DENTAL COUNCIL OF INDIA

B.D.S. Course Regulations

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DENTAL COUNCIL OF INDIA
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PREFACE

_B.D.S. COURSE REGULATIONS_  
(Modified: 27-6-1983)

To
(1) All State Governments/Union Territories.
(2) All Universities.

SUB: -- Opening of new Dental College and Post-graduate Dental Departments- Seeking of prior approval of the Dental Council of India.

Sir,

I am directed to say that under the Dentists Act, 1948, the Dental Council of India is charged with the responsibility for according recognition to the Dental Degrees awarded by the various Universities and also for maintaining uniform standards of dental education in the country. In the discharge of its functions and responsibilities, the Council inspects the various dental Institutions and brings the deficiencies observed to the notice of the authorities concerned for suitable remedial action.

2. Before Dental College or a Post-graduate Dental Department is set up, it should essentially fulfill certain minimum requirements in respect of the staff equipment, buildings etc. Without these pre-requisites, it is hardly possible to ensure that the students joining these institutions will be able to attain the Dental Education of the prescribed standard. In fact recognition of the qualifications of the students hinges on fulfillment of these prerequisites.

3. With a view to maintaining high standards of academic Institutions introducing new dental courses, it is requested that the State/Union Territory Governments and the Universities may kindly ensure that:

(a) that no Dental college is permitted to start functioning unless and until the Dental Council of India has satisfied itself through
inspection or otherwise that the teaching staff, equipment, building, etc., provided for, are in conformity with the minimum requirements, as laid down by the Council and approved by the Central Government; and

(b) that no Dental Institution is permitted to start Post-graduate Course(s) unless and until the Dental Council of India has satisfied itself, through inspection or otherwise, that the minimum requirements in respect of teaching staff, equipment etc., have been fully provided for in respect of B.D.S. Courses and that the teaching staff, equipment, etc., for the Post-graduate course(s) are in conformity with the minimum requirements laid down by the Dental Council of India and approved by the Central Government.

4. The receipt of this letter may kindly be acknowledged.

Yours faithfully,

Sd/-

(N. S. BHATIA)

UNDER SECRETARY.

No. U. 13011/1/72-ME(UG)

Copy forwarded for information to the:

(1) The Secretary, Dental Council of India, Temple Lane, Kotla Road, New Delhi, with reference to their letter No. DE-14-99/7181 dated the 3rd January, 1970.

(2) The D.G.H.S., New Delhi.

(3) M.P.T. Section with reference to their File No. 3-3/709-MPT.

Sd/-N.S. Bhatia

Under Secretary
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4. General Pathology
5. Microbiology
6. General and Dental Pharmacology and Therapeutics
7. Oral and Dental Anatomy, Physiology and Histology
8. General Medicine
9. General Surgery
10. Oral Pathology and Microbiology
11. Orthodontics
12. Periodontics
13. Pedodontics
14. Prosthodontics and Crown & Bridge
15. Conservative Dentistry and endodontics
16. Oral Surgery, Local Anaesthesia and General Anaesthesia
17. Oral Medicine and Roentgenology
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BASIC PRINCIPLES FOR THE MAINTENANCE OF MINIMUM EDUCATIONAL STANDARDS FOR THE DEGREE OF BACHELOR OF DENTISTRY

General:

Dental Faculties should be established in all the Universities conferring the degree of B.D.S. as early as possible.

CONDITIONS FOR ADMISSION TO BACHELOR OF DENTAL SURGERY COURSE

(a) The candidate has completed the age of 17 years at the time of admission or will complete this age on 31st December of the year of his admission; provided that the candidates who are being admitted to the 5 year course, including 1 year for pre-dental course, should have completed the age of 16 years at the time of admission or will complete this age on 31st December of the years of his admission to the pre-dental course;

(b) has passed the two years Intermediate or equivalent course thereof with Science subjects, viz. Physics, Chemistry and Biology from a recognized Indian University or Pre-University Intermediate Board:

(c) B.Sc. (Part I) Examination of an Indian University as laid down by the University Grants Commission (U.G.C.)

NOTE: A student who has passed the B.Sc Examination with one or more of the subjects mentioned at (b) above would be admitted to the Dental Course if he had passed the remaining subjects of the Medical group (Physics, Chemistry & Biology) in the Pre-University/Intermediate examination;
(d) The candidate should have secured not less than 50% of marks on the aggregate of the above subjects in the qualifying or competitive examination conducted on similar lines as the qualifying examination conducted by a competitive body. For Scheduled Castes/Scheduled Tribes, the minimum marks required for admission shall be 40% in lieu of 50% for general candidates.

*(Approved by the Central Government vide their letter No.Z.22025/1/82 PMS dated 6-11-1982)*

(e) The candidate should be medically fit.

**Reservation of seats for SC/ST for admission to BDS Course.**

For SC Candidate… 15% of the seats
For ST Candidate… 7½% of the seats

(Vide Govt. of India, Ministry of Health’s Order No. U. 12011/7/90-ME (P)/PPH dated 6-2-91).

**Duration of the Course:**

Duration of the B.D.S. Course will be four calendar years, followed by one year paid rotating Internship in the Dental Colleges. For MBBS degree holder the duration of the course will be two years.

The basic concept of Under-graduate dental education should be health oriented teaching with stress on prevention of oral diseases instead of the traditional diseases oriented teaching. To achieve this objective, It is desirable to expose the dental students to health problems throughout the period of Undergraduate training.

**Selection of Students:**

The selection of students to a Dental College should be based solely on merit of the candidate and for determination of merit, the following criteria be adopted uniformity throughout the country.
(a) In States, having only one dental College and one University/Board/Examining Body conducting the qualifying examination, the marks obtained at such qualifying examination be taken into consideration, exception being MBBS degree holders.

(b) In States, having more than one University/Board/Examining Body conducting the qualifying examination (or where there are more than one Dental College under the administrative/control of one authority), a competitive entrance examination may be held so as to achieve a uniform evaluation due to the variation of the standard of qualifying examinations conducted by different agencies.

(c) A competitive entrance examination in absolutely necessary in the case of Institutions of all India character.

(d) To be eligible for selection through competitive entrance examination a candidate must have passed any of the qualifying examination as enumerated under the head-note “Admission to B.D.S. Course” (above).

Provided that a candidate who has appeared in a qualifying examination, the result of which has not been declared may be provisionally allowed to take up to competitive entrance examination and in case of his selection for admission to dental course, he shall not be admitted thereto unless in the meanwhile has passed the qualifying examination.

*Provided also that a candidate for admission to the Dental Course must have obtained not less than 50% of the total marks in English and Science subjects taken together (i) at the qualifying examination (or at a higher examination) in the case of dental colleges where the admissions are made on the basis of marks obtained at these examinations or (ii) 50% of the total marks in English and Science subjects taken together at the competitive entrance examination where such examinations are hold for selection.

*Provided further that in respect of candidates belonging to Scheduled Castes/Scheduled Tribes, the minimum marks required for admission shall be 40% in lieu of 50% for general candidates. Where the seats reserved for Scheduled Castes and
Scheduled Tribes students in any State cannot be filled for want of requisite number of candidates fulfilling the minimum requirements prescribed from the State, then such vacant seats may be filled up on All India basis with Scheduled Castes and Scheduled Tribes candidates getting not less than the minimum prescribed pass percentage.

*(Approved by the Central Government vide their letter No. Z.22025/1/82-PMS dated 6-11-1982).

