REGULATIONS AND CURRICULUM GOVERNING

MDS PROGRAM

Pediatric and Preventive Dentistry

2025-2026

Department Of Pediatric and Preventive Dentistry

Yenepoya Dental College

Deralakatte, Mangalore, Karnataka.



NOTIFICATION FROM THE UNIVERSITY

YENEPOYA
(DEEMED TO BE UNIVERSITY)

Office of the Registrar , Yenepoya (Deemed to be University)

NOTIFICATION – 51-ACM/06/2023 dtd. 16.05.2023

Sub: Enrichment in postgraduate curriculum in the subject Paediatric and Preventive Dentistry

Ref: Resolution of the Academic council at its 51st meeting held on 16.05.2023, vide agenda – 8

****

The Academic Council at its 51st meeting held on 16.05.2023 and subsequently the Board of Management at its 62nd meeting held on 14.06.2023 has resolved to approve the amendment in PG curriculum in the subject Paediatric and Preventive Dentistry as follows:-

Sl. No.	Existing	Now Amended
	---	1. Clinical photography exercise asa part of preclinical requirement. Preparation of cast models as apart of preclinical requirement 2. Preparation of cast models as a part of preclinical requirement

This will be applicable from the academic year 2023-24 onwards.

REGISTRAR

mj

Copy to:

1. Principal – YDC
2. Professor & Head, department of Pedodontics
3. CoE
4. File copy

YENEPOYA UNIVERSITY

Ref. No.YU/REG/ACA/ACM-30/2017 Date: 04.11.2017

NOTIFICATION

Sub: Implementation of DCI Regulations 2017 – MDS reg.:-

Ref: (i) Proceedings of the 30th Academic Council meeting held on 20.10.2017
(ii) Gazette Notification Govt. of India dated 5th September 2017 on DCI Regulations 2017

With reference and Subject cited above, Yenepoya University based on the Academic Council proceedings is pleased to implement the DCI regulation 2017 for all the 9 MDS Programs offered with effect from 2018-19 academic year onwards.

B.T.

REGISTRAR

Registrar
Yenepoya University

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1. Preamble

Pediatric and preventive dentistry is age specific speciality branch that believes in rendering treatment modalities by taking into account the developmental changes of children. The appropriate behaviour management strategies are applied to make dental treatment a pleasurable experience. This specialization is concerned with excellence in dental care for children from infancy to adolescence and encompasses a variety of disciplines, techniques, procedures, and skills that are unique based on the requirements of infants, children and adolescents. With an emphasis on the prevention of oral diseases in children, the specialists provide proactive counselling to the parents regarding prevention that goes beyond caries to address all aspects of children's oral health.

2. Definitions

Branch Of Dentistry that provides quality education and training in the practice, treatment, and research in preventive and therapeutic oral health care for children from birth through adolescence including those with special health care needs.

3. Eligibility for admission

A candidate for admission to the Master in Dental Surgery course, must possess a recognised degree of Bachelor i Dental Surgery awarded by a university or institute in India and registered with the State Dental Council and has obtained provisional or permanent registration and has undergone compulsory rotator internship of a year in an approved/ recognised dental college.

Provided that in the case of a foreign national, the following procedure hall be followed—

The council may , on payment of the prescribed fee for registration for the duration of the post- graduate training restricted to the dental college/ institution to which he or she is admitted for the time being exclusively for post – graduate studies.

Provided further that temporary registration to such foreign national shall be subject to the condition that such person is duly registered as medical practitioner in his/ hr own country from which he/she has obtained his/her basics dental qualification and that

his/her degree is recognized by the corresponding state dental council of concerned authority.

4. Duration of the program

3 Years

5. Maximum period for completion of the program

The period of training for the award of the MDS course shall be of three years duration for three academic years as full time candidates in an institution including the period of examination:

Provided that the time period required for passing out of the MDS course shall be a maximum of six years from the date of admission is said curse:

Provided further that the duration of the post- graduate course for the post – graduate Diploma holders shall be of two years in the respective speciality. The syllabus and curriculum shall be the same as MDS Course I the concerned speciality expect that they are not required (i) to undergo study and training in Basic Sciences and (ii) pass the PART-I Examination of MDS Course. However, they have to submit the dissertation work, as part of the post – graduate programme.

6. Aim of the Program

GOALS:

The goals of the post- graduate training in pediatric dentistry is to train the graduate in DentalSurgery who will,

1. Practice respective speciality efficiently and effectively, backed by scientific knowledge andskill;
2. Exercise empathy and a caring attitude and maintain high ethical standards;
3. Continue to evince keen interest in professional education in the speciality and alliedspecialties whether in teaching or practice;
4. Willing to share the knowledge and skills with any learner, junior or a colleague;
5. To develop the faculty for critical analysis and evaluation of various concepts and views andto adopt the most rational approach.

7. Objectives/Outcomes of the program (Knowledge/Skill/Attitude/Communication)

OBJECTIVES

At the end of 3 years of training the candidate should be able to

- Create a good oral health in the child and also a good citizen of tomorrow.
- Instill a positive attitude and behaviour in children
- Understand the principles of prevention and preventive dentistry right from birth toadolescence
- Guide and counsel the parents in regards to various treatment modalities including differentfacets of preventive dentistry.
- Prevent and intercept developing malocclusion.

