

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY
No. 69, ANNA SALAI, GUINDY, CHENNAI – 600 032.

B.D.S.

DEGREE COURSES



SYLLABUS AND CURRICULUM

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI

PREFACE

The Syllabus and Curriculum for the B.D.S.Courses have been restructured with the Experts from the concerned specialities to educate students of BDS course to

1. Take up the responsibilities of dental surgeon of first contact and be capable of functioning independently in both urban and rural environment.
2. Provide educational experience that allows hands-on-experience both in hospital as well as in community setting.
3. Make maximum efforts to encourage integrated teaching and de-emphasize compartmentalisation of disciplines so as to achieve horizontal and vertical integration in different phases.
4. Offer educational experience that emphasizes health rather than only disease.
5. Teach common problems of health and disease and to the national programmes.
6. Use learner oriented methods, which would encourage clarity of expression, independence of judgement, scientific habits, problem solving abilities, self initiated and self-directed learning.
7. Use of active methods of learning such as group discussions, seminars, role play, field visits, demonstrations, peer interactions etc., which would enable students to develop personality, communication skills and other qualities towards patient care.

The Students passing out of this Prestigious University should be acquire adequate knowledge, necessary skills and such attitudes which are required for carrying out all the 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 students should also understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

(Subject to changes in Amendments in DCI Regulations and SAB Resolutions)

**Prof. Dr.S.GEETHALAKSHMI, M.D., Ph.D.
VICE-CHANCELLOR**

Comments / Feed back are welcome if any and mail it to registrar@tnmgrmu.ac.in

B.D.S. - DEGREE COURSE

THIRD YEAR SUBJECTS

Sl. No.	Subjects	Page. No.
	III Year	
1.	General Medicine	1 - 9
2.	General Surgery	10 - 16
3.	Oral Pathology and Oral Microbiology	17 - 30

9. GENERAL MEDICINE

1. GOAL

The broad goal of the teaching of undergraduate BDS students in General Medicine aims at providing comprehensive knowledge of the both the normal physiology as well as the abnormal pathology to provide a basis for understanding the clinical manifestations in the various disease presentations

2. OBJECTIVES

a. KNOWLEDGE and UNDERSTANDING:

At the end of the course the student shall be able to:

- i. Describe the etiology, pathogenesis, clinical signs and symptoms and complications of various disease processes
- ii. Know of the various pre-requisite settings for the various diseases to occur including a knowledge of the various co-morbidities especially lifestyle diseases such as Hypertension, Diabetes Mellitus.
- iii. Awareness of the oral manifestations of various systemic disorders
- iv. Knowledge of the medical conditions requiring screening and evaluation prior to dental procedures
- v. To be aware of BLS steps in cases of medical emergencies while undergoing dental procedures

b. SKILLS:

At the end of the course the student shall be able to:

- i. Take a proper history from the patient
- ii. Do a complete general physical examination including build and nourishment
- iii. Assess the vitals-recording the details of Pulse, recording the BP, temperature, checking capillary blood glucose and oxygen saturation
- iv. Look for cyanosis, clubbing, pallor, icterus, pedal edema, lymphadenopathy, rashes, ecchymosis
- v. Able to examine the CVS, RS, abdomen and the facial nerve
- vi. Interpret the elicited signs and symptoms of various systemic disease processes
- vii. Interpreting lab reports such as importance of CBC, RFT, ECG, BT, CT, PT, INRetc
- viii. To be trained in simple procedures such as giving intramuscular, intravenous Injection as well as starting an IV line
- ix. To be trained in basic life support

x. Writing prescriptions

c. ATTITUDE:

- i. Willingness to apply the current knowledge of dentistry in the best interest of the patient and community
- ii. Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community

d. INTEGRATION:

From the integrated teaching of other clinical sciences, the student shall be able to describe the various signs and symptoms and interpret the clinical manifestation of disease processes. Horizontal integration can be done in common with basic science departments, and vertical integration can be done with clinical departments. For example, horizontal integration can be the interpretation of lab results with Biochemistry and biopsy reports with Pathology; and vertical integration can be the study of oropharyngeal pathology of along with ENT and oral surgical procedures with General surgery

e. KNOWLEDGE ABOUT INFECTION AND CROSS INFECTION IN DENTISTRY

Knowledge about asepsis – disinfection and sterilization of instruments, clinical area/personal care as per universal protection, and disposal of medical wastes in the appropriate modes. Students should be aware of the rules and regulations pertaining to maintenance of clinical set up and waste disposal.

f. COMPUTER PROFICIENCY:

Basic knowledge of Computers, MS Office, Window 2000, Statistical Programmes Basic operative skills in analysis of data and knowledge of multimedia. Students should utilize a combination of traditional classroom courses, and online courses. The following validation is required and must be completed.