**Dental Curriculum:**

The aim and objective of the curriculum is to produce a Dentist who is socially acceptable and is able to work safely and effectively on patients in diagnosis, prevention and treatment of dental and oral diseases.

AND

To maintain uniformity in standards, technical and clinical requirements.

To produce a dental graduate who is capable of functioning effectively both under the rural and urban setting should be kept in view and emphasis should be placed in fundamental aspects on the subjects taught and on common problems of health and diseases avoiding unnecessary details and areas of specification.

The education process should be an evolving one and not merely a process of acquisition of a large number of disjointed facts.

There should be less emphasis on didactic lectures, and major part of the learning time should be devoted to demonstrations, group discussions, seminars, clinical work and conferences.

Frequent internal assessment tests should be held, so that, the process of learning would be continuous one and not sporadic.

Careful record of work should be maintained, which should form the base for internal assessment.
Every attempt should be made to encourage the students to participate in group discussions and seminar to enable them to develop expression, character and personality and other qualities essential for a dental graduate to serve the community and the nation effectively.

**MIGRATION AND TRANSFER OF STUDENTS FROM ONE DENTAL COLLEGE TO ANOTHER:**

Students studying in a recognized Dental College may be allowed to migrate or transfer to another Dental College under another or same University, provided a similar curriculum is followed by the two Universities. However, migration or transfer should be avoided in the middle of any year, and in no case before the completion of the First BDS examination.

Information of such transfer should be sent to the Council Immediately.

Every Dental Institution should submit to the Dental Council of India’s office within one months of admission, the students admitted to each course.

**Prior Permission of the Dental Council of India for increase in the Number of Admissions:**

The prior permission of the Dental Council of India should invariably be obtained by the concerned Dental Institution for increasing the number of admissions.

**MINIMUM PHYSICAL REQUIREMENTS OF A DENTAL COLLEGE**

**General**

1. *Administrative block.*
Accommodation may be proved for-Principal/Dean’s Office, Staff Room, College Council Room, Office Superintendent’s room office, record room, examination hall and Assembly Hall, common rooms for men and women students; cafeteria and other necessary accommodation.

2. Central Library—with sufficient space for at least 100 students for reading and having good lighting and ventilation and adequate space for stacking and display of books and journals.

There should be provision for:--
(a) Staff reading room.
(b) Rooms for librarian and other staff.
(c) Room for Daftaries and book binders.
(d) Microfilm reading room.
(e) Journal room.

3. General photographic and audiovisual sections with accommodation for studio, dark room, enlarging and photostat work. Accommodation should also be provided for Artists and Dental/Medical Illustrators, Modellers etc.

4. One Central Gas Plant or adequate number of smaller units.

5. Dental workshop with accommodation and facilities for repair of mechanical electrical and electronic equipment. Facilities for carpentary and plumbing should also be available.

N.B. Adequate sanitary facilities must be provided for the teaching staff, students (men and women) technical and other staff in all sections as required, as well as for the patients.
Accommodation

General Remarks

The College should be housed preferably in a unitary building having adequate dental hospital facilities and it should be located near a medical college and its teaching/associated hospitals.

The College grounds should have room for future expansion.

There should be 3 lecture theatres in the college with adequate seating capacity. They should be with good acoustics. Lecture theatres and demonstration rooms should be provide with necessary audio-visual aids.

In addition to the lecture theatre, there should be an auditorium of proper capacity and size.

Ample space shall be provided in each department for research work and further expansion of its activities.

Adequate number of store-rooms should be provided in each department.

Hostels for men and women students be provided. Provision of quarters for staff is desirable.

College Gymkhana (Indoor and outdoor games with physical instructor) and play grounds should be provided.

Teaching Hospitals

Departments in a Dental College

The following will be the teaching department of Dental College/Wing:-

1. Oral Medicine & Radiology
2. Oral and Maxillofacial Surgery
3. Prosthodontics
4. Periodontics
5. Conservative Dentistry
6. Pedodontics
7. Oral Pathology & Microbiology
8. Orthodontics
9. Community Dentistry
10. Dental Anatomy
11. Dental Materials

In an institution where the 11 Departments as enumerated above do not exist at present, any two allied departments may be combined for teaching and administrative purposes under one Professor.

*Yearwise Requirements for starting a New Dental College:*

It is recommended that while the year-wise Teaching Staff for starting a new Dental College with 40 admissions to the BDS Course be as per *Appendix-I* the following subjects be clubbed together under one Head forming the full block by the College authorities:-

- **Block I**: Prosthetics/Dental Materials.
- **Block II**: Operative Dentistry/Pedodontia/Dental Materials.
- **Block III**: Oral & Dental Pathology/Oral Medicine, Dental Radiology & Oral Diagnosis.
- **Block IV**: Oral Surgery/Dental Anatomy.
- **Block V**: Periodontia/Community Dentistry.
- **Block VI**: Orthodontia/Pedodontia/Dental Anatomy.

---with a note that: Not more than 2 subjects should be under one Head of the Department and not more than 2 subjects be clubbed together.
General

1. Accommodation be provided for Dean/Medical Superintendent’s office/Hospital offices, staff nurse’s room. Waiting hall for men and women visitors. There should be accommodation for:-

   - Enquiry office
   - Reception office
   - Store Rooms
   - Central Record Section
   - Hospital and Staff Committee Room.

2. Central Registration Department should be provided.
   (Sanitary Annexes to be provided as required).

3. Either in the Dental College & Hospital or in a Medical College & Hospital associated with the dental college teaching programme provision should be made for a minimum of 10 Beds for in-patients.

   Required Dental and Medical Staff should be appointed by way of Residents to attend on these patients as well as on other emergencies by rotation throughout the day. They should be provided with residential accommodation.

   The Number of Dental Chairs and Dental Units each required shall be twice the number of students admitted annually to the Institution. The distribution of the Chairs and Units should be left to the discretion of the Head of the Institution according to the need.

   The Dental Hospital Services, Clinical Assistants, post-graduate students and other activities would require suitable number of additional Dental Chairs and Dental Units and these cannot be mixed up with the number of chairs shown above for the under-graduate teaching requirements.
Necessary equipment and space with laboratory for the following subject for each student should be provided:-

Oral Anatomy and Oral Pathology including Microbiology.

In addition service laboratories for all necessary clinical investigations suitably equipped should be provided.

A balance room, store-room, special room for high speed centrifuge are also necessary.

Animal rooms with necessary facilities.

Demonstration room-One rooms for audiovisual aids should be provided for demonstrations purpose.

Museum:-- A well organized museum with a good collection of specimens models and charts should be established.

Research:-- Research facilities should be made available to teaching staff, and post-graduate students.

There should be preclinical dental laboratories for the Deptt. of Prosthetics and Conservative Dentistry with sufficient working space and equipment.

There should be a well equipped one small laboratory attached to the Prosthetic clinic.

There should be a well equipped Dental Radiology Department with necessary facilities for protection against radiation hazard.

The physical requirements of the basic medical departments viz. Anatomy, Physiology, Biochemistry, Pharmacology, Pathology and Microbiology, General Medicine and General Surgery, would be the same as manipulated by Medical Council of India from time to time.
MINIMUM STAFFING PATTERN FOR UNDERGRADUATE DENTAL STUDIES FOR 40-60-100 ADMISSIONS TO A BDS COURSE

(a) DENTAL STAFF:

There shall be a 3 tier system of uniform designations of Dental Teachers throughout India in all the Dental Institutions. They shall be:--

(1) Professors
(2) Readers
(3) Lecturers

The Principal/Dean should teach one of the subjects and he will be the Professor and Head of the Department in his speciality.

