
# MASTER OF DENTAL

# SURGERY (M.D.S.) DEGREE

## REGULATIONS -2017

(For students admitted from 2017 - 2018 onwards)

## CONSERVATIVE DENTISTRY AND ENDODONTICS

**FACULTY OF MEDICINE AND HEALTH SCIENCES**
**SRM Institute of Science and Technology**
**(Formerly Known as SRM UNIVERSITY)**
**Kattankulathur – 603 203**

**REGULATIONS -2017**
**MASTER OF DENAL SURGERY (M.D.S.)**
**CONSERVATIVE DENTISTRY AND ENDODONTICS**

## 1. SHORT TITLE AND COMMENCEMENT:

These regulations shall be called 'MASTER OF DENTAL SURGERY REGULATIONS 2017' under SRM Institute of Science and Technology, Kattankulathur, Kancheepuram District, Tamilnadu. The regulations are in compliance to the Dental Council of India Master of Dental Surgery course regulations 2017 released in the Gazette of India dated 05.09.2017. The same has been placed and approved by the 36th Academic council meeting of SRM Institute of Science and Technology held on 25.10.2017.

The regulations shall come into force for the candidates admitted from the academic year 2017-2018 onwards.

## DEFINITIONS:

**CONSERVATIVE DENTISTRY AND ENDODONTICS**

Conservative dentistry deals with prevention and treatment of the diseases and injuries of the hard tissues and the pulp of the tooth and associated periapical lesions.

**NEET:**

NEET means the National Eligibility –cum-Entrance Test conducted by the National Board of Examination for admission to post-graduate courses

## 2. GOALS & OBJECTIVES:

### 2.A. GOALS:

The goals of postgraduate training in various specialties are to train B.D.S. graduate who will, after successful completion of the course:

- ✓ Practice respective specialty efficiently and effectively, backed by scientific knowledge and skill.
- ✓ Exercise empathy and a caring attitude and maintain high ethical standards.
- ✓ Continue to evince keen interest in continuing professional education in the specialty and allied specialties irrespective of whether in teaching or practice.
- ✓ Willing to share the knowledge and skills with any learner, junior or a colleague.
- ✓ Develop the faculty for critical analysis and evaluation of various concepts and views, to adopt the most rational approach.

**2.B. OBJECTIVES:**

The objective is to train a candidate so as to ensure higher competence in both general and special area of interest and prepare him for a career in teaching, research and speciality practice. A candidate must achieve a high degree of clinical proficiency in the subject matter and develop competence in research and its methodology as related to the field concerned.

The above objectives are to be achieved by the time the candidate completes the course. The objectives may be considered as under -

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. Human values, ethical practice and communication abilities

**KNOWLEDGE:**

- ✓ Demonstrate understanding of basic sciences relevant to speciality.
- ✓ Describe aetiology, patho-physiology, principles of diagnosis and management of common problems within the speciality in adults and children.
- ✓ Identify social, economic, environmental and emotional determinants in a given case and take them into account for planning treatment.
- ✓ Recognise conditions that may be outside the area of speciality/competence and to refer them to an appropriate specialist.
- ✓ Update knowledge by self study and by attending courses, conferences, and seminars relevant to speciality.
- ✓ Undertake audit, use information technology and carryout research both and clinical with the aim of publishing or presenting the work at various scientific gatherings.

**The students undergoing postgraduate courses shall be exposed to the following:-**

- o Basics of statistics to understand and critically evaluate published research papers.
- o Few lectures on other type of exposure to human behavior studies.
- o Basic understanding of pharmaco-economics.
- o Introduction to the non-linear mathematics.

**SKILLS:**

- ✓ Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reason diagnosis about the condition.
- ✓ Acquire adequate skills and competence in performing various procedure required in the specialty.

**HUMAN VALUES, ETHICAL PRACTICE AND COMMUNICATION ABILITIES:**

- ✓ Adopt ethical principles in all aspects of practice.
- ✓ Professional honesty and integrity are to be fostered.
- ✓ Patient care is to be delivered irrespective of social status, caste, creed or religion of the patient.
- ✓ Develop communication skills, in particular and skill to explain various option available in management and to obtain a true informed consent from the patient
- ✓ Provide leadership and get the best out of his team in a congenial working atmosphere.
- ✓ Apply high moral and ethical standards while carrying out human or animal research.
- ✓ Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- ✓ Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

## 3. ELIGIBILITY FOR SELECTION CRITERIA OF STUDENTS:

A candidate for admission to the Master in Dental Surgery course, must possess a recognized degree of **Bachelor in 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 rotatory internship of a year in an approved/recognized dental college:

**Provided that in the case of a foreign national, the following procedure shall be followed:—**

The Council may, on payment of the prescribed fee for registration, grant temporary 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/her 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 or concerned authority.

## 3.A. SELECTION OF CANDIDATE FOR POST-GRADUATE COURSES:

There shall be a uniform **NEET** for admission to the post-graduate dental courses in each academic year conducted in the manner, as prescribed by the National Board of Examination or any other authority appointed by the Central Government

in this behalf. The overall superintendence, direction and control of the NEET shall vest with the Council.

**3.B. QUALIFYING CRITERIA FOR ADMISSION TO POST-GRADUATE COURSES :**

(a) The candidate has to secure the following category-wise minimum percentile in NEET for admission to post-graduate courses held in a particular academic year. Provided that the percentile shall be determined on the basis of highest marks secured in the All-India common merit list in NEET for post-graduate courses:

| **General** | **50th Percentile** |
|---|---|
| Person with locomotor disability of lower limbs | 45th percentile |
| Scheduled castes, Scheduled tribes, other backward classes | 40th percentile |

Provided further, that when sufficient number of candidates in the respective categories fail to secure minimum marks as prescribed in NEET held for any academic year for admission to post-graduate courses, the Central Government in consultation with the Council may, at its discretion lower the minimum marks required for admission to post-graduate courses for candidates belonging to respective categories and marks so lowered by the Central Government shall be applicable for the said academic year only.

(b) The reservation of seats in dental college/institutions for respective categories shall be as per applicable laws prevailing in States/Union territories. An all India merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in NEET Test and candidates shall be admitted to post-graduate courses from the said merit list only.

(c) A candidate who has failed to secure the minimum percentile as prescribed in these regulations, shall not be admitted to any post-graduate courses in any academic year.