- i. Technological Requirements for all Graduate Students
- ii. A laptop or desktop computer that supports the following requirements
 - a) Operating system requirements
 - b) Internet browser requirements

- c) Reliable and consistent access to the internet
- d) Antivirus software which is current and consistently updated
- e) Microsoft Office
- f) Adobe Reader (or equivalent to view PDF files)

3. COMPETENCIES

1. General skills
2. Practice Management
3. Communication and Community Resources
4. Patient Care – Diagnosis
5. Patient Care - Treatment Planning
6. Competencies specific to the subject

4. TEACHING HOURS

Lecture Hours	- 60 hrs
Practical Hours	- 90 hrs

Total	- 150 hrs

5. TEACHING METHODOLOGY

Theory (Teaching-Learning methods)

- Didactic Lecture- with a problem solving approach, with discussions of relevant clinical problems.
- Interactive Lecture (include buzz groups, self-assessment questions, quizzes, MCQs, One minute paper)
- Seminar
- Symposium

- Role play and discussion on medical ethics topics
- Self-directed learning

6. THEORY SYLLABUS

TOPIC	MUST KNOW	DESIRABLE TO KNOW	NICE TO KNOW
Aim Of Medicine	Know about signs symptoms Diagnosis, differential diagnosis investigation treatment and prognosis		
Infections	Mumps, measles Herpes zoster/ varicella Herpes Simples HIV/AIDS Oral Hairy lecoplaka Hand, foot and mouth disease Swine flu	rubella EBV infections— Infectious mononucleosis Nasopharyngeal Ca	chikungunya Yellow fever
	Syphilis Diphtheria Enteric fever Leptospirosis	Sepsis	PUO
	Hansen’s disease Tuberculosis		
	Dengue Malaria	Amoebiasis Filariasis	
	Candidiasis	Mucormycosis	
Vitamin & micronutrient Deficiencies	B1,B2, B3, B6,B12 Vitamin C and D Fluoride Zinc Iron	Vitamin K Selenium Chromium	Balanced diet PEM
Endocrine	Diabetes Mellitus Acromegaly Calcium metabolism and Parathyroid Addison’s disease Cushing’s disease Hypothyroidism Hyperthyroidism		
CVS	Acute Rheumatic fever Rheumatic valvular heart disease Infective Endocarditis Hypertension Ischemic heart disease Common Arrhythmias	Bronchiectesis Lung abscess Pleural effusion Pneumothorax Bronchogenic Ca	

	Congestive cardiac failure		
RS	COPD Bronchial asthma Pulmonary TB Pneumonia		
Renal system	Acute renal failure Chronic Renal failure Nephritis Nephrotic syndrome	Diarrhoea Dysentery Amoebiasis Malabsorption	
GIT	Stomatitis Gingival hyperplasia Dysphagia Acid peptic Disease GERD Jaundice Acute hepatitis Chronic Hepatitis Cirrhosis of liver Ascites		
Haematology	Anaemias Bleeding and clotting disorders Leukemias and lymphomas Agranulocytosis Splenomegaly Generalized lymphadenopathy Oral manifestations of Haematological disorders	Meningitis	
CNS	Facial palsy Facial pain including trigeminal neuralgia Headache including migraine Epilepsy Lower cranial nerves	Acute pulmonary edema ARDS	Examination of comatose patient
Critical Care	Syncope Cardiac Arrest CPR Shock		

Bioethics

Bioethics is the application of ethics to the field of medicine and healthcare. Bioethics includes medical ethics, which focuses on issues in health care; research ethics, which focuses issues in the conduct of research; environmental ethics, which focuses on issues pertaining to the relationship between human activities and the environment and public health ethics.