SKILLS:

- Obtain Proper clinical history, methodological examination of the child patient, perform essential diagnostic procedures and interpret them. And arrive at a reasonable diagnosis and treat appropriately.
- Be competent to treat dental diseases which are occurring in child patient.
- Manage to repair and restore the lost/ tooth structure to maintain harmony between both hardand soft tissues of the oral cavity.
- Manage the disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.
- To acquire skills in managing life threatening condition with emphasis on basic life support measures.

ATTITUDES:

- Develop an attitude to adopt ethical principles in all aspects of Pedodontic practice.
- Professional honesty and integrity to be fostered.
- Treatment and care to be delivered irrespective of the social status, cast, creed, and religion of the patient.
- Willingness to share the knowledge and clinical experience with professional colleagues.
- Willingness to adopt, after a critical assessment, new methods and techniques of Pedodonticmanagement developed from time to time, based on scientific research, which is in the best interest of the child patient.
- Respect child patient's rights and privileges, including child patients‟ right to information and right to seek a second opinion.
- Develop an attitude to seek opinion from allied medical and dental specialties, as and when required.

- **Program Outcomes**

PO 1	Help children to grow up with good oral health and prepare them to be good citizen of tomorrow
PO 2	Establish a positive attitude towards oral health.
PO 3	Practice the principles of prevention and preventive dentistry right from birth to adolescence.
PO 4	Explain and appraise the parents/ care givers in regards to various treatment modalities including different facets of preventive dentistry.
PO 5	Record and evaluate proper clinical history, examine the child patient, perform the diagnostic procedure, correlate and interpret them to arrive at a reasonable diagnosis and formulate an individualized treatment plan for that particular child.
PO 6	To predict and identify developing malocclusion and design preventive and interceptive strategies to prevent malocclusion
PO 7	Develop adequate skills to prevent, repair and restore the loss of tooth structure in order to maintain harmony between both the hard and soft tissues of the oral cavity.
PO 8	Identify and initiate treatment in children with special health care needs which are tailored to their individual requirements and conditions.
PO 9	Develop an attitude to adopt ethical principles in all aspects of pediatric dental practice.
PO 10	Propose treatment care irrespective of the social status, caste, creed and the religion of the patients.
PO 11	Communicate clinical Knowledge and experience with professional colleagues.
PO12	Adopt advanced techniques and trends in pediatric dentistry through current research and evidence based.
PO13	Respect child patients rights and privileges including their right to information and prevent indentify and report child abuse and neglect
PO14	Develop the attitude to seek an opinion from allied medical and dental specialties as and when required.

8. Attendance

Minimum **80%** percent attendance in Practical/Clinical will be criteria for eligibility to appear for university examination.

9. Syllabus / Course contents

1. Applied Anatomy & genetics
2. Applied Physiology
3. Applied Pathology
4. Nutrition and Die tics
5. Growth & Development: Prenatal and Postnatal development of cranium, face, jaws, teeth and supporting structures. Chronology of dental development and development of occlusion. Dimensional changes in dental arches, Cephalometirc evaluation of growth.
6. Child Psychology: Development & Classification of behavior, personality, intelligence in children theories of child psychology, stages of psychological child development, fear anxiety, apprehension & its management.
7. Behavior Management: Non- pharmacological & Pharmacological methods.
8. Child Abuse & Dental Neglect.
9. Conscious Sedation, Deep Sedation & General Anesthesia in Pediatric Dentistry, including other Drugs, Synergic & Antagonistic Actions of various drugs used in Children.
10. Preventive Pedodontics: Concepts, chair side preventive measures for dental diseases, high- risk caries including rampant & extensive caries-Recognition, Features & preventive Management, Pit and Fissures Sealants, Oral Hygiene measures, Correlation of brushing with dental caries and periodontal diseases. Diet & Nutrition as related to dental caries. Diet Counselling.
11. Dental Plaque: Definition, Initiation, Pathogenesis, Biochemistry, and Morphology & Metabolism.
12. Microbiology & Immunology as related to Oral Diseases in Children: Basic concepts of immune system in human body, Auto Immune diseases,

Histopathology, Pathogenesis, Immunology of dental caries, Periodontal diseases, Tumours, Oral Mucosal lesions etc.

13. Gingival & Periodontal diseases in Children.
    a. Normal Gingival & Periodontium in children.
    b. Gingival & Periodontal diseases-Etiology, Pathogenesis, Prevention & Management.
14. Pediatric Operative Dentistry
    a. Principle of Operative Dentistry along with modifications of materials/past, current& latest including tooth colored materials.
    b. Modifications required for cavity preparation in primary and young permanent teeth.
    c. Various Isolation Techniques.
    d. Restorations of decayed primary, young permanent and permanent teeth in children using various restorative materials like Glass Ionomer, Composites, Silver, Amalgam& latest materials.
    e. Stainless steel, Polycarbonate & Resin Crowns/ Veneers & fiber post systems.
15. Minimal Invasive Dentistry(MID) Principal of MID Recommendation in cavity preparations. Recommendation in restorative materials
16. Pediatric Endodontics:
    a. Primary Dentition: Diagnosis of pulpal diseases and their management- Pulp capping,Pulpotomy, Pulpectomy (Materials & Methods), Controversies & recent concepts.
    b. Young permanent teeth and permanent teeth, Pulp capping, Pulpotomy, Apexogenesis, Apexification, Concepts, Techniques and Materials used for different procedures.
    c. Recent advances in Pediatric diagnosis and Endodontics.
17. Traumatic Injuries in Children:
    a. Classifications & Importance.
    b. Sequalae & reaction of teeth to trauma
    c. Management of jaw fracture in children.
18. Interceptive Orthodontics:

