

Faculty of Dental Sciences

Ordinance No. V-9 (A)

Bachelor of Dental Surgery (BDS)

Approved by Academic Council in its meeting held on 06.10.2008



Subharti Dental College
SWAMI VIVEKANAND SUBHARTI UNIVERSITY



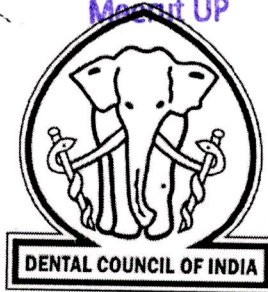
DENTAL COUNCIL OF INDIA

BDS COURSE REGULATIONS 2007

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PREFACE

TO

BDS COURSE REGULATIONS 2007

(Modified: 25.07.2007)

Framed by the Dental Council of India and approved by the Central Government under the Dentists Act, 1948 – vide Government of India, Ministry of Health & Family Welfare (Deptt. of Health's) letter No.V.12012/3/2006-DE dated 25.07.2007.

CONTENTS

S.No.		Page
1.	Admission, Selection and Migration	
	I. Eligibility Criteria	
	II. Selection of Students	
	III. Duration of the course	
	IV. Migration	
	V. Attendance requirement, Progress and conduct	
	VI. Subject of Study	
	VII. Examination	
	VIII. Qualification and experience to be eligible for examinership	
2.	Goals and objectives	
	➤ Goals	
	➤ Objectives	
	➤ Recommendations : General	
	➤ Recommendations : Specific	
	➤ Competencies	
	➤ Minimum working hours for each subject of study	
	➤ Recommended Books	
3.	Infrastructural, Functional & Equipment Requirements	
	• General Facilities	
	• General Hospital	
	• Dental Hospital	
4.	Equipment Requirements	
	• Department : Oral Medicine and Radiology	
	• Department : Oral Pathology and Oral Microbiology	
	• Department : Public Health Dentistry	
	• Department : Paediatric and Preventive Dentistry	
	• Department : Orthodontics & Dentofacial Orthopaedics	
	• Department : Periodontology	
	• Department : Conservative Dentistry and Endodontics	
	• Department : Oral & Maxillofacial Surgery	
	• Department : Prosthodontics and Crown & Bridge	
5.	Minimum basic qualification & teaching experience required for teachers for undergraduate dental studies	
	• Dental Staff	
	• Medical Staff	
6.	Staffing Pattern – Teaching & Non-Teaching Staff	
	• Minimum Staffing for UG Dental Studies for 50 Admissions	
	• Minimum Staffing for UG Dental Studies for 100 Admissions	
	• Medical Teaching Staff in a Dental College	
	• Other Staff Pattern for 50 Admissions	
	• Other Staff Pattern for 100 Admissions	
7.	Syllabus of Study	
	1. Human Anatomy, Embryology, Histology & Medical Genetics	
	2. Human Physiology & Biochemistry, Nutrition & Diatics	
	3. Dental Anatomy, Embryology and Oral Histology	
	4. General Pathology & Microbiology	
	5. General and Dental Pharmacology and Therapeutics	
	6. Dental Materials	
	7. Pre Clinical Conservative Dentistry Laboratory Exercisesz	
	8. Oral Pathology & Oral Microbiology	
	9. General Medicine	
	10. General Surgery	
	11. Conservative Dentistry and Endodontics	
	12. Oral & Maxillofacial Surgery	
	13. Oral Medicine and Radiology	
	14. Orthodontics & Dentofacial Orthopaedics	
	15. Paediatric & Preventive Dentistry	
	16. Public Health Dentistry	
	17. Periodontology	
	18. Prosthodontics and Crown & Bridge	
	19. Aesthetic Dentistry	
	20. Forensic Odontology	
	21. Oral Implantology	
	22. Behavioural Science	
	23. Ethics	

**DENTAL COUNCIL OF INDIA
NOTIFICATION
New Delhi, the 25th July, 2007**

No.DE-22-2007.-In exercise of the powers conferred by Section 20 of the Dentists Act, 1948, the Dental Council of India with the previous sanction of the Central Government hereby makes the following Revised BDS Course Regulations :-

1. Short title and commencement. – (i) These Regulations may be called the Dental Council of India Revised BDS Course Regulations, 2007.
(ii) They shall come into force on the date of their publication in the Official Gazette.

REGULATIONS FOR THE DEGREE OF BACHELOR OF DENTAL SURGERY

GENERAL: Universities awarding the degrees in Bachelor of Dental Surgery (BDS) and Master of Dental Surgery (MDS) shall establish independent Dental Faculty.

The heading ‘ADMISSION, SELECTION, AND MIGRATION’ shall be read as under, in terms of (8th Amendment) notification published on 12.7.2017 in the Gazette of India.

~~ADMISSION, SELECTION AND MIGRATION:-~~

ADMISSION, SELECTION, COUNSELLING AND MIGRATION:-

I. Admission to the Dental Course – Eligibility Criteria:

No Candidate shall be allowed to be admitted to the Dental Curriculum of first Bachelor of Dental Surgery (BDS) Course until:

1. He/she shall complete the age of 17 years on or before 31st December, of the year of admission to the BDS course;

The following has been inserted, and the existing sub-regulation “2.” is re-numbered as “3”., in terms of (5th Amendment) notification published on 31st May, 2012 in the Gazette of India.

2. He/She has obtained a minimum of marks in National Eligibility-cum-Entrance Test as prescribed in sub-regulation 5 of Regulation II under the heading “**Selection of students:**”

The following has been inserted in terms of (5th Amendment) notification published on 1st June, 2012 in the Gazette of India

3. ~~2.~~ In order to be eligible to take National Eligibility-cum-Entrance Test he/she has passed qualifying examination as under:-
 - a. The higher secondary examination or the Indian School Certificate Examination which is equivalent to 10+2 Higher Secondary Examination after a period of 12 years study, the last two years of study comprising of Physics, Chemistry, Biology and Mathematics or any other elective subjects with English at a level not less than the core course for English as prescribed by the National Council for Educational Research and Training after the introduction of the 10+2+3 years educational structure as recommended by the National Committee on education;
Note: Where the course content is not as prescribed for 10+2 education structure of the National Committee, the candidates will have to undergo a period of one year pre-professional training before admission to the dental colleges;
or
 - b. The intermediate examination in science of an Indian University/Board or other recognised examining body with Physics, Chemistry and Biology which shall include a practical test in these subjects and also English as a compulsory subject;
or
 - c. The pre-professional/pre-medical examination with Physics, Chemistry and Biology, after passing either the higher secondary school examination, or the pre-university or an equivalent examination. The pre-professional/pre-medical examination shall include a practical test in Physics, Chemistry and Biology and also English as a compulsory subject;
or

- d. The first year of the three years degree course of a recognized university, with Physics, Chemistry and Biology including a practical test in three subjects provided the examination is a "University Examination" and candidate has passed 10+2 with English at a level not less than a core course;
- or
- e. B.Sc examination of an Indian University, provided that he/she has passed the B.Sc examination with not less than two of the following subjects Physics, Chemistry, Biology (Botany, Zoology) and further that he/she has passed the earlier qualifying examination with the following subjects-Physics, Chemistry, Biology and English.
- or
- f. Any other examination which, in scope and standard is found to be equivalent to the intermediate science examination of an Indian University/Board, taking Physics, Chemistry and Biology including practical test in each of these subjects and English.

The following have been added under the heading "Admission to the Dental Course- Eligibility Criteria" after sub-clause 2 (f), in terms of (2nd Amendment) notification published on 29th October, 2010 in the Gazette of India.

"3. 3% seats of the annual sanctioned intake capacity shall be filled up by candidates with locomotory disability of lower limbs between 50% to 70%

Provided that in case any seat in this 3% quota remains unfilled on account of unavailability of candidates with locomotory disability of lower limbs between 50% to 70% then any such unfilled seat in this 3% quota shall be filled up by persons with locomotory disability of lower limbs between 40% to 50% before they are included in the annual sanctioned seats for General Category candidates.

Provided further that this entire exercise shall be completed by each Dental College/Institution as per the statutory time schedule for admissions and in no case any admission will be made in the BDS course after 30th of September."

The following has been deleted in terms of (5th Amendment) notification published on 1st June, 2012 in the Gazette of India

Note:

- ~~Marks obtained in Mathematics are not to be considered for admission to BDS Course.~~
- After the 10+2 course is introduced, the integrated courses should be abolished.

II. Selection of Students: The selection of students to dental college shall be based solely on merit of the candidate and for determination of the merit, the following criteria be adopted uniformly throughout the country:

The following has been deleted in terms of (5th Amendment) notification published on 1st June, 2012 in the Gazette of India

- ~~1. In states, having only one Dental College and one university board/examining body conducting the qualifying examination, the marks obtained at such qualifying examination may be taken into consideration;~~
- ~~2. In states, having more than one university/board/examining body conducting the qualifying examination (or where there is more than one dental college under the administrative control of one authority) a competitive entrance examination should be held so as to achieve a uniform evaluation as there may be variation of standards at qualifying examinations conducted by different agencies;~~
- ~~3. Where there are more than one college in a state and only one university/board conducting the qualifying examination, then a joint selection board be constituted for all the colleges;~~
- ~~4. A competitive entrance examination is absolutely necessary in the cases of institutions of All India character;~~

The following has been deleted and substituted in terms of (5th Amendment) notification published on 1st June, 2012 in the Gazette of India

5. Procedure for selection to BDS course shall be as follows:-
- i. ~~in case of admission on the basis of qualifying examination under clause (1) based on merit, candidate for admission to BDS course must have passed in the subjects of Physics, Chemistry, Biology & English individually and must have obtained a minimum of 50% marks taken together in Physics, Chemistry, and Biology at the qualifying examination. In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or Other Backward Classes, the marks obtained in Physics, Chemistry and Biology taken together in qualifying examination be 40% instead of 50% as above and must have qualifying marks in English.~~

~~The following have been added before the clause 5 (ii) under the heading “selection of students”, in terms of (2nd Amendment) notification published on 29th October, 2010 in the Gazette of India.~~

~~“Provided that the eligibility criteria for admission to persons with locomotory disability of lower limbs in terms of Clause 3 above will be a minimum of 45% marks instead of 50% taken together in qualifying examination and competitive entrance examination for admission in BDS Course.”~~

- ii. ~~In case of admission on the basis of competitive entrance examination under clause (2) to (4) of this regulation, a candidate must have passed in the subjects of Physics, Chemistry, Biology and English individually and must have obtained a minimum of 50% marks taken together in Physics, Chemistry and Biology at the qualifying examination and in addition must have come in the merit list prepared as a result of such competitive entrance examination by securing not less than 50% marks in Physics, Chemistry and Biology taken together in the competitive examination. In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or any other categories notified by the Government the marks obtained in Physics, Chemistry and Biology taken together in qualifying examination and competitive entrance examination be 40% instead of 50% as stated above:~~

~~Provided that a candidate who has appeared in the qualifying examination the result of which has not been declared, he may be provisionally permitted to take up the competitive entrance examination and in case of selection for admission to the BDS course, he shall not be admitted to that course until he fulfils the eligibility criteria as per above regulations.~~

- i. ~~There shall be a single eligibility-cum-entrance examination namely “National Eligibility-cum-Entrance Test for admission to BDS course” in each academic year.”~~
- ii. ~~In order to be eligible for admission to BDS Course for a particular academic year, it shall be necessary for a candidate to obtain minimum of marks of 50th percentile in ‘National Eligibility-cum-Entrance Test to BDS course’ held for the said academic year. However, in respect of candidates belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes, the minimum marks shall be at 40th percentile. In respect of candidates with locomotory disability of lower limbs, the minimum marks shall be at 45th percentile. The percentile shall be determined on the basis of highest marks secured in the All-India common merit list in “National Eligibility-cum-Entrance Test for admission to BDS course.”~~

~~Provided when sufficient number of candidates in the respective categories fail to secure minimum marks as prescribed in National Eligibility-cum-Entrance Test held for any academic year for admission to BDS Course, the Central Government in consultation with Dental Council of India may at its discretion lower the minimum marks required for admission to BDS Course for candidates belonging to respective categories and marks so lowered by the Central Government shall be applicable for the said academic year only.~~

- iii. ~~The reservation of seats in dental colleges 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 National Eligibility-cum-Entrance Test and candidates shall be admitted to BDS course from the said lists only.

- iv. No Candidate who has failed to obtain the minimum eligibility marks as prescribed in Clause (ii.) above shall be admitted to BDS course in the said academic year.
- v. All admissions to BDS course within the respective categories shall be based solely on marks obtained in the National Eligibility-cum-Entrance Test.
- vi. To be eligible for admission to BDS Course, a candidate must have passed in the subjects of Physics, Chemistry, Biology/Biotechnology and English individually and must have obtained a minimum of 50% marks taken together in Physics, Chemistry and Biology/Biotechnology at the qualifying examination as mentioned in Sub-regulation 2 of Regulation I and in addition must have come in the merit list of "National Eligibility-cum-Entrance Test" for admission to BDS course. In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or other Backward Classes the minimum marks obtained in Physics, Chemistry and Biology/Bio-technology taken together in qualifying examination shall be 40% instead of 50%. In respect of candidates with locomotory disability of lower limbs in terms of sub-regulation 4, after the commencement of these amendments, of Regulation 1 above, the minimum marks in qualifying examination in Physics, Chemistry and Biology/Bio-technology taken together in qualifying examination shall be 45% instead of 50%.
 Provided that a candidate who has appeared in the qualifying examination the result of which has not been declared, he/she may be provisionally permitted to take up the National Eligibility-cum-Entrance Test and in case of selection for admission to the BDS course, he/she shall not be admitted to that course until he fulfills the eligibility criteria under Regulation 1.
- vii. The Central Board of Secondary Education shall be the organization to conduct National Eligibility-cum-Entrance Test for admission to BDS course.