7. PRACTICALS ----PROCEDURES/ CLINICAL DEMONSTRATIONS

1. System wise case presentation
2. Demonstration of clinical signs
3. Small group discussion of clinical manifestations, diagnosis, differential diagnosis, investigations and treatment

LIST OF DEMONSTRATIONS IN PRACTICALS

1. Demonstration of BLS
2. Confirming cardiac arrest
3. Checking carotid pulse
4. Manual Inline stabilization of cervical spine
5. Establishing airway patency during CPR
6. Applying chest compression in CPR

8. THEORY EXAMINATION (3 Hours)

Elaborate on : 2 x 10 = 20 Marks

Write notes on: 10 x 5 = 50 Marks

Total = 70 marks

9. PRACTICALS / CLINICAL EXAMINATION

Long case----1----- 50 Marks

Short case----1----- 30 Marks

Spotter----- 10 Marks

Total marks= 90 Marks

Long Case

-----Complete case sheet writing including

-----History Taking

-----General Examination

-----Examination of system involved as the case may be

- CVS
- RS
- Abdomen
- Facial nerve

Examination of other systems

-----Diagnosis / Differential Diagnosis

-----Investigations

-----Treatment

Short case-

-----Only General examination and examination of system involved

-----Discussion of case findings, diagnosis and treatment

-----No case sheet writing

List of spotters for practical examination--- For example---

Facial palsy -----Unilateral / bilateral facial palsy

Herpes Oral pigmentations of systemic diseases

Cervical Lymphadenopathy Cyanosis Clubbing / koilonychia

Pallor Icterus

Examination to include in VIVA

Questions in various systems including

Instruments---use for systemic evaluation and procedures-- For example

1. BP apparatus
2. IV cannula
3. Pulse oximeter
4. Thermometer
5. Glucometer
6. Ryle tube

7. Urinary catheter
8. AMBU bag
9. Endotracheal tube
10. Lab reports --- CBC, BT, CT, PT, aPTT, INR

List of Xrays including---

Normal Chest Xray
 Xrays of CVS like cardiomegaly
 Xrays of RS like that of COPD

Drugs & medications used in various medical emergencies in the dental procedures for example

1. Management of hypotension with IV saline
2. Management of cardiogenic shock with Inj Adrenaline & Inj Atropine
3. Management of seizures with Inj Diazepam / Inj Phenytoin
4. Inj Soda bicarb
5. Inj Hydrocortisone
6. Management of pulmonary edema with Inj Morphine / Inj Furosemide
7. Management of hypocalcemia with Inj Calcium gluconate
8. Management of bleeding with Inj Vit K / Inj Adrenochrome
9. Management of hypoglycemia with Inj 25 % dextrose
10. Management of asthma with bronchodilators

Viva marks= 20Marks

	Examination	Internal Assessment	Viva	Total
Theory	70	10	20	100
Practicals	90	10	-	100
Total				200

10. FORMATIVE / INTERNAL ASSESSMENT

The continuing assessment examination (both Theory/Practical) held at least 3times in a particular year and best of two examinations should be considered. The Internal Assessment marks to be submitted to the University, once in every three months. The marks scored by the students shall be displayed on the Notice board, a copy forwarded by HOD shall be sent to the University once in every 3months.

Theory IA	= 10 marks
Practical IA	= 10 marks

Total	20 marks

11. RECORD NOTE / LOG BOOK

Record shall be maintained and assessed periodically by faculty and HOD. Institution shall provide adequate number of cases/teaching materials as specified in Dental Council of India regulation for the students during clinical/practical training and examinations.

12. TEXT BOOKS

- i. Davidson's Principle and Practice of Medicine
- ii. Hutchison's clinical methods

10. GENERAL SURGERY

1. GOAL

The students should gain the knowledge and insight into the basic surgical principles, common surgical conditions of Head & Neck and its management.

2. OBJECTIVES

KNOWLEDGE AND UNDERSTANDING

At the end of the third BDS in General surgery the undergraduate student is expected to

1. Know the surgical anatomy , physiology and pathological basis of diseases of head and neck
2. Know the basic surgical principles
3. Know the common surgical conditions of Head & Neck
4. Know eliciting History and to do Clinical examination and to arrive at a Provisional diagnosis
5. Know about Radiological and blood investigations to arrive at a diagnosis

SKILLS

1. Know the interpretation of Radiological films of Head and Neck
2. Know the Operative procedures, Post operative complications and Post operative management
3. To differentiate between Benign and Malignant diseases of Head & Neck
4. Know to perform minor surgical procedures such as Draining an Abscess and taking a Biopsy

ATTITUDE

1. Willingness to apply the current knowledge of dentistry in the best interest of the patient and community
2. Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community

INTEGRATION

By emphasizing on the relevant information and sound knowledge of Basic Science, to acquaint the student with various diseases, which may require surgical expertise and to train the student to analyse the history and be able to do a thorough clinical examination of the patient.