The teaching strength for 40 admissions –60 admissions –100 admissions shall be as follows respectively:--

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
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<tbody>
<tr>
<td>40 admissions</td>
<td>60 admissions</td>
<td>100 admissions</td>
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<tr>
<td>• Not less than 6 of which one will be Principal.</td>
<td>• Not less than 6 of which one will be Principal.</td>
<td>• Not less than 6 of which one will be Principal.</td>
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</table>

(The grouping of subjects is left to local authorities).

DCI's decision of 66th Session (October 1983-Jaipur)

(Approved by the Central Government vide their letter No. V.12012/1/84-PMS dated 30-3-84)

(*The number of Professors (minimum) need be only 6 for either 40 or 60 or 100 admissions, and it need not very according to increase in admissions).
NOTE:(1) Each Department should be headed by a Professor. However, in case persons with requisite qualifications etc. for the post of Professors as laid down by the Dental Council of India are not available to head the different departments of a Dental College then a provisional post of an Associate Professor be considered adequate to head the department, to tide over this difficulty, and that this post be upgraded to that of a Professor as and when the incumbent attains the qualifications etc., prescribed by the Dental Council of India for the post of Professor.

(2) The 6 Professors including Principal/Dean/Head of the Dental Institution in those Dental Institutions, where the admissions are less than 40 may be allocated various subjects, after keeping in view the quantum of work load of both the major and minor subject.

<table>
<thead>
<tr>
<th></th>
<th>Less than 40 admission</th>
<th>41 to 59 admission</th>
<th>61 to 100 admissions</th>
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<tbody>
<tr>
<td>Reader</td>
<td>9 (one each for the 9 Deptts.)</td>
<td>11 (of these, 2 for Prosthetics and 2 for Conservative Dentistry to be earmarked)</td>
<td>13 (of these 3 for Prosthetics, 2 for Oral Surgery and 2 for Conservative Dentistry to be earmarked)</td>
</tr>
<tr>
<td>Lecturers</td>
<td>16 Break-up</td>
<td>27 Break-up</td>
<td>39 Break-up</td>
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<tr>
<td>* Prosthetics</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>* Conservative</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Dentistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Oral Surgery</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>* Periodontics</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>* Orthodontics</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>* Pedodontics</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>* Oral Pathology</td>
<td>1</td>
<td>2</td>
<td>2</td>
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</tbody>
</table>
* Oral Anatomy 1 1 1
* Oral Medicine 1 2 3
* Community Dentistry 1 2 3

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<td>16</td>
<td>27</td>
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<td>39</td>
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</table>

*The distribution is left to local authorities.

Paid House-Surgeons

(i) Not less than 50% of the number of admissions and each of minimum 6 months duration

(ii) Minimum of one Sr. Houseman per department but not exceeding 25% of the admissions for 40 admissions and more- the duration being 6 months.

Note:- For those persons who intend to take up Government service, the provision of Housemanship could be made compulsory, but those who wish to embark upon private practice soon after graduation could be exempted from House-Surgeonship.

(b) **Non-Teaching Clinical Posts**

**RESIDENTS:**—It is recommended that three posts of Residents should be created to attend on Oral-Surgical in-door as well out-door emergency cases round the clock.

**Dental Surgeons:**—It is recommended that for a daily-patient attendance of old and new patients up to 100, four (4) non-teaching Dental Surgeons should be provided and for every additional 100 patients two (2) more Dental Surgeons should be provided.
“Dental Surgeons” posts may be drawn from the Department of Health, as such posts, if created in the College would not provide promotional prospects to the incumbents and would create difficulty.

(c) **Medical Staff**

It would be in the interest of the Dental students to have full-time staff to teach medical subjects also. However, if such an arrangement cannot be made, the services of the teachers of the Medical College could be availed. The Head of the each department in both the cases cited above would be in-charge of the training programme of the dental students.

The following will be the staffing Pattern in (Medical subjects Full-time) for admission of 40 candidates per year:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Assistant Professor</th>
<th>Demonstrators/Lecturers</th>
<th>...</th>
<th>...</th>
<th>...</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Physiology &amp; Biochemistry</td>
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<td></td>
<td>2</td>
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<tr>
<td>Pharmacology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pathology &amp; Microbiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Medicine</td>
<td></td>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>Surgery</td>
<td></td>
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<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Anaesthesia</td>
<td></td>
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<td></td>
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<td>1</td>
</tr>
</tbody>
</table>

In case where the Medical College staff are part-time for the Dental College (40 admission)—
<table>
<thead>
<tr>
<th>Position</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. &amp; Head of Deptt.</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>1</td>
</tr>
<tr>
<td>Lecturers/Demonstrators</td>
<td>3</td>
</tr>
</tbody>
</table>

for each Department

(d) **Other Staff**  (for an admission less than 40 and proportionate increase for higher admission)

1. **Nurses**  
   One Nurse per each Clinical Department except in Oral Surgery where it should be minimum 3 nurses.

2. **Chair side-Assistant/Dental Hygienists**  
   One in each Clinical Department & minimum 3 in Periodontics where over and above 100 patients, the Out patients’ work load is heavy, for additional 50 out-patients, 1(one) more Hygienist in the Deptt. of Periodontia + 2 Reserve.

3. **Dental Mechanics**  
   Minimum-7(3)for Prosthetics, 1 for Conservative Dentistry, 1 for Oral Surgery & Periodontia 2 for Orthodontia).

4. **Histopathology Technicians**  
   2
<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Laboratory Assistants</td>
<td>Two in each clinical and one in each non-clinical deptt.</td>
</tr>
<tr>
<td>6.</td>
<td>Clinic/Lab. Cleaners</td>
<td>One upto 10 chairs or 10 students in each laboratory.</td>
</tr>
<tr>
<td>7.</td>
<td>Junior Mechanical Engineer</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Junior Electrical Engineer</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>Artist</td>
<td>One</td>
</tr>
<tr>
<td>10.</td>
<td>Photographer</td>
<td>One</td>
</tr>
<tr>
<td>11.</td>
<td>Senior Radiographer</td>
<td>One</td>
</tr>
<tr>
<td>12.</td>
<td>Radiographer/X-ray Technician</td>
<td>One</td>
</tr>
<tr>
<td>13.</td>
<td>Plumber-cum-Mechanic</td>
<td>One</td>
</tr>
<tr>
<td>14.</td>
<td>Electrician</td>
<td>One</td>
</tr>
<tr>
<td>15.</td>
<td>Office Superintendent</td>
<td>One</td>
</tr>
<tr>
<td>16.</td>
<td>Head Clerk</td>
<td>One</td>
</tr>
<tr>
<td>17.</td>
<td>Accountant</td>
<td>One</td>
</tr>
<tr>
<td>18.</td>
<td>Cashier</td>
<td>One</td>
</tr>
<tr>
<td>19.</td>
<td>Senior Scale Stenographer</td>
<td>One</td>
</tr>
</tbody>
</table>
20. Steno-Typist …. Two

21. Store-Keeper …. One

22. Assistant Store Keeper …. One

23. Librarian …. One

24. Assistant Librarian …. One

25. Library Attendants …. Two

26. Clerks …. Three (For admission less than upto 40) for admission upto 100 =5)

27. Record Keeper …. One

28. Office Peons …. Four

29. Watchman …. Four

30. Sweepers …. 12 for less than 40 admission, 16 for less than 60 admission, 20 for 100 admission

31. P.A. to the Head of the Institution …. One

Staff for Each Clinical Department

32. Steno- Clerk …. One

Note on designation of Teaching Posts (Dental)
The equivalence of the designation of the 3 tier system of Teaching Staff (Dental) at a Dental Institution as enumerated above shall be as under:--

(1) READER (New designation) should be considered as equivalent to old designation: Reader/Assistant Professor/Senior Lecturer (with Postgraduate qualification).