The following has been added under clause II 'Selection of Students', in terms of (8th Amendment) notification published on 27th July, 2017 in the Gazette of India:

II. A Common Counselling.

1. There shall be a common counselling for admission to BDS course in all dental educational institutions on the basis of merit list of the National Eligibility-cum-Entrance Test.
2. The designated authority for counselling for the 15% All India Quota seats of the contributing States and all BDS seats of Dental Education Institutions of the Central Government universities established by an Act of Parliament and the Deemed Universities shall be the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.
3. The counselling for admission to BDS course in a State/Union Territory, including Dental Education Institutions established by the State Government, University established by an Act of State/Union Territory Legislature, Trust, Society, Minority Institutions shall be conducted by the State/Union Territory Government.
4. In case any dispute arises on such common counselling, the respective State Government shall refer the matter to the Central Government and its decision shall be final, in this regard.

III. Duration of the Course:

The following provision has been substituted to the extent indicated hereunder in terms of (3rd Amendment) notification published on 25th August, 2011 in the Gazette of India and the same is as under:-

~~The undergraduate dental training programme leading to BDS degree shall be of 5 years with 240 teaching days in each academic year. During this period, the student shall be required to have engaged in full-time study at a dental college recognized or approved by the Dental Council of India.~~

The undergraduate dental programme leading to BDS Degree shall be of 4 (four) Academic years with 240 teaching days in each academic year, plus one year paid rotating Internship in a dental college. Every candidate will be required, after passing the final BDS Examination to undergo one year paid rotating internship in a dental college. The detailed curriculum of Dental Internship Programme is annexed as Annexure-A. The internship shall be compulsory and BDS Degree shall be granted after completion of one year paid Internship.

~~NOTE: It is recommended by the DCI that the colleges who have implemented the revised BDS Course Regulation, 2007 itself, has to carry on with the existing five year programme. Regarding internship for this batch it is upto the respective university to decide.~~

Further, the admissions made from the year 2008-09, the students may be included in this amendment provided the concerned University's rules permit.

Provided that the Affiliating University/State Government are free to make applicable these amendment is upto the University to implement this amendment provided it abides by their Act/Rules and Regulations.

The above NOTE has been deleted and the following proviso is inserted below the NOTE in terms of (4th Amendment) notification published on 9.12.2011 in the Gazette of India and the same is as under:-

NOTE: Provided that the students of the batch admitted during the academic session 2007-2008, and consequently they are going to pursue their 5th year BDS Course as per the course curriculum and syllabus prescribed in the principal Revised BDS Course Regulations, 2007, may complete their Theory in 4 (four) subjects with 160 Lecture hours within a period of 6 (six) months as given below:-

Subject	Lecture Hours
Oral & Maxillofacial Surgery	30
Conservative Dentistry & Endodontics	50
Prosthodontics and Crown & Bridge	50
Public Health Dentistry	30
Total	160

On completion of such study, they shall have to appear in the University Examination and only after passing University Examination successfully, they shall be allowed to do six months Paid Rotating Internship Programme in all the Departments for the duration indicated against each Department as under:-

Departments	Period of Postings
1. Oral Medicine & Radiology	20 days
2. Oral && Maxillofacial Surgery	30 days
3. Prosthodontics	30 days
4. Periodontics	15 days
5. Concervative Dentist	10 days
6. Pedodontics	15 days
7. Oral Pathology & Microbiology	10 days
8. Orthodontics	10 days
9. Community Dentist/Rural Service	30 days
10. Elective	10 days
Total	180 days

The following proviso has been inserted in terms of (6th Amendment) notification published on 24.6.2013 in the Gazette of India:-

Provided further that students of 2007-2008 BDS batch who are declared passed with 4 ½ + 6 months Paid Rotatory Internship or 5-year duration course, as the case may be, as per Revised BDS Course (4th Amendment) Regulations, 2011, shall be deemed at par/equivalent with 4+1 year BDS Course, including one year Paid Rotatory Internship programme, for all interns and purposes i.e. for admission in MDS Course, applying for Govt Jobs, registration in State Dental Councils etc.

IV. Migration:

- (1) Migration from one dental college to other is not a right of a student. However, migration of students from one dental college to another dental college in India may be considered by the Dental Council of India. Only in exceptional cases on extreme compassionate ground*, provided following criteria are fulfilled. Routine migrations on other ground shall not be allowed.
- (2) Both the colleges, i.e. one at which the student is studying at present and one to which migration is sought, are recognised by the Dental Council of India.
- (3) The applicant candidate should have passed first professional BDS examination.
- (4) The applicant candidate submits his application for migration, complete in all respects, to all authorities concerned within a period of one month of passing (declaration of results) the first professional Bachelor of Dental Surgery (BDS) examination.
- (5) The applicant candidate must submit an affidavit stating that he/she will pursue 240 days of prescribed study before appearing at IInd professional Bachelor of Dental Surgery (BDS) examination at the transferee dental college, which should be duly certified by the Registrar of the concerned University in which he/she is seeking transfer. The transfer will be applicable only after receipt of the affidavit.

Note 1:

- (i) Migration is permitted only in the beginning of IInd year BDS Course in recognized Institution.
- (ii) All applications for migration shall be referred to Dental Council of India by college authorities. No Institution/University shall allow migrations directly without the prior approval of the Council.
- (iii) Council reserved the right, not to entertain any application which is not under the prescribed compassionate grounds and also to take independent decisions where applicant has been allowed to migrate without referring the same to the Council.

Note 2: *Compassionate ground criteria:

- (i) Death of supporting guardian.
- (ii) Disturbed conditions as declared by Government in the Dental College area.

V. Attendance requirement, Progress and Conduct

- (i) 75% in theory and 75% in practical/clinical 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.

VI. Subjects of Study:

First Year

- i) General Human Anatomy including Embryology and Histology
- ii) General Human Physiology and Biochemistry, Nutrition and Dietics
- iii) Dental Anatomy, Embryology and Oral Histology
- iv) Dental Materials
- v) Pre-clinical Prosthodontics and Crown & Bridge

Second Year

- i) General Pathology and Microbiology
- ii) General and Dental Pharmacology and Therapeutics
- iii) Dental Materials
- iv) Pre clinical Conservative Dentistry
- v) Pre clinical Prosthodontics and Crown & Bridge
- vi) Oral Pathology & Oral Microbiology

Third Year

- i) General Medicine

- ii) General Surgery
- iii) Oral Pathology and Oral Microbiology
- iv) Conservative Dentistry and Endodontics
- v) Oral & Maxillofacial Surgery
- vi) Oral Medicine and Radiology
- vii) Orthodontics & Dentofacial Orthopaedics
- viii) Paediatric & Preventive Dentistry
- ix) Periodontology
- x) Prosthodontics and Crown & Bridge

Fourth Year

- i) Orthodontics & dentofacial orthopaedics
- ii) Oral Medicine & Radiology
- iii) Paediatric & Preventive Dentistry
- iv) Periodontology
- v) Oral & Maxillofacial Surgery
- vi) Prosthodontics and Crown & Bridge
- vii) Conservative Dentistry and Endodontics
- viii) Public Health Dentistry

Fifth Year

- ~~i) Oral & Maxillofacial Surgery~~
- ~~ii) Prosthodontics and Crown & Bridge~~
- ~~iii) Conservative Dentistry and Endodontics~~
- ~~iv) Public Health Dentistry~~

The above 5th year subjects have been deleted in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India.

EXAMINATIONS

SCOPE: These regulations shall be applicable for the B.D.S. degree examinations conducted by various universities in the country.

I. PREFACE:

- (A) Evaluation is a continuous process, which is based upon criteria developed by the concerned authorities with certain objectives to assess the performance of the learner. This also indirectly helps in the measurement of effectiveness and quality of the concerned B.D.S. programme.
- (B) Evaluation is achieved by two processes
 1. Formative or internal assessment
 2. Summative or university examinations.

Formative evaluation is done through a series of tests and examinations conducted periodically by the institution.

Summative evaluation is done by the university through examination conducted at the end of the specified course.

II. METHODS OF EVALUATION:

Evaluation may be achieved by the following tested methods:

1. Written test
2. Practicals
3. Clinical examination
4. Viva voce

INTERNAL ASSESSMENT EXAMINATION

The continuing assessment examinations may be held frequently at least **3** times in a particular year and the average marks of these examinations should be considered. 10% of the total marks in each subject for both theory, practical and clinical examination separately should be set aside for the internal assessment examinations.

SCHEME OF EXAMINATION:

The following has been substituted in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India and the same is as under:-

~~The scheme of examination for B.D.S. Course shall be divided into 1st B.D.S. examination at the end of the first academic year, 2nd B.D.S. examination at the end of second year, 3rd B.D.S. examination at the end of third, 4th BDS at the end of 4th and final B.D.S at the end of 5th year. 240 days minimum teaching in each academic year is mandatory.~~

The Scheme of Examination for BDS Course shall be divided into 1st BDS examination at the end of the first academic year, 2nd BDS examination at the end of second year, 3rd BDS examination at the end of third, 4th and final BDS at the end of 4th year. Where semester system exists, there shall be two examinations in the final year, designated as part 1 and part 2 of the respective examinations (regulations 1983) 240 days minimum teaching in each academic year is mandatory.

In terms of (6th Amendment) notification published on 24.6.2013 in the Gazette of India, in 1st line of 2nd paragraph under the heading (III) “Scheme of Examination”, the word “semester” has been substituted by the word “Part I or Part II, whichever is applicable”, as follows:-

For University opting for ~~semester~~ Part I or Part II, whichever is applicable mode, the subjects that are to be covered in each semester proposed below.

Part-I

- Public Health Dentistry
- Periodontology
- Orthodontics and Dentogacial Orthopaedic
- Oral Medicine and Radiology

Part-II

- Oral & Maxillofacial Surgery
- Conservative and Endodontics
- Prosthodontics and Crown & Bridge
- Paediatric and preventive Dentistry

The examination shall be open to a candidate who satisfies the requirements of attendance, progress and other rules laid down by the University.

(1) Universities shall organize admission timings and admission process in such a way that teaching starts from 1st day of August in each academic year.

I B.D.S. Examination:

1. General anatomy including embryology and histology
2. General human physiology and biochemistry
3. Dental Anatomy, Embryology and Oral Histology

~~Any student who does not clear the first BDS University Examination in all subjects within 3 years from the date of admission, shall be discharged from the Course.~~

The above clause has been substituted by the following clause in terms of (7th Amendment) notification published in the Gazette of India and the same is as under:-

Any student who does not clear the BDS Course in all the subjects within a period of 9 years, including one year Compulsory Rotatory paid Internship from the date of admission shall be discharged from the course.

~~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 is permitted to appear for the next higher examination.~~

The above has been substituted in terms of (3rd Amendment) notification published on 25th August,2011 in the Gazette of India and the same is as under:-

Any candidate who fails in one subject in an Examination is permitted to go to the next higher class and appears for the said failed subject and complete it successfully before he is permitted to appear for the next higher examination. However, the Dental Council of India would have no objection, if the concerned University follows their examination scheme provided in their statute/regulations.

II B.D.S. Examination:

A candidate who has not successfully completed the 1st B.D.S. examination can not appear in the IInd year Examination.

1. General pathology and Microbiology
2. General and dental pharmacology and therapeutics
3. Dental Materials
4. Pre Clinical Conservative – Only Practical and Viva Voce
5. Pre Clinical Prosthodontics – Only Practical and Viva Voce

The following has been added after Sl. No. 5 of the subject, Pre-clinical Prosthodontics, in terms of (3rd Amendment) notification published on **25th August, 2011** in the Gazette of India and the same is as under:-

Any candidate who fails in one subject in an Examination is permitted to go to the next higher class and appears for the said failed subject and complete it successfully before he is permitted to appear for the next higher examination. However, the Dental Council of India would have no objection, if the concerned University follows their examination scheme provided in their statute/regulations.

III B.D.S. Examination:

A candidate who has successfully completed the 2nd B.D.S. examination can appear IIIrd B.D.S. Examination.

1. General Medicine
2. General Surgery
3. Oral Pathology and Oral Microbiology

The following has been added after Sl. No. 3 of the subject Oral Pathology and Oral Microbiology, in terms of (3rd Amendment) notification published on **25th August, 2011** in the Gazette of India and the same is as under:-

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 is permitted to appear for the next higher examination. However, the Dental Council of India would have no objection, if the concerned follows their examination scheme (2nd year onwards) provided in their statute/regulations.

IV B.D.S. Examination:

- ~~1. Oral Medicine and radiology~~
- ~~2. Paediatric & Preventive Dentistry~~
- ~~3. Orthodontics & dentofacial orthopaedics~~
- ~~4. Periodontology~~

The above has been substituted in terms of (3rd Amendment) notification published on **25th August, 2011** in the Gazette of India and the same is as under:-

Final BDS (Fourth Year):

- Public Health Dentistry
 - Periodontology
 - Orthodontics and Dentofacial Orthopaetic
 - Oral Medicine and Radiology
 - Oral & Maxillofacial Surgery
 - Conservative and Endodontics
 - Prosthodontics and Crown & Bridge
 - Paediatric and Preventive Dentistry
- OR

Part-I

- Public Health Dentistry
- Periodontology
- Orthodontics and Dentofacial Orthopaetic
- Oral Medicine and Radiology

Part-II

- Oral & Maxillofacial Surgery
- Conservative and Endodontics
- Prosthodontics and Crown & Bridge
- Paediatric and preventive Dentistry

Note:-

1. The concerned Universities may opt for any one of the examination pattern mentioned above in 4th BDS final year.
2. If any University opt for the part examination system then any candidate who fails in any subject in 4th (final) year Part-I examination is permitted to go to the Part-II examination and should complete both parts successfully before he/she is permitted to go for Internship programme.
3. Since there are Inadequate teaching staffs in Department of Public Health Dentistry, the same may be clubbed together under the head of periodontics. This arrangement shall be reviewed after three years.

V BDS Examination:

1. ~~Prosthodontics and Crown & Bridge~~
2. ~~Conservative Dentistry and Endodontics~~
3. ~~Oral and Maxillofacial Surgery~~
4. ~~Public Health Dentistry~~

The V BDS examination has been deleted in terms of (3rd Amendment) notification published on 25th August, 2011 in the Gazette of India.