This insight is gained in a variety of ways:

1. Lectures and small group teachings
2. Clinical Demonstrations
3. Observing Surgical procedures in theatres
4. Charts and models for Common surgical conditions

KNOWLEDGE ABOUT INFECTION AND CROSS INFECTION IN DENTISTRY

Knowledge about asepsis – disinfection and sterilization of instruments, clinical area/ personal care as per Universal protection, and disposal of medical wastes in the appropriate modes. Students should be aware of the rules and regulations pertaining to maintenance of clinical set up and waste disposal.

COMPUTER PROFICIENCY

Basic knowledge of Computers, MS Office, Window 2000, Statistical Programmes, Basic operative skills in analysis of data and knowledge of multimedia. Students should utilize a combination of traditional classroom courses, and online courses. The following validation is required and must be completed.

1. Technological Requirements for all Graduate Students
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 - Antivirus software which is current and consistently updated
 - Microsoft Office
 - Adobe Reader (or equivalent to view PDF files)

3. COMPETENCIES

1. General skills
2. Practice Management
3. Communication and Community Resources
4. Patient Care – Diagnosis
5. Patient Care - Treatment Planning
6. Competencies specific to the subject

4. TEACHING HOURS

Lecture Hours -60 hrs
Practical Hours -90hrs
Total-150 hrs

5. TEACHING METHODOLOGY

- Combination of Lectures
- Small group seminars, tutorials
- Observing treatment in out patient department and in General wards
- Observing Operative procedures in theatres
- Audio visual aids

6. THEORY SYLLABUS INCLUDING BIOETHICS, DENTAL JURISPRUDENCE THEORY SYLLABUS

TOPIC	MUST KNOW	DESIRABLE TO KNOW	NICE TO KNOW
		History of surgery	
	General Principles of Surgery		
Wounds	Classification, types, healing, Repair, Treatment	Medicolegal aspect and Complications	
Inflammation	Acute and chronic infections of soft tissues, causative organisms and complications & treatment Transmissible viral infections		
Shock & hemorrhage	Definition, Classification, causes Clinical features and Management	Blood groups, Transfusion, blood products	Hemophilias
Tumours Ulcers Cysts	Classification, Clinical examination, treatment		

Sinus Fistulae			
Diseases of lymphatic System	TB, Secondaries	Lymphoma	Leukemia
Diseases of Oral Cavity	Infections, Premalignant malignant diseases of oral cavity, Salivary gland		
Diseases of larynx & Nasopharynx		Infective and malignant diseases	
Trachea	Tracheostomy		
Nervous system	Facial nerve, Trigeminal neuralgia	Principles of peripheral nerve injuries, regeneration, treatment	
Fractures	Mandible, Le Fort fracture	General principles of fractures, clinical presentation and treatment	Newer methods
Principles of operative surgery	Minor surgical procedures	Asepsis, Antiseptics	Sterilisation
		Principles of anaesthesia Principles of tissue replacement	Sutures, Drains, Diathermy Laser
Anomalies of Development of Face	Cleft lip and cleft palate		
Thyroid and Parathyroid	Thyroid disorders Malignancy	Parathyroid Disorders	
Jaw Swellings	Differential diagnosis and management		
Biopsy	Different types of biopsies		

Bioethics

Bioethics is the application of ethics to the field of medicine and healthcare. Bioethics includes medical ethics, which focuses on issues in health care; research ethics, which focuses issues in the conduct of research; environmental ethics, which focuses on issues pertaining to the relationship between human activities and the environment, and public health ethics.

