

**FURTHER DETAILS REGARDING MAIN TOPICS OF  
PROGRAMME No. 09/2021 (Item No: 1)**

**ASSISTANT PROFESSOR IN DERMATOLOGY & VENEREOLOGY  
MEDICAL EDUCATION SERVICE**

**(Category No. 322/2020)**

## M.D. DERMATOLOGY AND VENEREOLOGY

### Dermatology

#### 1. Fundamental

- History taking and examination of dermatological patient
- Type of skin lesions
- Distribution patterns
- Aids in diagnosis of skin diseases etc. in relation to the skin.
- Epidermal cell kinetics and keratinization.
  
- The structure, functions and development of human skin.
- Ultra structural aspects of epidermis, epidermal appendages, dermo-epidermal junction, dermis, and sub-cutis.
- Immunology, molecular biology and genetics
- Lipids of epidermis and sebaceous glands.
- Percutaneous absorption.
- Skin as an organ of protection, barrier function and thermoregulation.
- Biology of eccrine and apocrine sweat glands
- Biology of melanocytes and melanin formation
- Biology of hair follicles, sebaceous glands and nails
- Epidermal proteins
- Dermal connective tissue: collagen, elastin, reticulin, basement membrane and ground substance.
- Metabolism of carbohydrates, proteins, fats and steroids by the skin.
- Cutaneous vasculature and vascular reactions.
- Mechanism of cutaneous wound healing.
- Cellular and molecular biology of cutaneous inflammation and arachidonic and metabolism.
- Role of Extracellular matrix metalloproteinases in connective tissue remodeling.
- Innate immunity skin
- Immunologic aspects of epidermis /Skin – An immunologic barrier
- HLA system
- Immunoglobulins
- Cytokines and chemokines
- Lymphocytes, neutrophils, eosinophils, basophils and mast cells
- Complement system.
- Hypersensitivity and allergy / DNA repair
- Cutaneous carcinogenesis (chemical, viral & radiation)
- Photo immunology
- Basics of cutaneous bacteriology, mycology, virology, parasitology and host resistance.
- Common laboratory procedures, stains and culture media etc, related to the cutaneous diagnosis.
- Basic pathologic patterns and reactions of skin. • Common laboratory stains and procedures used in the histopathologic diagnosis of skin diseases and special techniques such as immunofluorescence, immunoperoxidase and other related techniques.
- Topical and systemic therapy pertaining to Dermatology, Venereology and leprosy.

## CLINICAL DERMATOLOGY

- Epidemiology of skin disease
- Genetics and genodermatoses
- The neonate
- Naevi and other developmental defects
- Disorders of keratinisation
- Psoriasis
- Pruritis
- Urticaria and Mastocytosis
- Eczema, Lichenification, Prurigo and Erythroderma
- Atopic Dermatitis
- Contact Dermatitis: Irritant
- Contact Dermatitis: Allergic
- Occupational Dermatoses
- Mechanical and Thermal Injury
- Sports Dermatology and Skin Problems in Warfield
- Cutaneous Photobiology
- Bacterial Infections
- Mycobacterial Infections
- Virus Infections and Prions and the skin
- HIV and the Skin
- Mycology
- Parasitic Worms and Protozoa
- Diseases caused by Arthropods and other noxious Animals
- Genetic Blistering Diseases
- Immunobullous Diseases
- Lichen Planus and Lichenoid Disorders
- Disorders of the Sebaceous Glands
- Rosacea, Perioral Dermatitis and Similar Dermatoses, Flushing and Flushing Syndromes
- Disorders of Sweat Glands
- Disorders of Connective Tissue
- Subcutaneous Fat
- Diseases of the Veins and Arteries: Leg Ulcers
- Disorders of Lymphatic Vessels
- Purpura and Microvascular Occlusion
- Vasculitis, Neutrophilic Dermatoses and Related Disorders
- The 'Connective Tissue Diseases'
- Non-Melanoma Skin Cancer and Other Epidermal Skin Tumours
- Tumours of the Skin Appendages
- Lentigo, Melanocytic Naevi and Melanoma- Histiocytoses
- Soft-Tissue Tumours and Tumour-like Conditions
- Cutaneous Lymphomas and Lymphocytic Infiltrates
- Disorders of Skin Colour
- Metabolic and Nutritional Disorders
- Necrobiotic Disorders
- Sarcoidosis
- Systemic Disease and the Skin
- The Skin and the Nervous System

- Psychocutaneous Disorders
- Disorders of Nails
- Disorders of Hair
- The Oral Cavity and Lips
- The Breast
- The Genital, Perianal and Umbilical Regions
- General Aspects of Treatment
- Topical Therapy
- Systemic Therapy
- Drug Reactions, Cutaneous manifestations of Drug abuse, Cutaneous reactions to Cytokines and Growth Factors.
- Erythema Multiforme, Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis
- Dermatological Surgery
- Lasers and Flashlamps in the Treatment of Skin Disorders
- Radiotherapy and Reactions to Ionizing Radiation

## **LEPROSY**

- Approach to the patient with leprosy
- Epidemiological Aspects
- Structure, biochemistry, microbiology of Mycobacterium leprae
- Animal models
- Pathogenesis
- Classification
- Immunology and molecular biological aspects
- Histopathology and diagnosis including laboratory aids
- Clinical features • Reactions
- Systemic involvement (Ocular, bone, mucosa, testes and endocrine etc.)
- Pregnancy and leprosy
- HIV infection and leprosy
- Therapeutic aspects including newer drugs.
- Immunotherapy
- Disabilities, deformities and Rehabilitation
- Prevention, education and counseling
- National Leprosy Control and Elimination Programme

## **VENEREOROLOGY**

- Clinical approach to the patient of sexually transmitted disease.
- Anatomy of Male & Female Genitalia.
- Epidemiological aspects of STDs
- Viral STD including HIV, Herpes, HPV, Molluscum Contagiosum, EBV, etc
- Bacterial STDs; Syphilis, Gonorrhoea, Chancroid, Donovanosis.
- Chlamydial infections; Lymphogranuloma Venereum, Urethritis, Cervicitis,
- NGU, Nonspecific Vaginitis.

- Fungal Infections; Candidiasis.
- Protozoa ; Trichomoniasis.
- Ectoparasite : Scabies, Pediculosis, Infestation.
- Syndromic Management of STDs
- STDs in Reproductive health & Pediatric
- STDs & HIV.
- Prevention, Counselling & Education of different STDs including HIV.
- National Control Programmes of STDs & HIV.
- Medicolegal, Social Aspects of STDs including Psychological & Behavioural abnormalities in STD patients.

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**NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.**