

B.Sc. NUTRITION & DIETETICS

SYLLABUS (CBCS) WITH EFFECT FROM 2019-20)

B. Sc. I YEAR SEMESTER I PAPER I

DSC - 1A

Code BS 104 INTRODUCTION TO FOODS AND NUTRITION (Theory)

CREDITS -4; 60 HOURS

Objective:

CREDITS - 4

- **To familiarize students with various food groups, their nutritive value and effect of processing on nutritive value of foods**

CREDIT I: INTRODUCTION TO FOOD GROUPS, CEREALS & MILLETS & PURE CARBOHYDRATES **(15 HOURS)**

1.1 Definition- Food, nutrition, nutrients; food groups based on functions, origin and nutritive value. Food guide pyramid, balanced diet

1.2 Cereals and Millets - Composition, nutritive value and nutrient losses during processing; breakfast cereals

1.3 Sugars - Types of sugars and stages of sugar cookery

1.4 Jaggery - Manufacture and stages of jaggery cookery

CREDIT II : PULSES & LEGUMES, NUTS & OIL SEEDS AND FATS & OILS

(15 HOURS)

2.1 Pulses & Legumes - Composition, nutritive value, nutrient losses during processing, importance of germination and malting; anti nutritional factors

2.2 Nuts & Oilseeds – Nutritive value, toxins and role in cookery

2.3 Fats & Oils – Composition, nutritive value, properties- physical and chemical, functions of oils and fat in foods

2.4 Rancidity of Oils- Types and prevention

CREDIT III: VEGETABLES , FRUITS & FOOD PRESERVATION (15 HOURS)

3.1 Vegetables - Classification, composition and nutritive value, changes during

Cooking, loss of nutrients during cooking, storage, factors affecting storage

3.2 Fruits - Classification, composition, nutritive value, storage and ripening

3.3 Enzymatic browning and its prevention

3.4 Food preservation – principles, methods- dehydration, low temperature, high temperature and preservatives.

CREDIT IV: ANIMAL FOODS AND FOOD ADULTERATION (15 HOURS)

4.1 Milk- Composition, nutritive value, fermented and non fermented milk products

4.2 Egg - Composition, nutritive value and quality ; poultry- Classification, composition and nutritive value

4.3 Meat -Nutritive Value and changes during cooking; fish - classification, composition and nutritive value

4.4 Food Adulteration- intentional and incidental

Books Recommended:

Text Books

- ❖ Srilakshmi B- Food Science, 5th Edition, New Age International Publishers, New Delhi – 110002, 2011.

Reference Books

- ❖ Shakuntala Manay N - Food Facts and Principles, New Age International Publishers, New Delhi – 110002, 2005.
- ❖ Norman Potter N -Food Science, CBS Publishers and Distributors, New Delhi – 110002, 2007.

I -SEMESTER

BS104 DISCIPLINE SPECIFIC COURSE IA- (DSC IA)

Introduction to Foods and Nutrition (Practical)

CREDIT 5

NO. OF CREDITS-1

I. Standardization, Preparation and Nutritive value calculation of the recipes based on the following food group and combination

- 1. Cereal, millet and malting of grains**
- 2. Pulse, germination of grains**
- 3. Cereal-pulse combination**
- 4. Stages of sugar cookery, preparation with jiggery**

II. Methods of Preservation of

- 5. Fruits- Squashes and jams**
- 6. Vegetables by Pickling**

III.7. Determination of quality of an egg

IV. Detection of Adulterants

- 8. Water, urea and starch in milk**
- 9. Hydrogenated fat in ghee and butter**
- 10. Identification of food colours and textile colours**

Reference Books:

- ❖ Srilakshmi B- Food Science, 5th Edition, New Age International Publishers, New Delhi – 110002, 2011.**
- ❖ Longvah T. , Ananthan R. , Bhaskarachary K. and Venkaiah K. Indian Food Composition Table, National Institute of Nutrition, Tarnaka, 2017.**