**3.C. COMMON COUNSELING:**

(1) There shall be a common counseling for admission to all post-graduate specialties (MDS) on the basis of merit list of the NEET to be conducted by the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

**3.D. REQUIRED DOCUMENTS:**

No candidate shall be admitted to any Postgraduate MDS course unless the candidate has obtained and produced eligibility certificate issued by University. The candidate has to make an application to the University with the following documents along with the prescribed fee:

a. BDS pass / degree certificate issued by the University.
b. Marks cards of all the university examinations passed (I to IV BDS year course).
c. Attempt Certificate issued by the Principal.
d. Certificate regarding the recognition of the Dental College by the Dental Council of India.
e. Completion of paid rotatory internship certificate from a recognized college.
f. Registration by any State Dental Council and
g. Proof of SC/ ST or Category I, as the case may be.

Candidates should obtain the Eligibility Certificate before the last date for admission as notified by the University.

A candidate who has been admitted to postgraduate course should register his / her name in the University within a month of admission after paying the registration fee.

**4. COURSE OVERVIEW:**

**4.A. DURATION OF THE COURSE:**

The Course shall be of three years duration. All the candidates for the degree of MDS are required to pursue the prescribed course for at least three academic years course as full time candidates under the direction of the Head of the Department, who has to be a recognized postgraduate teacher in that specialty.

**4.B. MAXIMUM DURATION OF THE COURSE:**

The time period required for passing out of the MDS course shall be a maximum of 6 years from the date of admission in said course.

**5. COMMENCEMENT OF ACADEMIC SESSION:**

The classes for the course shall commence from 1st week of May and the cut –off date for admission will be 31st May.

**6. MIGRATION:**

Under no circumstances, the migration or the transfer of students undergoing post-graduate degree shall not be permitted by SRM Institute Of Science And Technology

or the authority. No interchange of the speciality in the same institution or in any other institution shall be permitted after the date of commencement of session

**7. COMMENCEMENT OF EXAMINATION:**

Written examination shall consist of Basic Science -Part 1, which will be conducted at the end of 1st year of MDS cours. Part 2 examination shall be conducted during the 1st week of June after completion of 3 years/ 36 months. Examinations for the repeaters /arrears shall be conducted in the month of December every academic year.

The University shall conduct not more than two examinations in a year, for any subject, with an interval of not less than 4 and not more than 6 months between the two examinations.

**8. STRUCTURE OF PROGRAM:**

| **M.D.S - Conservative Dentistry and Endodontics** | | |
|---|---|---|
| **Subject Code** | | **Subject Title** |
| **Part I** | | |
| 17MDS311 | Paper-1 | Applied Basic Sciences: Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatistics and Research Methodology and Applied Dental Materials. |
| Part - II | | |
| 17MDS321 | Paper - 1 | Conservative Dentistry |
| 17MDS322 | Paper - 2 | Endodontics |
| 17MDS323 | Paper - 3 | Descriptive and Analysing type question |
| 17MDS324 | Paper - 4 | Practical and Clinical |
| 17MDS325 | Paper - 5 | Viva - Voce and Pedagogy |

**9. ATTENDANCE, PROGRESS AND CONDUCT:**

A candidate pursuing degree/diploma course should work in the concerned department of the institution for the full period as a full-time student. No candidate is permitted to run a clinic/ work in a clinic / laboratory /nursing home while studying post graduate course.

No candidate shall join any other course of study or appear for any other examination conducted by this university or any other university in India or abroad during the period of registration. Each year shall be taken as a unit for the purpose of calculating attendance. Every candidate shall have not less than 80 percent of

attendance in each year of the course. However, candidates should not be continuously absent as the course is a full time one.

Every candidate shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself /herself from work without valid reasons.

**CONDONATION:**
There is no condonation for MDS courses

**10. MONITORING PROGRESS OF STUDIES:**

**10.1. WORK DIARY / LOG BOOK:**

- ✓ Every Post Graduate candidate shall maintain a record of skills [Log Book] he has acquired during the three years training period, certified by the various Heads of Departments he has undergone training.
- ✓ The candidate should record of his / her participation in the training programme conducted by the department such as journal reviews, seminars, etc. in the Log book.
- ✓ Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.
- ✓ The Head of the Department shall scrutinize the Log Book every 3 months.
- ✓ At the end of the course, the candidate should summarise the contents and the Log Book certified by the Head of the Department and Head of the Institution.
- ✓ The Log Book should be submitted at the time of University practical / Clinical examination for the scrutiny of the board of Examiners.

**10.2. PERIODIC TESTS:**

In case of degree courses of three years duration, the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practical/clinical and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

**10.3. RECORDS:**

Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University when called for.

## 11. DISSERTATION:

The trainees shall prepare a dissertation based on the clinical or experimental work or any other study conducted by them under the supervision of the guide.

### 11.1. DISSERTATION:

The dissertation is aimed to train a postgraduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within **six months** from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation should be written under the following headings:

i. Introduction
ii. Aims or Objectives of study
iii. Review of Literature
iv. Material and Methods
v. Results
vi. Discussion
vii. Conclusion
viii. Summary

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexure. It should be neatly typed in double line spacing on one side of paper ( A4 size, 8.27" x 11.69" ) and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

The completed dissertation should be submitted six months before the final examination as per calendar of events.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

**Guide:** The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as laid down by Dental Council of India.

**Co-guide:** A co-guide may be included provided the work requires substantial contribution from a sister department or from another institution recognised for teaching/training by the Dental Council of India. The co-guide shall be a recognised postgraduate teacher of the University.

**Change of guide:** In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

**12. EXAMINATION:**

**ELIGIBILITY:** 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 meetings, symposia, conferences, case presentations, clinics and didactic lectures during each year organised 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 diary and log book shall be verified and certified by the Head of the Department of the institution. The certification of satisfactory progress is based on the work diary and log book.

**UNIVERSITY EXAMINATION.** The university examination shall consist of theory, practical and clinical examination and viva-voce and Pedagogy

**12.1. THEORY**:

Part-I: Shall consist of one paper There shall be a theory examination in the Basic Sciences at the end of 1st year of course. The question papers shall be set and evaluated by the concerned Department/Specialty. The candidates shall have to

secure a minimum of 50% in the Basic Sciences and shall have to pass the Part-I examination at least six months prior to the final (Part-II) examination.

Part-II: Shall consist of

(i) Three theory papers
(ii) Practical and Clinical Examination;
(iii) Viva-voce
(iv) Pedagogy

A candidate who wishes to study in a second specialty, shall have to undergo the full course of three years duration in that specialty.

