# BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY), PUNE, INDIA PhD Entrance Test – 2023

SECTION-II: Oral Pathology and Microbiology - 50 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
  - Immunoflourescence
  - DNA probes
  - Fluorescence In Situ Hybridization
- III. Microbiology Technique Aerobic microrganisms
  - 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 ass0ciated 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. Tencates: 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