a. Concepts of occlusion and esthetics: Structure and function of all anatomic components of occlusion, mechanics of articulations, recording of masticatory function, diagnosis of Occlusal dysfunction, relationship of TMJ anatomy and pathology and related neurnomuscular physiology.
b. A comprehensive review of the local and systemic factors in the causation of malocclusion.
c. Recognition and management of normal and abnormal developmental occlusions in primary, mixed and permanent dentitions in children.
d. Biology of tooth movement: A comprehensive review of the principles of teeth movement. Review of contemporary literature, Histopathology of bone and periodontal ligament, Molecular and ultra cellular consideration in tooth movement.
e. Myofunctional appliances: Basic principles, contemporary appliances: Design & Fabrication.
f. Removable appliances: Basic principles, contemporary appliances: Design &Fabrication.
g. Case selection & diagnosis in interceptive Orthodontics (Cephalometrics, Image processing, Tracing, Radiation hygiene, Video imaging & advanced Cephalometric techniques).
h. Space Management: Etiology, diagnosis of space problems, analysis, Biomechanics, Planned extraction in interception orthodontics.

19. Oral Habits in Children:
    a. Definition, Etiology & Classification.
    b. Clinical features of digit sucking, tongue thrusting, mouth breathing & various othersecondary habits.
    c. Management of oral habits in children.
20. Dental care of Children:
    a. Definition, Etiology, Classification, Behavioral clinical features & Management ofchildren with:
    b. Physically handicapping conditions

c. Mentally compromising conditions
d. Medically compromising conditions
e. Genetic disorders

21. Oral manifestations of Systemic Conditions in Children & their Management
22. Management of Minor Oral Surgical Procedures in Children
23. Dental Radiology as related to Pediatric Dentistry
24. Cariology
    a. Historical background
    b. Definition, Aeitology & Pathogenesis
    c. Caries pattern in primary, young permanent and permanent teeth in children.
    d. Rampant caries, early childhood caries and extensive caries. Definition, aeitology,Pathogenesis, Clinical features, Complications & Management
    e. Dietary modifications & Diet counseling.
    f. Subjective & objective methods of Caries detection with emphasis on Caries Activity tests, Caries prediction, Caries susceptibility & their clinical Applications
25. Pediatric Oral Medicine & Clinical Pathology: Recognition & Management of developmental dental anomalies, teething disorders, stomatological conditions, mucosal lesions, viral infection etc.
26. Congenital Abnormalities in Children: Definition, Classification, Clinical features & Management.
27. Dental Health Education & School Dental Health Programme
28. Dental Materials used in Pediatric Dentistry
29. Preventive Dentistry:
    a. Definition
    b. Principles & Scope
    c. Types of prevention
    d. Different preventive measures used in Pediatric Dentistry including fissure sealants and caries vaccine.
30. Dental Health Education & School Dental Heath Programme
31. Dental health concepts, Effects of civilization and environment, Dental Health

deliverysystem, Public Health measures related to children along with principles of Paediatric Preventive Dentistry.

32. Fluorides:
    a. Historical background
    b. Systemic & Topical fluorides
    c. Mechanism of action
    d. Toxicity & Management
    e. Defluoridation techniques
33. Medico legal aspects in Pediatric Dentistry with emphasis on informed concept.
34. Counselling in Paediatric Dentistry
35. Case History Recording, Outline of principles of examination, diagnosis & treatment planning.
36. Epidemiology: Concepts, Methods of recording & evaluation of various oral diseases.Various national & global trends of epidemiology of oral diseases.
37. Comprehensive Infant Oral Health Care.
38. Principles of Bio-Statistics & Research Methodology , Understanding of Computers andPhotography
39. Comprehensive cleft care management with emphasis on counselling, feeding, nasoalveolar bone remodelling, speech rehabilitation.
40. Setting up of Pedodontics & Preventive Dentistry Clinic.
41. Emerging concepts in Paediatric Dentistry, Scope of laser /minimum invasive procedures.

Preclinical Work

First Year (Duration- first 6 months of Months of First Year MDS)

1. Carving of all deciduous teeth & Permanent teeth
2. Basic wire bending exercises

A. Wire bending exercises

- Straightening of 6 inch wire of 1mm diameter stainless steel wire
- Square bent from 0.8 inch straightened wire (2”×2”)
- Circle of diameter 2” bent from 0.7 inch straightened wire

- Triangle bent from 0.8 inch (“1x1”)
- Bending of U, V with a distance of 10mm

B. Clasps, bows, springs, Canine retractors

a. Clasps: one each on Maxillary/ Mandibular molar

- ¾ clasps
- Full clasps
- Adam's clasps
- Arrow head clasps
- Ball ended clasps

b. Bow

Labial Bows:

- Short
- Long

c. Finger springs:

- Single cantilever
- Double cantilever
- “Z” springs: single & double

d. Canine retractors:

