understand the nature of microorganisms involved in food spoilage, food infections and intoxications.

**CO2:** Understand the importance of microorganisms in food biotechnology.

**CO3:** Identify the important pathogens and spoilage microorganisms in foods.

**CO4:** Identify the conditions under which the important pathogens are commonly inactivated, killed and made harmless in foods.

**CO5:** Learn the different microbial culturing methods.

**Pedagogy :** Teaching through audio-visual aids, and small projects.

**Evaluation:** Unit Tests and Group discussion

**Course Name: NUTRITIONAL BIOCHEMISTRY I**

**Course Code: FNDFNC311**

**Objective:** Obtain an insight into the chemistry of major nutrients and physiologically important compounds.

**Course Outcome:**

**CO1:** Understand the principles of biochemistry (as applicable to human nutrition)

**CO2:** Understand the biological processes and systems as applicable to human nutrition.

**CO3:** Apply the knowledge acquired to human nutrition and dietetics.

**CO4:** Recognize, distinguish and describe the molecular structures and properties of major food components.

**CO5:** Relate molecular structures to properties of compounds found in food.

**CO6:** Describe major food chemical reactions and their mechanisms.

**Pedagogy :** Teaching through audio-visual aids, and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: THERAPEUTIC DIET**

**Course Code: FNDFNC312**

**Objective:** Understand the role of dietician.

**Course Outcome:**

**CO1:** Understand the role of dietician in preventive, promotive and curative health care.

**CO2:** Be able to make appropriate dietary modification for various disease conditions based on the path physiology.

**CO3:** Know the principles of diet therapy

**CO4:** Understand physiology and plan diets for conditions like Diabetes Mellitus, Disease of the liver, Disease of the gall bladder and pancreas, Disease of the Kidneys

**CO5:** To be thorough with all kinds of diet to work in hospital environment.

**Pedagogy :** Lectures, Group discussion and Case studies

**Evaluation:** Unit Tests and presentation.

**Course Name: FOOD LAWS AND FOOD STANDARDS.**

**Course Code: FNDFNC313**

**Objective:** Familiarize international and National Food Laws, Regulation and standards

**Course Outcome:**

**CO1:** Gain an insight into quality of food.

**CO2:** Know the adulterants added to food.

**CO3:** Different food laws practiced in the country.

**CO4:** Know about Hazard analysis critical control point.

**CO5:** Know about various improvements in food packaging technology.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: PRINCIPLES OF FOOD PRESERVATION**

**Course Code: FNDFNC314**

**Objective:** Understand the basic concepts and parameters of preservation techniques

**Course Outcome:**

**CO1:** Know the types and varieties of foods available in the market.

**CO2:** Learn to purchase and preserve different foods.

**CO3:** Learn various qualities in preservation techniques used in various foods.

**CO4:** Know about different methods of preserving foods.

**CO5:** Understand Permanent and temporary methods of food preservation.

**CO6:** Understand various storage conditions for different types of foods.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: CHEMISTRY III**

**Course Code: FNDFNC315**

**OBJECTIVE:** Expose the students to the rapid development and enormous expansion of every phase of chemistry.

**Course Outcome:**

**CO1:** Enrich the knowledge about the basic principles, fundamental concepts and unique mechanistic steps involved in chemical and biochemical reactions.

**CO2:** Provide an introduction to key concepts of modern analytical methods and to equip the students to handle modern analytical instruments.

**CO3:** Know the properties and applications of various elements.

**CO4:** Understand the structures and preparation methods of various chemical compounds.

**CO5:** Know the different applications and reactions involved.

**Pedagogy :** Lectures, Group discussion and Case studies

**Evaluation:** Unit Tests and presentation.

## **SEMESTER VI**

**Course Name: FOOD MICROBIOLOGY II**

**Course Code: FNDFNC368**

**Objective:** To study the diversity and activity in micro-organism.

**Course Outcome:**

**CO1:** Understand the principles of various methods used in prevention and control of the microorganisms in foods

**CO2:** Understand the criteria for microbiological safety in various food operations to avoid the public health hazards due to contaminated foods.

**CO3:** Know the different microbial contaminations, causes, symptoms and prevention.

**CO4:** Know the common microorganisms present in the environment and study them.

**CO5:** Study various food borne diseases.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: NUTRITIONAL BIOCHEMISTRY II**

**Course Code: FNDFNC361**

**Objective:** Obtain an insight into the chemistry of major nutrients and physiologically important compounds.

**Course Outcome:**

**CO1:** Understand the principles of biochemistry (as applicable to human nutrition)

**CO2:** Understand the biological processes and systems as applicable to human nutrition.

**CO3:** Understand the major nutrient components in foods.

**CO4:** Study the classification and structure of major nutrient components.

**CO5:** Understand the working mechanisms of nutrients

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion.

**Course Name: CLINICAL DIETETICS**

**Course Code: FNDFNC362**

**Objective:** Understand the modifications of normal diet for therapeutic purposes.

**Course Outcome:**

**CO1:** Know the principles of diet therapy.

**CO2:** To be thorough with all kinds of diet to work in hospital environment.

**CO3:** Understand physiology and plan diets for conditions like Cardiovascular Disease, Hypertension, Cancer, Genetic and Mental Disorder.

**CO4:** Be thorough with all kinds of diet to work in hospital environment.

**Pedagogy :** Lectures, Group discussion and Case studies

**Evaluation:** Unit Tests and presentation

**Course Name: QUALITY CONTROL II**

**Course Code: FNDFNC363**

**Objective:** Be familiar with the sensory evaluation of various quality parameters of food.

**Course Outcome:**

**CO1:** Understand the principles that make a food product safe for consumption.

**CO2:** Be able to apply principles of food science or control and assure the quality of food products.

**CO3:** Know the different classes of food additives

**CO4:** Conduct sensory evaluation of foods.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion

**Course Name: FOOD PRESERVATION**

**Course Code: FNDFNC364**

**Objective:** Understand the basic concepts and parameters of preservation techniques

**Course Outcome:**

**CO1:** Know the types and varieties of foods available in the market.

**CO2:** Understand novel preservative techniques.

**CO3:** Know the changes occurring during preservation processing.

**CO4:** Learn the advantages and disadvantages of preservative techniques.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion

**Course Name: CHEMISTRY IV**

**Course Code: FNDFNC 365**

**Objective:** Expose the students to the rapid development and enormous expansion of every phase of chemistry.

**Course Outcome:**

**CO1:** Enrich the knowledge about the basic principles, fundamental concepts and unique mechanistic steps involved in chemical and biochemical reactions.

**CO2:** Provide an introduction to key concepts of modern analytical methods and to equip the students to handle modern analytical instruments.

**CO4:** Have brief knowledge about environmental chemistry

**CO5:** Know about pollution indicators.

**CO6:** Study the extraction and chromatography methods.

**Pedagogy :** Teaching through audio-visual aids and small projects.

**Evaluation:** Unit Tests and Group discussion