WRITTEN EXAMINATION:

1. The written examination in each subject shall consist of one paper of three hours duration and shall have maximum marks of 70.
2. In the subjects of Physiology & Biochemistry and Pathology & Microbiology each paper will be divided into two parts, A and B of equal marks.
3. The question paper should contain different types of questions like essay, short answer and objective type / M.C.Q's.
4. The nature of questions set, should be aimed to evaluate students of different standards ranging from average to excellent.
5. The questions should cover as broad an area of the content of the course. The essay questions should be properly structured and the marks specifically allotted.
6. The University may set up a question bank

PRACTICAL AND CLINICAL EXAMINATION:

1. **Objective Structured Clinical Evaluation:** The present system of conducting practical and clinical examination at several universities provide chance for unrealistic proportions of luck. Only a particular clinical procedure or experiment is usually given for the examination. The clinical and practical examination should provide a number of chances for the candidate to express one's skills. A number of examination stations with specific instructions to be provided. This can include clinical procedures, laboratory experiments, spotters etc. Evaluation must be made objective and structured. The method of objective structured clinical examinations should be followed. This will avoid examiner bias because both the examiner and the examinee are given specific instructions on what is to be observed at each station.
2. **Records/ Log Books:** The candidate should be given credit for his records based on the scores obtained in the record. The marks obtained for the record in the first appearance can be carried over to the subsequent appearances if necessary.
3. **Scheme of clinical and practical examinations:** The specific scheme of clinical and practical examinations, the type of clinical procedures/ experiments to be performed and marks allotted for each are to be discussed and finalized by the Chairman and other examiners and it is to be published prior to the conduct of the examinations along with the publication of the time table for the practical examinations. This scheme should be brought to the notice of the external examiner as and when the examiner reports. The practical and clinical examinations should be evaluated by two examiners of which one shall be an external examiner appointed from other universities preferably outside the State. Each candidate should be evaluated by each examiner independently and marks computed at the end of the examination.
4. **Viva Voce:** Viva voce is an excellent mode of assessment because it permits a fairly broad coverage and it can assess the problem solving capacity of the student. An assessment related to the affective domain is also possible through viva voce. It is desirable to conduct the viva voce

independently by each examiner. In order to avoid vagueness and to maintain uniformity of standard and coverage, questions can be pre-formulated before administering them to each student. Twenty marks are exclusively allotted for viva voce and that can be divided equally amongst the examiners, i.e., 10 marks per examiner.

MARKS DISTRIBUTION IN EACH SUBJECT :

Each subject shall have a maximum of 200 marks.

Theory 100
Practical/ Clinical 100

Theory – 100

University written exam 70
Viva Voce 20
Internal assessment (Written) 10

Total 100

Practicals/ clinicals – 100

University Exam 90
Internal assessment (Written) 10

100

Practical and Viva Voce Only in University Examination

Pre-clinical Prosthodontics
Pre-clinical Conservative Dentistry.....
Internal Assessment - 20
Practical - 60
Viva Voce - 20

100

Criteria for a pass:

Fifty percent of the total marks in any subject computed as aggregate for theory, i.e., written, viva voce and internal assessment and practicals including internal assessment, separately is essential for a pass in all years of study.

For declaration of pass in a subject, a candidate shall secure 50% marks in the University examination both in Theory and Practical/ Clinical examinations separately, as stipulated below:

- A candidate shall secure 50% marks in aggregate in University theory including Viva Voce and Internal assessment obtained in University written examination combined together.
- In the University Practical/ clinical examination, a candidate shall secure 50% of University practical marks and Internal Assessment combined together.
- In case of pre clinical Prosthetic Dentistry and Pre clinical conservative dentistry in II BDS, where there is no written examination, minimum for pass is 50% of marks in Practical and Viva voce combined together in University examination including Internal Assessment i.e. 50/100 marks.
- Successful candidates who obtain 65% of the total marks or more shall be declared to have passed the examination in First Class. Other successful candidates will be placed in Second Class. A candidate who obtains 75% and above is eligible for Distinction. Only those candidates who pass the whole examination in the first attempt will be eligible for distinction or class.
- First Class and Distinction etc. to be awarded by the University as per their respective rules.

Grace Marks: Grace marks upto a maximum of 5 marks may be awarded to students who have failed only in one subject but passed in all other subjects.

Re-evaluation: The objective of re-evaluation is to ensure that the student receives a fair evaluation in the university examination and to minimize human error and extenuating circumstances. There shall be two mechanisms for this purpose.

1. **Re-totaling:** The University on application and remittance of a stipulated fee to be prescribed by the university, shall permit a recounting or opportunity to recount the marks received for various questions in an answer paper/ papers for theory of all subjects for which the candidate has appeared in the university examination. Any error in addition of the marks awarded if identified should be suitably rectified.
2. **Re-evaluation:** Re-evaluation of theory papers in all years of study of the BDS course may be permissible by the university on application and remittance of a prescribed fee. Such answer script shall be re-evaluated by not less than two duly qualified examiners and the average obtained shall be awarded to the candidate and the result accordingly reconsidered. However in those universities where double evaluation provision exists, this provision of re-evaluation will not be applicable.

Qualification and experience to be eligible for examinership for BDS examination

1. M.D.S. Degree from a recognized Institution
2. 4 years teaching experience in the subject in a dental college after MDS

3. Should be holding the post of a Reader or above in a Dental Institution approved/recognised by the Dental Council of India for B.D.S.

Note:

1. In case of Public Health Dentistry, as there is acute shortage of teachers one examiner from Public Health Dentistry and the second one could be from Periodontics. To be reviewed after three years.
2. In case of Physiology and Biochemistry if Internal examiner is from Physiology, External examiner should be from Biochemistry or vice versa
3. In case of Pathology and Microbiology if Internal examiner is from Pathology, External examiner should be from Microbiology or vice versa
4. In case of Dental Materials, if internal is from Prosthodontics, external should be from Conservative Dentistry and vice versa

50% of Examiners appointed shall be external from Dental Institutions approved/recognised by the Dental Council of India for B.D.S. Course, from other University, preferably from outside the State.

Reciprocal arrangement of Examiners should be discouraged, in that, the Internal Examiner in a subject should not accept external examinership for a College from which External Examiner is appointed in his subject for the corresponding period.

No person shall be an external Examiner to the same University for more than 3 consecutive years. However, if there is a break of one year the person can be re-appointed.

“Minimum Physical Requirement and Minimum Staffing Pattern (as per DCI Regulations 2006).”

GOALS AND OBJECTIVES

GOALS:

The dental graduates during training in the institutions should acquire adequate knowledge, necessary skills and reasonable attitudes which are required for carrying out all activities appropriate to general dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The graduate also should understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

OBJECTIVES:

The objectives are dealt under three headings (a) Knowledge and understanding (b) skills and (c) Attitudes.

(A) KNOWLEDGE AND UNDERSTANDING:

The graduate should acquire the following during the period of training.

1. Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions and be able to evaluate and analyse scientifically various established facts and data.
2. Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general state of health and also bearing on physical and social well being of the patient.
3. Adequate knowledge of clinical disciplines and methods which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive diagnostic and therapeutic aspects of dentistry.
4. Adequate clinical experience required for general dental practice.
5. Adequate knowledge of the constitution, biological function and behaviour of persons in health and sickness as well as the influence of the natural and social environment on the state of health in so far as it affect dentistry.

(B) SKILLS:

A graduate should be able to demonstrate the following skills necessary for practice of dentistry.

1. Able to diagnose and manage various common dental problems encountered in general dental practice keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.
2. Acquire the skill to prevent and manage complications if encountered while carrying out various surgical and other procedures.
3. Possess skill to carry out certain investigative procedures and ability to interpret laboratory findings.
4. Promote oral health and help prevent oral diseases where possible.
5. Competent in the control of pain and anxiety among the patients during dental treatment.

(C) ATTITUDES:

A graduate should develop during the training period the following attitudes.

1. Willing to apply the current knowledge of dentistry in the best interest of the patients and the community.
2. Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
3. Seek to improve awareness and provide possible solutions for oral health problems and needs through out the community.
4. Willingness to participate in the CPED Programmes to update the knowledge and professional skill from time to time.
5. To help and participate in the implementation of the national oral health policy.

RECOMMENDATIONS

GENERAL:

1. The undergraduate course involves organisation of teaching programmes year-wise. However, this course, as a whole, should demonstrate integration of the basic sciences, clinical dentistry and practical or the laboratory skills. The course should be designed and integrated in such a way to permit smooth progression from pre-clinical to clinical phase. Collaboration should be encouraged between teachers of basic sciences, dental sciences and clinical subjects.
2. The undergraduate dental course consists of three main components. The first component consists subjects common to medicine and dentistry like anatomy, physiology, biochemistry and behavioural science, leading to pharmacology, pathology, microbiology and then on to general medicine and general surgery. The second component runs concurrently with the first and deals with special aspects of oral and dental tissues, oral biology and oral pathology. Finally, the third component based on the foundations of the first two, deals with the clinical and technical aspects of dentistry as is required for general dental practice.
3. The first component of the course is intended to provide initially, an appreciation of normal human structure, development, function and behaviour, leading to understanding of the diseases, its prevention and treatment. The main objective is to provide the student a broad knowledge of the normal structures and functions of the body, the alterations which take place in disease with particular reference to those conditions in which medical and dental co-operation is essential for proper management. At this stage, the student should also be made aware of the social and psychological aspects of patient care with special reference to the relationship between dentist and patient. The behavioural sciences including both sociology and psychology should be introduced at the initial stages of the training programme, much before the students actually deal with the patients.
4. The second component of dental undergraduate programme consists instruction in the subjects dealing with dental and oral aspects to ensure a detailed knowledge of the structure and function of the dental and oral tissues. This enables the student to diagnose, prevent and treat the dental and oral diseases and disorders which were not included in the first component. The subject of oral biology is to be introduced at this level to provide the students a comprehensive knowledge and application of oral physiology, microbiology, biochemistry and oral immunology. Students should be exposed to the basic aspects of forensic odontology at this stage of the course along with oral biology/oral pathology.
5. The third component of the course comprising the clinical and technical aspects of dentistry actually prepares the student to undertake total oral and dental health care of the patients of all ages. The emphasis at this stage should be on the prevention of the various dental diseases and how to preserve natural teeth with their supporting structures. The importance of the various preventive methods need to be stressed. The significance of diagnosis of various dental and oral problems needs to be emphasized along with treatment planning before actual treatment procedures are undertaken.

In addition to acquiring the knowledge, the students need to gain adequate clinical hands-on-experience in extractions and other minor oral surgical procedures, all aspects of conservative dentistry, endodontics, crown and bridge, provision of partial and complete dentures, various periodontal therapeutic procedures and use of removable orthodontic appliances. Familiarity with various radiological techniques, particularly intra-oral methods and proper interpretation of the radiographs, is an essential part of this component of training and has application in clinical diagnosis, forensic identification and age estimation.

Towards the final stage of the clinical training, each student should be involved in comprehensive oral health care or holistic approach to enable them to plan and treat patients as a whole, instead of piece-meal treatment provided in each speciality. The Dental Council of India strongly recommends that all the dental colleges should provide facilities and required infrastructure for this purpose.

The aim of the undergraduate programme should undoubtedly be to produce a graduate, competent in general dental practice.

6. The commitment towards the society as a whole, needs to be stressed along with the knowledge and treatment skills gained. Instruction in public health dentistry should emphasise the sociological aspects of health care particularly, oral health care, including the reasons for the

variation in oral and dental needs of different sections of the society. It is important to know the influence of the social, behavioural, environmental and economic factors on oral and dental health. Students should be made aware of the National oral health Policy and the importance of being a member of the Health care team delivering medical and oral health care particularly among rural population.

7. Scientific advancement of any profession is based largely on continuous research activities. Dentistry is no exception. It is important that in every dental college proper facilities should be provided for research and the faculty members should involve themselves in such activities. Inter-disciplinary research should be encouraged to bring in integration among various specialities. The teaching and training methodology should be such that the students are motivated to think and indulge in self study rather than playing a passive role. Provision should be made in the daily schedules for adequate time for reading. Proper library facilities with adequate timings and seating capacity should be made available in all dental colleges. Adequate audio visual aids, like video tapes, computer assisted learning aids, Medline and internet facilities should be provided in all dental colleges to encourage self-study. Students should be encouraged to participate in simple research project work and the system of electives, spending some stipulated amount of time in another dental college within the country or outside should be given a serious consideration by all the dental institutions.
8. The society has a right to expect high standards and quality of treatment. Hence, it is mandatory and a social obligation for each dental surgeon to upgrade his or her knowledge and professional skills from time to time. The Dental Council of India strongly recommends that facilities and proper infrastructure should be developed to conduct the continuous professional education programmes in dentistry to enable the practitioners to update their knowledge and skills. The Council is of the opinion that the dental colleges by virtue of their infrastructural facilities will be ideal to conduct such courses and recommends establishment of a Department of continuing dental education in each of the dental colleges. In addition, the practitioners should be encouraged to attend conferences of state and national level, workshops, seminars and any other such activity which the Council feels is suitable to upgrade the knowledge and skills.
9. The undergraduate curriculum should stress the significance of infection and cross- infection control in dental practice. Aspects like sources of infection, measures to be adopted both general and specific for control particularly the HIV and hepatitis should be properly incorporated into the curriculum so that the graduates are aware of its significance and follow it in their practice.
10. The information technology has touched every aspect of an individual's personal and professional life. The Council hence recommends that all undergraduates acquire minimum computer proficiency which will enable them to enhance their professional knowledge and skills.

RECOMMENDATIONS

SPECIFIC:

1. The undergraduate dental training programme leading to B.D.S. degree shall be a minimum of five years duration. During this period, the students shall be required to engage in full time study at a dental college recognized or approved by the Dental Council of India.

During the five years undergraduate course, the instruction in clinical subjects should be at least for three years

2. Basic Medical & Dental Subjects:

The basic medical and dental sciences comprise anatomy gross and microscopic, physiology, biochemistry, pharmacology, oral biology and science of dental materials. Subjects like behavioural sciences, which is useful to develop communication skills, should also be introduced in the first year itself and spread over the undergraduate course. An introduction to Public Health Dentistry & Preventive Dentistry also will be useful to develop the concept of commitment to community. The laboratory skills to be developed by the students like pre-clinical Prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology exercises and studying dental morphology also is a part of initial training. The instruction in the above medical and dental sciences shall be for two years duration. At the end of this period the student should be in a position to understand and comprehend in general the development, structure and function of the human body in both health and disease.