- Single U loop canine retractor
- Helical canine retractor
- Palatal canine retractor
- Robert's retractor

3. Fabrication of

- Maxillary bite plate/Hawley’s
- Maxillary expansion screw appliance
- Canine retractor appliance
- All habit breaking appliances
    i. Removable type
    ii. Fixed type
    iii. Partially fixed and removable

- Myofunctional appliance - Twinblock, Activator, Lip Bumper, Oral Screen
- Making of inclined plane appliance
- Feeding appliance

4. Basic soldering exercise -making of a lamppost of stainless steel wire pieces of differentgauges soldered on either side of heavy gauge main post.
5. Fabrication of space maintainers

   Removable type-

   - Unilateral Non- Functional space maintainer
   - Bilateral Non-Functional space maintainer
   - Unilateral functional space maintainer
   - Bilateral functional space maintainer

   Space Regainers

   - Hawley's appliances with Helical space regainer
   - Gerber space regainer

   Fixed Space maintainers

   - Band & long loop space maintainer
   - Band & short loop space maintainer
   - Transpalatal arch space maintainer
   - Nance Palatal holding arch
   - Distal shoe appliance

6. Basic for spot welding exercise
7. Collection of extracted deciduous and permanent teeth
   - Sectioning of the teeth at various levels and planes (Horizontal/cross)
   - Drawing of section and shapes of pulp
   - Phantom Head Exercise: Performing ideal cavity preparation for various restorativeprocedures
     i. Composite - Class I, II, III, IV, V
     ii. GIC - Class I & Class II on posteriors
     iii. Silver amalgam - Class I & Class II on posteriors
8. Performing pulpotomy, Pulpectomy, root canal treatment and Apexification

procedure

a. Tooth preparation and fabrication of various temporary and permanent restorationson fractured anterior teeth.- composite for Ellies Class II # .
b. Preparation of teeth for various types of crowns
    i. SSC, ZERCONIA- Ant & post ,metal, PFM ant& post, all ceramic Ant.
c. Laminates/veneers
d. Bonding & banding exercise

9. Performing of behavioral rating and IQ tests for children.
10. Computation of:-
    a. Caries index and performing various caries activity test.
    b. Oral Hygiene Index
    c. Periodontal index
    d. Fluoride/ Index
11. Surgical Exercises a). Fabrication of splints .b). Type of Wiring. C). Suturing.
12. Radiology Exercises
    a. Taking of periapical, Occlusal, bitewing radiographs of children
    b. Developing and processing films
    c. Tracing of soft tissue dental and skeletal landmarks as observed on Cephalometric radiographs and drawing various planes and angles, further interpretation of Cephalometric radiographic analysis.
    d. Mixed dentition cast analysis
13. Library assignment.
14. Synopsis topic submission
15. Clinical Photography Exercise
16. Preparation of study caste Modules of primary mixed and permanent dentition
17. Post Graduate students will attend the Department of Pediatrics and Department of Anesthesiology, respectively, for a period of 15 days each.

10. Teaching - Learning methods

Teaching /Learning Activities And Monitoring Learning Progress

All the candidates registered for MDS will pursue the course for 3 years as full time students. During this period, each student shall take part actively in learning activities.

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. The monitoring will be done by the staff of the department based on participation of students in various teaching / learning activities using Assessment Proforma.

The number of activities attended and the topics prevented are to be recorded in log book. The log book will be periodically validated by the supervisors.

I. Acquisition of Knowledge

Journal Review Meeting (Journal Club): The trainees should make presentation from the allotted journals of selected article at least five times in a year. The ability to do literature search, indepth study, presentation skills, and use of audio-visual aids will be assessed during presentation. The assessment will be made by faculty members and peers attending the meeting using Assessment Proforma 1 in Section II.

Seminars: The seminars may be held at least twice a week in each postgraduate department. All candidates are expected to participate actively and enter relevant detail in the logbook. Each candidate shall make at least five seminars presentations in each year. The topics should beassigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skill and use of audio-visual aids are to be assessed using the Assessment Proforma 2, Section II.

Symposium: Symposiums on topics covering multiple disciplines will be held periodically

Inter Disciplinary Clinical Meeting: The Inter Disciplinary Clinical Meeting will be held once a month, and attended by all departments .The PG student is encouraged to present the clinical details, radiological, and histo-pathological interpretations, and participation in the discussion.

II. Clinical skills

Day to day work: Skills in outpatient and clinical work will be assessed periodically. The assessment includes candidate's sincerity and punctuality, analytical ability and communication skills (Assessment Performa 3, Section II)

Clinical Meetings: Candidates should periodically present cases to his peers and faculty members. This is assessed using a check list (Assessment Proforma 4, Section II)

III. Teaching skills: All the candidates are encouraged to take part in undergraduate teaching programs, in the form of lectures or group discussions. This performance is based on assessment by the faculty members of the department and from feedback from the undergraduate students (Proforma 5, Section II)

1. **Periodic tests**: The departments will conduct periodical tests. A mock Exam will be held three months before the final examination. The tests include written papers, practical/ clinical and viva voce.
2. **Work Diary /Log Book**: Every candidates will maintain a work diary and record his /her participation in the training programme conducted by the department such as journalreviews, seminars, etc. special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures.
3. **Records:** Records, log books and marks obtained in tests will be maintained by the Head of the Department.