7. CLINICAL HOURS

- Clinical demonstration in OPD – 40 Hours
 - Bedside clinics – 35 Hours
 - Operation Theatre observation – 10 Hours
 - Demonstration of emergency trauma care – 5 Hours
- Total - 90 Hours**

8. THEORY EXAMINATION: (3 Hours)

Elaborate on: 2 x10= 20 Marks

Write notes on: 10x5 = 50 Marks

Total marks 70 Marks

The questions should cover different topics of General surgery

9. PRACTICAL EXAMINATION

Long case: one case : 1 x 50 marks = 50 marks

Short case: one case: 1 x 30 marks = 30 marks

OSCE : two stations : 2 x 5 marks = 10 marks

Total : 90 Marks

Criteria to be followed during General Surgery practical examination:

Duration of Long Case : 45 minutes

Candidate should write Case sheet with Provisional Diagnosis, Investigations and Treatment

Duration of Short case: 15 minutes

Only Physical Examination of patient is sufficient

OSCE duration – Each station 3 minutes

VIVA VOCE -20 MARKS

Instruments – 10 marks

X rays and Specimen – 10 marks

	Examination	Internal Assessment	Viva	Total
Theory	70	10	20	100
Practicals	90	10	-	100
Total				200

10. FORMATIVE/INTERNAL ASSESSMENT

The continuing assessment examination (both Theory/Practical) held at least 3times in a particular year and best of two examinations should be considered. The Internal Assessment marks to be submitted to the University, once in every three months. The marks scored by the students shall be displayed on the Notice board and a copy forwarded by HOD shall be sent to the University once in every 3 months.

Total – 20 Marks

Theory IA - 10 Marks.

Practical IA -10 Marks.

Topics for each assessment:

- I. History of Surgery, General Principles of Surgery, Wounds, Inflammation, Infections, Transmissible viral infections:
- II. Shock & Hemorrhage, Tumours, Ulcers, Cysts, Sinus and Fistulae, Diseases of lymphatic system, Diseases of oral cavity, Diseases of larynx, Nasopharynx

III. Nervous system, Fractures, Principles of operative surgery, Anomalies of Development of Face, Diseases of Thyroid and Parathyroid, Swellings of Jaw, Biopsy

11. RECORD NOTE / LOG BOOK

Record shall be maintained and assessed periodically by faculty and HOD. Institution shall provide adequate number of cases as specified in Dental Council of India regulation for the students during clinical training and examinations.

12. TEXT BOOKS:

- i. Bailey and Love 26th Edition
- ii. Das Clinical Surgery
- iii. Short Cases surgery Das

11. ORAL PATHOLOGY AND ORAL MICROBIOLOGY

1. GOAL

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 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.

2. OBJECTIVES

The objectives are dealt as UNDER three headings (a) Knowledge and Understanding (b) Skills and (c) Attitudes.

a. KNOWLEDGE AND UNDERSTANDING:

- Adequate knowledge of the scientific foundations' on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions; ability to evaluate and analyse' scientifically various established facts and data.
- 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.
- 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.
- Adequate clinical experience required for general dental practice
- Adequate knowledge of the constitution, biological function and behavior 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.

- 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.
- Prevent and manage complications if encountered while carrying out various surgical and other procedures.
- Carry out certain investigative procedures and ability to interpret laboratory findings.
- Promote oral health and help prevent oral diseases where possible.
- Control pain and anxiety among the patients during dental treatment.

c. ATTITUDE:

- Willingness to apply the current knowledge of dentistry in the best interest of the patient and community.
- Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
- Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
- Willingness to participate in the CPED Programmes to update knowledge and professional skill from time to time.
- Help and participate in the implementation of the national oral health policy.

d. INTEGRATION:

The knowledge gained from learning core basic and clinical science in medicine and dentistry are applied in the context of Oral Pathology for the following purpose:-

- To understand the process of disease mechanism and consequential outcome.
- To interpret radiological and/or laboratory features to make reliable pathological diagnosis, and thereby, to manage human health and disease.
- In addition by integration of sound basic knowledge into clinical practice will enable students to develop and advance their skills for the betterment of patient care by applying scientific method either for critical appraisal of evidence based medicine or to pursue independent research relevant to medical/dental practice.

e. KNOWLEDGE ABOUT INFECTION AND CROSS INFECTION IN DENTISTRY :

Knowledge about asepsis – disinfection and sterilization of instruments, clinical area / personal care as per universal protection, and disposal of medical wastes in the appropriate modes. Students should be aware of the rules and regulations pertaining to maintenance of clinical set up and waste disposal.

f. COMPUTER PROFICIENCY:

Basic knowledge of Computers, MS Office, Window 2000, Statistical Programmes. Basic operative skills in analysis of data and knowledge of multimedia. Students should utilize a combination of traditional classroom courses, and online courses. The following validation is required and must be completed.