3. The instruction in basic dental sciences should include theoretical and practical aspects of oral anatomy and physiology, to provide a detailed knowledge of the form and structure of teeth associated tissues and occlusal relationships.

The study should also aim at development of a concept regarding physiological and biochemical processes relevant to oral cavity for better understanding of the changes which occur with the onset of disease in the oral cavity.

The student should be made aware of the importance of various dental tissues in forensic investigation.

4. Clinical, Medical and Dental subjects:

The students should be introduced to clinics in the initial stage, preferably in the first year, as an observer to familiarise with clinical set-up and working. The period of instruction in the clinical subjects shall be not less than three years full time. During this, the student shall attend a dental hospital, general hospital, community camps and satellite clinics, in order to obtain instruction and experience in the practice of dentistry. The main objective of training in clinical dental subjects is to produce a graduate able and competent to recognize or diagnose various dental and oral diseases, to undertake general dental treatment, advise on the provision of specialized treatment available and finally advise the patient on prevention. The student should also understand the relationship between oral and systemic diseases.

5. The general medicine and surgery training should provide sufficient knowledge on human disease to enable the student to understand its manifestations as relevant to the practice of dentistry. This requires clinical teaching on patients and shall be carried out in in-patient and outpatient medical departments and specialist clinics.

This clinical instruction should enable the student to understand and perhaps diagnose common systemic diseases which have relevance to dental practice, by adopting a systematic approach of history taking and clinical examination. The student should also realize the significance of various general and special investigations in the diagnosis of diseases. The ability to recognize physical and mental illness, dealing with emergencies, effective communication with patients, interaction with various professional colleges also become important aspects of this training.

6. The Dental Council of India considers it important for all dental students to receive instruction in first-aid and principles of cardio-pulmonary resuscitation. It is also desirable that the student spend time in an accident and emergency department of a general hospital.

7. The purpose of the clinical training is to provide sufficient practical skill in all aspects of clinical dentistry. The instruction should also include patient management skills, treatment of patients of all ages with special reference to children (paediatric), very elderly (geriatric), medically compromised and disabled patients.

8. During the three years clinical course, the students should receive thorough instruction which involves history taking, diagnosis and treatment planning in all aspects of dentistry and should be competent on graduation to carry out all routine general procedures.

In Oral & Maxillofacial Surgery and Oral Implantology, instruction should include the knowledge of various maxillofacial problems like injuries, infections and deformities of the jaws and associated structures. The clinical experience should include those procedures commonly undertaken in general practice like extraction of teeth, minor oral surgical procedure etc.

In Conservative, Endodontics & Aesthetic Dentistry, Prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology and Periodontology and Oral Implantology students should be competent on graduation to carry out routine treatment like restorations of various kinds, endodontic procedures, removable and fixed prosthodontics, concept of osseointegration and finally various kinds of periodontal therapy. In addition, students should be aware of their limitations on graduation, need to refer patients for consultant opinion and/or treatment and also the need for postgraduate and continuous education programmes.

In Orthodontics & Dento Facial Orthopedics, students should carry out simple appliance therapy for patients. Students should also be able to appreciate the role of dentofacial growth in the development and treatment of malocclusion.

In Paediatric dentistry, the students should concentrate on clinical management, efficacy of preventive measures, treatment needs particularly for children with disabilities. In oral medicine and oral diagnosis, the student should receive instruction in various lesions, occurring in the oral cavity with particular reference to oral cancer.

9. The successful control and management of pain is an integral part of dental practice. Upon graduation the students should be competent to administer all forms of local anaesthesia. The value of behavioural methods of anxiety management should be emphasised. The students should also have the practical experience in the administration of intra-muscular and intravenous injections. Knowledge of pain mechanisms and strategies to control post-operative pain is essential for practice of dentistry.

10. All students should receive instructions and gain practical experience in taking processing and interpretation of various types of intra and extra oral radiographs. They should be aware of the hazards of radiation and proper protective measures from radiation for the patient, operator and other staff.

11. Instruction should be given in dental jurisprudence, legal and ethical obligations of dental practitioners and the constitution and functions of Dental Council of India.
12. Infection and cross infection control assume significance in dental practice. The students should be made aware of the potential risk of transmission in the dental surgery, various infectious diseases particularly HIV and hepatitis. The students should be aware of their professional responsibility for the protection of the patients, themselves and their staff and the requirements of the health and safety regulations.
13. In the recent times, the subjects of esthetic dentistry, oral implantology, behavioural sciences and forensic odontology have assumed great significance. Hence, the Council recommends that these four specialities should be incorporated into the undergraduate curriculum. The instruction and clinical training in aesthetic dentistry shall be carried out by the departments of Conservative, Endodontics & Aesthetic Dentistry and prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology. Similarly, the instruction and clinical training in oral implantology shall be done by the departments of Oral & Maxillofacial Surgery, Prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology and Periodontology and Oral Implantology. The instruction in behavioural sciences should ideally commence before the students come in contact with the patients and shall be carried out by the departments of Public Health Dentistry & Preventive Dentistry and Pedodontics & Preventive Dentistry. Forensic Odontology will be a part of Oral Pathology & Oral Microbiology and Oral Medicine and Radiology.

COMPETENCIES

At the completion of the undergraduate training programme the graduates shall be competent in the following.-

General Skills

- Apply knowledge & skills in day to day practice
- Apply principles of ethics
- Analyze the outcome of treatment
- Evaluate the scientific literature and information to decide the treatment
- Participate and involve in professional bodies
- Self assessment & willingness to update the knowledge & skills from time to time
- Involvement in simple research projects
- Minimum computer proficiency to enhance knowledge and skills
- Refer patients for consultation and specialized treatment
- Basic study of forensic odontology and geriatric dental problems

Practice Management

- Evaluate practice location, population dynamics & reimbursement mechanism
- Co-ordinate & supervise the activities of allied dental health personnel
- Maintain all records
- Implement & monitor infection control and environmental safety programs
- Practice within the scope of one's competence

Communication & Community Resources

- Assess patients goals, values and concerns to establish rapport and guide patient care
- Able to communicate freely, orally and in writing with all concerned
- Participate in improving the oral health of the individuals through community activities.

Patient Care – Diagnosis

- Obtaining patient's history in a methodical way
- Performing thorough clinical examination
- Selection and interpretation of clinical, radiological and other diagnostic information
- Obtaining appropriate consultation
- Arriving at provisional, differential and final diagnosis

Patient Care – Treatment Planning

- Integrate multiple disciplines into an individual comprehensive sequence treatment plan using diagnostic and prognostic information
- Able to order appropriate investigations

Patient Care – Treatment

- Recognition and initial management of medical emergencies that may occur during Dental treatment
- Perform basic cardiac life support
- Management of pain including post operative
- Administration of all forms of local anaesthesia
- Administration of intra muscular and venous injections
- Prescription of drugs, pre operative, prophylactic and therapeutic requirements

Uncomplicated extraction of teeth
 Transalveolar extractions and removal of simple impacted teeth
 Minor oral surgical procedures
 Management of Oro-facial infections
 Simple orthodontic appliance therapy
 Taking, processing and interpretation of various types of intra oral radiographs
 Various kinds of restorative procedures using different materials available
 Simple endodontic procedures
 Removable and fixed prosthodontics
 Various kinds of periodontal therapy

ORAL MEDICINE & RADIOLOGY

- Able to identify precancerous and cancerous lesions of the oral cavity and refer to the concerned speciality for their management
- Should have an adequate knowledge about common laboratory investigations and interpretation of their results.
- Should have adequate knowledge about medical complications that can arise while treating systemically compromised patients and take prior precautions/ consent from the concerned medical specialist.
- Have adequate knowledge about radiation health hazards, radiations safety and protection.
- Competent to take intra-oral radiographs and interpret the radiographic findings
- Gain adequate knowledge of various extra-oral radiographic procedures, TMJ radiography and sialography.
- Be aware of the importance of intra- and extra-oral radiographs in forensic identification and age estimation
- Should be familiar with jurisprudence, ethics and understand the significance of dental records with respect to law

PAEDIATRIC & PREVENTIVE DENTISTRY

- Able to instill a positive attitude and behaviour in children towards oral health and understand the principles of prevention and preventive dentistry right from birth to adolescence.
- Able to guide and counsel the parents in regards to various treatment modalities including different facets of preventive dentistry.
- Able to treat dental diseases occurring in child patient.
- Able to manage the physically and mentally challenged disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.

ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS

- Understand about normal growth and development of facial skeleton and dentition.
- Pinpoint aberrations in growth process both dental and skeletal and plan necessary treatment
- Diagnose the various malocclusion categories
- Able to motivate and explain to the patient (and parent) about the necessity of treatment
- Plan and execute preventive orthodontics (space maintainers or space regainers)
- Plan and execute interceptive orthodontics (habit breaking appliances)
- Manage treatment of simple malocclusion such as anterior spacing using removable appliances
- Handle delivery and activation of removable orthodontic appliances
- Diagnose and appropriately refer patients with complex malocclusion to the specialist

PERIODONTOLOGY

- Diagnose the patients periodontal problem, plan and perform appropriate periodontal treatment
- Competent to educate and motivate the patient
- Competent to perform thorough oral prophylaxis, subgingival scaling, root planning and minor periodontal surgical procedures
- Give proper post treatment instructions and do periodic recall and evaluation
- Familiar with concepts of osseointegration and basic surgical aspects of implantology

PROSTHODONTICS AND CROWN & BRIDGE

- Able to understand and use various dental materials
- Competent to carry out treatment of conventional complete and partial removable dentures and fabricate fixed partial dentures
- Able to carry out treatment of routine prosthodontic procedures.
- Familiar with the concept of osseointegration and the value of implant-supported Prosthodontic procedures

CONSERVATIVE DENTISTRY AND ENDODONTICS

- Competent to diagnose all carious lesions
- Competent to perform Class I and Class II cavities and their restoration with amalgam
- Restore class V and Class III cavities with glass ionomer cement
- Able to diagnose and appropriately treat pulpally involved teeth (pulp capping procedures)
- Able to perform RCT for anterior teeth
- Competent to carry out small composite restorations
- Understand the principles of aesthetic dental procedures

ORAL & MAXILLOFACIAL SURGERY

- Able to apply the knowledge gained in the basic medical and clinical subjects in the management of patients with surgical problems
- Able to diagnose, manage and treat patients with basic oral surgical problems
- Have a broad knowledge of maxillofacial surgery and oral implantology
- Should be familiar with legal, ethical and moral issues pertaining to the patient care and communication skills
- Should have acquired the skill to examine any patient with an oral surgical problem in an orderly manner
- Understand and practice the basic principles of asepsis and sterilisation
- Should be competent in the extraction of the teeth under both local and general anaesthesia
- Competent to carry out certain minor oral surgical procedure under LA liketrans-alveolar extraction, frenectomy, dento alveolar procedures, simple impaction, biopsy, etc.
- Competent to assess, prevent and manage common complications that arise during and after minor oral surgery
- Able to provide primary care and manage medical emergencies in the dental office
- Familiar with the management of major oral surgical problems and principles involved in the in-patient management

PUBLIC HEALTH DENTISTRY

- Apply the principles of health promotion and disease prevention
- Have knowledge of the organization and provision of health care in community and in the hospital service
- Have knowledge of the prevalence of common dental conditions in India.
- Have knowledge of community based preventive measures
- Have knowledge of the social, cultural and env. Factors which contribute to health or illness.
- Administer and hygiene instructions, topical fluoride therapy and fissure sealing.
- Educate patients concerning the aetiology and prevention of oral disease and encourage them to assure responsibility for their oral health.

MINIMUM WORKING HOURS FOR EACH SUBJECT OF STUDY
(B.D.S COURSE)

The following has been substituted in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India and the same is as under:-

Subjects	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
General Human Anatomy Including Embryology, Osteology and Histology.	100	175		275
General Human Physiology	120	60		180
Biochemistry	70	60		130
Dental Materials	80	240		320
Dental Anatomy Embryology, and Oral Histology	105	250		355
Dental Pharmacology & Therapeutics	70	20		90
General Pathology	55	55		110
Microbiology	65	50		115
General Medicine	60		9	150
General Surgery	60		90	150
Oral Pathology & Microbiology	145	130		275
Oral Medicine & Radiology	65		200	265
Paediatric & Preventive Dentistry	65		200	265
Orthodontics & dental orthopaedics	50		200	250
Periodontology	80		200	280
Oral & Maxillofacial Surgery	70		360	430
Conservative Dentistry & Endodontics	135	200	460	795
Prosthodontics & Crown & Bridge	135	300	460	895
Public Health Dentistry	60		290	350
Total	1590	1540	2550	5680

Note:

There should be a minimum of 240 teaching days every year consisting of 8 working hours including one hour of lunch break.

Subjects	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
General Human Anatomy Including Embryology, Osteology and Histology.	100	175		275
General Human Physiology	120	60		180
Biochemistry	70	60		130
Dental Materials	80	240		320
Dental Anatomy Embryology, and Oral Histology	105	250		355
Dental Pharmacology & Therapeutics	70	20		90
General Pathology Microbiology	55	55		110
	65	50		115
General Medicine	60		9	150
General Surgery	60		90	150
Oral Pathology & Microbiology	145	130		275
Oral Medicine & Radiology	65		170	235
Paediatric & Preventive Dentistry	65		170	235
Orthodontics & dental orthopaedics	50		170	220
Periodontology	80		170	250
Oral & Maxillofacial Surgery	70		270	340
Conservative Dentistry & Endodontics	135	200	370	705
Prosthodontics & Crown & Bridge	135	300	370	805
Public Health Dentistry including Lectures on Tobacco Control & Habit Cessation	60		200	260
Total	1590	1540	1989	5200

Note:

There should be a minimum of 240 teaching days each academic year consisting of 8 working hours, including one hour of lunch break.