**12.2 DISSERTATION:** Every candidate appearing for the post-graduate degree examination shall at least six months prior to the examinations, submit with his form for examination, four typewritten copies of the dissertation undertaken by the candidate, prepared under the direction and guidance of his/her guide. The dissertation so submitted shall be referred to the examiners for their examination and acceptance of it shall be a condition precedent to allow the candidate to appear for the written part of the examination.

Provided that a candidate whose dissertation has been accepted by the examiner, but declared failed at the examination, shall be permitted to re-appear at the subsequent examination without a new dissertation: Provided further that if the dissertation is rejected by the examiner, the examiner shall assign reasons therefor with suggestions for its improvement to the candidate and such candidate shall resubmit his/ her dissertation to the examiner who shall accept it before appearing in the examination.

**CLINICAL/PRACTICAL EXAMINATION**:
Clinical/practical examination is designed to test the clinical skill, performance and competence of the candidate in skills such as communication, clinical examination, medical/dental procedures or prescription, exercise prescription, latest techniques, evaluation and interpretation of results so as to undertake independent work as a specialist. SRM Institute of Science and Technology shall ensure that the candidate has been given ample opportunity to perform various clinical procedures. The practical/clinical examination in all the specialties shall be conducted for six candidates in two days.

Provided that practical/clinical examination may be extended for one day, if it is not complete in two days.

**VIVA-VOCE EXAMINATION**:
Viva voce examination aims at assessing the depth of knowledge, logical reasoning, confidence and communication skill of the students.

**UNIVERSITY EXAMINATION:**
**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 (Part-I) of three hours duration shall be conducted at the end of First year of MDS course. Part-II Examination shall be conducted at the end of Third year of MDS course. Part-II Examination shall consist of Paper-I, Paper-II and 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.

**12.3 DISTRIBUTION OF MARKS:**

**THEORY:(TOTAL 400 MARKS)**
**(1) PART I UNIVERSITY EXAMINATION (100 Marks):**
There shall be 10 questions of 10 marks each (Total of 100 Marks)

**(2) PART II (3 papers of 100 Marks):**
(i) **Paper-I:** 2 long essay questions of 25 marks each and 5 short essays of 10 marks each. (Total of 100 Marks)
(ii) **Paper-II:** 2 long essay questions of 25 marks each and 5 short essays of 10 marks each. (Total of 100 Marks)
(iii) **Paper III:** 2 out of 3 essay questions (50 x 2 = 100 Marks)

**PRACTICAL EXAMINATION: 200 MARKS**
**VIVA-VOCE AND PEDOGOGY: 100 MARKS**

**(MODEL QUESTION PATTERN)**
**MDS DEGREE EXAMINATIONS**
**PART I**
**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

TIME : 3 HRS MAX.MARKS:100
Answer All the Questions (10x10=100 marks)

1.----------
2.----------
3.----------
4.----------
5.----------
6.----------
7.----------
8.----------
9.----------
10.----------

**(MODEL QUESTION PATTERN)**
**MDS DEGREE EXAMINATIONS**
**PART II- PAPER I**
**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

TIME : 3 HRS MAX.MARKS:100
Section A (2x25=50 marks)
Answer All the Questions
1.----------
2.----------

Section B (5x10=50 marks)
Answer All the Questions
3.----------
4.----------
5.----------
6.----------
7.----------

**(MODEL QUESTION PATTERN)**
**MDS DEGREE EXAMINATIONS**

**PART II- PAPER II**
**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

TIME : 3 HRS MAX.MARKS:100
Section A (2x25=50 marks)
Answer All the Questions

1.----------
2.----------

Section B (5x10=50 marks)
Answer All the Questions
3.----------
4.----------
5.----------
6.----------
7.----------

**(MODEL QUESTION PATTERN)**
**MDS DEGREE EXAMINATIONS**
**PART II- PAPER III**
**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

TIME : 3 HRS MAX.MARKS:100
Section A (2x50=100 marks)
Answer Any 2 Questions
1.----------
2.----------
3.----------

| M.D.S - Conservative Dentistry and Endodontics | | | | |
|---|---|---|---|---|
| **Subject Code** | | **Subject Title** | **Passing Minimum** | **Maximum Marks** |
| **Part I** | | | | |
| 17MDS311 | Paper 1 | Applied Basic Sciences: Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatistics and Research Methodology and Applied Dental Materials. | 50 | 100 |
| | | Theory Aggregate | 50 | 100 |
| **Part - II** | | | | |
| 17MDS321 | Paper 1 | Conservative Dentistry | | 100 |
| 17MDS322 | Paper 2 | Endodontics | | 100 |
| 17MDS323 | Paper 3 | Descriptive and Analysing type question | | 100 |
| | | Theory Aggregate | 150 | 300 |
| 17MDS324 | Paper 4 | Practical and Clinical | | 200 |
| 17MDS325 | Paper 5 | Viva - Voce and Pedagogy | | 100 |
| | | Practical aggregate | 150 | 300 |

***Note:** 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.

**PRACTICAL EXAMINATIONS:PRACTICAL/CLINICAL EXAMINATION :200 MARKS**

**DAY 1& DAY 2 SEPARATE:**

**A. Clinical : 200 Marks**

The duration of Clinical and Viva Voce examination will be 2 days for a batch of four students. If the number of candidates exceeds 4, the programme can be extended to **3rd** day.

**Day 1**

**Clinical Exercise I - 50 Marks**

(i) Cast core preparation
(ii) Tooth Preparation - 10 marks
(iii) Direct Wax Pattern - 10 marks
(iv) Casting - 10 marks
(v) Cementation - 10 marks
(vi) Retraction as Elastomeric Impression - 10 marks

**Clinical Exercise II - 50 Marks (Inlay Exercise)**

(i) Tooth preparation for Class II Gold Inlay - 25 marks
(ii) Fabrication of Direct Wax Pattern **Day 2**- 25 marks

**Clinical Exercise III -100 Marks (Molar Endodontics)**

(i) Local Anaesthesia and Rubber Dam application – 20 marks
(ii) Access Cavity- 20 marks
(iii) Working length determination-20 marks
(iv) Canal Preparation- 20 marks
(v) Master cone selection- 20 marks

**VIVA-VOCE AND PEDAGOGY:** 100 Marks

- ✓ 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.
- ✓ Pedagogy Exercise: 20 marks
  A topic will be given to each candidate in the beginning of clinical examination. He/ she will be asked to make a presentation on the topic for 8-10 minutes.

