

**BHARATI VIDYAPEETH  
(DEEMED TO BE UNIVERSITY), PUNE, INDIA  
PhD Entrance Test – 2025**

**SECTION-II: Pediatric and Preventive Dentistry - 35 Marks**

- 1. Growth & development:** Prenatal and Postnatal development of cranium, face, jaws, teeth and supporting structures. Chronology of dental development and development of occlusion. Dimensional change in dental arches. Cephalometric evaluation of growth.
- 2. Child psychology:** Development & Classification of behavior, personality intelligence in children, theories of child psychology, stages of psychological child development, fear anxiety, apprehension & its management..
- 3. Behavior management:** Non- pharmacological & pharmacological methods.
- 4. Child abuse & dental neglect.**
- 5. Conscious sedation, deep sedation & general anesthesia in pediatric dentistry.**
- 6. Preventive paedodontics**
- 7. Gingival & periodontal diseases in children**
  - Normal gingiva & Periodontium in Children .
  - Gingival & periodontal diseases – Etiology, Pathogenesis, Prevention, & Management.
- 8. Pediatric operative dentistry**
  - Principle of Operative Dentistry.
  - Modifications required for cavity preparation in primary and young permanent teeth.
  - Restorations of decayed primary, young permanent and permanent teeth
  - Stainless steel, polycarbonate & Resin Crowns / Veneers & fibre post systems.
- 9. Pediatric endodontics**
  - a. Primary Dentition: - Diagnosis of pulpal diseases and treatment.
  - b. Endodontic procedures in Young permanent teeth and permanent teeth.
  - c. Recent advances in Pediatric diagnosis and Endodontics.
- 10. Traumatic injuries in children:**
  - Classification & Importance.
  - Sequelae & reaction of teeth to trauma.
  - Management of traumatized teeth with latest concepts.
  - Management of jaw fracture in children.
- 11. Oral habits in children:**
- 12. Dental care of children with special needs:**
  - Definition, Etiology, Classification, Behavioral, Clinical feature & Management of children with:
    - Physically handicapping conditions.
    - Mentally compromising conditions.
    - Medically compromising conditions.
    - Genetic disorders.

### **13. Oral manifestations of systemic conditions in children & their management.**

#### **14. Cariology:**

- Definition , Aetiology & Pathogenesis
- Caries pattern in primary young permanent and permanent teeth in children.
- Rampant caries early childhood caries and extensive caries Definition aetiology, pathogenesis  
Clinical features Complications & Management
- Dietary modification & Diet counseling.
- Subjective & objective method of caries detection.

#### **15. Paediatric oral medicine & clinical pathology:** Recognition & Management of developmental dental anomalies, teething disorders, stomatological condition mucosal lesions, viral infection etc.

#### **16. Preventive dentistry:**

- Definition.
- Principles & Scope.
- Types of prevention.
- Different preventive measures used in Pediatric dentistry including fissure sealants and caries vaccine.

#### **17. Fluorides:**

- Historical background.
- Systematic & Topical fluorides.
- Mechanism of action.
- Toxicity & Management.
- Defluoridation techniques.

### **REFERENCE BOOKS:**

1. Textbook of Pedodontics: Shoba Tandon: 2nd edition
2. Fundamentals of Pediatric Dentistry: Mathewson
3. Pediatric Dentistry: Infancy through Adolescence: Pinkham: 4<sup>th</sup> edition
4. Dentistry for the Child and Adolescent: McDonald: 13th edition
5. Pediatric Dentistry Clinical Approach: Koch Goran: 2nd ed.
6. Pediatric Dentistry: Welbury: 3rd edition