

1) **Title of the course** - FELLOWSHIP COURSE IN PEDIATRIC & PREVENTIVE DENTISTRY

2) **Duration of the course**- 1 year or as per University rules and regulations

3) **Course contents/ syllabus** –

1. Child psychology: development & classification of behaviour, personality, intelligence in children, theories of child psychology , stages of psychological child development , fear anxiety, apprehension & its management
2. Behaviour management: non – pharmacological & pharmacological methods.
3. Conscious sedation , deep sedation & general anaesthesia in pediatric dentistry : (including other drugs, synergic & antagonistic actions of various drugs used in children
4. Preventive Pedodontics: concepts, chair side preventive measures for dental diseases, high-risk caries including rampant & extensive caries- recognition, features & preventive management , pit & fissures sealants, oral hygiene measures, correlation of brushing with dental caries & periodontal diseases. Diet & nutrition as related to dental caries. Diet counselling
5. Pediatric operative dentistry
 - Principle of operative dentistry along with modifications of material/ past, current & latest including tooth colored materials.
 - Modifications required for cavity preparation in primary and young permanent teeth.
 - Various isolation techniques
 - Restorations of decayed primary, young permanent & permanent teeth in children using various restorative material like glass ionomer, composites, silver, amalgam & latest material
 - Stainless steel, polycarbonate & resin crowns / veneers & fibre post systems.
6. Pediatric endodontics:
 - Primary dentition:- diagnosis of pulpal diseases & their management – pulp capping , Pulpotomy, Pulpectomy, controversies & recent

concepts.

- Young permanent teeth & permanent teeth, pulp capping, Pulpotomy, Apexogenesis, Apexification, concepts, techniques & materials used for different procedures.
- Recent advances in pediatric diagnosis & endodontics.

7. Prosthetic considerations in paediatric dentistry.

8. 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.

9. Interceptive orthodontics:

- Concepts of occlusion and aesthetics: structure & function of all anatomic components of occlusion , mechanics of articulations, recording of masticatory function, diagnosis of occlusal dysfunction, relationship of TMJ anatomy & pathology and related neuromuscular physiology.
- A comprehensive review of the local & systemic factors in the causation of malocclusion.
- Recognition & management of normal & abnormal developmental occlusions in primary, mixed & permanent dentitions in children.
- Biology of tooth movement: a comprehensive review of the principles of teeth movement. Review of contemporary literature. Histopathology of bone & periodontal ligament, molecular and ultra cellular consideration in tooth movement.
- Myofunctional appliance: basis principles , contemporary appliances: design & fabrication
- Removable appliances: basis principles, contemporary appliances: design & fabrication
- Case selection & diagnosis in interceptive orthodontics
- Space management: etiology, diagnosis of space problems, analysis,

biomechanics, planned extraction in interception orthodontics.

10. Oral habits in children :

- Definition , etiology, & classification
- Clinical features of digit sucking, tongue thrusting, mouth breathing & various other secondary habits.
- Management of oral habits in children

11. Dental care of children with special needs:

- Definition etiology , classification , behavioural, clinical features & management of children with:
- Physically handicapping conditions
- Mentally compromising conditions
- Medically compromising conditions
- Genetic disorders

12. oral manifestations of systemic conditions in Childrens & their management

13. Dental radiology as related to pediatric dentistry

14. Cariology

- Historical background
- Definition, aetiology & pathogenesis
- Caries pattern in primary, young permanent & permanent teeth in children.
- Rampant caries, early childhood caries & extensive caries. Definition, aetiology & pathogenesis, clinical features, complications & management.
- Role of diet & nutrition in dental caries
- Dietary modifications & diet counselling.
- Subjective & objective methods of caries detection with emphasis on caries activity tests, caries prediction, caries susceptibility & their

clinical applications

15. Congenital abnormalities in children: definition, classification, clinical features & management.
16. Dental emergencies in children & their management
17. Dental materials used in pediatric dentistry.
18. Fluorides:
 - Historical background
 - Systemic & topical fluorides
 - Mechanism of action
 - Toxicity & management
 - Defluoridation techniques
19. Case history recording, outline of principles of examination, diagnosis, & treatment planning.
20. Comprehensive infant oral health care.
21. Comprehensive cleft care management with emphasis on counselling, feeding, Nasoalveolar bone remodelling, speech rehabilitation.