## 13. EVALUATION METHOD

### 13.1. EXAMINERS:

**PART I:**
There shall be one internal and one external examiner for three students appointed by the affiliating university for evaluating the answer scripts of the same specialty. However, the number of examiner/s may be increased with the corresponding increase in number of students.

**PART II:**
There shall be four examiners in each subject. Out of them, two (50%) shall be external examiners and two (50%) shall be internal examiners. Both external examiners shall be from a university other than the affiliating university and one examiner shall be from a university of different State.

### 13.2. QUALIFICATION AND EXPERIENCE FOR EXAMINERS:

The qualification and experience for appointment of an examiner shall be as under:-

(i) Shall possess qualification and experience of a Professor in a post-graduate degree programme;

(ii) A person who is not a regular post-graduate teacher in the subject shall not be appointed as an examiner;

(iii) The internal examiner in a subject shall not accept external examinership in a college for the same academic year;

(iv) No person shall be appointed as an external examiner for the same institution for more than two consecutive years. However, if there is a break of one year, the person can be re-appointed.

### 13.3. VALUATION OF ANSWER BOOKS:

**PART-I & II:**
Answer books shall be evaluated by four examiners, two internal and two external and the average marks shall be computed.

## 14. PASSING MINIMUM:

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 specialty.

**15. RE-VALUATION AND RE-TOTALLING:**

There is no provision for re-evaluation or re-totaling of answer books.

**16. CLASSIFICATION:**

As the Master of Dental Surgery course is more of training and practice oriented giving class is precluded.

**MEDALS AND RANKINGS:**

All papers should be cleared in the first attempt and percentage of marks secured should be above 60

**17. SYLLABUS:**

**Part-I** -Applied Basic Sciences

**Part-II**

Paper-I : Conservative Dentistry

Paper-II :Endodontics

Paper-III : Descriptive and analyzing type question

**DETAILED SYLLABUS:**

| | |
|---|---|
| **PART I** | Applied Basic Sciences-Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatistics and Research Methodology and Applied Dental Materials. |
| **PART II** | |
| Paper-1 | Conservative dentistry & Aesthetic Dentistry |
| Paper-2 | Endodontics |
| Paper-3 | Descriptive and analyzing type question |

**PART I**

| SUBJECT CODE | PAPER | SUBJECT TITLE |
|---|---|---|
| 17MDS311 | PAPER 1 | Applied Basic Sciences: Applied Anatomy, Physiology, Pathology including Oral Microbiology, Pharmacology, Biostatistics and Research Methodology and Applied Dental Materials. |

**PART I**
**PAPER-1:**

**APPLIED ANATOMY OF HEAD AND NECK**

1. Development of face, paranasal sinuses and the associated structures and their anomalies, cranial and facial bones, TMJ anatomy and function, arterial and venous drainage of head and neck, muscles of face and neck including muscles of mastication and deglutition, brief consideration of structures and function of brain. Brief consideration of all cranial nerves and autonomic nervous system of head and neck. Salivary glands, Functional anatomy of mastication, deglutition and speech.
2. Detailed anatomy of deciduous and permanent teeth, general consideration in physiology of permanent dentition, form, function, alignment, contact, occlusion.)
3. Internal anatomy of permanent teeth and its significance
4. Applied histology - histology of skin, oral mucosa, connective tissue, bone cartilage, blood vessels, lymphatics, nerves, muscles, tongue.

**DEVELOPMENT OF TEETH**

1. Enamel-Development and composition , physical charecteristics chemical properties, structure
2. Age changes –clinical structure
3. Dentin- Development, physical and chemical properties , structure and type of dentin, innervations , age and functional changes
4. Pulp- development, histological structures ,innervations, functions ,regressive changes, clinical considerations
5. Cementum- composition, cementogenesis, structure, function, clinical consideration.
6. Periodontal ligament - development, structure, function and clinical consideration. Salivary glands - structure, function, clinical considerations.
7. Eruption of teeth.

**APPLIED PHYSIOLOGY:**

1. Mastication, deglutition, digestion and assimilation, fluid and electrolyte Balance.
2. Blood composition, volume, function, blood groups, haemostasis, coagulation, blood transfusion, circulation, heart, pulse, blood pressure, shock, respiration, control, anoxia, hypoxia, asphyxia, artificial respiration, and endocrinology - general principles of endocrine activity and disorders

relating to pituitary, thyroid, parathyroid, adrenals including pregnancy and lactation.

3. Physiology of saliva - composition, function, clinical significance.
4. Clinical significance of vitamins, diet and nutrition -balanced diet.
5. Physiology of pain, sympathetic and Para sympathetic nervous system, pain pathways, physiology of pulpal pain, odontogenic and non-odontogenic pain, pain disorders - typical and atypical, biochemistry such as osmotic pressure, electrolytic dissociation, oxidation, reduction etc. Carbohydrates, proteins, lipids and their metabolism, nucleoproteins, nucleic acid and their metabolism. Enzymes, vitamins and minerals, metabolism of inorganic elements, detoxification in the body, anti metabolites, chemistry of blood lymph and urine.

**PATHOLOGY:**

1. Inflammation, repair, degeneration, necrosis and gangrene.
2. Circulatory disturbances - ischemia, hyperemia, edema, thrombosis, embolism, infarction, allergy and hypersensitivity reaction.
3. Neoplasms - classifications of tumors, characteristics of benign and malignant tumors, spread of tumors.
4. Blood dyscrasias
5. Developmental disturbances of oral and Para oral structures, dental caries, regressive changes of teeth, pulp, periapical pathology, pulp reaction to dental caries and dental procedures.
6. Bacterial, viral, mycotic infections of the oral cavity.

**MICROBIOLOGY:**

1. Pathways of pulpal infection, oral flora and microorganisms associated with endodontic diseases, pathogenesis, host defense, bacterial virulence factors, healing, and theory of focal infections, microbes or relevance to dentistry - strepto, staphylococci, lactobacilli, cornyebacterium, actinomycetes, clostridium, neisseria, vibrio, bacteroids, fusobacteria, spirochetes, mycobacterium, virus and fungi.
2. Cross infection, infection control, infection control procedure, sterilization and disinfection.
3. Immunology - antigen antibody reaction, allergy, hypersensitivity and anaphylaxis, auto immunity, grafts, viral hepatitis, HIV infections and AIDS. Identification and isolation of microorganisms from infected root canals. Culture medium and culturing technique (Aerobic and anaerobic interpretation and antibiotic sensitivity test).