Continuing dental education programme: The department will organize these programs on regular basis involving other institutions. The trainees shall also be encouraged to attend such programs conducted elsewhere

Conference/workshops/advanced courses: The trainee shall be encouraged not only to attend conferences/ workshops/ advanced courses, but also to present at least 2 papers at state, national specialty meetings during their training period.

Dissertation: Every candidate shall prepare a dissertation based on the clinical or experimentalwork or any other study conducted by them under the supervision of the post graduate guide. (Assessment Proforma 6 & 7, Section III)

4. Log Book

The log book is a record of the important activities of the candidates during the training. Internal assessment will be based on the evaluation of the log book. The record will include academic activities as well as the presentations and procedures carried out by the candidate.

11. Scheme of Examination

- **Internal Assessment (Frequency, Pattern-Theory, and Practical)**

  Periodic Progressive Assessment at the end of six months for preclinical exercise and theoretical and practical assessment at the end of each academic year

- **University Examination (Pattern-Theory, and Practical)**

A. Theory: Part-I: Basic Sciences Paper - **100 Marks**

Part-II: Paper-I, Paper-II & Paper-III - **300 Marks**

(100 Marks for each Paper)

Written examination shall consist of Basic Sciences Paper (Part-I) of three hours duration and should be conducted at the end of First year of MDS course. Part-II Examination will be conducted at the end of Third year of MDS course. Part-II Examination will consist of Paper-I, Paper-II & Paper-III, each of three hours duration. Paper-I & Paper-II shall consist of two long answer questions carrying 25 marks each and five questions carrying 10 marks each. Paper-III will be on Essays. In Paper-III three Questions will be given and student has to answer any two questions. Each question carries 50 marks. Questions on recent advances may be asked in any or all the papers. Distribution of topics for each paper will be as follows: *

Part-I: Applied Basic Sciences – Applied Basic Sciences: Applied Anatomy, Physiology, & Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology and Biostatistics Growth & Development and Dental plaque, Genetics.

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Part-II:

Paper-I : Clinical Paedodontics

1. Conscious sedation, Deep Sedation & General Anesthesia in Pediatric Dentistry
2. Gingival & Periodontal Diseases in Children
3. Pediatric Operative Dentistry
4. Pediatric Endodontics
5. Traumatic Injuries in Children
6. Interceptive Orthodontics
7. Oral Habits in children
8. Dental Care of Children with special needs
9. Oral Manifestations of Systemic Conditions in Children & their Management
10. Management of Minor Oral Surgical Procedures in Children
11. Dental Radiology as Related to Pediatric Dentistry
12. Pediatric Oral Medicine & Clinical Pathology
13. Congenital Abnormalities in Children
14. Dental Emergencies in Children & Their Management
15. Dental Materials Used in Pediatric Dentistry
16. Case History Recording
17. Setting up of Pedodontic & Preventive Dentistry Clinic

Paper-II: Preventive and Community Dentistry as applied to Pediatric Dentistry

1. Child Psychology
2. Behavior Management
3. Child Abuse & Dental Neglect
4. Preventive Pedodontics
5. Cariology
6. Preventive Dentistry
7. Dental Health Education & School Dental Health Programmes:
8. Fluorides
9. Epidemiology
10. Comprehensive Infant Oral Health Care/Comprehensive cleft care

11. Principles of Bio-Statistics & Research Methodology & Understanding of Computers and Photography

Paper-III: Essays (descriptive and analyzing type question)

** The topics assigned to the different papers are generally evaluated under those sections. However a strict division of the subject may not be possible and some overlapping of topics is inevitable. Students should be prepared to answer overlapping topics.*

B. Practical /Clinical Examination : 200 Marks

The Clinical / Practical and Viva-Voce Examinations are conducted for a minimum of twodays.

First Day:

1 Case Discussion, Pulp Therapy i.e. Pulpectomy on a Primary Molar.

Case Discussion	:	20 marks
Rubber Dam application	:	10 marks
Working length X-ray	:	20 marks
Obturation	:	20 marks
Total	:	70 marks

2 Case Discussion, Crown preparation on a Primary Molar for Stainless steel crownand cementation of the same.

Case Discussion	:	10 marks
Crown Preparation	:	20 marks
Crown selection and Cementation		20 marks
Total	:	50 marks

3 Case Discussion, band adaptation for fixed type of space maintainer and impressionmaking.

Case discussion	:	20 marks
Band adaptation	:	20 marks
Impression	:	20 marks
Total	:	60 marks

Second Day:

1. **Evaluation of Fixed Space Maintainer and Cementation : 20 marks**

C. Viva Voce : 100 Marks

a. ***Viva-Voce examination*** *: 80 marks*

All examiners will conduct viva-voce conjointly on candidate‟s comprehension, analytical approach, expression, interpretation of data and communication skills. It includes all components of course contents. It includes presentation and discussion on dissertation also.

b. ***Pedagogy Exercise*** *: 20 marks*

A topic be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation on the topic for 8-10 minute

- **Departmental examination**

I MDS - Part 1 Theory Mock Exam

II MDS - Annual Exams

III MDS –

Monthly topic wise exam

College Preparatory Exam

Final Theory and Practical Mock Exam

12. Eligibility to appear for University Examination

The following requirements shall be fulfilled by the candidate to become eligible for the final examination

i) Attendance: Every candidate shall secure (80% attendance during each academic year).

ii) Progress and conduct: Every candidate shall participate in seminars, Journal review meeting, symposia, conferences, case presentations, clinics and didactic lectures during each year organized by the concerned department.

iii) Work diary and log book: Every candidate shall maintain a work diary and log book as per Annexure –I appended to these regulations for recording his or her participation in the training programmes conducted by the department. The work dairy and logbook shall be verified and certified by the Head of the department of the institution. The certification of satisfactory progress is based on the work dairy and log book.