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3. COMPETENCIES

- 1. General skills
- 2. Practice Management
- 3. Communication and Community Resources
- 4. Patient Care – Diagnosis
- 5. Patient Care - Treatment Planning
- 6. Competencies specific to the subject

4. TEACHING HOURS

a) Lecture Hours – 25 hours (2nd BDS)
 120 hours (3rd BDS)

Total 145 hours

b) Practical/clinical hours – 50 hours (2nd BDS)
 80 hours (3rd BDS)

Total 130 hours

5. TEACHING METHODOLOGY

- i. Class room lecture
- ii. Slide demonstration
- iii. Tutorials
- iv. Problem-solving

6. THEORY SYLLABUS

TOPIC	MUST KNOW	DESIRABLE TO KNOW	NICE TO KNOW
1.Introduction:		A bird's eye view of the different pathological processes involving the oral cavity & oral cavity involvement in systemic diseases to be brought out. Interrelationship between General Medicine, General Surgery and Oral Pathology is to be emphasised.	
2.	Developmental disturbances of teeth, jaws and soft tissues of oral and paraoral region : Introduction to developmental disturbances–Hereditary, Familial mutation, Hormonal etc. causes to be highlighted.	<ul style="list-style-type: none"> • Developmental disturbances of teeth-Etiopathogenesis,clinical features, radiological features and histopathological features as appropriate. • The size, shape, number, structure and eruption of teeth and clinical significance of the anomalies to be emphasized. • Forensic Odontology. • Developmental disturbances of the jaws-size and shape of the jaws. • Developmental disturbances of oral and paraoral soft tissues-lip and palate-clefts, tongue, gingival, mouth, salivary glands and face 	
Dental caries	<ul style="list-style-type: none"> - Definition - Clinical features - Clinical types 	Caries preventive measures.	

	<ul style="list-style-type: none"> - Diagnosis - Caries microbiology <p>Aetiopathogenesis- Theories of caries with emphasis on ecologic plaque hypothesis, specific and non-specific plaque hypothesis.</p> <ul style="list-style-type: none"> •Histopathology •Immunology <p>Complication/sequelae of dental caries.</p>		
Pulp and periapical pathology and osteomyelitis.	<ul style="list-style-type: none"> • Aetiopathogenesis and their interrelationship. • Clinical features • Types of pulpitis • Microbiology • Radiology • Histopathology • Periapical diseases • Definition, classification, clinical features and diagnosis of osteomyelitis. • Sequelae of periapical abscess–summary of space infections, systemic complications and significance. 		
Periodontal disease	<ul style="list-style-type: none"> •Aetiopathogeneis and interrelationship •Clinical features •Radiology •Microbiology •Histopathology 	Basic immunological mechanisms of periodontal disease to be highlighted.	

	<ul style="list-style-type: none"> •Gingivitis •Desquamative gingivitis •Gingival enlargements •Periodontitis 		
Microbial infection of soft tissue: Microbiology, defence mechanisms including immunological aspects, oral manifestation, Histopathology and laboratory diagnosis of common bacterial, viral and fungal infections namely:-	<p>BACTERIAL Tuberculosis, syphilis, ANUG and its complications, Cancrum Oris. Actinomycosis</p> <p>VIRAL</p> <ul style="list-style-type: none"> •Herpes Simplex infections •Varicella Zoster •Measles •Mumps •Epstein-Barr virus •HIV infection <p>FUNGAL</p> <ul style="list-style-type: none"> •Relevant superficial mycosis <p>APHTHOUSULCERS</p>	Relevant deep mycosis	
Common non-inflammatory diseases involving jaws:		<p>Aetiopathogenesis, clinical features, radiological and laboratory values in diagnosis of</p> <ul style="list-style-type: none"> •Osteogenesis imperfecta •Rickets •Cleidocranial dysplasia •Achondroplasia •Marfan's syndrome <p>Down's syndrome</p>	
Diseases of TMJoint:			Ankylosis, summary of

			different types of arthritis and other developmental malformations, traumatic injuries and myofascial pain dysfunction syndrome
<p>Cysts of oral and paraoral region.</p> <p>Cysts of odontogenic origin, non-odontogenic cysts, pseudocysts of jaws and soft tissue cyts of oral and paraoral region.</p>	<ul style="list-style-type: none"> •Epidemiology •Classification •Histogenesis •Aetiopathogenesis •Definition •Clinicalfeatures •Radiology •Histopathology Laboratoryfeatures 		
<p>Tumors of the oral cavity</p>	<p>Classification of odontogenic tumors, non-odontogenic tumors and Salivary gland tumors with reference to</p> <ul style="list-style-type: none"> •Epidemiology •Classification •Histo genesis •Aetiopathogenesis •Definition 		

