

## SEMESTER-II (Pool-A)

### COURSE NAME: NUTRITION AND HEALTH

(CHOI-A42)

Number of Credit: - 02

Maximum marks: 50

#### UNIT-I

**Introduction to Nutrition Science; Basic Nutrients: Macronutrients-I:** Carbohydrates and Water  
**Macronutrients-II:** Proteins and Lipids, Vitamins, Minerals; Food Safety; Nutrition Related Disorders  
Major Deficiency Diseases, Nutrition, and Infection

#### UNIT-II

**Meal Planning:** Principles of Meal Planning and Meal Planning for the Adult, Food Budgeting, Food Selection, Food Storage, Food Preservation and Other Methods of Maximization of Nutritional Benefit.

#### UNIT-III

**Effective utilization of food resources: Food safety;** Understand the hazards of food adulteration and apply laws and standards regarding food quality and safety, protect food from different types of food contamination, -list substances that are accidentally or intentionally added to food items.

#### UNIT-IV

**Common food borne diseases:** Identify the types, causes, and spread of diarrhea, dysentery, cholera, typhoid, and infectious hepatitis enumerate their symptoms and complications and describe the factors in the control, prevention and management of these diseases; **Parasitic Infestation of Man:** Identify the common parasitic infestations of man Taeniasis, Hydatidosis, Ascariasis, Amoebiasis, Giardiasis.

#### UNIT-V

**Dietary Management of Diabetes:** Study the role of nutrition in the prevention and management of pre-diabetes and Types 1, 2 and gestational diabetes, **Dietary Management of Cancer:** Diet and cancer are certainly linked diet related risk factors in cancer development as well as evidence-based guidelines for the nutritional management of cancer and treatment-related side effects. The roles of dietary fiber and probiotics and prebiotics in gut health.

#### Recommended Reading Material:

1. Eastwood, M. (2010). Principles of Human Nutrition. Blackwell Publishing 2<sup>nd</sup> ed.
2. Gibney, M.J., Lanham, S.A., Cassidy, N.A., Vorster, H.H. (2009). Introduction to Human Nutrition. 2<sup>nd</sup> ed. Wiley-Blackwell.

3. Dennis M.M, Robert E.C (2013) Advanced Human Nutrition Jones & Bartlet.
4. Geissler.C, Powers, H (2010) Human Nutrition Churchill Livingstone 12th ed. 5.  
Whitney E.N, Rolfe S.R (2012) Understanding Nutrition Cengage Learning; 13th ed.