(2) LECTURER (New designation) should be considered as equivalent to old designation: Demonstrator/Junior Lecturer/Tutor (without Postgraduate qualification).

MINIMUM BASIC QUALIFICATION AND TEACHING EXPERIENCE REQUIRED FOR TEACHERS FOR UNDER-GRADUATE DENTAL STUDIES

(a) Dental Staff

Principal/Dean: Same qualifications as prescribed for a Professor. Experience as professor for not less than 5 years.

Professors: A BDS Degree of an Indian University or an equivalent qualification with Post-graduate qualification in the subject and with 5 years teaching experience after the postgraduate qualification as Reader.

However, for the purposes of teaching Oral Anatomy and Histology, Dental Materials, and Community Dentistry a candidate with BDS or equivalent qualification with 10 years teaching experience in that subject may be considered for the post of a Reader till such time Post-graduate training facilities in this subject is available in our country. However, such a candidate without Post-graduate qualification
cannot be considered for the post of a Professor.

**Associate Professor:** A BDS degree of an Indian University or an equivalent qualification with Post-graduate qualification in the subject and with 3 years teaching experience as Reader after he gets his post-graduate qualification.

**Readers:** A BDS Degree of an Indian University or an equivalent qualification with post-graduate qualification in the subject and with 3 years teaching experience after post-graduation in the subject of specialisation.

**Lecturers:** A recognized BDS degree of an Indian University or an equivalent qualification with 6 months experience as House-Surgeon.

**House-Surgeons:** A recognized BDS Degree of an Indian University or an equivalent qualification.

**Note:** In case of individuals with discrepancy between teaching experience and the Post-graduate qualification, a reference may be made to the Dental Council of India through competent authority for consideration. This is not applicable for future entrants.

(b) **Medical Staff**

**Professor** As prescribed by the Medical Council of India for such posts.

**Assistant Professors, Readers/Senior Lecturers for Anatomy, Biochemistry, Physiology, Pathology, Microbiology & Pharmacology/Medicine, Surgery**
and Anaesthesia, General Medicine, General Surgery.

Note:- BDS with post-graduate qualification in the subject should be preferred.

Demonstrators for anatomy, Physiology, Biochemistry, Pathology, Microbiology and Pharmacology.

MBBS or M.Sc. (in the subject) or B.D.S. with M.Sc in the subject

Teaching experience
Nil.
PROFESSIONAL (B.D.S.) EXAMINATIONS

Examinations are to be conducted to assess whether the candidate has acquired the necessary minimum skill and clear concepts of the fundamentals essential to his day to day professional work.

Examinations shall be held twice in a year.

To inculcate the habits of progressive day to day learning, introduction of frequent tests are essential. These tests must be held at least four times in each year (class) or twice in each semester and 25% of the total marks in each subject theory ands practical/clinical-individually must be set apart in the professional examination for this.

Maximum marks and duration of examination

Each subject will have a maximum of 200 Marks as follows:-

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practical/Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Examination</td>
<td>Written 50</td>
</tr>
<tr>
<td></td>
<td>Orals 25</td>
</tr>
<tr>
<td>Internal Assessment</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>=200</td>
</tr>
</tbody>
</table>

(1) For a pass the candidate must secure a minimum of 50% marks in the University examination and 50% marks in the aggregate i.e., University examination and internal assessment in each division viz., theory and practical and or clinical separately.

(2) First class and Distinction etc., to be awarded by the University as per their respective rules.
(3) Any candidate who fails in one subject in an Examination is permitted to go to the next higher class and appear for the subject and complete it successfully before he can appear for the next higher examination. If semester system is followed, the candidate can carry one subject from one semester to the next semester only, and appear for both semester examinations simultaneously.

**Duration of Examination**

Each written paper will be of 3 hours duration and each practical/clinical examination shall not exceed 3 hours in duration.

Note: Not more than 20 candidates in clinical or practical should be examined in one day.

**ATTENDANCE:**

(i) 75% in theory and 75% in practical/clinical in each subject in each year.

(ii) In case of a subject in which there is no examination at the end of the academic year/semester, the percentage of attendance shall not be less than 70%. However, at the time of appearing for the professional examination in the subject, the aggregate percentage of attendance in the subject should satisfy condition (i) above.

**Field Programme in Community Dentistry:**

With a view to expose the student to problems of rural and semi-urban areas, field programmes equivalent to 100 hours during the III and Final years should be arranged.

Until a Dental College is a position to arrange such programmes in rural areas, the students can participate in such programmes in “slums” of the city. However, the college should make available all facilities required for rural programmes within two years.

It is recommended that the Field programmes be arranged suitably by the institution.
REGULATIONS AND SCHEME EXAMINATION (BDS Course)

The scheme of examination for the B.D.S. course shall be divided into 4 professional examinations, namely, 1st B.D.S. examination at the end of 1st academic year IInd at the end of 2nd academic year, IIIrd at the end of 3rd academic year and IV & Final BDS examination at the end 4th academic year.

Where semester system exists, there shall be 2 examinations in each year, designated as Parts I & II of the respective examinations.

The examination shall be open to a candidate who satisfies the requirement of attendance, progress and conduct as stipulated by the respective University.

Certificate to the above effect should be produced from the Head of the Institution by the candidate alongwith the application for examination and the prescribed fee.

I BDS Examination:

1. General Human Anatomy including Embryology and Histology.
2. General Human Physiology and Biochemistry.
3. Dental Materials.

II BDS Examination:

Regulation are the same as far as the I year BDS examination. However, no candidate who has not successfully completed the I BDS examination, can appear for the IIInd BDS Examination.

1. General Pathology and Microbiology.
2. Human Oral Anatomy including Embryology and Histology.
3. General and Dental Pharmacology and Therapeutics.
**III BDS Examination:**

Regulations are the same as for the IIInd BDS Examination. A candidate who has successfully completed the IIInd BDS Examination can appear for the IIIrd BDS Examination.

1. General Medicine.
2. General Surgery.
3. Oral Pathology and Microbiology.
4. Preventive and Community Dentistry.

**Final BDS Examination:**

Regulations are the same as the 3rd BDS Examination. A candidate who has not successfully completed IIIrd B.D.S. Examination cannot appear for the Final BDS examination.

1. Prosthodontics and Crown and Bridge.
2. Conservative Dentistry including Endodontics.
3. Pedodontics.
5. Periodontics.
6. Orthodontics.
7. Oral Medicine (Oral Diagnosis) and Radiology.

It is recommended to have a separate examination for each of the above subject.

The teaching of a subject may be spread over one or more terms (one or more classes of BDS) depending upon the local facilities. However, taking care to see that excessive load is not placed on candidates during any one year.