	<ul style="list-style-type: none"> •Clinical features •Radiology •Histopathology Laboratory features 		
Odontogenic Tumors–All Lesions.			
Non – Odontogenic Tumors	<p>Benign Epithelial</p> <ul style="list-style-type: none"> •(Papilloma, Keratoacanthoma and Naevi). <p>Malignantepithelial (Basal cell carcinoma, Verrucous Carcinoma, Squamous Cell Carcinoma and Malignant Melanoma).</p>		
Mesenchy Mal Tumors	<p>Benign Tumors</p> <ul style="list-style-type: none"> •Fibroma •Aggressivefibrouslesions •Lipoma •Haemangioma •Lymphangioma •Neurofibroma •Schwannoma •Chondroma •Osteoma •Tori. 	<p>Malignant Tumors</p> <ul style="list-style-type: none"> •Fibrosarcoma •Osteosarcoma •Giantcelltumor •Chondrosarcoma •Angiosarcoma •Kaposi sarcoma <p>Lymphomas</p> <ul style="list-style-type: none"> •Ewing's sarcoma 	Others such as osteoid osteoma / osteoblastoma / Osteochondroma.
Salivary Gland Tumors	<p>Benign Tumors</p> <ul style="list-style-type: none"> •Pleomorphic adenoma 	<ul style="list-style-type: none"> •Oncocytoma •Warthins tumor <p>Malignant Tumors</p> <ul style="list-style-type: none"> •Adenoid cystic carcinoma •Mucoepidermoid carcinoma 	<ul style="list-style-type: none"> •Acinic cell carcinoma <p>Adenocarcinoma NOS.</p>

Tumors of disputed origin		Melanotic neuroectodermal tumor of infancy Congenital epulis Granular cell myoblastoma.	
Metastatic tumors to and from oral cavity and their routes of metastasis.			General characteristics.
Fibro-osseous/Giant cell/and related lesions	<ul style="list-style-type: none"> •Fibrous dysplasia •Cemento-osseous dysplasia •Ossifying fibroma •Paget's disease •Central giant cell granuloma •Aneurysmal bone cyst •Cherubism <p>Hyperparathyroidism</p>		
Traumatic, reactive and regressive lesions of oral cavity:	<ul style="list-style-type: none"> •Pyogenic granuloma, exostoses, fibrous hyperplasia, traumatic ulcer and traumatic neuroma. <p>Attrition, abrasion, erosion, bruxism, hypercementosis, dentinal changes, pulp calcifications and resorption of teeth.</p> <ul style="list-style-type: none"> •Radiation effects of oral cavity, summary of physical and chemical injuries including allergic reactions of the oral cavity. <p>Healing of oral wounds and complications–Dry socket.</p>		

<p>Non neoplastic salivary gland diseases.</p>	<ul style="list-style-type: none"> •Definition •Classification •Epidemiology •Pathogenesis •Clinical features •Histopathology of the following:- •Sialolithiasis •Sialosis •Sialadenitis •Xerostomia •Ptyalism 	<ul style="list-style-type: none"> •Necrotizing sialometaplasia Sjogren's syndrome. 	
<p>Systemic diseases involving oral cavity: Brief review and oral manifestations, diagnosis and significance of common blood, nutritional, hormonal and metabolic diseases of oral cavity.</p>	<ul style="list-style-type: none"> •White blood cell diseases •Red blood cell diseases •Thyroid diseases •Hyperparathyroidism •Vitamin A •Vitamin B complex •Vitamin C deficiency •Vitamin D deficiency •Recurrent Aphthous disease 	<ul style="list-style-type: none"> •Progressive systemic sclerosis •Wegener's granulomatosis •Orofacial granulomatosis Sarcoidosis 	
<p>Mucocutaneous lesions.</p>	<ul style="list-style-type: none"> •Lichen •planus Pemphigus •Pemphigoid •Lupus erythematosus 	<ul style="list-style-type: none"> •Psoriasis •Scleroderma •Ectodermal dysplasia •Epidermolysis bullous White sponge nevus 	

