

BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY), PUNE, INDIA
PhD Entrance Test – 2025
SECTION-II: Oral Pathology and Microbiology - 35 Marks

1. Applied Basic Sciences, General & Oral Anatomy, General Pathology & Microbiology, Physiology and Embryology:

- I. Oral Anatomy - Development & Anatomy of Head, Neck & Face
 - Development & Anatomy of Teeth
- II. General Pathology- Inflammation
 - Spread of various infections
 - Repair & Regeneration
 - Neoplasia & Metastasis
- III. Microbiology of various pathogenic microorganisms found in the oral cavity
- III. Oral Embryology
- IV. Physiology of Blood
- V. Physiology of Speech & Deglutition

2. Laboratory techniques used as basic and advanced methods in histopathology and microbiology:

- I. Basic Laboratory techniques – Biopsy & its processing
 - Fine Needle Aspiration Cytology
 - Exfoliative Cytology
 - Chair-side methods of diagnosis
 - Histochemistry
 - Culture methods
- II. Advanced Technique – Immunohistochemistry
 - Polymerase Chain Reaction
 - Immunofluorescence
 - DNA probes
 - Fluorescence In Situ Hybridization
- III. Microbiology Technique – Aerobic microorganisms
 - Anaerobic microorganisms

3. Oral pathology & microbiology:

- Developmental Defects of the Oral & Maxillofacial region
- Abnormalities of Teeth
- Pulp and Periapical Diseases
- Periodontal Diseases
- Bacterial Infections
- Fungal & Protozoal Diseases

- Viral Infections
- Physical & Chemical Injuries
- Allergies & Immunologic Diseases
- Epithelial Pathology
- Salivary Gland Pathology
- Soft Tissue Tumors
- Hematologic Disorders
- Bone Pathology
- Odontogenic Cysts & Tumor
- Mucocutaneous Disorders
- Oral Manifestations of systemic Diseases
- Facial Pain & Neuromuscular Diseases
- Forensic Dentistry

4. Oral oncology:

- Carcinogenesis malignant neoplasm associated with the oral cavity
- Advances in Oral Oncology

5. Principles of proteomics & genomics

6. Stem cells & its significance

REFERENCE BOOKS:

1. Shear: Cysts of the Oral regions
2. Tencares: Oral Histology
3. Oral Cells and Tissues: P.R.Garant
4. Odontogenic Tumours and Allied Lesions:Reichart
5. WHO Classification: Blue book of Oral lesions
6. Nevill: Oral & Maxillofacial pathology