



**SYLLABUS**  
For  
**3<sup>rd</sup> Semester**  
(Second Professional) BDS



**SUBJECT: ORAL BIOLOGY & TOOTH MORPHOLOGY**

**SEMESTER: THIRD**

LEC. #	TOPICS
	<b>MODULE – I</b>
	<b>GENERAL EMBRYO, DEVELOPMENT OF TOOTH, ORAL MUCOSA INTRODUCTION TO TOOTH MORPHOLOGY</b>
1	Germ cell formation & fertilization, Prenatal development
2	Primary epithelial band, Stages of tooth development
3	Introduction and functions of Oral mucosa
4	Induction, Competence and differentiation, Formation of three layered embryo
5	Formation of permanent dentition and Hard tissue formation
6	Organization of oral mucosa, Component tissues and glands
7	Neural tube, Folding of embryo
8	Root Formation
9	Oral epithelium, Proliferation and maturation
10	Neural crest
11	Formation of supporting structures of Teeth
12	Cellular events in maturation, permeability and absorption
13	Tooth numbering system and landmarks
	<b>Module-I Test</b>
	<b>MODULE – II</b>
	<b>ENAMEL, STAGES OF TOOTH DEVELOPMENT, NON KERATINOCYTES, SURFACES &amp; RIDGES OF TOOTH</b>
14	Enamel (Physical characteristic and structure)
15	Stages of tooth eruption
16	Non Keratinocytes in oral epithelium, Lamina propria
17	Amelogenesis
18	Formation of permanent dentition
19	Fibers and gland system, Blood and Nerve supply of oral mucosa
20	Light and electron microscopy of Amelogenesis
21	Types of oral mucosa (structural variation), Development
22	Stages in Amelogenesis
23	Junction in oral mucosa, Age changes
24	Tooth surfaces and ridges, Division in to 3 <sup>rd</sup>
25	Revision
	<b>Module-II Test</b>
	<b>MODULE – III</b>
	<b>ENAMEL FORMATION, EMBRYOLOGY OF ORAL CAVITY CEMENTUM, MAXILLARY INCISORS AND CANINES</b>
26	Enamel Proteins
27	Head formation
28	Introduction and Biochemical composition of cementum
29	Mineral pathway and mineralization in enamel
30	Brachial arches
31	Development and differentiation of cementum
32	Structural and organizational features of Enamel
33	Face formation
34	Cementum verities
35	Palate formation
36	Age changes in enamel
37	Maxillary Incisors and Canines



## BHITAI DENTAL & MEDICAL COLLEGE

	<b>Module-III Test</b>
	<b>MODULE – IV</b>
	<b>ENAMEL, EMBRYOLOGY OF FACE, ALVEOLAR PROCESS, PERIODONTAL LIGAMENT, MANDIBULAR INCISOR AND CANINE</b>
38	Defects of Amelogenesis
39	Development of Mandible
40	Introduction and Histology of alveolar process
41	Clinical Implication of Enamel
42	Development of Maxilla
43	Introduction and Cells of Periodontal ligament
44	Development of Temporo mandibular joint
45	Fibers, blood supply and Nerve supply of PDL
46	Congenital defects in development
47	Mandibular Incisors and canines
48	Cytoskeleton, Junctions and Fibroblasts
49	<b>Module-IV Test</b>

**Subject: ORAL BIOLOGY & TOOTH MORPHOLOGY (PRACTICALS-IN GROUPS)**

<b>DAYS: Monday, Wednesday, Thursday (12:00 TO 01:45 PM) &amp; Friday (08:00 to 10:00 AM)</b>	
<b>PRAC. #</b>	<b>TOPICS</b>
	<b>ORAL BIOLOGY</b>
	Oral Histology slides on: Oral mucosa and Structures of tooth
	<b>TOOTH MORPHOLOGY</b>
	Tooth morphology practical, teaching to draw the different deciduous and permanent anterior teeth on graph copies
	<b>JUNIOR OPERATIVE</b>
	Junior operative practical: Different classes of caries Class-I, Class-II and Class-III on plaster models
	<b>JUNIOR PROSTHETICS</b>
	Construction of complete Denture starting from Initial impression to the final plate