Internship – 240x8 hours-1920 clinical hours

MINIMUM WORKING HOURS FOR EACH SUBJECT OF STUDY
(B.D.S COURSE)

I B.D.S

Subject	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
General Human Anatomy Including Embryology, Osteology and Histology	100	175		275
General Human Physiology	120	60		180
Biochemistry.	70	60		130
Dental Anatomy Embryology, and Oral Histology	105	250		355
Dental Materials	20	40		60
Pre clinical Prosthodontics & Crown & Bridge	-	100		100
Total	415	685		1100

II B.D.S

Subject	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
General & Dental Pharmacology and therapeutics	70	20		90
General Pathology	55	55		110
Microbiolog	65	50		115
Dental Materials	60	200		260
Oral Pathology and Oral Microbiology	25	50		75
Pre Clinical Prosthodontics & Crown & Bridge	25	200		225
Pre Clinical Conservative Dentistry	25	200		225
Total	325	775		1100

III B.D.S

Subject	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
General Medicine	60		90	150
General Surgery	60		90	150
Oral Pathology and Oral Microbiology	120	80		200
Oral Medicine and Radiology	20		70	90
Paediatric and Preventive Dentistry	20		70	90
Orthodontics & Dentofacial Orthopaedics	20		70	90
Periodontology	30		70	100
Oral & Maxillofacial Surgery.	20		70	90
Conservative Dentistry & Endodontics.	30		70	100
Prosthodontics and Crown & Bridge	30		70	100
Total	410		750	1160

IV B.D.S

The following has been substituted in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India and the same is as under:-

Subject	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
Oral Medicine and Radiology	45		130	175
Paediatric and Preventive Dentistry	45		130	175
Orthodontics & Dentofacial Orthopaedics	30		130	160
Periodontology	50		130	180
Oral & Maxillofacial Surgery.	20		90	110
Conservative Dentistry & Endodontics.	30		90	120
Prostodontics and Crown & Bridge	30		90	120
Public Health Dentistry	30		90	120
Total	280		880	1160

Subjects	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
Prosthodontics	80		300	380
Oral Medicine	45		100	145
Periodontics	50		100	150
Public Health	60		200	260
Conservative Dentistry	80		300	380
Oral Surgery	50		200	250
Orthodontics	30		100	130
Pedodontics	45		100	145
Total	440		1400	1840

Provided that nothing contained in the provision of this regulations or statue or rules, regulations or guidance or notifications of the concerned university, or any other law for the time being in force shall prevent any student pursuing his/her 4th year BDS Course who fails in any one or more subjects of 1st semester will carry over those subjects to the 2nd Semester and will appear in those subjects together with the subjects of the 2nd semester. A pass in all the eight subjects is mandatory for completion of the 4th BDS Course before undergoing internship programme.

The following teaching Hours as prescribed for "V BDS" Course has been deleted in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India.

V B.D.S

Subject	Lecture Hours	Practical Hours	Clinical Hours	Total Hours
Oral & Maxillofacial Surgery.	30		200	230

Conservative Dentistry & Endodontics.	50		300	350
Prostodontics and Crown & Bridge	50		300	350
Public Health Dentistry	30		200	230
Total	160		1000	1160

The following has been substituted only for Punjab and Andhra Pradesh in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India

Only 2007 batch (Punjab & Andhra Pradesh) will have to follow the existing 5th year only programme.

Thereafter this 3rd amendment will be applicable.

Provided the concerned University follows the proposed amendment.

Note:

The following footnote has been modified/deleted as under in terms of (3rd Amendment) notification published on **25th August,2011** in the Gazette of India:-

- * Behavioral Sciences Classes shall commence in 1st Year.
- * Forensic odontology shall be covered in the department of Oral pathology and Oral Medicine during 3rd Year.
- * Esthetic Dentistry shall be covered in the Departments of Conservative Dentistry and Prosthodontics during 4th & 5th Year.
- * Oral Implantology shall be covered in the Department of Maxillofacial Surgery, Prosthodontics & Crown & Bridge and Periodontology during 4th & 5th Years.
- * Ethics and dental jurisprudence shall be covered in Public Health Dentistry in 4th and 5th years.
- * Electives / Research work should be encouraged during the 5th Year lasting for a period of atleast one month to be spent in a different dental institution in India / overseas.
- ~~* All the institutions shall compulsorily make arrangements for Comprehensive oral health care training for atleast 3 months during 5th Year. The department of Public Health Dentistry may be utilised in case, the institution does not have separate department for this purpose. Qualified faculty members from the departments of Prosthodontics, Conservative and periodontics should guide the students along with faculty of Public Health Dentistry Department.~~
- * The minimum working hours indicated each year of study does not include one month mid year vacation and one month of university examination.

It is the prerogative of the Dental Council of India to conduct inspections, at any of the colleges, at any time during the calendar year for inspecting whether the colleges are following the internship norms as laid down by DCI.

RECOMMENDED BOOKS

1. **Human Anatomy, Embryology, Histology & Medical Genetics**
 1. SNELL (Richard S.) Clinical Anatomy for Medical Students, Ed. 5, Little Brown & company, Boston.
 2. RJ LAST'S Anatomy – McMinn, 9th edition.
 3. ROMANES(G.J.) Cunningham Manual of Practical Anatomy : Head & Neck & Brain Ed.15.Vol.III, Oxford Medical publication.
 4. WHEATER,BURKITT & DANIELS, Functional Histology, Ed. 2, Churchill Livingstone.
 5. SADLER , LANGMAN'S, Medical Embryology, Ed. 6.
 6. JAMES E ANDERSON, Grant's Atlas of Anatomy. Williams & Wilkins.
 7. WILLIAMS, Gray's Anatomy, Ed.38. ,Churchill Livingstone.
 8. EMERY,Medical Genetics.
2. **Physiology**
 1. Guyton; Text book of Physiology, 9th edition.
 2. Ganong; Review of Medical Physiology, 19th edition
 3. Vander; Human physiology, 5th edition
 4. Choudhari; Concise Medical Physiology, 2nd edition
 5. Chatterjee; Human Physiology, 10th edition
 6. A.K. Jain; Human Physiology for BDS students, 1st edition
 7. Berne & Levey; Physiology, 2nd edition
 8. West-Best & Taylor's, Physiological basis of Medical Practise, 11th edition

EXPERIMENTAL PHYSIOLOGY:

1. Rannade; Practical Physiology, 4th edition
2. Ghai; a text book of practical physiology
3. Hutchison's; Clinical Methods, 20th edition

3. Biochemistry

1. Concise text book of Biochemistry (3rd edition) 2001, T.N. Pattabiraman
2. Nutritional Biochemistry 1995, S. Ramakrishnan and S.V. Rao
3. Lecture notes in Biochemistry 1984, J.K. Kandlish

REFERENCE BOOKS:

1. Text book of Biochemistry with clinical correlations 1997, T.N. Devlin
2. Harper's Biochemistry, 1996., R.K. Murray et.al
Basic and applied Dental Biochemistry, 1979, R.A.D. Williams & J.C.Elliot

4. Dental Anatomy, Embryology and Oral Histology

1. Orban's Oral Histology & Embryology - S.N. Bhaskar
2. Oral Development & Histology - James & Avery
3. Wheeler's Dental Anatomy, Physiology & Occlusion - Major M. Ash
4. Dental Anatomy - its relevance to dentistry - Woelfel & Scheid
5. Applied Physiology of the mouth - Lavelle
6. Physiology & Biochemistry of the mouth - Jenkins

5. General Pathology

1. Robbins – Pathologic Basis of Disease Cotran, Kumar, Robbins
2. Anderson's Pathology Vol 1 & 2 Editors – Ivan Damjanov & James Linder
3. Wintrobe's clinical Haematology Lee, Bithell, Foerster, Athens, Lukens

6. Microbiology

1. Text book of Microbiology – R.Ananthanarayan & C.K.Jayaram Paniker.
2. Medical Microbiology – David Greenwood et al.
3. Microbiology – Prescott, et al.
4. Microbiology – Bernard D. Davis , et al.
5. Clinical & Pathogenic Microbiology – Barbara J Howard, et al.
6. Mechanisms of Microbial diseases – Moselio Schaechter, et al.
7. Immunology an Introduction – Tizard
8. Immunology 3rd edition – Evan Roitt , et al.

7. Dental Materials

1. Phillips Science of Dental Materials – 10th edn.- Kenneth J. Anusavice
2. Restorative Dental Materials - 10 edn. Robert G.Craig
3. Notes on Dental Materials - E.C. Combe
4. Prep. Manual for undergraduates – Dental Materials – Dr. M.S. Koudi & Dr. SanjayGouda B. Patil

8. General and dental pharmacology and therapeutics

1. R.S.Satoskar, Kale Bhandarkar's Pharmacology and Pharmacotherapeutics, 10th Edition, Bombay Popular Prakashan 1991.
2. Bertam G Katzung, Basic and Clinical pharmacology 6th ed. Appleton & Lange 1997
3. Lawrence D.R. Clinical Pharmacology 8th ed. Churchill Livingstone 1997
4. Satoskar R.S. & Bhandarkar S.D., Pharmacology and Pharmacotherapeutics part I & part ii, 13th Popular Prakashan Bombay 1993
5. Tripathi K.D., Essentials of Medical Pharmacology 4th ed Jaypee Brothers 1999.

9. General Medicine

Textbook of Medicine Davidson
Textbook of Medicine Hutchinson

10. General Surgery

Short practice of Surgery Baily & Love

11. Oral Pathology & Oral Microbiology

1. A Text Book of Oral Pathology Shafer, Hine & Levy
2. Oral Pathology - Clinical Pathologic correlations Regezi & Sciubba.
3. Oral Pathology Soames & Southam.
4. Oral Pathology in the Tropics Prabhu, Wilson, Johnson & Daftary

12. Public Health Dentistry

1. Dentistry Dental Practice and Community by David F. Striffler and Brain A. Burt, Edn. – 1983, W. B. Saunders Company
2. Principles of Dental Public Health by James Morse Dunning, IVth Edition, 1986, Harvard University Press.

3. Dental Public Health and Community Dentistry Ed by Anthony Jong Publication by The C. V. Mosby Company 1981
4. Community Oral Health-A system approach by Patricia P. Cormier and Joyce I. Levy published by Appleton-Century-Crofts/ New York, 1981
5. Community Dentistry-A problem oriented approach by P. C. Dental Hand book series Vol.8 by Stephen L. Silverman and Ames F. Tryon, Series editor-Alvin F. Gardner, PSG Publishing company Inc. Littleton Massachuseltts, 1980.
6. Dental Public Health- An Introduction to Community Dentistry. Edition by Geoffrey L. Slack and Brain Burt, Published by John Wriqth and sons Bristol, 1980
7. Oral Health Surveys- Basic Methods, 4th edition, 1997, published by W. H. O. Geneva available at the regional office New Delhi.
8. Preventive Medicine and Hygiene-By Maxcy and Rosenau, published by Appleton Century Crofts, 1986.
9. Preventive Dentistry-by J. O. Forrest published by John Wright and sons Bristol, 1980.
10. Preventive Dentistry by Murray, 1997.
11. Text Book of Preventive and Social Medicine by Park and park, 14th edition.
12. Community Dentistry by Dr. Soben Peter.
13. Introduction to Bio-statistics by B. K. Mahajan
14. Introduction to Statistical Methods by Grewal

13. Paediatric and Preventive Dentistry

1. Pediatric Dentistry (Infancy through Adolescences) – Pinkham.
2. Clinical Use of Fluorides – Stephen H. Wei.
3. Understanding of Dental Caries – Niki Foruk.
4. Handbook of Clinical Pedodontics – Kenneth. D.
5. Dentistry for the Child and Adolescence – Mc. Donald.
6. Pediatric Dentistry – Damle S. G.
7. Behaviour Management – Wright
8. Traumatic Injuries – Andreason.
9. Textbook of Pedodontics – Dr. Shobha Tandon

14. Oral Medicine and Radiology

- a) Oral Diagnosis, Oral Medicine & Oral Pathology
 1. Burkit – Oral Medicine – J.B. Lippincott Company
 2. Coleman – Principles of Oral Diagnosis – Mosby Year Book
 3. Jones – Oral Manifestations of Systemic Diseases – W.B. Saunders company
 4. Mitchell – Oral Diagnosis & Oral Medicine
 5. Kerr – Oral Diagnosis
 6. Miller – Oral Diagnosis & Treatment
 7. Hutchinson – clinical Methods
 8. Oral Pathology – Shafers
 9. Sonis.S.T., Fazio.R.C. and Fang.L - Principles and practice of Oral Medicine
- b) Oral Radiology
 1. White & Goaz – Oral Radiology – Mosby year Book
 2. Weahrman – Dental Radiology – C.V. Mosby Company
 3. Stafne – Oral Roentgenographic Diagnosis – W.B.Saunders Co.,
- c) Forensic Odontology
 1. Derek H.Clark – Practical Forensic Odontology - Butterworth-Heinemann (1992)
 2. C Michael Bowers, Gary Bell – Manual of Forensic Odontology - Forensic Pr (1995)

15. Orthodontics and Dentofacial Orthopedics

1. Contemporary Orthodontics William R. Proffit
2. Orthodontics For Dental Students White And Gardiner
3. Handbook Of Orthodontics Moyers
4. Orthodontics - Principles And Practice Graber
5. Design, Construction And Use Of Removable Orthodontic Appliances C. Philip Adams
6. Clinical Orthodontics: Vol1 & 2 Salzman

16. Oral and Maxillofacial Surgery

1. Impacted teeth; Alling John F & etal.
2. Principles of oral and maxillofacial surgery; Vol.1,2 & 3 Peterson LJ & etal.
3. Handbook of medical emergencies in the dental office, Malamed SF.
4. Killeys Fractures of the mandible; Banks P.
5. Killeys fractures of the middle 3rd of the facial skeleton; Banks P.
6. Killey and Kays outline of oral surgery – Part-1; Seward GR & etal
7. Essentials of safe dentistry for the medically compromised patients; Mc Carthy FM
8. Extraction of teeth;Howe, GL
9. Minor Oral Surgery; Howe.GL

17. Prosthodontics, Crown & Bridge

1. Syllabus of Complete denture by – Charles M. Heartwell Jr. and Arthur O. Rahn.

2. Boucher's "Prosthodontic treatment for edentulous patients"
3. Essentials of complete denture prosthodontics by – Sheldon Winkler.
4. Maxillofacial prosthetics by – Willam R.Laney.
5. McCracken's Removable partial prosthodontics
6. Removable partial prosthodontics by – Ernest L. Miller and Joseph E. Grasso.