The following is the minimum requirement to be completed before the candidate can beconsidered eligible to appear in the final MDS Examinations;

Sl. No.	Clinical work	Total	7 to 12 Months	13 to 24 months	25 to 36 months
1.	Behaviour Management of different age groups children with complete records	17	2	10	5
2.	Detailed Case evaluation with complete records, treatment planning and presentation of cases with chair side and discussion	17	2	10	5

3.	Step-by-step chair side preventive dentistry scheduled for high risk children with gingival and periodontal diseases & Dental Caries	11	1	5	5
4.	Practical application Preventive dentistryconcepts in a class of 35-50 children & Dental Health Education & Motivation	7	1	4	2
5.	Pediatric operative Dentistry (a) Management of Dental Caries				
	(i) Class I	50	30	10	10
	(II)Class II	100	40	50	10
	(III) other Restoration	100	20	50	30
	(b) Management of traumatized anterior teeth	15	04	06	15
	(c) Aesthetic Restorations	25	05	10	10
	(d) Pediatric Endodontic Procedures • Deciduous teeth Pulpotomy/ Pulpectomy • Permanent Molars • Permanent Incisor • Apexification & Apexogenesis	 150 20 15 20	 30 03 02 02	 50 07 03 08	 70 10 10 10
6.	Stainless steel crowns	50	10	20	20
7.	Other crowns	05	01	02	02
8.	Fixed: Space Maintainers Habit breaking appliances	30	08	12	10

9.	Removable: Space Maintainers	20	05	07	08
10.	Functional Appliances	05	01	02	02
11.	Management of patients under Sedation/General Anesthesia	06	00	03	03
12.	Minor oral surgical procedures	06	00	03	03
13.	Preventive measures like fluoride	20	08	08	04
	applications & Pit & Fissure Sealants applications with complete follow-up anddiet counseling				
14	Special Assignments (i) School Dental Heath Programme	03	01	01	01
	(ii) Camps etc.,	02	01	01	-

15. Submission of Library Assignment
16. Laboratory usage
17. Continuing Dental Health Programme
18. Submission of Dissertation.

OTHER WORK TO BE DONE DURING

FIRST YEAR

1. **Seminars**:. Each student should present a minimum of five seminars each year
2. **Journal club**: Each student should present a minimum of five presentations each year.
3. **Symposium**: On topic covering multiple disciplines
4. **Library assignment should be submitted on or before the end of six months**.
5. **Protocol for dissertation to be submitted on or before the end of six**

months from the dateof submission.

6. **Field Survey**: To be conducted and submit the report.
7. **Case discussions**.
8. **Field Visits: To attend dental camps and to educate the masses.**
9. **Basic subjects classes.**
10. **Under Graduate classes:** Each post graduate student should handle 1-2 classes
11. Internal Assessment
12. **Dissertation work:** On getting the approval from the university, work for the dissertation to bestarted.

SECOND YEAR:

The clinical cases taken up should be followed under the guidance. More case discussions and casesto be taken up. Other routine work as follows:

1. **Seminars:** Each student should present a minimum of five seminars each year.
2. **Journal club:** Each student should present a minimum of five presentations each year.
3. **Under graduate classes:** each post-graduate student should handle 1-2 classes.
4. **Case discussions**.
5. **Field Visits: To attend dental camps and to educate the masses.**
6. **Internal assessment**
7. **Dissertation work:** On getting the approval from the university, work for the dissertation tobe started.
8. Rotation posting to Anaesthesia, Paediatrics, ENT and craniofacial (including speech andhearing).

THIRD YEAR:

The clinical cases taken up should be followed under the guidance. More case discussions and casesto be taken up. Other routine work as follows:

1. **Seminars:** Each student should present a minimum of five seminars each year.
2. **Journal club**: Each student should present a minimum of five presentations each year.
3. **Under graduate classes:** each post-graduate student should handle 1-2 classes.
4. **The completed dissertation should be submitted <u>three months</u> before the final**

examination.

5. **Case discussions.**
6. Internal Assessment
7. **Field Visits**: To attend and participate in school dental health programms and dental camps.
8. **Mock examination.**

Pre-Requisite for Appearing To University Examination

The student will be allowed to appear for mock examination, only on the basis of performance in above three internal assessment examinations.

Mock examination will be conducted at least one month prior to University examination, strictly on par with university pattern. Passing in internal assessment examination is a pre requisite. All PG students will have to attend and present Seminar and Journal articles as per the schedule fixed by Department.

Every PG student will have to present minimum two scientific papers and one Table clinic/poster presentation at Specialty Conventions or Conferences or Publish two scientific papers in Journals.

