

COURSE OUTLINE T – Theory

| Unit | Time (Hrs) | Learning Outcomes | Content | Teaching/ Learning Activities | Assessment Methods |
|-------------|-------------------|--|---|--|--|
| I | 2 (T) | Define nutrition and its relationship to Health | Introduction to Nutrition <i>Concepts</i> <ul style="list-style-type: none"> • Definition of Nutrition & Health • Malnutrition – Under Nutrition & Over Nutrition • Role of Nutrition in maintaining health • Factors affecting food and nutrition <i>Nutrients</i> <ul style="list-style-type: none"> • Classification • Macro & Micronutrients • Organic & Inorganic • Energy Yielding & Non-Energy Yielding <i>Food</i> <ul style="list-style-type: none"> • Classification – Food groups • Origin | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| II | 3 (T) | Describe the classification, functions, sources and recommended daily allowances (RDA) of carbohydrates Explain BMR and factors affecting BMR | Carbohydrates <ul style="list-style-type: none"> • Composition – Starches, sugar and cellulose • Recommended Daily Allowance (RDA) • Dietary sources • Functions Energy <ul style="list-style-type: none"> • Unit of energy – Kcal • Basal Metabolic Rate (BMR) • Factors affecting BMR | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides • Models • Display of food items | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| III | 3 (T) | Describe the classification, Functions, sources | Proteins □ Composition | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides | <ul style="list-style-type: none"> • Essay • Short answer • Very short |

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| | | and RDA of proteins. | <ul style="list-style-type: none"> • Eight essential amino acids • Functions • Dietary sources • Protein requirements – RDA | <ul style="list-style-type: none"> • Models • Display of food items | answer |
| IV | 2 (T) | Describe the classification, Functions, sources and RDA of fats | Fats <ul style="list-style-type: none"> • Classification – Saturated & unsaturated • Calorie value • Functions • Dietary sources of fats and fatty acids • Fat requirements – RDA | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides • Models • Display of food items | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |

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| V | 3 (T) | Describe the classification, functions, sources and RDA of vitamins | Vitamins <ul style="list-style-type: none"> • Classification – fat soluble & water soluble • Fat soluble – Vitamins A, D, E, and K • Water soluble – Thiamine (vitamin B1), Riboflavin (vitamin B2), Nicotinic acid, Pyridoxine (vitamin B6), Pantothenic acid, Folic acid, Vitamin B12, Ascorbic acid (vitamin C) • Functions, Dietary Sources & Requirements – RDA of every vitamin | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides • Models • Display of food items | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| VI | 3 (T) | Describe the classification, functions, sources and RDA of minerals | Minerals <ul style="list-style-type: none"> • Classification – Major minerals (Calcium, phosphorus, sodium, potassium and magnesium) and Trace elements • Functions • Dietary Sources • Requirements – RDA | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides • Models • Display of food items | <ul style="list-style-type: none"> • Short answer • Very short answer |
| VII | 7 (T) 8 (L) | Describe and plan balanced diet for different age groups, pregnancy, and lactation | Balanced diet <ul style="list-style-type: none"> • Definition, principles, steps • Food guides – Basic Four Food Groups • RDA – Definition, limitations, uses • Food Exchange System • Calculation of nutritive value of foods • Dietary fibre Nutrition across life cycle <ul style="list-style-type: none"> • Meal planning/Menu planning – Definition, principles, steps • Infant and Young Child Feeding (IYCF) guidelines – breast feeding, infant foods • Diet plan for different age groups – | <ul style="list-style-type: none"> • Lecture cum Discussion • Meal planning • Lab session on <ul style="list-style-type: none"> ○ Preparation of balanced diet for different categories ○ Low cost nutritious dishes | <ul style="list-style-type: none"> • Short answer • Very short answer |