18. Periodontology

1. Glickman's Clinical Periodontology – Carranza

REFERENCE BOOKS :

1. Essentials of Periodontology and Periodontics – Torquil MacPhee
2. Contemporary Periodontics – Cohen
3. Periodontal therapy – Goldman
4. Orbans' Periodontics – Orban
5. Oral Health Survey – W.H.O.
6. Preventive Periodontics – Young and Stiffler
7. Public Health Dentistry – Slack
8. Advanced Periodontal Disease – John Prichard
9. Preventive Dentistry – Forrest
10. Clinical Periodontology – Jan Lindhe
11. Periodontics – Baer & Morris.

19. Conservative Dentistry and Endodontics

1. Esthetic guidelines for restorative dentistry; Scharer & others
2. Esthetics of anterior fixed prosthodontics; Chiche (GJ) & Pinault (Alain)
3. Esthetic & the treatment of facial form, Vol 28; Mc Namara (JA)

20. Aesthetic Dentistry

1. Aesthetic guidelines for restorative dentistry; Scharer & others
2. Esthetics of anterior fixed prosthodontics; Chiche (GJ) & Pinault (Alain)
3. Aesthetic & the treatment of facial form, Vol 28; Mc Namara (JA)

21. Forensic Odontology

1. Practical Forensic odontology – Derek Clark

22. Oral Implantology

1. Contemporary Implant Dentistry - Carl .E. Misch Mosby 1993 First Edition.
2. Osseointegration and Occlusal Rehabilitation Hobo S., Ichida .E. and Garcia L.T. Quintessence Publishing Company, 1989 First Edition.

23. Behaviourial Science

1. General psychology -- Hans Raj, Bhatia
2. Behavioural Sciences in Medical practice -- Manju Mehta

24. Ethics

1. Medical Ethics, Francis C.M., I Ed. 1993, Jaypee Brothers, New Delhi p. 189.

- Note: 1. Books titles will keep on adding in view of the latest advances in the Dental Sciences.
2. Standard Books from Indian Authors are also recommended.

LIST OF JOURNALS:

1. Journal of Dentistry
2. British Dental Journal
3. International Dental Journal
4. Dental Abstracts
5. Journal of American Dental Association
6. British Journal of Oral and Maxillofacial Surgery
7. Oral Surgery, Oral Pathology and Oral Medicine
8. Journal of Periodontology
9. Journal of Endodontics
10. American journal of Orthodontics and Dentofacial Orthopedics
11. Journal of Prosthetic Dentistry
12. Journal of Public Health Dentistry
13. Endodontics and Dental Traumatology
14. Journal of Dental Education
15. Dental Update
16. Journal of Dental Material

- Note : This is the minimum requirement. More journals both Indian and Foreign are recommended for imparting research oriented education.

INFRASTRUCTURE & FUNCTIONAL REQUIREMENTS

50 ADMISSIONS

General Facilities:

1. **Administrative block:** 2000 sq.ft.
consisting of –
 - (a) Dean's room,
 - (b) Administrative officer's room
 - (c) Meeting room
 - (d) Office
 - (e) Office stores
 - (f) Pantry etc.
2. **Library:** 4500 sq.ft.
consisting of –
 - (a) Reception & waiting
 - (b) Property counter
 - (c) Issue counter
 - (d) Photocopying area
 - (e) Reading room to accommodate 50% of total students strength.
 - (f) Postgraduates & staff reading room
 - (g) Journal room
 - (h) Audio-visual room
 - (i) Chief librarian room
 - (j) Stores and stocking area.
3. **Lecture halls – 4 :** 3200 sq.ft.
Each hall to accommodate 10% more of admission strength with proper seating arrangement, blackboard, microphone and facilities for slide, overhead and multi-media projection.
4. **Central stores:** 400 sq.ft.
With proper storing facilities like racks, refrigerator, preferably compact storage systems.
5. **Maintenance room:** 600 sq.ft.
Equipped with proper facilities to maintain and repair dental chairs and units and various other equipments in the college and hospital.
6. **Photography and artist room:** 250 sq.ft.
With proper studio facilities for clinical photography, developing, preparation of slides, charts, models etc.
7. **Medical stores:** 200 sq.ft.
Stocked with all the necessary drugs usually prescribed in a dental hospital.
8. **Aminities area:** 2000 sq.ft.
 - (a) Boys' and Girls' locker rooms
 - (b) Boys' and Girls' common rooms
 - (c) Common room for non-teaching staff
 - (d) Common room for teaching staff
 - (e) Change room for men
 - (f) Change room for women
9. **Compressor and room for gas plant:** 200 sq.ft.
Adequate to accommodate required capacity compressors, gas cylinders etc.
10. **Pollution control measures:**
All the dental institutions shall take adequate pollution control measures by providing incineration plant, sewage water treatment plant, landscaping of the campus etc.
11. **Cafeteria:** 800 sq.ft.
With accommodation for 100 people with kitchen, stores, washing area etc.
12. **Examination hall:** 1800 sq.ft.
A separate hall for university and other examination furnished with chairs and individual tables to accommodate 125 students at a time.
13. **Hostels:**
The hostel accommodation shall be provided based on number of admissions for all the boys and girls in the Dental College campus itself. The accommodation may be increased in a phased manner over a period of 4 years.
14. **Staff quarters:**
All the staff members, teaching and non-teaching working in the institution shall be provided adequate accommodation in the 5 acres land earmarked for the college. The staff quarters may be built in a phased manner over a period of 4 years.

15. Play ground:

There shall be facilities for both indoor and out-door games in the premises.

Against Serial No. 17. Auditorium, the word serial No. 17 has been deleted and substituted by 16, in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

16.17. Auditorium:

To accommodate at least 400 people consisting of –

Proper seating arrangements, reception counter, green rooms, lobby, fitted with sound system, slide and multimedia presentation facility.

Against Serial No. 18. Laboratories, the word serial No. 18 has been deleted and substituted by 17, in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

17.18. Laboratories :**I. Dental subjects:**

- (a) Pre-clinical Prosthodontics and dental material lab – 1500 sq.ft.
- (b) Pre-clinical conservative lab – 1300 sq.ft.
- (c) Oral biology and oral pathology lab – 1300 sq.ft.
- (d) Laboratory for orthodontics and pedodontics – 800 sq.ft.

II. Medical subjects: (only for independent dental colleges): 4500 sq.ft.

- (a) Anatomy dissection hall with storage for cadavers, osteology, demonstration room etc. Area– 1500 sq.ft.

The following have been added in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

- (b) One laboratory for physiology and pathology and microbiology with stores and preparation rooms for individual subjects attached to it. Area–1500 sq.ft. **for each subject**
- (c) Laboratory for biochemistry and pharmacology with store and preparation rooms separately for both subjects. Area–1500 sq.ft. **for each subject**

III. Clinical:

- (a) Prosthodontics-Plaster room
Polymers room
Wax room
Casting laboratory
Ceramic lab 1300 sq.ft.
- (b) Conservative Dentistry – Plaster room
Casting & ceramic laboratories ... 300 sq.ft.
- (c) Oral pathology for histopathology ... 400 sq.ft.
- (d) Haematology and clinical biochemistry: a laboratory for routine blood and biochemical investigation and urine analysis ... 200 sq.ft.

Against Serial No. 16. Distilled Water Plant, the word serial No. 16 has been deleted and substituted by 18, in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

18. 16-Distilled Water Plant

The following have been added after the substituted Serial No. 18 Distilled Water Plant, in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

“Note: Minimum built up area of the dental college building other than Hostel and Staff Quarters should not be less than 30,000 sq. ft. in 3rd Year as per DCI Regulations, 2006.”

100 ADMISSIONS**General:**

1. **Administrative block:** 3000 sq.ft.
consisting of –
 - (e) Dean’s room,
 - (f) Administrative officer’s room
 - (g) Meeting room
 - (h) Office

- (i) Office stores
 - (j) Pantry etc.
2. **Library:** 8000 sq.ft.
consisting of –
 - (a) Reception & waitingProperty counter
 - (b) Issue counter
 - (c) Photocopying area
 - (d) Reading room to accommodate 50% of total students strength.
 - (e) Postgraduates & staff reading room
 - (f) Journal room
 - (g) Audio-visual room
 - (h) Chief librarian room
 - (i) Stores and stocking area.
 - (j) E-Consortium provision to be provided in the College Library connected with the National Medical Library.
 3. **Lecture halls – 4 :** 6400 sq.ft.
Each hall to accommodate 10% more of admission strength with proper seating arrangement, blackboard, microphone and facilities for slide, overhead and multi-media projection.
 4. **Central stores:** 800 sq.ft.
With proper storing facilities like racks, refrigerator, preferably compact storage systems.
 5. **Maintenance room:** 1000 sq.ft.
Equipped with proper facilities to maintain and repair dental chairs and units and various other equipments in the college and hospital.
 6. **Photography and artist room:** 400 sq.ft.
With proper studio facilities for clinical photography, developing, preparation of slides, charts, models etc.
 7. **Medical stores:** 300 sq.ft.
Stocked with all the necessary drugs usually prescribed in a dental hospital.
 8. **Aminities area:** 3200 sq.ft.
 - (a) Boys' and Girls' locker rooms
 - (b) Boys' and Girls' common rooms
 - (c) Common room for non-teaching staff
 - (d) Common room for teaching staff
 - (e) Change room for men
 - (f) Change room for women
 9. **Compressor and room for gas plant:** 300 sq.ft.
Adequate to accommodate required capacity compressors, gas cylinders etc.
 10. **Pollution control measures:**
All the dental institutions shall take adequate pollution control measures by providing incernation plant, sewage water treatment plant, landscaping of the campus etc.
 11. **Cafeteria:** 1500 sq.ft.
With accommodation for 100 people with kitchen, stores, washing area etc.
 12. **Examination hall:** 3600 sq.ft.
A separate hall for university and other examination furnished with chairs and individual tables to accommodate 250 students at a time.
 13. **Hostels:**
The hostel accommodation shall be provided based on number of admissions for all the boys and girls in the Dental College campus itself. The accommodation may be increased in a phased manner over a period of 4 years.
 14. **Staff quarters:**
All the staff members, teaching and non-teaching working in the institution shall be provided adequate accommodation in the 5 acres land earmarked for the college. The staff quarters may be built in a phased manner over a period of 4 years.
 15. **Play ground:**
There shall be facilities for both indoor and out-door games in the premises.
 16. **Auditorium:**
To accommodate at least 500 people consisting of –
Proper seating arrangements, reception counter, green rooms, lobby, fitted with sound system, slide and multimedia presentation facility.
 17. **Laboratories:**

I. Dental subjects:

- (a) Pre-clinical Prosthodontics and dental material lab – 3000 sq.ft.
- (b) Pre-clinical conservative lab – 2500 sq.ft.
- (c) Oral biology and oral pathology lab – 2500 sq.ft.
- (d) Laboratory for orthodontics and pedodontics – 1500 sq.ft.

II. Medical subjects: (only for independent dental colleges):7500 sq.ft.

- (a) Anatomy dissection hall with storage for cadavers, osteology, demonstration room etc. Area – 2500 sq.ft.

The following have been added in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

- (b) One laboratory for physiology and pathology and microbiology with stores and preparation rooms for individual subjects attached to it. Area – 2500 sq.ft. **for each subject**
- (c) Laboratory for biochemistry and pharmacology with store and preparation rooms separately for both subjects – 2500 sq.ft. **for each subject**

III. Clinical:

- (a) Prosthodontics - Plaster room
Polymers room
Wax room
Casting laboratory
Ceramic lab 2500 sq.ft.
- (b) Conservative Dentistry – Plaster room
Casting & ceramic laboratories ... 600 sq.ft.
- (c) Oral pathology for histopathology ... 600 sq.ft.
- (d) Haematology and clinical biochemistry: a laboratory for routine blood and biochemical investigation and urine analysis ... 300 sq.ft.

18. **Distilled Water Plant**

The following have been added after the Serial No. 18. Distilled Water Plant, in terms of (1st Amendment) notification published on 7th January,2008 in the Gazette of India.

“Note: Minimum built up are of the dental college building other than Hostels and Staff Quarters should not be less than 60,000 sq. ft. in 1st Year and 1,00,000 sq. ft. in 3rd Year as per DCI Regulations, 2006.”

TEACHING AIDS:

Audiovisual – Adequate number of overhead projectors, slide projectors shall be provided in the lecture halls and seminar rooms attached to various departments. It is also desirable to have an LCD or DLP projector for multimedia presentations.

Computers – The administrative area, clinics, stores and library shall be provided with computers & printers preferably interconnected for better co-ordination.

General Hospital:

The applicant owns and manages a General Hospital of not less than 100 beds as per DCI (Establishment of New Dental Colleges, Opening of New or Higher Course of Study or Training and Increase of Admission Capacity in Dental Colleges) Regulations, 2006 with necessary infrastructure facilities including teaching pre-clinical, para-clinical and allied medical sciences in the campus of the proposed dental college,

or

The proposed dental college is located in the proximity of a Government Medical College or a Medical College recognised by the Medical Council of India and an undertaking of the said Medical College to the effect that it would facilitate training to the students of the proposed dental college in the subjects of Medicine, Surgery and Allied Medical Sciences has been obtained,

or

Where no Medical College is available in the proximity of the proposed dental college, the proposed dental college gets itself tied up at least for 5 years with a Government General Hospital having a provision of at least 100 beds and located within a radius of 10 K.M. of the proposed dental college and the tie-up is extendable till it has its own 100 bedded hospital in the same premises. In such cases, the applicant shall produce evidence that necessary infrastructure facilities including teaching pre-clinical, para-clinical and allied medical sciences are owned by the proposed dental college itself.