**PHARMACOLOGY:**

1. Dosage and route of administration of drugs, actions and fate of drug in body, drug addiction, tolerance of hypersensitivity reactions.
2. Local anesthesia - agents and chemistry, pharmacological actions, fate and metabolism of anaesthetic, ideal properties, techniques and complications.
3. General anesthesia - pre medications, neuro muscular blocking agents, induction agents, inhalation anesthesia, and agents used assessment of anesthetic problems in medically compromised patients.
4. Anaesthetic emergencies
5. Antihistamines, corticosteroids, chemotherapeutic and antibiotics, drug resistance, haemostasis, and haemostatic agents, anticoagulants, sympathomimetic drugs, vitamins and minerals (A, B, C, D, E, K IRON), anti sialagogue, immunosuppressants, drug interactions, antiseptics, disinfectants, anti viral agents, drugs acting on CNS.

**BIOSTATISTICS AND RESEARCH METHODOLOGY:**

1. Introduction, Basic concepts, Sampling, Health information systems – collection, compilation, presentation of data. Elementary statistical methods – presentation of statistical data, Statistical averages – measures of central tendency, measures of dispersion, Normal distribution. Tests of significance-parametric and non parametric tests( Fisher extract test, Sign test, Median test, Mann whitney test , Krusical Wallis one way analysis, Friedmaann two way analysis, Regression analysis),Correlation and regression, Use of computers

**APPLIED DENTAL MATERIALS:**

1. Physical and mechanical properties of dental materials, biocompatibility.
2. Impression materials, detailed study of various restorative materials, restorative resin and recent advances in composite resins, bonding- recent developments- tarnish and corrosion, dental amalgam, direct filling gold, casting alloys, inlay wax, die materials, investments, casting procedures, defects, dental cements for restoration and pulp protection (luting, liners, bases) cavity varnishes.
3. Dental ceramics-recent advances, finishing and polishing materials.
4. Dental burs - design and mechanics of cutting- other modalities of tooth preparation.
5. Methods of testing biocompatibility of materials used.

**PART II**

| SUBJECT CODE | PAPER | SUBJECT TITLE |
|---|---|---|
| 17MDS321 | PAPER 1 | Conservative Dentistry |

**PART II :**

**PAPER-1 : CONSERVATIVE DENTISTRY**

1. Examination, diagnosis and treatment plan.
2. Occlusion as related to conservative dentistry, contact, contour, its significance. Separation of teeth, matrices, used in conservative dentistry.
3. Dental caries- epidemiology, recent concept of etiological factors, pathophysiology, Histopathology, diagnosis, caries activity tests, prevention of dental caries and management -recent methods.
4. Hand and rotary cutting instruments, development of rotary equipment, speed ranges, hazards.
5. Dental burs and other modalities of tooth reparation- recent developments (air abrasions, lasers etc)
6. Infection control procedures in conservative dentistry, isolation equipments etc.
7. Direct concepts in tooth preparation for amalgam, composite, GIC and restorative techniques, failures and management.
8. Direct and indirect composite restorations.
9. Indirect tooth colored restorations- ceramic, inlays and onlays, veneers, crowns, recent advances in fabrication and materials.
    a. Tissue management
10. Impression procedures used for indirect restorations.
11. Cast metal restorations, indications, contraindications, tooth preparation for class 2 inlay, onlay full crown restorations.
12. Restorative techniques, direct and indirect methods of fabrication including materials used for fabrication like inlay wax, investment materials and
13. Direct gold restorations.
14. Recent advances in restorative materials and procedures.
15. Management of non-carious lesion.
16. Advance knowledge of minimal intervention dentistry.
17. Recent advances in restoration of endodontically treated teeth and grossly mutilated teeth
18. Hypersensitivity, theories, causes and management.
19. Lasers in Conservative Dentistry
20. CAD-CAM ;CAD-CAM in restorative dentistry

21. Dental imaging and its applications in restorative dentistry (clinical photography)
22. Principles of esthetics:
    a. Color
    b. Facial analysis
    c. Smile design
    d. Principles of esthetic integration
    e. Treatment planning in esthetic dentistry

**PART II**

| SUBJECT CODE | PAPER | SUBJECT TITLE |
|---|---|---|
| 17MDS322 | PAPER 2 | Endodontics |

**PART II**

**PAPER-2: ENDODONTICS**

1. Rationale of Endodontics.
2. Knowledge of internal anatomy of permanent teeth, anatomy of root apex and its implications in endodontic treatment.
3. Dentin and pulp complex.
4. Pulp and periapical pathology
5. Pathobiology of periapex.
6. Diagnostic procedure - recent advances and various aids used for diagnosis- a. Orofacial dental pain emergencies: endodontic diagnosis and management
7. Case selection and treatment planning
8. Infection control procedures used in Endodontics (aseptic techniques such as rubber dam, sterilization of instruments etc.)
9. Access cavity preparation - objectives and principles
10. Endodontic instruments and instrumentation - recent developments, detailed description of hand, rotary, sonic, ultrasonic etc.
11. Working length determination / cleaning and shaping of root canal system and recent development in techniques of canal preparation.
12. Root canal irrigants and intra canal medicaments used including non - surgical Endodonticsby calcium hydroxide.
13. Endodontic microbiology.
14. Obturating materials, various obturation techniques and recent advances in obturation of root canal.
15. Traumatic injuries and management - endodontic treatment for young permanent teeth. Pediatric Endodontics - treatment of immature apex.
16. Endodontic surgeries, recent developments in technique and devices, endoosseous endodontic implants - biology of bone and wound healing.

17. Endoperio interrelationship, endoPerio lesion and management
18. Drugs and chemicals used in Endodontics
19. Endo emergencies and management.
20. Restoration of endodontically treated teeth, recent advances.
21. Geriatric Endodontics
22. Endo emergencies and management.
23. Biologic response of pulp to various restorative materials and operative procedures.
24. Lasers in Endodontics.
25. Multidisciplinary approach to endodontics situations.
26. Endodontics radiology- digital technology in endodontics practice.
27. Local anesthesia in endodontics.
28. Procedural errors in endodontics and their management.
29. Endodontics failures and retreatment.
30. Resorptions and its management.
31. Microscopes in endodontics.
32. Single visit endodontics, current concepts and controversies.