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| | | | Children, adolescents and elderly <ul style="list-style-type: none"> • Diet in pregnancy – nutritional requirements and balanced diet plan • Anemia in pregnancy – diagnosis, diet for anemic pregnant women, iron & folic acid supplementation and counseling • Nutrition in lactation – nutritional requirements, diet for lactating mothers, complementary feeding/ weaning | | |

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| VIII | 6 (T) | Classify and describe the common nutritional deficiency disorders and identify nurses' role in assessment, management and prevention | Nutritional deficiency disorders <ul style="list-style-type: none"> • Protein energy malnutrition – magnitude of the problem, causes, classification, signs & symptoms, Severe acute malnutrition (SAM), management & prevention and nurses' role • Childhood obesity – signs & symptoms, assessment, management & prevention and nurses' role • Vitamin deficiency disorders – vitamin A, B, C & D deficiency disorders –causes, signs & symptoms, management & prevention and nurses' role • Mineral deficiency diseases – iron, iodine and calcium deficiencies –causes, signs & symptoms, management & prevention and nurses' role | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides • Models | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| IX | 4 (T) 7 (L) | Principles of diets in various diseases | Therapeutic diets <ul style="list-style-type: none"> • Definition, Objectives, Principles □ Modifications – Consistency, Nutrients, • Feeding techniques. • Diet in Diseases – Obesity, Diabetes Mellitus, CVD, Underweight, Renal diseases, Hepatic disorders Constipation, Diarrhea, Pre and Post-operative period | <ul style="list-style-type: none"> • Lecture cum Discussion • Meal planning • Lab session on preparation of therapeutic diets | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| X | 3 (T) | Describe the rules and preservation of nutrients | Cookery rules and preservation of nutrients <ul style="list-style-type: none"> • Cooking – Methods, Advantages and Disadvantages • Preservation of nutrients • Measures to prevent loss of nutrients during preparation • Safe food handling and Storage of foods • Food preservation • Food additives and food adulteration • Prevention of Food Adulteration Act (PFA) • Food standards | <ul style="list-style-type: none"> • Lecture cum Discussion • Charts/Slides | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
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| XI | 4 (T) | Explain the methods of nutritional assessment and nutrition education | Nutrition assessment and nutrition education <ul style="list-style-type: none"> • Objectives of nutritional assessment • Methods of assessment – clinical examination, anthropometry, laboratory & biochemical assessment, assessment of dietary intake including Food frequency questionnaire (FFQ) method • Nutrition education – purposes, principles and methods | <ul style="list-style-type: none"> • Lecture cum Discussion • Demonstration • Writing nutritional assessment report | <ul style="list-style-type: none"> • Essay • Short answer • Evaluation of Nutritional assessment report |

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| XII | 3 (T) | Describe nutritional problems in India and nutritional programs | National Nutritional Programs and role of nurse <ul style="list-style-type: none"> • Nutritional problems in India • National nutritional policy • <i>National nutritional programs</i> – Vitamin A Supplementation, Anemia Mukht Bharat Program, Integrated Child Development Services (ICDS), Mid-day Meal Scheme (MDMS), National Iodine Deficiency Disorders Control Program (NIDDCP), Weekly Iron Folic Acid Supplementation (WIFS) and others as introduced <input type="checkbox"/> Role of nurse in every program | <input type="checkbox"/> Lecture cum Discussion | <ul style="list-style-type: none"> • Essay • Short answer • Very short answer |
| XIII | 2 (T) | Discuss the importance of food hygiene and food safety Explain the Acts related to food safety | Food safety <ul style="list-style-type: none"> • Definition, Food safety considerations & measures • Food safety regulatory measures in India – Relevant Acts • Five keys to safer food • Food storage, food handling and cooking • General principles of food storage of food items (ex. milk, meat) • Role of food handlers in food borne diseases • Essential steps in safe cooking practices | <input type="checkbox"/> Guided reading on related acts | <ul style="list-style-type: none"> • Quiz • Short answer |