A 100 bedded teaching hospital should have a definite out patient departments, in-patient services and 24 hours emergency and critical care services. It should have a medical programme as under:-

I. MEDICAL PROGRAMME

A) Medical & Allied Disciplines

- General Medicine
- General Surgery
- Obstetrics and Gynaecology
- Orthopaedics
- Critical Medicine
- Emergency Medicine
- Otorhino Laryngology
- Paediatrics
- Pathology
- Anaesthesiology
- Blood Bank & Transfusion
- Community Medicine
- Hospital Administration

B) Nursing, Paramedical, Technical and Allied Services

- Dielities and Therapeutics
- Drugs & Pharmacy
- ECG Technology
- Imaging Technology
- Central Sterile Supply department
- Physiotherapy
- Medical Record Sections

C) Engineering & Allied Services

- Fire protection
- Electrical
- Air conditioning/Central heating
- Medical Gases
- Refrigeration
- Central Workshop
- Ambulance Service
- Water Supply
- Sewage Treatment/Disposal and waste disposal cell

D) Administration and Ancillary Services

- General Administration
- Material Management
- Medical Social Worker
- PRO
- Library
- Security

II. FUNCTIONAL PROGRAMME

A) Site

Site should be within 10 k.m. radius of the teaching block of Dental College – a site with high degree of sensitivity to outside noise should not be present. It should be accessible by transport and building should be well ventilated.

B) Category wise Bed Distribution

(i)	General Ward – Medical including allied specialities	30 beds
(ii)	General Ward – Surgical including allied specialities.	30 beds
(iii)	Private Ward (A/C & Non A/C)	9 beds
(iv)	Maternity Ward	15 beds
(v)	Pediatric Ward	6 beds

The intensive care services for medical/surgical intensive care with bed complement of 4 beds (4% of bed strength).

The critical care services for medical/surgical emergencies with bed complement of 6 beds (6% of bed strength).

III. AREA REQUIREMENTS (AS PER BUREAU OF INDIAN STANDARDS)

- Covered area requirement is 20 sq. m. / bed
- Out of the total covered area
- 40% inpatient services
- 35% outpatient services

- 25% department and supportive services

IV. MAN POWER REQUIREMENTS

The consultants in the various departments should have atleast 8 years teaching experience after post graduation.

MEDICAL STAFF

- General Surgery	-	2
- General Medicine	-	2
- Obstetrics & Gynaecology	-	2
- ENT	-	2
- Paediatrics	-	2
- Anaesthesia	-	2
- Orthopaedics	-	2
- Pharmacologist	-	1
- Radiologist	-	1
- G. DMO	-	1
- Community Medicine	-	1
- Hospital Administration	-	1

NURSING STAFF

- Matron	-	1
- Sister in-charge	-	6
- O. T. Nurses	-	6
- General Nurses	-	20
- Labour Room Nurses	-	4

HEALTH STAFF

- Female Health Assistant	-	1
- Extension Educator	-	1
- Paramedical Staff		
- Lab Technician/Blood Bank Tech.-	-	4
- ECG Technician	-	1
- Pharmacist	-	4
- Sr. Radiographer	-	1
- CSSD	-	2
- Medical Records	-	1

ENGINEERING STAFF

- Civil	-	2
- Mechanical	-	2
- Electrical	-	2
- Engineering aid	-	4

OTHER STAFF

- Drivers	-	2
- Carpenter	-	1
- Cooks	-	2
- Barber	-	1
- Class IV including chowkidars	-	55

ADMINISTRATIVE STAFF

- Office Superintendent	-	1
- Head Clerk	-	1
- Cashier	-	1
- Stenographer	-	1
- U.D.C.	-	2
- L.D.C.	-	4

Satellite Dental Clinics:

All the dental colleges are encouraged to establish atleast one or two satellite centers with all the infrastructural facilities within 50 kms distance to train and expose students in community oral health care programmes.

Dental Hospital:

The following are the clinical departments in a Dental College.

1. Oral Medicine and Radiology
2. Oral Pathology and Oral Microbiology
3. Public Health Dentistry.
4. Paediatric and Preventive Dentistry
5. Orthodontics & Dental orthopaedics
6. Periodontology
7. Conservative Dentistry and Endodontics.

8. Oral & Maxillofacial Surgery.
9. Prosthodontics and Crown & Bridge

Out patients:

Since dentistry being more clinical oriented speciality, the Council desires that all the institutions make efforts to have adequate clinical material for satisfactory training of undergraduate students. There shall be atleast 75 to 100 new patients on an average each day in colleges with 50 admissions and 100 – 150 new patients in colleges with 100 admissions.

Each of the clinical departments should have the following functional areas –

50 ADMISSIONS:

- (a) Reception and waiting room – 200 sq.ft.
- (b) Undergraduate clinic adequate to accommodate the prescribed number of dental chairs and units.
- (c) Sterilization room where central sterilization facilities are not provided – 150 sq.ft.
- (d) Small department stores – 100 sq.ft.
- (e) Seminar room – 200 sq.ft.

Staff rooms :

1. H.O.Ds room - 180 sq.ft.
2. Readers' room - 150 sq.ft.
3. Lecturers' room - 250 sq.ft.

Note: Departments having postgraduate training should provide additional functional requirements as per MDS regulations.

Main reception and dental records section: 800 sq.ft.

100 ADMISSIONS:

- (a) Reception and waiting room – 300 sq.ft.
- (b) Undergraduate clinic adequate to accommodate the prescribed number of dental chairs and units.
- (c) Sterilization room where central sterilization facilities are not provided – 200 sq.ft.
- (d) Small department stores – 100 sq.ft.
- (e) Seminar room – 400 sq.ft.

Staff rooms:

1. H.O.Ds room - 180 sq.ft.
2. Readers' room - 150 sq.ft.
3. Lecturers' room - 300 sq.ft.

Note: Departments having postgraduate training should provide additional functional requirements as per MDS regulations.

Main reception and dental records section: 1500 sq.ft.

There should be adequate area for patients reception, waiting, registration, storage of patients records etc.

Requirement of dental chairs and units:

For 50 admissions - 100
For 100 admissions - 200

Note: Requirement of Dental Chairs for 1st and 2nd BDS will be as per DCI (Establishment of New Dental Colleges, Opening of New or Higher Course of Study or Training and Increase of Admission Capacity in Dental Colleges) Regulations, 2006.

Distribution of dental chairs and units in various departments (Specification is mentioned in the DCI Regulations 2006):

Department	50 admissions	100 admissions
Oral Medicine & Radiology	06	12
Oral Pathology & Oral Microbiology	01	02
Public Health Dentistry	08	16
Paediatrics and Preventive Dentistry	10	20
Orthodontics	09	18
Periodontology	17	34
Conservative Dentistry and Endodontics	17	34
Oral & Maxillofacial Surgery	15	30
Prosthodontics and Crown & Bridge	17	34
	-----	-----
	100	200
Total approximate area for U.G. clinics (50 admissions) -		12,500 sq.ft.
Total approximate area for U.G. clinics (100 admissions) -		25,000 sq.ft.

EQUIPMENT REQUIREMENTS**Department : ORAL MEDICINE AND RADIOLOGY**

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
	(Space allocation for each Dental chair 100 Sq Ft in all the Departments)		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air Ventury Suction, X-Ray viewer, 3 way syringe, instrument tray, Dental Operator's Stool with height adjustment.	6	12
Panoramic X-Ray with Cephalometric	Preferably digital	1	1
Intra Oral X-ray Unit	70 KV , 8mA, high frequency preferably Digital timer	2	3
Pulp testers	Digital	2	3
Automatic periapical X-ray Developer		1	1
Automatic Panoramic with Cephalometric X-ray Developer		1	1
X-ray viewer	For Panoramic and Cephalometric films	2	2
Radiovisiography	Digital Intra X-ray System with one Sensor and Software	1	1
General X-ray Unit		1	1
Ortho Pantmograph	preferably digital	1	1
Automatic Developers/ <i>Dark Room</i>		1	2
Lead aprons		2	2
Lead Gloves		1	1
X-ray Hangers		6	6
X-ray viewers		2	2
Diagnostic Kits	Mouth mirror, dental probe, college tweezers	20	40
<i>Lead Screen</i>		1	1
<i>Biopsy Kit</i>		1	1
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2
Computers	Minimum Pentium -IV	1	1
Intra Oral Camera	With High resolution	1	1
Needle Burner with Syringe Cutter		2	2

Department : ORAL PATHOLOGY AND ORAL MICROBIOLOGY

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
Dental Chairs and Units	With shadowless lamp, spittoon, 3 way syringe, instrument tray and suction	1	2
Microscopes		20	40
Microtome		1	1
Wax bath		1	1
Water bath		1	1
Knife sharpner		1	1
Hot plate		1	1
Spencer knife		1	1

Department : PUBLIC HEALTH DENTISTRY

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air ventury suction, micromotor control light cure 3 way syringe, X-ray viewer, instrument tray Dental Operators stool with height adjustment With shadowless lamp, spittoon, 3 way	8	16

	syringe, instrument tray and suction, micromotor, airtor, light cure		
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters.	1	2
Ultrasonic cleaner	Minimum capacity 13 liters with mesh bucket with digital timer	1	2
Needle burner with syringe cutter		2	4
MOBILE CLINIC			
Mobile dental van	Mobile dental van with two dental chairs with all the attachments and adequate sitting space for 15 to 20 people		
Dental chair with unit	Hydraulically operated with spittoon attachment, halogen light with 2 intensity, air ventury suction, airtor, micromotor, 3 way-scaler and light cure, x-ray viewer, instrument tray, operating stool.	2	
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters.	1	1
Intraoral x-ray	Portable, 70 KV, 8mA	1	1
Glass bead sterilizers		1	1
Compressor	1.25HP	1	1
Metal Cabinet	With wash basin	1	1
Portable dental chair	Suitcase unit with airtor, micromotor, scaler and compressor 0.25HP	2	2
Stabilizer	4KV	1	1
Generator	4KV	1	1
Water tank	400ltrs	1	1
Oxygen cylinder		1	1
Public address system		1	1
TV and video cassette player		1	1
Demonstration models			

Department : PAEDIATRIC AND PREVENTIVE DENTISTRY

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power motorized evacuation system, Air rotor with miniature, Airtor HPS, Micro motor with miniature contrangle Hand piece, 3 way syringe, ultrasonic sealer with 3 tips, Light cure unit LED based heat free, X-ray viewer, instrument tray Dental Operator's stool with height adjustment (Pedo chair preferred)	10	20
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters.	1	2
Ultrasonic cleaner	Minimum capacity 13 liters with mesh bucket with digital timer	1	2
Needle Burner with syringe cutter		2	3
Amalgamator		1	1
Pulp Tester-Digital		1	1
Rubber dam kit for pedo		3	5
Apex locator		1	1
Endo motor	With torque control HPs	1	1
Injectable gutta percha with condensation		1	1
Radiovisiography	Digital intra X-ray system with pedo sensor and software	1	1
Intra Oral Camera	With high resolution	1	1
Scaling instruments		5	10
Restorative instruments		5	10
Extraction forceps		5	10
Intra-oral X-ray		1	1
Automatic Developer		1	1
Computer	Minimum Pentium IV	1	1
PEDO LAB			

Plaster dispenser	One each for plaster and stone plaster	2	2
Model Trimmer	With diamond disc	1	1
Model Trimer	Double disc one diamond and one carborandum disc	1	1
Welder with soldering attachments		1	1
Vibrator		2	2
Lab micro motor	Heavy duty with Hps	2	3
Dental Lathe		1	1
Model Trimmer		1	1
Steam cleaner		1	1
Pressure moulding machine		1	1
Carborandum Disc		1	1
Diamond disc		1	1

Department : ORTHODONTICS

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air ventury suction, micromotor control light cure 3 way syringe, X-ray viewer, instrument tray Dental Operators stool with height adjustment	9	18
Unit mount scaler		3	5
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2
Ultrasonic Cleaner	Minimum capacity 13 liters with mesh bucket with digital timer	1	2
ORTHO LAB			
Plaster dispenser	One each for plaster and stone plaster	2	2
Vibrator		2	2
Model Trimmer		1	2
Micromotor -	heavy duty	2	4
Lathe		1	2
X-ray viewers		2	2
OPG with cephalostat	If available in radiology its is adequate.	1	1
Welders		2	4
Blue Torch		1	1
Base Formers		2	4
Typodont		2	4
Set of Pliers		5	10
Welder with soldering attachments		1	1
Hydro solder		1	1
Typhodont articulator	With metal teeth wax rim of Class I, II, III	3	4
Pressure moulding machine		1	1

Department : PERIODONTOLOGY

NAME	SPECIFICATION	QUANTITY	
		50 Admns.	100 Admns.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, With shadowless lamp, spittoon, 3 way syringe, ultrasonic sealer with 3 tips, X-ray viewer, instrument tray dental operator's stool with height adjustment	17	34
	Note: Atleast 25% of the units should have the Airpolisher.		
Scaling instrument sets		5	10
Surgical instrument sets		3	6
Autoclave	Having wet and dry cycle, which can achieve	2	3

	135°C with minimum capacity of 20 liters		
Ultrasonic scaler	Minimum capacity 13 liters with mesh bucket	1	2
Electro surgical cautery		1	1
Needle burner with syringe cutter		4	6
LASER	Soft tissue laser	1	1
Surgical motor with physio dispenser		1	1

Department : CONSERVATIVE DENTISTRY AND ENDODONTICS

NAME	SPECIFICATION	QUANTITY	
		50 Adms.	100 Adms.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, With shadowless lamp, spittoon, 3 way syringe, ultrasonic sealer with 3 tips, X-ray viewer, instrument tray dental operator's stool with height adjustment	17	34
Rubber dam kits		4	6
Restorative instruments kits		5	10
R.C.T. instrument kits		5	10
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	2	3
Ultrasonic cleaner	Minimum capacity 13 liters with mesh bucket	1	2
Needle burner with syringe cutter		3	4
Amalgamator	With auto proportion, auto dispenser	2	3
Rubber dam kits		4	6
Pulp Tester-Digital		2	4
Apex Locator		1	2
Glass bead sterilizers		4	6
Plaster dispensers		2	2
Vibrator		1	2
Ceramic Unit		1	1
Casting machine		1	1
Intra-oral X-ray Unit	Proper radiation safety	1	1
Automatic Developer		1	1
Radiovisiography	RVG with Computer	1	1
Endo motor	With torque control Hps	1	1
Bleaching unit		1	1
Magnification loops		1	2
Injectable gutta percha		1	2
PHANTOM LAB UNIT	Phantom Table fitted with Halogen Operating Light Phantom Head body type neck joint for all the movement, TMJ movement. Modular with Air rotor, Micro motor with contra angle Hps, 3-way syringe, jaw with ivorine teeth, preferably soft gingival, dental operator's stool (not to use extracted or cadaver teeth).	30	60