**Internship:** Every candidate will be required after passing the Final BDS Examination to undergo one year paid rotating Internship in a Dental College.
## MINIMUM WORKING HOURS FOR EACH SUBJECT OF STUDY
(B.D.S.) COURSE

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Subject</th>
<th>Hours of Lectures</th>
<th>Total Hours</th>
<th>Total Clinical Hours</th>
<th>Available Clinical Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General Human Anatomy</td>
<td>70</td>
<td>130</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>2.</td>
<td>General Human Physiology and Biochemistry</td>
<td>50</td>
<td>40</td>
<td></td>
<td>145</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Dental Materials</td>
<td>35</td>
<td>30</td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>4.</td>
<td>General Pathology and Microbiology</td>
<td>45</td>
<td>60</td>
<td></td>
<td>195</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>General and Dental Pharmacology</td>
<td>40</td>
<td>20</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>6.</td>
<td>Oral Anatomy, Histology and Physiology</td>
<td>40</td>
<td>90</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>7.</td>
<td>General Medicine</td>
<td>40</td>
<td>90</td>
<td>(90)</td>
<td>130</td>
</tr>
<tr>
<td>8.</td>
<td>General Surgery</td>
<td>40</td>
<td>90</td>
<td>(90)</td>
<td>130</td>
</tr>
<tr>
<td>9.</td>
<td>Oral Pathology and Microbiology</td>
<td>50</td>
<td>90</td>
<td>---</td>
<td>140</td>
</tr>
<tr>
<td>10.</td>
<td>Orthodontics</td>
<td>40</td>
<td>150</td>
<td>(120)</td>
<td>190</td>
</tr>
<tr>
<td>11.</td>
<td>Periodontics</td>
<td>45</td>
<td>205</td>
<td>(150)</td>
<td>250</td>
</tr>
<tr>
<td>12.</td>
<td>Pedodontics</td>
<td>40</td>
<td>150</td>
<td>(100)</td>
<td>190</td>
</tr>
<tr>
<td>13.</td>
<td>Prosthodontics &amp; Crown &amp; Bridge</td>
<td>100</td>
<td>900</td>
<td>(540)</td>
<td>1000</td>
</tr>
<tr>
<td>14.</td>
<td>Conservative Dentistry and Endodontics</td>
<td>70</td>
<td>600</td>
<td>(360)</td>
<td>670</td>
</tr>
<tr>
<td>15.</td>
<td>Oral Surgery, Local Anaesthesia &amp; General Anaesthesia</td>
<td>60</td>
<td>220</td>
<td>(150)</td>
<td>280</td>
</tr>
<tr>
<td>16.</td>
<td>Oral Medicine and Roentgenology</td>
<td>40</td>
<td>90</td>
<td>(90)</td>
<td>130</td>
</tr>
<tr>
<td>17.</td>
<td>Community Dentistry</td>
<td>30</td>
<td>100</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>890</strong></td>
<td><strong>3145</strong></td>
<td><strong>(1690)</strong></td>
<td><strong>4035</strong></td>
</tr>
</tbody>
</table>
SYLLABUS B.D.S.
GENERAL HUMAN ANATOMY INCLUDING EMBRYOLOGY
OSTEOLOGY AND HISTOLOGY

1. Introduction.
2. Detailed anatomy and Osteology of Head & Neck.
4. Embryology of Head, Neck with emphasis on development of face, jaws, tongue, palates, salivary glands, pharyngeal arches and pouches Lymphatic and blood vessel system.
   G.I. system.
5. Paranasal air sinuses.
6. (a) Gross Anatomy of the brain;
   (b) Study of Cranial nerves – in detail extra cranial course 5th, 7th and 9th nerves and upper Cervical nerves.
8. Anthropology: General Principles.

HISTOLOGY

A course of 30 lectures/demonstrations and practicals covering the following:-

1. Epithelioum including gland and of Gastro-intestinal tract.
2. Muscle
3. Periosteum
4. Bone
5. Cartilage
6. Adipose tissue
7. Fibrous tissue
8. Elastic tissue
9. Lymph tissue
10. Blood
11. Blood vessels
12. Nerves
13. Lung
14. Kidney
15. Spleen-liver-thymus-pancreas
16. Endocrine glands.
   Dissection of Head and neck excluding opening of skull and
demonstrations of wet and dry specimens including brain.
   Lectures .... .... .... .... .... 70 hours
   Dissection and Practical demonstrations .... 130 hours
   Total 200 hours.
GENERAL HUMAN PHYSIOLOGY, BIOCHEMISTRY
NUTRITION AND DIETS

THEORY : Introduction to Physiology- The cell, the components of cell and their functions.
         Tissues of the body:- Functions of epithelial tissues; glandular tissues, connective tissue and other tissues.

BLOOD : Fundamentals of muscle nerve physiology, Composition and functions of RBC- variations in number in physiological and pathological states-life span and development of RBC. Blood volume, methods of measurement and variation.
         Haemoglobin: Basic Chemistry and fate of Hb. Blood groups. WBC types, number, variations, functions, formation, circulation. Functions of lymph; Physiology of clotting.

CARDIO-VASCULAR SYSTEM : Basic haemodynamic principles, arterial blood pressure and factors affecting it. The structure and physiological properties of cardiac muscle. Origin and conduction of heat beat. Cardiac cycle, heat sounds, ECG. Regulation of heart’s action Vasomotor system and its regulation-Physiology of shock.

changes in artificial respiration.


DIGESTION : Digestion in the mouth, digestion in the stomach and intestines, enzymes of the gastrointestinal tract and their functions. Movements of the gastro-intestinal tract. Physiology of liver, pancreas, absorption and assimilation of food.

ENDOCRINES : Thyroid-Iodine metabolism-functions of thyroid gland, Hyper and Hypo functioning of thyroid.

Adrenal Cortex- Secretion of the cortical cells Actions of gluco and minerals corticoids, hyper and hypo functions of adrenal cortex Adrenaline and non-adrenaline action on various systems.


Parathyroid-Actions of Parathromone and calcium metabolism.

methods.

CENTRAL NERVOUS SYSTEM: Reflex action, spinal cord, conditional reflex, ascending and descending tracts, cerebral cortex, various areas and functions of Cerebellum.

_Cerebellum:_ Physiology of thalamus and hypothalamus, autonomic nervous system. Cerebrospinal fluid Fundamental knowledge of C.N.S. and special senses-Regulation of body temperature.

SPECIAL SENSES: Fundamental knowledge of vision, hearing, taste and smell.

NUTRITION: General metabolism, principles of colorimetry. Basal Metabolic rate; Metabolism of proteins, fats and carbohydrates. Vitamins-Sources, requirement and actions. Basic principles of dietetics.

**Biochemistry:**

The course should provide the students with a sound knowledge on concepts of Biochemistry which are applied to Dental Science. The students should be conversant with the principles and clinical application of Biochemistry - the structure and properties of aminoacids, peptides and proteins; and introduction to the nature of enzymes, and enzymatic reactions, mineral metabolism, whole body metabolism; biological carbohydrates and fats.

**Physiology Practicals**

1. Enumeration of Red blood cells.
2. Enumeration of white blood cells and Differential count.
3. Determination of haemoglobin.
4. Determination of blood groups.
5. Determination of Pulse and blood pressure.
6. Determination of bleeding time, and clotting time.

**Demonstrations**

1. Determination of packed cell volume.
2. Clinical examination of chest.
3. Properties of excitable tissue.
4. Activity of frog’s heart and effects of vagus stimulation and of atropine and adreneline.
5. Perfusion of frog’s heart effects on Na, Ca, and K ions.
6. Demonstration of deep and superficial reflexes.

**Biochemistry Practicals**

1. Reactions of carbohydrates proteins, fats, bile, salts and bile pigments.
2. Gastric analysis.

<table>
<thead>
<tr>
<th>Lectures</th>
<th>-50 plus 25  === 75</th>
<th>Total - 145</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicals</td>
<td>-40 plus 30  === 70</td>
<td></td>
</tr>
</tbody>
</table>

**Dental Materials:**

Lectures 35 hours, Practicals & Demonstrations = 30 Hrs.