**PART II**

| SUBJECT CODE | PAPER | SUBJECT TITLE |
|---|---|---|
| 17MDS323 | PAPER 3 | Descriptive and Analysing type question |

**PAPER-III:** Descriptive and analyzing question

**18. TEACHING AND LEARNING ACTIVITIES:**

**18.1. LECTURES:**

There shall be some didactic lectures in the specialty and in the allied fields. The departments shall encourage guest lectures in the required areas and integrated lectures by multi-disciplinary teams on selected topics, to strengthen the training programmes.

**18.2. JOURNAL REVIEW:**

The journal review meetings shall be held at least once a week. All trainees associate and staff associated with the post-graduate programme are expected to participate actively and enter relevant details in the logbook. The trainee shall make presentations from the allotted journals of selected articles. A model check list for the evaluation of journal review presentation is annexed at Schedule-I of these regulations.

**18.3. SEMINARS:**
The seminars shall be held at least twice a week in each department. All trainees are expected to participate actively and enter relevant details in logbook. A model check list for the evaluation of seminar presentation is annexed at Schedule-II of these regulations.

**18.4. SYMPOSIUM:**
It is recommended to hold symposium on topics covering multiple disciplines.

**18.5. CLINICAL POSTINGS:**
Each trainee shall work in the clinics on regular basis to acquire adequate professional skills and competency in managing various cases, A model check list for evaluation of clinical postings is annexed at Schedule-III of these regulations.

**18.6. CLINICO- PATHOLOGICAL CONFERENCE:**
The clinico pathological conference shall be held once a month involving the faculties of Oral Medicine and Radiology, Oral Pathology and allied clinical departments. The trainees shall be encouraged to present the clinical details, radiological and histo-pathological interpretations and participation in the discussions.

**18.7. INTER-DEPARTMENT AL MEETINGS:**
To encourage integration among various specialties, there shall be inter-departmental meeting chaired by the Dean with all heads of post-graduate departments at least once a month.

**18.8. TEACHING SKILLS:**
All the trainees shall be encouraged to take part in undergraduate teaching programmes either in the form of lectures or group discussions. A model check list for evaluation of teaching skills is annexed at Schedule-IV of these regulations.

**18.9. DENTAL EDUCATION PROGRAMMES:**
Each department shall organize dental education programmes on regular basis involving other institutions. The trainees shall also be encouraged to attend such programmes conducted outside their university or institute.

**18.10. CONFERENCES / WORKSHOPS / ADVANCED COURSES:**
The trainees shall be encouraged to attend conference/workshops/advanced courses and also to present at least two scientific papers and two posters at State / national level specialty and allied conferences / conventions during the training period.

**18.11. ROTATION AND POSTING IN OTHER DEPARTMENTS:**

To bring in more integration among the specialties and allied fields, each department shall workout a programme to rotate the trainees in related disciplines.

**18.12. DISSERTATION / THESIS**:

A model check list for evaluation of dissertation presentation and continuous evaluation of dissertation work by guide / co-guide is annexed at Schedule-V of these regulations. A model overall assessment sheet to be filled by all the trainees undergoing post-graduate course is annexed at Schedule-VI of these regulations.

**18.13. MINIMUM REQUIRED QUOTA**:

All the students of the specialty 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: 1in a year
(e) Scientific Paper / Poster Presentations In State / : National Level Conferences : 4 papers/posters during three years of training workshop period
(f) Clinico Pathological Conferences : 2 presentations during three years of training period
(g) Scientific Publications (optional) : 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 months : 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

**18.14. CLINICAL QUOTA:**

**FIRST YEAR:**

Pre Clinical Work - Operative and Endodontics Pre-clinical 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. Casing - 04

**3. Only preparation on molars - 02**

a. Casting - 01

**4. Full Crown**

b. Anterior - 05

c. 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)

**PRE CLINICAL 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
8. Full crown anterior – 06 (2 and 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 prep
   b. Step back
   c. Crown down
   d. Obturation 03

5. BMP Premolar 06 (2 upper and 2 lower) obturation 1 each.
6. BMP Molar 06 (3 upper - 2 first molars and I second molar, 3 lower - 2 first molars and1 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: Technique work 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 by each student - should include topics in dental materials, conservative dentistry and endodontics
- Journal clubs - by each student
- Submission of synopsis at the end of 6 months
- Library assignment work
- 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 assignment 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.

**19. RECOMMENDED LIST OF TEXTBOOKS & JOURNALS:**

**TEXT BOOKS:**

| S. No | Title | Author | Publisher | Year |
|---|---|---|---|---|
| 1 | Clinical Problem Solving in Dentistry 2 Ed | Odell. (Edward W) | Churchill Livingstone | 2005 |
| 2 | Problem Solving in Endodontics: prevention, Identification and Management 5Ed | Gutmann (James. L) | Elsevier | 2006 |
| 3 | Practical Clinical Endodontics | Lumley Philip | Elsevier | 2006 |

| | | | | |
|---|---|---|---|---|
| 4 | Endodontics 3 Ed | Stock Christopher. JR | Elsevier | 2004 |
| 5 | Endodontics: Text book | Hegde (Mithra.N) | Emmess Medical Publisher | 2009 |
| 6 | Practical Clinical Endodontics | Lumlay (Adams) | Churchill Livingstone | 2006 |
| 7 | Endodontics in Clinical Practice 5 Ed | Pitt Ford (TR) | Wright | 2004 |
| 8 | Endodontic Principle & Practice 4Ed | Torabinjad | Saunders Elsevier | 2009 |
| 9 | Pathways of the Pulp 9Ed | Cohen | Elsevier | 2006 |
| 10 | Endodontics 3 Ed | Stock Christopher. JR | Mosby | 2004 |
| 11 | Endodontics Science Vol-I | Estrela (Carlos) | Editora Medicas | 2009 |
| 12 | Endodontics Science Vol-II | Estrela (Carlos) | Editora Medicas | 2009 |
| 13 | A Clinical Atlas of Endodontic Surgery | Loushine (Robert) | Quintessence Books | 1991 |
| 14 | Grossmans Endodontic Practice | Suresh (Chandra B) | Lippincott Williams And Wilkins | 2010 |
| 15 | Ingles Endodontics 6Ed | Ingle | Bc Decker | 2008 |
| 16 | Problem Solving in Endodontics 4Ed | Gutman | Mosby | 2009 |
| 17 | Sedation: A Guide to Patient Management 5Ed | Malamed (Stanley J) | Mosby | 2010 |
| 18 | Cohen's pathways of Pulp 10Ed | Cohen | Elsevier | 2011 |
| 19 | A Clinical Atlas of Endodontics surgery | Beilizzi | Quintessence Books | 1991 |
| 20 | Endodontics: Text Book 2Ed | Nisha | Jaypee Brothers | 2010 |
| 21 | Problems in Endodontics Etiology, Diagnosis & Treatment | Hulsman | Quintessence Books | 2009 |
| 22 | Endodontic Microsurgery | Merino | Quintessence Books | 2009 |

