

CONSERVATIVE DENTISTRY & ENDODONTICS

MDS CURRICULUM

All the students of the speciality departments shall complete the minimum quota for the teaching and learning activities, as follows:

(a) Journal Clubs: 5 in a year

(b) Seminars: 5 in a year

(c) Clinical Case Presentations: 4 in a year

(d) Lectures taken for undergraduates: 1 in a year

(e) Scientific Paper / Poster Presentations in State / National Level Conferences:

4 papers/posters during three years of training workshop period

(f) Clinical Pathological Conferences: 2 presentations during three years of training period

(g) Scientific Publications: One publication in any indexed scientific journal

(h) Submission of Synopsis: One synopsis within six months from the date of commencement of the course

(i) Submission of Dissertation: One dissertation within six months before appearing for the university examination

(j) Submission of Library Dissertation: One dissertation within eighteen months from the date of commencement of the course

TEACHING / LEARNING ACTIVITIES:

The following is the minimum required to be completed before the candidate can be considered eligible to appear for the final MDS exam.

First Year

Preclinical Work

Conservative Dentistry:

Preclinical work on typhodont teeth

1. Class 2 amalgam cavities

- a) Conservative preparation - 03
- b) Conventional preparation - 03

2. Inlay cavity preparation on premolars and molars - MO, DO, MOD - 10

- a) Wax pattern -06
- b) Casting -04

3. Onlay preparation on molars-02

- a) Casting-01

4. Full Crown

- a) Anterior-05
 - b) Posterior-05
- (2 each to be processed)

5. 7/8 crown-02

(1 to be processed)

6. 3/4 crown premolars-02

(1 to be processed)

Preclinical work on natural teeth

1. Inlay on molars and premolars MO, DO, and MOD - 08

- a) Casting - 02
- b) Wax pattern - 02

2. Amalgam cavity preparation

- a) Conventional - 02
- b) Conservative - 02

3. Pin retained amalgam on molar teeth - 02

4. Post and core build up

- a) Anterior teeth -10
- b) Posterior teeth - 05

5. Casting

- a) Anterior - 04
- b) Posterior - 02

6. Onlay on molars - 03

(1 to be processed)

7. Full crown premolars and molars - 04

(2 to be processed)

8. Full crown anterior - 06

(3 to be processed)

9. Veneers anterior teeth (indirect method) - 02

10. Composite inlay (class 2) - 03

(1 to be processed)

11. Full tooth wax carving- all permanent teeth

Endodontics:

1. Sectioning of all maxillary and mandibular teeth

2. Sectioning of teeth - in relation to deciduous molar, 2nd primary upper and lower molar- 1 each

3. Access cavity opening and root canal therapy in relation to maxillary and mandibular permanent teeth.

4. Access cavity preparation and BMP

Anterior

- a. Conventional preparation
- b. Step back
- c. Crown down

Obturation-03

5. BMP Premolar - 04 (2 upper and 2 lower) obturation 1 each

6. BMP Molar - 06 (3 upper - 2 first molars and 1 second molar, 3 lower - 2 first molars and 1 second molar) obturation 1 each

7. Post and core preparation and fabrication in relation to anterior and posterior teeth

- a. Anterior - 10 (casting 4)
- b. Posterior - 05 (casting 2)

8. Removable dies – 04

NOTE: Pre-clinical exercises to be completed in the first four months

Clinical Work:

A	Composite restorations	30
B	GIC Restorations	30
C	Complex amalgam restorations	05
D	Composite inlay + veneers (direct and indirect)	05
E	Ceramic jacket crowns	05
F	Post and core for anterior teeth	05
G	Bleaching	
	Vital	05
	Non-vital	05
H	RCT Anterior	20
I	Endo surgery - observation and assisting	05

Presentation of:

- Seminars - 5 seminars in a year by each student - should include topics in Dental Materials, Conservative Dentistry and Endodontics
- Journal clubs – 5 in a year by each student
- Synopsis: Submission of synopsis within 6 months from the date of commencement of the course
- Library Dissertation: One dissertation within eighteen months from the date of commencement of the course
- Internal assessment - theory and clinicals.

Second Year**Case discussion- 5**

1	Ceramic jacket crowns	10
2	Post and core for anterior teeth	10
3	Post and core for posterior teeth	05
4	Composite restoration	05
5	Full crown for posterior teeth	15
6	Cast gold inlay	05
7	Other special types of work such as splinting - Reattachment of fractured teeth etc.	05

8	Anterior RCT	20
9	Posterior RCT	30
10	Endo surgery performed independently	05
11	Management of endo - perio problems	05

- Under graduate teaching program as allotted by the HOD
- Seminars - 5 by each student
- Journal club - 5 by each student
- Dissertation work
- Prepare scientific paper and present in conference and clinical meeting
- Library Dissertation to be submitted 18 months after starting of the course
- Internal assessment - theory and clinical

Third Year

Dissertation work to be submitted 6 months before final examination.