1. **Introduction:**
   Aims and scope of the science of dental materials.
2. **Structure and behaviour of Matter.**
3. **Important physical properties applicable to Dental Materials including their biological considerations.**
4. Gypsum products used in dentistry including fasting investment materials with or without gypsum binder.

5. Impressions materials used in dentistry including duplicating materials.

6. Synthetic resins used in dentistry-
   (a) General properties and physical characteristics.
   (b) Resins as denture base materials, repair and reline materials, soft liners, tissue conditioners
   (c) Resins as restorative materials: unfilled and filled resin restorative materials, tissue sealant.
   (d) Direct-bonding cement materials.

7. Metals and alloys: Their structure and behaviour, some important physical properties.
   (a) Dental amalgam
   (b) Gold foil:
   (c) Dental casting gold alloys:
   (d) Stainless steel, chrome-cobalt alloys.

8. Dental waxes including inlay casting wax.

9. Gold inlay casting procedures:
   Preparation of the die-wax pattern spruing, investing -control of shrinkage compensation. Wax elimination- casting machines, casting, defects in castings.

10. Welding and soldering- materials used.

11. Dental Cements: Classification, composition, manipulation, properties and uses:
Zinc Cements, Copper cements, Zinc-oxide eugenol cements, Silicate cements, cavity liners, cavity varnishers, resin cements.

12. Dental porcelain including porcelain fused to metal. Porcelain furnace and fusing.


15. Die & counter die materials including electroforming & Electro-polishing. Practicals & Demonstrations to be arranged in the manipulation of the more common materials.

GENERAL PATHOLOGY

Introduction to Pathology as a scientific study of disease and some techniques used in the same.

Causes of disease with special reference to our prevailing conditions.
Cellular structure and Metabolism.
Disturbances in Metabolism of cells.
Retrogressive changes—Degeneration, Necrosis and Gangrene, Amylodesis, Ligidosis and disorders of Pigmentation, calcification.

Inflammation -Acute and chronic inflammation. Repair with special emphasis on repair of bones, wounds and the effects of modern treatment on repair.

Hypersensitivity and Allergic.
Haemorrhage, shock, reaction of body to injury.
Circulatory disturbance and Hypertension.
Pathology of Bacterial infections with reference to the common diseases prevalent in our country, i.e. Pyogenic infection, Enteric fever, toxemias Tuberculosis Leprosy,
Syphilis and some examples of epidemic infections of public health interest and hospital infections. Common diseases of the bone.
Injuries due to chemical and physical agents including ionizing radiations.
Disturbances of nutrition with special reference to Indian conditions. Metabolic disorders. E.g. Rickets, Scurvey, Diabetes, Mellitus, etc.
General biology of Tumours, spread of malignant tumours.

A course of lectures, lecture demonstrations and practicals in clinical pathology comprising of Anemias and their laboratory investigations. Laboratory Investigations commonly required by Dental Surgeon.

- Lectures ……. 45 hours
- Practicals and demonstrations ……. 60 hrs.

Microbiology

A course of lectures, lecture demonstrations and practicals in general Bacteriology and elementary virology, mycology and parasitology.

Introduction to Bacteriology with special reference to Medical and Dental Bacteriology including public health and preventive aspect of infection and infections diseases.

- Pyaemia, sepioemia and toxaemia.
- Immunity and immunizing agents-vaccines, sera.
- Auto-immunity with special emphasis on practical application.
- Morphology, Physiology and classification of micro-organisms in general and of the following in particular pus forming organisms-cocci and bacilli:--
- Normal flora of the mouth and upper and lower respiratory tracts.
- Organisms causing meningitis diptheria, tetanus, gas gangrene, tuberculosis, syphilis.
- Organisms related to dental caries.
- Elementary knowledge of virology and mycology with examples of lesions of Orofacial region.
Common parasites and parasitic diseases- Amebiasis, malaria, helminthic infections.

Lectures 30 hours
Practicals and Demonstrations 60 hours

GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS

Lectures:

1. General Pharmacology:

   1. General principles of pharmacology; dosage forms; prescription writing; pharmacokinetics (absorption, distribution, metabolism and excretion of drugs), mode of action of drugs, factors modifying drug response, adverse drug reactions; drug interactions.

   2. CNS drugs; General anaesthetics, hypnotics, analgesics, psychotropic drugs, antiepileptics muscle relaxants, analeptics, local anaesthetics.

   3. Autonomic drugs: sympathomimetics, antiadrenergic drugs, parasympathomimetics, parasympatholytics, histamine and antihistaminics.

   4. Cardiovascular drugs: Cardiac stimulants and antiarrhythmic drugs; antihypertensive drugs: vasopressor agents and treatment of shock.

   5. Drugs acting on blood: Coagulants and anti-coagulants, hematinics.


   8. Chemotherapy: Sulphonamides and antibiotics, chemotherapy of tuberculosis, leprosy and malignancy.

10. Miscellaneous drugs: such as diuretics, heavy metal antagonists (B.A.L. and E.D.T.A.) etc.

II Dental pharmacology & Therapeutics:

1. Anti-septics, astringents, obtundents, mummifying agents, bleaching agents, styptics, disclosing agents, dentifrices and mouth washes.

2. Treatment of common oral condition.
   Practical and Demonstrations: To familiarizes the student with the methodology: prescription writing and dispensing.

   \[
   \begin{align*}
   \text{Lectures} & \quad 40 \\
   \text{Practicals & Demonstrations} & \quad 20 \\
   \hline
   \text{Total 60 hours}
   \end{align*}
   \]

Oral and Dental Anatomy, Physiology and Histology

INTRODUCTION:-

Development and growth of jaws. Development of the teeth and surrounding structures and calcifications (including theories) of hard tissues. Microscopic anatomy of hard and soft tissue of the tooth and surrounding structures oral mucous membrane, the lips, tongue, floor of the mouth; palate and the salivary glands.

   Eruption and shedding of teeth.
   Morphology of teeth Occlusion.
   Saliva, Calcium metabolism. Mastication and
   Age changes in teeth and surrounding structures.
   Clinical consideration where applicable.

Practicals/Demonstrations:

1. Demonstration of preparation of dental tissues for microscopic examination. Ground and stained sections
2. Microscopic study of normal oral and dental tissues.
3. Microscopic study and identification of teeth.
4. Tooth carving.
   Lectures 40 hours
   Practicals 90 hours

**General Medicine**

**INTRODUCTION:**
- Aims of Medicine.
- Definition of diagnosis, prognosis and treatment.
- History taking and physical examination of a medical case.
- Medical emergencies in dental practice.

**G.I. Disorders:**
- Stomatitis, glossitis, gastritis, Diarrhoea, Ambiasis, Ascites, malabsorption syndrome.

**Liver**
- Jaundica, Viral hepatatis, cirrhosis liver. Tender hepatonegaly.

**Cardiovascular System:**
- Congenital heart disease, classification rheumatic heart disease Subacute bacterial endocarditis.
- Congestive heart failure Left verticular failure.
- Hypertension.
- Coronary artery disease.

**Respiratory System**
- Pheumonia, Bronchitis, Embhysaema, Lung, Abscess, Eosinopbilia, Plumonary Embolism, Pulmonary Tuberculosis, respiratroy failure.

**Renal Diseases:**
- Nepuritis, Nephrotic Syndrome

**Hematology:**
- Anaemia, Coagulation defects, Bleeding disorders.
- Agranulocytosis, Leukaemia, Oral manifestations of hematological disorders, Lymphadenopathy and splenonegaly.