| | | | | |
|---|---|---|---|---|
| 23 | Seltzer & Bender's Dental Pulp | Hargreaves | Quintessence Books | 2002 |
| 24 | Minimally Invasive dentistry | Nairn Wilson | Quintessence Books | 2007 |
| 25 | Endodontics: Text book 3Ed | Nisha Garg | Jaypee Brothers | 2014 |
| 26 | Endo-Periodontal Lesions | Foce (Edoardo) | Quintessence Publishing | 2011 |
| 27 | Practical Lessons in Endodontic Surgery | Arens (Donald.E) | Quintessence Publishing | 1998 |
| 28 | Seltzer & Bender's Dental pulp 2Ed | Hargreaves (Kenneth M) | Quintessence Publishing | 2012 |
| 29 | Treatment of Endodontic Infections | Siqueira (Jose. F) | Quintessence Publishing | 2011 |
| 30 | Indirect Restorations | Sikri (Vimal K) | Quintessence Books | 2007 |
| 31 | Endodontic Therapy 6Ed | Wine (Franklin.S) | Mosby | 2014 |
| 32 | Cohen's Pathways of Pulp 10Ed | Hargreaves (Kenneth M) | Mosby | 2011 |
| 33 | Dental Instruments Pocket guide 4Ed | Bartolomucci (Linda. R) | Saunders Elsevier | 2012 |
| 34 | Caries Management science and Clinical Practice | Meyer (Hendrik) Etail…. | Thieme | 2013 |
| 35 | Colour Atlas of Endodontics | Jonson (William. T) | Elsevier | 2009 |
| 36 | Harty's Endodontics in Clinical Practice 6Ed | Chong (Bun San) | Elsevier | 2010 |
| 37 | Infection Control and Management of Hazardous Materials in Dental Team 5Ed | Miller (Chris. H) | Elsevier | 2014 |
| 38 | Preclinical Conservative Dentistry Questions and answers | Karthikeyan. K.S | Cbs Publisherss | 2013 |
| 39 | Adhesive Restoration of Endodontically Treated Teeth | Mannoci (Francesco) | Quintessence Publishing | 2008 |

| | | | | |
|---|---|---|---|---|
| 40 | Endodontic Principle & Practice 5Ed | Torabinjad (Mahmoud) | Elsevier | 2014 |
| 41 | Endodontic Microbiology | Fouad (Ashraf.F) | Wiley Blackwell | 2009 |
| 42 | Minimally invasive Dentistry: The Management of Caries | Wilson (Nairn H.F) | Quintessence Publishing | 2007 |
| 43 | Evidence based Dentistry for effective practice | Clarkson. (Jan) (etal…) | Informa Health Care | 2003 |
| 44 | Grossmans Endodontic Practice 13Ed | Suresh (Chandra B) | Wolters Kluwer | 2003 |
| 45 | Medical Problems in Dentistry 7Ed | Scully (Crispian) | Elsevier | 2014 |
| 46 | Wheelers Dental Anatomy physiology and Occlusion 9Ed | Nelson (Stanley.J) | Saunders Elsevier | 2014 |
| 47 | Antibiotic & Antimicrobial use in Dental practice 2Ed | Newman (Mcehael. G) | Quintessence Publishing | 2001 |
| 48 | Endodontics: Text Book 2ed | Bergenholtz (Gonner) | Blackwell Publishing | 2010 |
| 49 | Dental Erosion | Chadwick (Graham.R) | Quinteince International | 2006 |
| 50 | Infection Control and management of Hazardous Materials in Dental team 5Ed | Miler (Chris.H) | Mosby | 2014 |
| 51 | Dental Bleaching | Kellemer (Martin. GD) | Quintessence Publishing | 2008 |
| 52 | Color of Endodontics | Johnson (William. T) | Saunders Elsevier | 2002 |
| 53 | Pulp-Dentin Biology in Restorative Dentistry | Mjor. A (Ivar) | Quintessence Books | 2002 |
| 54 | Little and Falace Dental Management of the Medically Compromised Patient 8Ed | Little (James. W) (etall..) | Elsevier | 2013 |
| 55 | Endodontics Current concepts and Practice | Ramya Raghu | Emmess Medical Publisher | 2015 |

| | | | | |
|---|---|---|---|---|
| 56 | Foundations of Dental Technology: Anatomy and Physiology | Hohmann (Arnold) | Quinteince International | 2014 |
| 57 | Principles and Operative Dentistry | Qualtrough (A.J.F) etal… | Blackwell Publishing | 2005 |
| 58 | The Science & Art of Porcelain Laminate Veneers | Gurel (Galip) | Quintessence Publishing | 2003 |
| 59 | Comprehensive Dentistry | Tsutsui | Quintessence Publishing | 2008 |
| 60 | Endodontic manual for the general Dentistry | Trope (Martin) | Quintessence Publishing | 2005 |
| 61 | Endodontics | Ingle (John. I) etal… | CBS Publisherss | 2008 |
| 62 | Lasers in Operative Dentistry and Endodontics | Vinisha (Pandey) | Cbs Publishers | 2015 |
| 63 | Tooth Erosion: Prevention and treatment | Kevin (Y. P) etal… | Jaypee Brothers | 2009 |
| 64 | Cohen's Pathways of Pulp 11Ed | Hargreaves (Kenneth M) | Elsevier | 2016 |

**JOURNALS :**

**PRINT VERSION :**

1. Journal of Endodontics
2. International Endodontic Journal
3. Journal of Esthetic and Restorative Dentistry
4. International Journal of Esthetic Dentistry
5. Operative Dentistry
6. Dental Materials
7. Caries Research
8. Dental Traumatology
9. Jouranl of Adhesive Dentistry
10. European Journal of Prosthodontics and Restorative dentistry
11. Dental Clinics of North America (G)
12. British Dental Journal (G)
13. Quintessence International (G)
14. The Journal of the American Dental Association (G)
15. Journal of Dental Research (G)
16. Endodontology (**National**)
17. The Journal of Conservative Dentistry (**National**)
18. International Jnl. of Prosthodontics & Restorative Dentistry (**National**)