Clinical work

- Cast gold inlay- onlay, cuspal restoration 10
- Post and core 20
- Molar endodontics 50
- Endo surgery 05
- All other types of surgeries including crown lengthening, perioesthetics, hemi sectioning, splinting, replantation, endodontic implants.

Presentation of:

- Seminars: 5 by each student
- Journal club: 5 by each student
- Teaching - lecture (under graduates)
- Internal assessment - Theory and clinical

MONITORING LEARNING PROGRESS:

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on

participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects.

SCHEME OF EXAMINATION:

MDS Examination Pattern

Part I – Basic Sciences

- **Duration:** 3 hours
 - **Timing:** Conducted at the end of the **First Year** of the MDS course.
 - **Content:** Covers **Basic Sciences** relevant to the specialty.
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Part II – Final Examination

- **Timing:** Conducted at the end of the **Third Year** of the MDS course.
- **Components:**
 - **Paper I**
 - **Paper II**
 - **Paper III (Essays)**

Each paper is of **3 hours duration**.

Paper I & Paper II

- **Structure:**
 - **Two Long Answer Questions – 25 marks each**
 - **Five Short Answer Questions – 10 marks each**
 - **Total Marks per Paper: 100**
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Paper III – Essays

- **Structure:**

- **Three Essay Questions** will be given.
 - Students must **attempt any two**.
 - **Each question carries 50 marks.**
 - **Total Marks: 100**
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Additional Notes:

- **Recent Advances** may be included in **any or all papers**.

Distribution of topics for each paper will be as follows:

Part-I

Paper-I: Applied Basic Sciences: Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatistics and Research Methodology and Applied Dental Materials.

Part-II

Paper-I: Conservative Dentistry

Paper-II: Endodontics

Paper-III: Descriptive and analysing type question

Distribution of Marks

Theory – Total: 400 Marks

1. **Part I – University Examination (100 Marks)**
 - There shall be **10 questions**, each carrying **10 marks**.
 - **Total Marks: 100**
2. **Part II – Final Examination (3 Papers of 100 Marks Each)**
 - **Paper I:**
 - 2 Long Essay Questions – *25 marks each*

- 5 Short Essay Questions – *10 marks each*
- **Total:** 100 Marks
- **Paper II:**
 - 2 Long Essay Questions – *25 marks each*
 - 5 Short Essay Questions – *10 marks each*
 - **Total:** 100 Marks
- **Paper III (Essays):**
 - 3 Essay Questions will be provided
 - Student must answer **any 2 questions**
 - Each essay carries **50 marks**
 - **Total:** 100 Marks

B. Clinical Examination – Total: 200 Marks

The Practical/Clinical Examination shall be conducted for a maximum of six candidates over two days as follows:

Day 1

Clinical Exercise I – Cast Core Preparation (50 Marks)

- Tooth Preparation – 10 marks
- Direct Wax Pattern – 10 marks
- Casting – 10 marks
- Cementation – 10 marks
- Retraction & Elastomeric Impression – 10 marks

Clinical Exercise II – Inlay Exercise (50 Marks)

- Tooth Preparation for Class II Gold Inlay – 25 marks
 - Fabrication of Direct Wax Pattern – 25 marks
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Day 2

Clinical Exercise III – Molar Endodontics (100 Marks)

- Local Anaesthesia and Rubber Dam Application – 20 marks
 - Access Cavity Preparation – 20 marks
 - Working Length Determination – 20 marks
 - Canal Preparation – 20 marks
 - Master Cone Selection – 20 marks
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C. Viva-Voce Examination – Total: 100 Marks

1. General Viva-Voce – 80 Marks

- Conducted jointly by all examiners.
- Assessment based on:
 - Comprehension and analytical ability
 - Interpretation of data and expression
 - Communication skills
 - Knowledge of entire course content
 - Presentation and discussion of dissertation

2. Pedagogy Exercise – 20 Marks

- Each candidate will be assigned a topic at the start of the clinical examination.
 - The candidate will deliver a presentation for 8–10 minutes on the assigned topic.
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Day 3 (If Required)

- **Viva-Voce may continue on the third day if:**
 - More than four candidates are appearing