**Central Nervous System:**
Meningitis, Facial Palsy, facial pain Epilepsy, Headache, Syncope.

**Nutritional and Metabolic:**

Balanced diet normal daily.
Protein caloric main nutrition requirements
Avitaminosis
Diabetes mellitus
Calcium homeostasis

**Endocrine Disorder:**

Thyroid-Hypo and hyper pituitary
Hypo and hyper parathyroid

**Infections:**

Enitic fever
Mumps
Viral exanthemata
Diphtheria
Syphilis
Gonorrhoeo

**Miscellaneous:**

Allergy
Drug reactions
Drug Interactions
Evaluation of a case for general anaesthesia.

Lectures … 40}
\[130 \text{ hours}\]
Clinicals … 90
GENERAL SURGERY

1. Introduction to surgery, surgery especially related to Ora-dental surgery, Classification of diseases.


5. Cysts and new growths-Their general consideration with special reference to those occurring in the Buccal Cavity.

6. Diseases of the Lymphatic glands, especially of the neck.

7. Outline of diseases of the mouth, lips, tongue, palate tonsils and salivary glands.

8. Infections and diseases of the larynx, Tracheostomy.


11. Fracture-General principles of treatment, Diathermy and healing.

12. Cleft lip and cleft palate.

13. Thyroid and Parathyroid.
14. Swellings of jaws

i. Case sheet writing and demonstration.

ii. Ward procedure, including wound dressing.

\[
\begin{array}{ll}
\text{Lectures} & \ldots \quad 40 \text{ Hours} \\
\text{Clinicals} & \ldots \quad 90 \text{ Hours}
\end{array}
\]

Total 130 Hours

**ORAL PATHOLOGY AND MICROBIOLOGY.**

1. Aims and objectives.

2. Development disturbances of dental, oral and para-oral structures, including hereditary disorders.

3. Dental Caries.

4. Pulpal and periapical pathosis and their sequelae.

5. Environmental lesions of the oral and para-oral structures.

6. Defence mechanism of oral tissues and healing following injuries.

7. Diseases of periodontal ligament, gingivae and cementum.

8. Effects of nutritional disturbances and normal disorders on the oral and para-oral structures.


12. Pre-Cancerous lesions-etiology and pathology.


15. Diseases of temporo-Mandibular joint.

16. Diseases of nerves, skin, blood and their implications to oral tissues.

17. Effects of radiation on oral and para-oral tissues.

18. Oral Microbiology.
PRACTICALS

1. Identification of hard and soft tissue specimens.
2. Identification of hard and soft tissue specimens.
3. Biopsy and exfoliative cytology techniques.

Lectures .... 50 hours
Practicals .... 90 hours

140 hrs.

ORTHODONTICS

The following syllabus is suggested with a view to make the student understand the types of cases he can select for treatment as a general practitioner and how best he can guide the patient and parents. Hence stress should be on the preventive and interceptive principles of Orthodontics.

(1) Definition, aims, objects and scope of Orthodontics.
(2) Growth and development of Jaws, teeth, face and skull and establishment of normal occlusion.
(3) Genetics as applied to Orthodontics.
(4) Normal occlusion and its characteristics. Factors responsible for establishment and maintenance of normal occlusion.
(5) Malocclusion-type & Different classification.
(6) Aetiology of malocclusion.
(7) Histology taking and examination of patient and case analysis and differential diagnosis including cephalometrics and treatment planning.
(8) (a) Preventive and Interceptive treatment of malocclusion.
   (b) Extraction in Orthodontics.
(9) Appliances used in Orthodontic treatment-Adequate knowledge of (a) removable appliances, Mechanical appliances and functional appliances and elementary knowledge of fixed appliances.
(10) Tissue changes incident to Orthodontic treatment.
(11) Retention after treatment and replace.
(12) Materials used in Orthodontia.
(13) Habit breaking appliances.

Lectures … 40 hours
Practicals & Clinicals … 150 hours.

The teaching of Orthodontia clinics and practicals should be arranged during pre-final and final BDS years.

**Periodontics**

1. Introduction:- Scope and applicability of the subject, Historical background of Periodontology.


3. Classification of gingival and periodontal disturbances.


5. Infective muco-gingival conditions-specific and non-specific.

6. Degenerative conditions-Gingivosis and Periodontosis.

7. Atrophic conditions affecting gingival and periodontal tissues.

8. Local and systemic factors in the causation of gingival and periodontal lesions.


11. Diagnosis and diagnostic aids incuding roentgenography and its uses limitations.

12. Proanosis.


17. Instrumentation.
19. Preventive periodontics, concept of focal infection.
20. Materials used in periodontia.

**CLINICALS**

Varied approaches towards plaque control.

Treatment of the sufficient number of cases of scaling and root planning.

Approach, examination, diagnosis (including differential/diagnosis) and analysis of Periodontal and other cases, clinically.

Treatment planning including surgical treatment, and execution of the same

Occlusal equilibration.

Lectures … 45 hrs.

Practicals/Clinicals … 205 hrs.

**Pedodontics**

I. Introduction, definition, scope and importance of pedodontics.


III. Morphology of Dentitions and its application
   (a) Applied Monphology and Histology and desiduary and permanent teeth.
   (b) Importance of first permanent molar.

IV. Fundamentals of Dental Health.

V. Biological factors responsible for maintenance of Dental and Oral Health.
VI. Contributory local factors affecting oral health-plaque etc.
VII. Child psychology and management of child patient.
VIII. Examination, Diagnosis, and treatment planning.
IX  Clinical Pedodontics.
    Set up of Pedodontic clinic
    Teething disorders
    Developmental anomalies.
    Dental caries in children
    Restorative dentistry
    Pulp Therapy and Endodontics
    5 Space Maintainers
    Treatment of traumatized teeth
    Management of problems of the primary and mixed dentition period.
    Gingival disorders in children.
    Stomatological conditions in children.
    Management of handicapped children.
    Mouth habits and their management.
Lectures … 40 hours
Practicals & Clinicals… 150 hours
Total 190 hours.

PROSTHWETICS AND CROWN & BRIDGE

A. Complete Dentures.
1. Introduction & scope.
3. Examination, diagnosis treatment planning and desiduary prognosis.
5. Principles and techniques of impression making.
6. Preparation of casts, trays and temporary denture-bases.
7. Jaw-relations and methods of registration.
8. Artificial teeth their selection and arrangements and esthetics.
9. Articulators and face bows.
10. Occlusion and articulation in complete denture.
11. Trying in of complete dentures.
12. Processing and finishing of dentures.
13. Correction of occlusal discrepancies.
14. Delivery and adjustments of complete dentures.
15. Sequelae of ill-fitting dentures.
16. Repair, rebasing and relining.
17. Immediate dentures.
18. Implant dentures.

B. Removable Partial Dentures.
1. Introduction and scope.
2. Classification.
3. Examination, diagnosis and treatment planning.
4. Components of removable partial dentures & their function.
5. Surveyors.
6. Mouth preparations for partial dentures.
7. Impression procedures.
9. Fabrication of cast metal frame work.
11. Selection and arrangement of teeth.
13. trying in of partial dentures.
14. Processing, finishing, delivery and maintenance of partial dentures.
15. Immediate partial dentures.