CHEMICAL LABORATORY

Plaster Dispenser	One each for plaster and stone plaster	2	2
Model Trimmer	Carborandum disc	1	1
	Diamond disc	1	1
Lathe	Heavy Duty	1	2
Lab Micromotor	With heavy duty handpiece	2	3
Ultrasonic cleaner	Minimum capacity 5 liters	1	1
Spindle Grinder		1	1
Vibrator		1	2
Burnout furnace		1	1
Porcelain furnace		1	1

Sandblasting Machine		1	1
Lab Airrotor		1	1
Pindex System		1	1
Circular saw		1	1
Vacuum mixer		1	1
Pneumatic chisel		1	1
Casting machine	Motor cast/induction casting preferred	1	1

Department : ORAL & MAXILLOFACIAL SURGERY**A) EXODONTIA**

NAME	SPECIFICATION	QUANTITY	
		50 Adms.	100 Adms.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air ventury suction, X-ray viewer, 3 way syringe, instrument tray Dental Operator's stool and height adjustment and suction, Micromotor/ Airotor	15	30
Autoclaves	Front loading Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	2	2
Ultrasonic Cleaner	Minimum capacity 13 liters with mesh bucket	1	2
Needle burner with syringe cutter		4	6
Extraction forceps sets	Complete set	10	20
Dental elevators	Complete set	5	10
Minor Oral surgery kits		3	6
Emergency drugs tray		1	1
Oxygen cylinder with mask		1	1
X-ray viewers		2	2
Computer	Minimum Pentium IV	1	1

B) MINOR SURGERY

Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, 3 way syringe, instrument tray Dental Operator's stool and height adjustment and suction,	3	5
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Department : PROSTHODONTICS AND CROWN & BRIDGE

NAME	SPECIFICATION	QUANTITY	
		50 Adms.	100 Adms.
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, 3 way syringe, ultrasonic sealer with 3 tips, Light cure unit, instrument tray and suction, Dental operator stool with height adjustment Electrically operated, Spittoon attachment, Halogen Light with 2 intensity , Air ventury suction, instrument tray, Dental operator stool with height adjustment	17	34
Semi adjustable articulator	With face bow	2	2
Extra oral/intra oral tracer		2	2
Dewaxing unit		1	2
Curing unit		1	2
Dental casting machine		1	1
Wax burnout furnace		1	1
Pre heating furnace		1	1
Surveying unit		1	2
Heavy duty hand piece	Lab micromotors	3	4

Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2
Needle burner with syringe cutter		1	2
Plaster Dispenser	One each for plaster and stone plaster	2	2
Model Trimmer with Carborandum Disc		1	1
Model Trimmer with Diamond Disc		1	2
Acrylizer		2	3
Lathe		1	2
Flask press		4	4
Deflasking unit		4	4
Dewaxing unit		2	3
Hydraulic Press		2	3
Mechanical Press		1	2
Vacuum mixing machine		1	1
Lab Micro motor	With heavy duty handpiece	3	4
Curing pressure pot		1	1
Porcelain furnace		1	2
Vibrator		1	2
Sand blasting unit		2	2
Ultrasonic cleaner		1	2
Model Trimmer		2	4
Hot water sterilizer		1	2
Geyser	Compound bath	1	2
H.P. grinder with suction		2	3
Heavy duty lathe		2	2
Phantom heads		50	50
Pre-clinical working tables	Gas connection & bunsen burner	50	100

CERAMIC AND CAST PARTIAL LABORATORY

NAME	SPECIFICATIONS	50 ADMN	100 ADMN
Plaster Dispensor	One each for plaster and stone plaster	2	2
Duplicator		1	1
Pindex System		1	1
Circular saw		1	1
Burn out furnace		1	1
Sandblasting machine	With two containers	1	1
Electro-polisher		1	1
Model Trimmer with Carborandum disc		1	1
Model Trimmer with Diamond disc		1	1
Induction casting machine		1	1
Programmable porcelain furnace with vacuum pump with instrument kit and material kit		1	1
Spot welder with soldering, attachment of cable		1	1
Vacuum mixing machine		1	1
Steam Cleaner		1	1
Spindle Grinder 24,000 RPM with vacuum suction		1	1
Wax heater		1	1
Wax carver		1	1
Curing pressure pot		1	1
Milling machine		1	1
Heavy duty lathe with suction		1	1
Preheating furnace		1	1
Palatal trimmer		1	1
Ultrasonic cleaner	5 liters capacity	1	1
Composite curing unit		1	1
Micro surveyor		1	1
PRE-CLINICAL PROSTHETICS LABORATORY	Work table preferably complete stainless steel fitted with light, Bunsen burner, air	30	60

	blower, working stool. Adequate number of lab micro motor with attached hand piece	10	20
PLASTER ROOM FOR PRE-CLINICAL WORK			
Plaster dispenser	One each for plaster and stone plaster	2	2
Vibrator		2	2
Lathe		2	2
Model Trimmer		1	1
Carborandum Disc		1	1
Diamond disc		1	1

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 in a Dental Institution.

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

Readers: A BDS Degree of an Indian University or an equivalent qualification with Post-graduate qualification /Diplomate of National Board in the subject and with 4 year's teaching experience after post-graduation.

Lecturers: A recognised MDS Degree of an Indian University/Diplomate of National Board or an equivalent qualification.

Tutors A recognised BDS Degree of Indian University or an equivalent qualification with at least one year experience.

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

The requirement of medical teaching staff is to be as per DCI Regulations 2006

Qualification and Teaching Experience of the medical teaching staff will be as per MCI Regulations.

MINIMUM STAFFING PATTERN FOR UNDER GRADUATE DENTAL STUDIES FOR 50 ADMISSIONS
(As per DCI Regulations 2006)

Principal/Dean: - 1 (One post of Professor can be deleted in the under mentioned tabulation according to the subject of specialisation)

Each Dental Department should be headed by a Professor.

	I Year			II Year			III Year			Total Posts in position from the beginning of 3 rd year onwards		
	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor
	2*	2	10	3*	4	20	6*	11	30	6	11	30#
Prosthodontics and Crown & Bridge	1	1	-	1	2	-	1	2	-	1	2	-
Oral Pathology and Oral Microbiology	-	-	-	-	1	-	1	1	-	1	1	-
Conservative Dentistry and Endodontics	-	1	-	1	1	-	1	2	-	1	2	-
Oral & Maxillofacial Surgery	-	-	-	-	-	-	1	1	-	1	1	-
Periodontology	-	-	-	-	-	-	1	1	-	1	1	-
Orthodontics	-	-	-	-	-	-	1	1	-	1	1	-
Paediatric & Preventive Dentistry	-	-	-	-	-	-	-	1	-	-	1	-
Oral Medicine & Radiology	-	-	-	-	-	-	-	1	-	-	1	-
Public Health Dentistry	-	-	-	-	-	-	-	1	-	-	1	-
Dental Materials	-	-	-	-	-	-	-	-	-	-	-	-
Dental Anatomy, Embryology & Oral Histology	-	-	-	-	-	-	-	-	-	-	-	-

* Includes the Principal who can head any one of the six specialities.

25% MDS and 75% BDS.

MINIMUM STAFFING PATTERN FOR UNDER GRADUATE DENTAL STUDIES FOR 100 ADMISSIONS
(As per DCI Regulations 2006)

Each Dental Department should be headed by a Professor

	I Year			II Year			III Year			Total Posts in position from the beginning of 3 rd year onwards		
	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor	Prof.	Reader	Lecturer/ Tutor
	2*	3	16	4*	5	30	6*	13	40	6*	13	40#
Prosthodontics and Crown & Bridge	1	2	-	1	2	-	1	2	-	1	2	-
Oral Pathology and Oral Microbiology	-	-	-	1	1	-	1	1	-	1	1	-
Conservative Dentistry and Endodontics	-	1	-	1	2	-	1	2	-	1	2	-
Oral & Maxillofacial Surgery	-	-	-	-	-	-	1	2	-	1	2	-

Periodontology	-	-	-	-	-	-	1	2	-	1	2	-
Orthodontics	-	-	-	-	-	-	1	1	-	1	1	-
Paediatric & Preventive Dentistry	-	-	-	-	-	-	-	1	-	-	1	-
Oral Medicine & Radiology	-	-	-	-	-	-	-	1	-	-	1	-
Public Health Dentistry	-	-	-	-	-	-	-	1	-	-	1	-
Dental Materials	-	-	-	-	-	-	-	-	-	-	-	-
Dental Anatomy, Embryology & Oral Histology	-	-	-	-	-	-	-	-	-	-	-	-

* Includes the Principal who can head any one of the six specialities.

25% MDS and 75% BDS.

**Medical Teaching Staff in a Dental College
(As per DCI Regulations 2006)**

Year	Subjects	Intake and Designation					
		50 Admissions			100 Admissions		
		Prof	Reader	Lecturer	Prof	Reader	Lecturer
I	Anatomy	-	1	2	-	1	4
I	Physiology	-	1	2	-	1	2
I	Biochemistry	-	1	2	-	1	2
II	Pharmacology	-	1	2	-	1	3
II	General Pathology	-	1	2	-	1	2
II	Microbiology	-	1	2	-	1	2
III	General Medicine	-	1	2	-	1	3
III	General Surgery	-	1	2	-	1	3
III	Anaesthesia	-	1	1	-	1	1

OTHER STAFF PATTERN FOR 50 ADMISSIONS

Administrative Officer 1
Secretary to Dean 1
Public Relation officer 1

Designation	Receptionist	Establishment	Accounts	Admissions	Exams	Stores	Library	Maintenance	Security	Illustration	Clinical Depts.	Computer	Laboratories	Sports	Total
Managers/ Office Suptd.		1	1						1			1			4
Assistants		1	1	1	1	1	2	1							8
Receptionist	8														8
Librarian							1								1
D.S.A.(Chair side Attendant)											10				10
Dent. Tech. (Dental Mechanic)											6				6
Dent. Hygst.											3				3
Radiographer											2				2
Photographer										1					1
Artist										1					1
Programmer												1			1
Data Entry Operators												1			1
Physical Director														1	1
Engineer								1							1
Electricians								2							2
Plumber								1							1
Carpenter								1							1
Mason								1							1
A.C. Tech.								1							1
Helpers Electrical								1							1
Sweepers & Scavengers							2	2			3		3		10
Attenders	2	1	1		1	1	1	2			4	1	4		18
Security Personal									5						5
Dept. Secretaries											4				4
Driver									4						4
Nurses											3				3
Lab. Technicians													3		3

Note:

The above staff pattern indicates minimum requirements for the stipulated admissions. However, the actual staff requirements may marginally vary depending upon the patients' flow, work culture and design of the building.

OTHER STAFF PATTERN FOR 100 ADMISSIONS

Administrative Officer 1
Secretary to Dean 1
Public Relation officer 1

Designation	Receptionist	Establishment	Accounts	Admissions	Exams	Stores	Library	Maintenance	Security	Illustration	Clinical Depts.	Computer	Laboratories	Sports	Total
Managers / Office Supdt.	1	1	1		1	1			1			1			7
Assistants		2	2	2	1	1	4	1							13
Receptionist	14														14
Librarian							1								1
D.S.A.(Chair side Attendant)											20				20
Dent. Tech.(Dental											10				10

Mechanic)														
Dent. Hygst.										5				5
Radiographer										3				3
Photographer									1					1
Artist									1					1
Programmer											1			1
Data Entry Operators											2			2
Physical Director													1	1
Engineer							1							1
Electricians							4							4
Plumber							2							2
Carpenter							1							1
Mason							1							1
A.C. Tech.							1							1
Helpers Electrical							3							3
Sweepers & Scavangers						2	4			5		6		17
Attenders	3	1	1		1	2	2	3		5	1	6		25
Security Personal									6					6
Dept. Secretaries										8				8
Driver									5					5
Nurses										9				9
Lab. Technicians												5		5

Note:

The above staff pattern indicates minimum requirements for the stipulated admissions. However, the actual staff requirements may marginally vary depending upon the patients' flow, work culture and design of the building.

SYLLABUS OF STUDY**1. HUMAN ANATOMY, EMBRYOLOGY, HISTOLOGY & MEDICAL GENETICS****A) GOAL**

The students should gain the knowledge and insight into, the functional anatomy of the normal human head and neck, functional histology and an appreciation of the genetic basis of inheritance and disease, and the embryological development of clinically important structures. So that relevant anatomical & scientific foundations are laid down for the clinical years of the BDS course.

B) OBJECTIVES :

a) KNOWLEDGE & UNDERSTANDING:

At the end of the 1st year BDS course in Anatomical Sciences the undergraduate student is Expected to:

1. Know the normal disposition of the structures in the body while clinically examining a patient and while conducting clinical procedures.
2. Know the anatomical basis of disease and injury.
3. Know the microscopic structure of the various tissues, a pre-requisite for understanding of the disease processes.
4. Know the nervous system to locate the site of lesions according to the sensory and or motor deficits encountered.
5. Have an idea about the basis of abnormal development, critical stages of development, effects of teratogens, genetic mutations and environmental hazards.
6. Know the sectional anatomy of head neck and brain to read the features in radiographs and pictures taken by modern imaging techniques.
7. Know the anatomy of cardio-pulmonary resuscitation.

b) SKILLS

1. To locate various structures of the body and to mark the topography of the living anatomy.
2. To identify various tissues under microscope.
3. To identify the features in radiographs and modern imaging techniques.
4. To detect various congenital abnormalities.

C) INTEGRATION

By emphasising on the relevant information and avoiding unwanted details, the anatomy taught integrally with other basic sciences & clinical subjects not only keeps the curiosity alive in the learner but also lays down the scientific foundation for making a better doctor, a benefit to the society.

This insight is gained in a variety of ways:

- 1) Lectures & small group teaching
- 2) Demonstrations
- 3) Dissection of the human cadaver
- 4) Study of dissected specimens