

BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY), PUNE, INDIA
Ph. D. Entrance Test – 2025
SECTION-II: NUTRITION - 35 Marks

Basics of nutritional biochemistry

Carbohydrates, fat, proteins, and their functions, Energy calculations, Micro and macro-nutrients and its functions, vitamins (water and fat soluble), Fibre (crude and dietary), Water, Digestion and absorption of nutrients, bioavailability. Fat and carbohydrate metabolism, Protein metabolism, micronutrient metabolism, Drug nutrient interactions, Enzymes and hormones

Macro, macro nutrients and trace element

Food sources – general and specific sources. Relevance and essentiality – involvement in biochemical reactions and nutritional implications. Assessment of nutriture and analysis in food materials. Toxicity and deficiency - levels, symptoms, health consequences and their management.

Clinical Nutrition and Dietetics

Introduction to clinical nutrition, clinical biochemistry, therapeutic modulation of diet, nutrition for underweight and malnutrition, overweight. Nutrition during pregnancy, lactation infants, gastrointestinal disorders, cardiovascular diseases, kidney and liver disorders, nutrition in degenerative diseases, nutrition in special condition

Food Science

Food science & technology: Product development, Stability study, Sensory evaluation, physicochemical characterization, proximate analysis

Food processing: Cereals and Millets, Legumes, oilseeds and Pulses and sugars, Milk & milk products and fats, Egg, fish, poultry and meat, Vegetables and fruits

Community nutrition

Epidemiology of nutritional disorders, nutritional assessment, methodologies of nutritional assessment, regulatory guidelines in combating malnutrition, Challenges to community nutritional status, community nutritional program