C. Elements of Crown and Bridge Prosthesis:
1. Introduction Definitions
2. Indication and contra-indications.
3. Examination, diagnosis & treatment planning.
4. Selection and choice of abutment teeth.
5. Principles of tooth reduction.
6. Indication, contraindications, and procedures of preparation of abutment teeth for receiving various types of retainers.
7. Temporary protections of a prepared tooth.
8. Gingival retractions and Impression procedures.
9. Construction of days and working models, direct and indirect technique.
10. Technique of fabrication of retainers.
11. Selection & Fabrication of pontics.
13. Finishing commenting and maintenance of crowns and bridges

D. Maxillofacial Prosthesis:
1. Splints.
2. Obturators.
3. Carriers.

Lectures 80 plus 20 ==100 hrs.
Practicals/Clinicals 360(Techniques) plus 540 (Clinicals)
Total 1000 hours.

Conservative Dentistry and Endodontics

Definition & scope.
Oral hygiene in relation to conservative dentistry.
Instruments- No nomenclature design and formulae, care and sterilisation.
Examination diagnosis and treatment planning.
Charting and recording of cases.
Cavities classification and nomenclature.
Choice of filling materials.
Principles of cavity preparation control of pain, prevention of damage to hale and soft tissues during operative procedures.
Methods employed for exclusion of saliva.
Bio-Mechanics of cavity design and restoration with filling materials.
Filling materials. Plus and soft tissue protection.
Airotors and high speed equipment.
Cavity preparation for various types of restorations including inlays and onlays restorative procedures.
Matrices.

Drugs used in Conservative Dentistry.
Fractured teeth and their treatment.
Sensitive dentine, its treatment.
Ceramics in Conservative Dentistry.

Endodontics:

Rationale of endodontic therapy.
Diagnostic aids in Endodontics.
Care and Sterilisation of instruments for endodontics.
Treatment of vital and nonvital pulp.
Tests for sterility of the root canal.
Drugs used in root canal therapy.
Bleaching of teeth.
Restoration of dedodontically treated teeth.
Surgical treatment in Endodontics.

Lectures .... .... .... .... 70 hrs.
Technics .... .... .... .... 240 hrs.
Practicals .... .... .... .... 360 hrs.

Note: In view of the importance of the digital dexterity more number of hours is provided for technique work.

Oral Surgery Local Anaesthesia and General Anaesthesia Local Anaesthesia:

1. Introduction.
2. Properties of an ideal local anaesthetic drug.
3. Properties of common local or general anaesthesia.
4. Choice of anaesthesia, local of general anaesthesia.
5. Indications and contra-indications, advantages and disadvantages of local anaesthesia.

6. Components of a standard local anaesthetic solution and the part played by each component.

7. How does local anaesthetic acts.

8. Pre-anaesthetic medication.


10. Complications associated with local anaesthesia and their management.

**General Anaesthesia:**

1. Properties of general anaesthetic drugs commonly used.

2. Pre-anaesthetic preparation of a patient and pre-medication.


4. Short anaesthesia in a Dental Chair, Endotracheal anaesthesia, Intravenous anaesthesia.

5. Symptoms and signs of general anaesthesia.

6. Complications arising during the administration of general anaesthesia and their management.

**Exodontia:**

1. Objectives.

2. Indications for tooth extraction.

3. Pre-operative assessment.

4. ‘Forceps extraction,

5. ‘Surgical extraction. (Trans-alveolar extraction).

6. Exaraction technique under general anaesthesia in the Dental Chair.

7. Complication of tooth extraction and their management.
Oral Surgery:

1. Definition and Scope.
2. Diagnosis in Oral Surgery.
   (a) History taking, (b) Clinical examination, (c) Special investigations.
4. Treatment planning.
5. Sterilization.
7. Diagnosis, pre-operative assessment and treatment of impacted teeth.
8. Pre-prosthetic Surgery.
9. Surgical aid to Orthodontics.
11. Inflammatory diseases of Jaws bone and their management.
12. Diagnosis and management of Cysts of Oral Cavity.
13. Diagnosis and treatment of the fracture of the mandible.
15. Diagnosis and treatment of benign neoplastic lesions of the Oral Cavity (Odontogenic and non-odontogenic).
17. Surgical treatment of tumour like lesions of the Oral Cavity including odontome.
18. Diseases of maxillary sinus, with special reference to pro-antral fistula.
21. Surgical aspect of histopathological diagnosis.
22. Oral Surgical complications and their management.
23. Diagnosis of malignant condition of Oral Cavity, a broad outline about the different methods of treatment.
24. Diseases of temporomandibular joint, such as arthritis, hypoplasia, subluxation, dislocation, ankylosis. Other causes of inability to open the mouth.

25. Affections of trigeminal and facial nerves.

Lectures:

Anaesthesia (Local and general) 10
Exodontia 10
Oral Surgery 40

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Total 60
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Clinical 220 hrs.

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Total Practical & Clinical hours 280 hrs.

**ORAL MEDICINE AND ROENTGENOLOGY**

**Oral Medicine**

1. Scope and importance of the subject.
2. Methods of diagnosis including special investigations.
3. Acute infections of oral and para-oral structures.
5. Management of Cardiac patient in dentistry.
6. Metabolic and Endocrine disturbances their oral manifestations.
7. Nutritional deficiencies, and their significance in dentistry.
8. Oral sepsis and its effect on general system.
13. Cysts and tumours of the oral cavity.
15. Special investigations.
16. Immune concepts of oral lesions.
17. Forensic odontology.

**ROETGENOLOGY**

1. Physics of radiation-production and properties of X-rays.
3. Technique of intra-oral and extra-oral Radiography and normal anatomical land marks.
4. Radiological interpretation of abnormal dental and jaw conditions.
5. Elements of Radiation treatment in oral and facial conditions and their sequelae.
6. Contrast radiography and recent advance in Dental Radiology including radioactive traces.

Lectures 40 hrs.
Practicals 90 hrs.

**SYLLABUS FOR BDS—COMMUNITY DENTISTRY.**

1. **Biostatistics**

   Introduction and General Principles of Biostatics, Statistical procedures.

2. **Psychology**

   Introduction, Psychological development from birth to adolescence, Management of child in the dental office-parent counseling in respect of dental health and hygiene of the child.
3. **Public Health**

   Concept and philosophy of public health, public Health in India. General Epidemiology, Health Education, Environmental Health, disposal of wastes.

   Water: norms for potability, purification.

4. **Preventive Dentistry**

   Prevention, levels of prevention, various measures in the prevention of dental and oral diseases at individual and mass level.

5. **Public Health Dentistry**


6. **Social Sciences**

   As applied to health, social structure concepts, groups, social institution, urban and rural societies, their concept of health. Application of sociology in health programme, social environment. Cultural Anthropology objective, different aspects of folk medicine, and popular medicine. Cultural pattern and complexes, taboos, as related to health.
Field Programme

1. In rural areas to conduct survey of dental diseases, provide dental Health Education, emergency treatment.

2. School-Health Programme, dental care for school children and preventive programme- Topical flubride application and oral hygiene demonstrations.

   Lectures 30 hrs.
   Field programme 100 hours.
APPENDIX 1

DENTAL COUNCIL OF INDIA
(Chart as approved by the Govt. of India under section 20 of the Dentists Act, 1948 )

POSTS TO BE SANCTIONED YEAR-WISE-ADMISSION 40

Principal & Professor-1-(One post of Professor can be deleted in the undermentioned tabulation according to the subject of specialisation)

AT THE END OF A YEAR

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<th></th>
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DCI’S decision of 66th Session (October 1983- Jaipur)

Insert the following foot-note after putting an asteric mark against the heading “1st Year.

- One Professor in any speciality
- One Assistant Professor in other specialities.”