

## MGM INSTITUTE OF HEALTH SCIENCES

(Deemed University u/s 3 of UGC Act, 1956) Grade 'A' Accredited by NAAC

# PhD CET Syllabus

# Paper II – Subject Specific Test Clinical Nutrition

#### Unit I Physiology

- Living cell, Blood and other body fluids.
- Cardio-vascular, digestive, respiratory, Excretory and Nervous system.
- Endocrine glands, muscles and skeletal system, sensory organs, immunity,
- Reproduction and Development.

#### Unit II. Biochemistry

- Carbohydrates, lipids, proteins and their metabolism
- Nucleic acids and their metabolism.
- Enzymes, Structure & Biochemical role of co-enzymes.
- Detoxification & its mechanism.

### Unit- III . Assessment of Nutritional Status

- Assessment of nutritional status by Anthropometry & Clinical Examination
- Assessment of nutritional status by Biochemical and Dietary Assessment
- Assessment of nutritional status of community.
- Nutritional Surveillance and Social Aspects of Nutrition

#### Unit -IV. Advanced Nutrition

- Body composition, Energy, Water, Carbohydrates, Proteins & Lipids as nutrients inside the body.
- Macro & micro elements, their biochemical role, absorption, deficiency, transport and storage inside the body.
- Fat & water soluble vitamins: their absorption, Biochemical functions, Metabolism & Antagonists.
- Transport of nutrients across cell membrane.
- Emerging concepts in human nutrition.

#### Unit – V.Nutrition during life cycle

- Nutrition in Pregnancy & Lactation, Infancy, Childhood
- Nutrition during adolescents and adulthood.
- Geriatric & Sports Nutrition.
- Various nutritional intervention programs for improving health of the society.

#### **Unit-VI. Clinical & Therapeutic Nutrition**

- Dietetics, factors in patients care & rehabilitation Modification of normal diet.
- Diet in relation to fever & infections
- Gastro intestinal tract disease, disorders of liver and Gall bladder, Renal disease, Acute and Chronic diseases of heart
- Metabolic disorders, obesity and under nutrition.

## Unit – VII. Institutional Management

- Food Service, Management, Selection, Storage and Production
- Sanitation & Safety of food service establishments
- Physical layout and equipment
- Functional Management

### Unit-VIII. Nutrition in Critical Care

- Procedures of Nutritional Screening and Nutritional Status Assessment of the critically ill
- Conventional feeding method of Nutritional Support for Critically ill Patients.
- Tube, Parenteral and Transitional methods of nutritional support for critically ill patients
- Nutritional Requirements and Special Diets in Critical Care