They have to conduct theory classes of UG students as allotted by HOD. This is to expose the student for teaching methodology and confidence building.

Minimum **80%** percent attendance in Practical/Clinical will be criteria for eligibility to appear for university examination.

Monitoring Learning Progress

The learning progress of each candidate will be monitored through continuous appraisal and regular assessment. The monitoring will be done by the staff of the department based on participation of students in various teaching/learning activities. Assessment will be done using checklists that assess various aspects. Assessment Proforma are given in Section II

MDS Students have to record selected cases and upload the case details on “Patient Management Software“ mobile application for case discussion and treatment plan.

13.Criteria for passing

To pass the university examination, a candidate shall secure in both theory examination and in practical/clinical including viva voce independently with an aggregate of 50% of total marks allotted (50 out of 100 marks in Part I examination and 150 marks out of 300 in Part II examination in theory and 150 out of 300, clinical plus viva voce together). A candidate securing marks below 50% as mentioned above shall be declared to have failed in the examination.

A candidate who is declared successful in the examination shall be granted a Degree of Master of Dental Surgery in the respective speciality.

14.Logbook/Portfolio (if applicable)

Table 1

Academic Activities Attended

Name: Academic Year:

College:

Date	Type of activity (Specify Seminar, journal Club Presentation, Under graduate teaching)	Particulars

Table 2

Academic Presentation Made By Trainee

Name: Academic Year:

College:

Date	Topic	Type of activity(Specify Seminar, journal Club Presentation, Under graduate teaching)

Table 3

Diagnostic And Operative Procedures Performed

Name: Academic Year:

College:

Date	Name	OP No	Procedure	Category O,A,PA

Key:

O - Washed up and observed – Initial six months of admission
A - Assisted senior Surgeon – 1- year MDs
PA - Performed procedure under the direct supervision of a senior surgeon – II year MDS
PI - Performed independently – III Year MDS

15. Recommended books (In Vancouver style)

1. Pediatric Dentistry (Infancy through Adolescence) - Pinkham.2 .Kennedy"
2. Pediatric Operative Dentistry –Kennedy & Curzon.
3. Occlusal guidance in Pediatric Dentistry- Stephen H. Wei
4. Clinical Use of Fluorides –Stephen H.Wei.
5. Pediatric Oral & Maxillofacial Surgery – Kaban
6. Pediatric Medical Emergencies.-P.S Whatt.
7. Understanding of Dental Caries- Niki Foruk
8. An Atlas of Glass Ionomer cements-G.J Mount.
9. Clinical Pedodontics-Finn
10. Textbook of Pediatric Dentistry-Braham Morris.
11. Primary Preventive Dentistry –Norman O.Harris.
12. Handbook of Clinical Pedodntics –Kenneth. D
13. Preventive Dentistry- Forrester
14. The Metabolism and Toxicity of Fluoride- Garry M. Whitford.
15. Dentistry for the Child Adolescence.- Mc.Donald.
16. Pediatric Dentistry –Damle S.G
17. Behavior Management-Wright
18. Pediatric Dentistry –Mathewson.
19. Traumatic Injuries- Andreason.
20. Occlusal guidance in Pediatric Dentistry – Nakata
21. Pediatric Drug Therapy – Tomare
22. Contemporary Orthodontics –Profitt.
23. Endodontic Practice – Grossman.
24. Endodontics- Ingle.
25. Pathways of Pulp –Cohen.
26. Management of Traumatized anterior Teeth –Hargreaves.
27. Essentials of Community & Preventive Dentistry- Soben Peter.
28. Post graduate hand book by Barber

29. Scientific foundation of Pediatric Dentistry by Stewart and Barber
30. Diet and Nutrition in dentistry by Rutgunn
31. Preventive Dentistry by Murray.

16. **Journals (In Vancouver style)**

1. Journal of Indian Dental Association
2. British Dental Journal
3. Journal of American Dental Association
4. Journal Dentistry
5. Dental Clinics of North America
6. Journal of Dental Education
7. Dental Abstracts
8. Journal of Dental Research
9. Dental Index
10. Quintessence international
11. International Dental Journal
12. Australian Dental Journal
13. Journal of Dental materials
14. Journal of Aesthetic dentistry
15. Journal of cleft palate
16. European Journal of Pediatric Dentistry (EJP)

Specialty Journals –Pediatric & Preventive Dentistry

1. ASDC Journal of Dentistry for children
2. International Journal of Pediatric Dentistry
3. Pediatric Dentistry
4. Journal of Indian Society of Pedodontics & Preventive Dentistry
5. Journal of Clinical Pediatric Dentistry.

