

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH & STUDIES
(Deemed to be University under section 3 of the UGC Act 1956)

Ph.D ADMISSION TEST (MR-PAT)

Ph.D. in Oral Medicine & Radiology

Module 1: Principles Of Diagnosis

- 1.1 Evaluation of the Dental Patient: Diagnosis and Medical Risk Assessment

Module 2: Diagnosis And Management Of Oral And Salivary Gland Diseases

- 2.1 Ulcerative, Vesicular, and Bullous Lesions
- 2.2 Red and White Lesions of the Oral Mucosa
- 2.3 Pigmented Lesions of the Oral Mucosa
- 2.4 Benign Tumors of the Oral Cavity
- 2.5 Oral Cancer
- 2.6 Salivary Gland Diseases

Module 3: Orofacial Pain And Temporomandibular Disorders

- 3.1 Temporomandibular Disorders
- 3.2 Orofacial Pain

Module 4: Principles Of Medicine

- 4.1 Diseases of the Respiratory Tract
- 4.2 Diseases of the Cardiovascular System
- 4.3 Diseases of the Gastrointestinal Tract
- 4.4 Renal Disease
- 4.5 Hematologic Diseases
- 4.6 Bleeding and Clotting Disorders
- 4.7 Immunologic Diseases
- 4.8 Transplantation Medicine
- 4.9 Infectious Diseases
- 4.10 Endocrine disorders & Diabetes Mellitus
- 4.11 Neuromuscular Diseases
- 4.12 Geriatrics

Module 5: Foundations Of Radiology

- 5.1 Physics
- 5.2 Biologic Effects of Ionizing Radiation
- 5.3 Safety and Protection

Module 6: Head And Neck (H& N) Imaging

- 6.1 Image Receptors
- 6.2 Projection Geometry
- 6.3 Intraoral Projections
- 6.4 Cephalometric and Skull Imaging
- 6.5 Panoramic Imaging
- 6.6 Computed Tomography
- 6.7 Magnetic Resonance Imaging
- 6.8 Nuclear Medicine
- 6.9 Ultrasound Imaging

- 6.10 Radiographic Anatomy
- 6.11 Quality Assurance and Infection Control
- 6.12 Prescribing Diagnostic Imaging

Module 7: Radiographic Interpretation Of H&N Lesions

- 7.1 Principles of Radiographic Interpretation
- 7.2. Dental Caries
- 7.3 Periodontal Diseases
- 7.4 Dental Anomalies
- 7.5 .Inflammatory Conditions of the Jaws
- 7.6. Cysts
- 7.7 Benign Tumors and Neoplasms
- 7.8 Diseases Affecting the Structure of Bone
- 7.9 Malignant Neoplasms
- 7.10 Trauma
- 7.11 Paranasal Sinus Abnormalities
- 7.12 Craniofacial Anomalies
- 7.13 Temporomandibular Joint Abnormalities
- 7.14 Soft Tissue Calcifications and Ossifications
- 7.15 Salivary Gland Diseases

Module 8: Forensic Odontology

- 8.1 Various Techniques used in Forensic odontology for Age estimation, Sex determination, Personal & Racial identification
- 8.2 Medico-legal Aspects
- 8.3 Roles & Responsibilities of a Forensic odontologist
- 8.4 Importance of Dental Record Keeping

Suggested Readings:

1. Burket's Oral Medicine, Michael Glick (Editor-in-Chief), PMPH USA, Ltd. 13th Edition, 2014
2. Oral Radiology: Principles and Interpretation, Stuart C. White, Michael J. Pharoah, Elsevier Health Sciences 8th Edition, 2018
3. A Concise Textbook of Forensic Odontology, Dr. Sumit Bhateja, Dr. Geetika Arora, IP Innovative Publication, 1st Edition, 2020