	•Erythema multiforme		
Diseases of nerves: Facial neuralgias	•Trigeminal •Glossopharyngeal •VII nerve paralysis		•Causalgia •Psychogenic facial pain Burning mouth syndrome.
Pigmentation of oral and paraoral region and discolouration of teeth.			
Diseases of maxillary sinus:		Traumatic injuries to sinus, sinusitis, cysts and tumors involving antrum.	
Oral Precancer-Cancer	Epidemiology Aetiology Clinical and Histopathological featuresTNM classification.	a) Recent advances in diagnosis, management and prevention. b)Biopsy: •Types of biopsy, •Value of biopsy, •Cytology	Histochemistry and frozen sections in diagnosis of oral diseases.
Principles of Basic Forensic Odontology.		<ul style="list-style-type: none"> • Introduction, definition, aims and scope. • Sex and ethnic (racial) differences in tooth morphology and histological age estimation. • Determination of sex and blood groups from buccal mucosa/saliva. • DNA methods. • Bite marks, rugae pattern and lip prints. • Dental importance of poisons and 	

		<p>corrosives.</p> <ul style="list-style-type: none"> • Overview of forensic 	
Bioethics	<ul style="list-style-type: none"> •Introduction to ethics. •Ethics of the individual. •Professional ethics. 	<ul style="list-style-type: none"> •Research ethics. •Ethical workshop of cases. 	<ul style="list-style-type: none"> •Gathering all scientific factors. •Gathering all value factors. •Identifying working our criteria towards decisions.
Jursiprudence	<ul style="list-style-type: none"> •Medical negligence and liability •Informed consent and confidentiality •Rights and duties of doctors and patients Medicaland dental ethics (as per Dentists' Act) 		<ul style="list-style-type: none"> •Fundamentals of law and the constitution •Medical legislation and statutes (Dental and Medical Council Acts, etc) •Basics of civil law (including torts, contracts and consumer protection act) •Criminal and civil procedure code (including expert witness requirement) •Assessment and quantification of dental injuries in courts of law

7. PRACTICALS:

- a) Procedures– Histopathological slides of relevant diseases.
- b) Demonstrations– Spotters/specimens/radiographs.

8. THEORY EXAMINATION: (3 Hours)

Elaborate on 2 X 10 = 20 Marks

Write Notes on 10 X 5 = 50 Marks

70 Marks

9. PRACTICAL/ CLINICAL EXAMINATIONS

Slides ----- 12 X 5 = 60 marks

Spotter ----- 6 X 5 = 30 marks

Total = 90 marks

Viva ----- 20 marks

	Examination	Internal Assessment	Viva	Total
Theory	70	10	20	100
Practicals	90	10	-	100
Total				200

10. FORMATIVE/INTERNALASSESSMENT

The continuing assessment examination (both Theory/Practical) held at least 3times in a particular year and best of two examinations should be considered. The Internal Assessment marks to be submitted to the University, once in every three

months. The marks scored by the students shall be displayed on the Notice board and a copy forwarded by HOD shall be sent to the University once in every 3 months.

Theory Internal Assessment – 10 marks

Practical Internal Assessment – 10 marks

Total

20 marks

11. RECORD/LOGBOOK

Record shall be maintained and assessed periodically by faculty and HOD. Institution shall provide adequate number of cases/teaching material as specified in Dental Council of India regulation for the students during clinical/practical training and examinations.

12. TEXTBOOKS

- i. Oral Pathology –Soames & Southam.
- ii. Contemporary Oral and Maxillofacial pathology–Sapp, Eversole, Wysocki.

13. REFERENCEBOOKS

- i. A Text Book of Oral Pathology – Shafer, Hine & Levy.
- ii. Oral Pathology - Regezi & Sciubba.
- iii. Oral Pathology in tropics - Prabhu, Wilson, Johnson & Daftary.
- iv. Oral & Maxillofacial Pathology - Neville, Damm, Allen & Chi.
- v. Medical Ethics - Francis.
- vi. Oral pathology - Soames & Southam

14. CRI POSTING SCHEDULE AND ORIENTATION

Period of Postings

Oral Pathology & Microbiology - 15 days