17. Annexures

- Question paper layout for theory examinations

Time: 3 Hours	**Max. Marks:100**

PART -1

Paper-APPLIED BASIC SCIENCES

(Applied Basic Sciences – Applied Basic Sciences: Applied Anatomy, Physiology, & Biochemistry, Pathology, Microbiology, Pharmacology, Research Methodology and Biostatistics Growth & Development and Dental plaque, Genetics.**)**

Essays: **10 x 10 = 100 Marks**

Time: 3 Hours	**Max. Marks:100**

PART –II
PEDODONTICS AND PREVENTIVE DENTISTRY

Paper I: Clinical Pedodontics

LONG ESSAYS: **(2 x 25 = 50 Marks)**

SHORT ESSAYS: **(10 x 5 = 50 Marks)**

Time: 3 Hours	**Max. Marks: 100**

PART II

PEDODONTICS AND PREVENTIVE DENTISTRY

Paper-II (Preventive and community Dentistry as applied to Pediatric Dentistry)

1. **LONG ESSAYS:** **(25 x 2 = 50 Marks)**

2. **SHORT ESSAYS:** **(10 x 5 = 50 Marks)**

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(DEEMED TO BE UNIVERSITY)

Time: 3 **Hours** **Max. Marks: 100**

PART-II

PEDODONTICS AND PREVENTIVE DENTISTRY

Paper III (Descriptive and analyzing type question)

Essays : 3 questions,(Answer any two) **(50 x2 =100 Marks)**

- **Any other Checklist/Formats for assessment**

SCHEDULE 1

MODEL CHECKLIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name Of The Trainee:

Name Of The Faculty/ Observer: Date:

Sl. No	Items For Observation During Presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Article chosen was					
2	Extent of understanding of scope and objectives of the paper the candidate.					
3	Whether cross- references have been consulted					
4	Whether other relevant publications consulted					
5	Ability to respond to questions on the paper/subject					
6	Audio –Visual aids used.					
7	Ability to defend the paper					
8	Clarity of presentation					
9	Any other observation					
	Total Score					

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SCHEDULE II

MODEL CHECKLIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name Of The Trainee:

Name Of The Faculty/ Observer: Date:

Sl. No	**Items For Observation During Presentation**	**Poor 0**	**Below Average 1**	**Average 2**	**Good 3**	**Very Good 4**
1	Completeness & Preparation					
2	Clarity of presentation					
3	Understanding of Subject					
4	Whether other relevant publications consulted					
5	Whether cross – references have been consulted					
6	Ability to answer the questions					
7	Time scheduling					
8	Appropriate use of audio- visual aids					
9	Overall performance					
10	Any other observation					
	Total Score					

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SCHEDULE -III

MODEL CHECKLIST FOR EVALUATION OF CLINICAL WORK OUTPATIENT DEPARTMENT

(To be completed once a month by respective unit heads including posting in other department)

Name Of The Trainee:

Name Of The Unity Head: Date:

Sl. No	Items For Observation During Presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Regularity of attendance					
2	Punctuality					
3	Interaction with colleagues and supportive staff					
4	Maintenance of case records					
5	Presentation of cases					
6	Investigation workup					
7	Chair- side manners					
8	Rapport with patients					
9	Overall quality of clinical work					
	Total Score					

EVALUATION OF CLINICAL CASE PRESENTATION

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Name of the Trainee: Date:

Name of the Faculty/Observer:

Sl. No	Items For Observation during Presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Completeness of history					
2	Weather all relevant points elicited					
3	Clarity of Presentation					
4	Logical order					
5	Mentioned all positive and negative points					
6	Accuracy of general physical examination					
7	Diagnosis : Whether it follows logically from history and findings					
8	Investigations required					
	Complete list					
	Relevant order					
	Interpretation of investigations					
9	Ability to react to questioning Whether if follows logically from history and findings					
10	Ability to defend diagnosis					
11	Ability to justify differential diagnosis					
12	Others					
	Grant Total					

Note: Please use a separate sheet for each faculty member.

SCHEDULE -IV

MODEL CHECKLIST FOR EVALUATION OF TEACHING SKILL

Name of the Trainee: Date:

Name of the Faculty/Observer:

Sl. No	Items For Observation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Communication of the purpose of the talk					
2	Evokes audiences interest in the subject					
3	The introduction					
4	The sequences of ideas					
5	The use of practical examples and /or illustrations					
6	Speaking style(enjoyable, monotonous, etc. specify					
7	Attempts audience participatin					
8	Summery of the main points at the end					
9	Asks questions					
10	Answers questions asked by the audience					
11	Rapport of speaker with his audience					
12	Effectiveness of the talk					
13	Uses audio- visual aids appropriately					

SCHEDULE – V

(See clause (I) of sub- regulation (2) of regulations II)

a. MODEL CHECKLIST FOR DISSERTATION PRESENTATION

Name of the Trainee: date:

Name of the Faculty/Observer:

Sl. No	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Interest shown in selecting topic					
2	Appropriate review					
3	Discussion with guide and other faculty					
4	Quality of protocol					
5	Preparation of Performa					
	Total Score					

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b. CONTINUOS EVALUATION OF DISSERTATION WORK BY GUIDE /CO-GUIDE

Name of the Trainee: date:

Name of the Faculty/Observer:

Sl. No	Items For Observation during Presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Periodic consultation with guide/co-guide					
2	Regular collection of case material					
3	Depth of analysis/ discussion					
4	Quality of final output					
5	Others					
	Total Score					

SCHEDULE – VI

OVERALL ASSESSMENT SHEET

DATE:

Sl No	Faculty Member	**Name of Trainee and Mean Score**									
		A	B	C	D	E	F	G	H	I	J
1											
2											
3											

Signature of Head of the Department Signature of the Principal

Note: The overall assessment sheet used along with the logbook shall form the basis for certifying satisfactory completion of course of study in addition to the attendance required.

KEY:

Faculty Member: Name of the faculty doing the assessment.