19. Clinical Dentistry (**National**) – (G)
20. Jouranl of Forensic Dental Science (**National**) – (G)
21. Journal of Indian Dental Association. (**National**) – (G)
22. Indian Journal of Dental Research (**National**) – (G)
23. Journal of Oral Biology And Craniofacial Research (N–G)
24. Dental Technician (N-G)
25. Journal of Interdisciplinary Dentistry (N-G)
26. SRM Journal of Research in Dental Science (N-G)

**ONLINE VERSION:**

1. Journal of Endodontics
2. International Endodontic Journal
3. Australian Endodontic Journal
4. Endodontic Topics
5. International Journal of Esthetic Dentistry (Formerly European Journal of Esthetic Dentistry)
6. Journal of Esthetic and Restorative Dentistry
7. Dental Materials
8. Operative Dentistry
9. Dental Traumatology (Endodontics & Dental Traumatology)
10. Journal of Adhesive Dentistry
11. Dental Clinics of North America
12. British Dental Journal journal of Dental Research

## 20. CHECKLISTS

### CHECKLISTS AND LOGBOOK

**CHECKLIST-1**
**MODEL CHECK LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS.**

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. | Article chosen was | | | | | |
| *2.* | Extent of understanding of scope & objectives of the paper by 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 discuss the paper | | | | | |
| *8.* | Clarity of presentation | | | | | |
| *9.* | Any other observation | | | | | |
| | Total Score | | | | | |

**CHECKLIST-2**
**MODEL CHECK LIST FOR EVALUATION OF SEMINAR PRESENTATIONS.**

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 | Whether other relevant publications consulted | | | | | |
| 2 | Whether cross - references have been consulted | | | | | |
| 3 | Completeness of Preparation | | | | | |
| 4 | Clarity of Presentation | | | | | |
| 5 | Understanding of subject | | | | | |
| 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 | | | | | | |

**CHECKLIST-3**
**MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN OPD**

Name of the Trainee: Date:

Name of the Unit Head:

| Sl. No. | Items for observation | 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. | Investigations work -up | | | | | |
| 7. | Chair - side manners | | | | | |
| 8. | Rapport with patients | | | | | |
| 9. | Overall quality of clinical work | | | | | |
| | Total score | | | | | |

Please use a separate sheet for each faculty member

## CHECKLIST - 4
## EVALUATION FORM FOR CLINICAL CASE PRESENTATION

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. | Whether all relevant points elicited | | | | | |
| 3. | Clarity of presentation | | | | | |
| 4. | Logical order | | | | | |
| 5. | Mentioned all positive and negative | | | | | |
| 6. | Accuracy of general physical examination | | | | | |
| 7. | Investigations required Complete list | | | | | |
| 8. | Relevant order Intepretation of Investigations | | | | | |
| | Ability to discuss differential diagnosis. | | | | | |
| 9. | Ability to discuss diagnosis. | | | | | |
| 10. | Others | | | | | |
| | Grand Total | | | | | |

Please use a separate sheet for each faculty member

**CHECKLIST-5**
**MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL**

Name of the Trainee: Date:
Name of the faculty Observer:

| Sl. No. | | Strong Point | Weak Point |
|---|---|---|---|
| 1. | Communication of the purpose of the talk | | |
| 2. | Evokes audience interest in the subject | | |
| 3. | The introduction | | |
| 4. | The sequence of ideas | | |
| 5. | The use of practical examples and / or illustrations | | |
| 6. | Specking style (enjoyable, monotonous, etc. Specify) | | |
| 7. | Attempts audience participation | | |
| 8. | Summary of the main points at the end | | |
| 9. | Ask questions | | |
| 10. | Answer questions asked by the audience | | |
| 11. | Rapport of speaker with his audience | | |
| 12. | Effectiveness of the talk | | |
| 13. | Uses AV aids appropriately | | |

Please use a separate sheet for each faculty member

**CHECKLIST-6**
**MODEL CHECKLIST FOR DISSERTATION PRESENTATION**

Name of the Trainee: Date:
Name of the faculty / Observer:

| Sl. No. | Prints to be considered | Poor | Below | Average | Good | Very |
|---|---|---|---|---|---|---|
| 1. | Interest show in selecting topic | | | | | |
| 2. | Appropriate review | | | | | |
| 3. | Discussion with guide and other faculty | | | | | |
| 4. | Quality of protocol | | | | | |
| 5. | Preparation of Proforma | | | | | |
| | Total Score | | | | | |

**CHECKLIST-7**
**CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE/CO-GUIDE**

Name of the Trainee: Date :
Name of the Faculty/Observer:

| Sl. No. | Items for observation During resentation | 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. | Department presentation of findings | | | | | |
| 5. | Quality of final output | | | | | |
| 6. | Others | | | | | |
| | Total score | | | | | |

**CHECKLIST - 8**
**OVERALL ASSESSMENT SHEET**

Name of the College: Date:

| Check List No | PARTICULARS | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Journal Review Presentation | | | | | | | | | |
| 2. | Seminars | | | | | | | | | |
| 3. | Clinical work in wards | | | | | | | | | |
| 4- | Clinical presentation | | | | | | | | | |
| 5. | Teaching skill practice | | | | | | | | | |
| 6. | | | | | | | | | | |
| TOTAL | | | | | | | | | | |

**Signature of HOD** **Signature of Dean**

The above overall assessment sheet used along with the logbook should form the basis for certifying satisfactory completion of course of study, in addition to the attendance requirement.

**Key:**

**Mean score:** Is the sum of all the scores of checklists 1 to 7 **A, B,……..**: Name of trainees

## LOG BOOK - TABLE 1
## ACADEMIC ACTIVITIES ATTENDED

Name :
Admission Year :
College :

| Date | Type of activity – Specify Seminar, Journal club, Presentation, UG teaching | Particulars |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

## LOG BOOK - TABLE 2
## ACADEMIC PRESENTATIONS MADE BY THE TRAINEE

Name :
Admission Year :
College :

| Date | Topic | Type of activity - Specify Seminar, Journal club, Presentation, UG teaching |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**LOG BOOK - TABLE 3**
**DIAGNOSTIC AND OPERATIVE PROCEDURES PERFORMED**

Name :
Admission Year :
College :

| Date | Name | OP No. | Procedure | Category O, A, PA, PI |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

**Key:**

**C - WASHED UP AND OBSERVED - INITIAL 6 MONTHS OF ADMISSION**
**A - ASSISTED A MORE 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**