**SUBJECT: COMMUNITY & PREVENTIVE DENTISTRY  
SEMESTER: THIRD**

LEC. #	TOPICS
	<b>MODULE – I</b>
1	Community Dentistry: An Introduction
2	Public Health and Primary Health care
3	Dental Health Education
4	Ethics and Responsibility in Dental Care
	<b>Module-I Test</b>
	<b>MODULE – II</b>
5	WHO and other organization
6	Oral Health Promotion
7	Infection Control & Sterilization
8	Dental Manpower & Dental auxiliary personnel
	<b>Module-II Test</b>
	<b>MODULE – III</b>
9	Environment and Health
10	Epidemiology
11	Health, Disease and infection
12	Access to Dental care
	<b>Module-III Test</b>
	<b>MODULE – I V</b>
13	Level of preventions
14	Measurement of Oral indices, Periodontal disease
15	Measuring Dental caries
16	Measuring other Oral disease
	<b>Module-IV Test</b>

**Subject: COMMUNITY & PRVENTIVE DENTISTRY (PRACTICALS IN-GROUPS AND FIELD ASSIGNMENTS)**

PRAC. #	TOPICS
1	<b>Dentition and notation</b>
2	Examination of Oral Cavity
3	Examination instruments
4	Dental caries
5	Periodontal diseases
6	Dental fluorosis
7	Malocclusion



**SUBJECT: GENERAL PATHOLOGY  
SEMESTER: THIRD**

LEC. #	TOPICS
	<b>UNIT- I</b>
	<b>CELL INJURY, ADAPTATION &amp; CELL DEATH</b>
1	Introduction, Causes, Definitions and Adaptation
2	Adaptation, Mechanisms of injury –I
3	Mechanisms of injury-II
4	Cell swelling, Fatty change
5	Cell Death: Necrosis
6	Cell Death: Apoptosis – I
7	Cell Death: Apoptosis – II
8	Cell Death: Intracellular accumulation of glycogen & Proteins
9	Pigmentation exogenous
10	Endogenous pigments / Calcification, Hyaline Change
	Revision
	<b>GENERAL BACTERIOLOGY</b>
11	Introduction to microbiology
12	Bacterial cell / prokaryotes & eukaryotes
13	Bacterial structures
14	Bacterial growth & genetics
15	Classification of medically important bacteria
16	Host defenses
17	Pathogenesis
18	Laboratory diagnosis of bacteria
19	Sterilization
20	Bacterial & host relation
	<b>Unit-I Test</b>
	<b>UNIT – II</b>
	<b>GENERAL VIROLOGY</b>
21	Introduction & Structure of virus
22	Replication of virus
23	Classification of medically important virus
24	Pathogenesis
25	Laboratory diagnosis
26	Viral growth & Vaccine
	<b>INFLAMMATION &amp; REPAIR</b>
27	General features of Inflammation & Vascular changes
28	Cellular events Chemotaxis, Phagocytosis
29	Mechanism of Exudate
30	Chemical Mediators of inflammation – I
31	Chemical Mediators of inflammation – II
32	Chemical Mediators of inflammation – III
33	Outcome of inflammation + Chronic inflammation
34	Chronic granulomatous inflammation
35	Repair, definitions, types of cells
36	Cell cycle: Cyclins & CDK
37	Healing
38	Revision
	<b>HAEMODYNAMIC DISORDERS</b>
39	Edema



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40	Congestion & Hemorrhages
41	Thrombosis, Introduction & Pathogenesis
42	Thrombosis, Morphology & Fate
43	Embolism
44	Infarction
45	Shock – I
46	Shock – II
47	Revision
	<b>Unit-II Test</b>

**Subject: GENERAL PATHOLOGY (PRACTICALS-IN GROUPS)**

**DAYS: Monday & Saturday 10:00To 12:00 Noon AND  
Friday 08:00 to 09:00 AM**

PRAC. #	TOPICS	TEACHER
<b>UNIT – I</b>		
<b>CELL INJURY, ADAPTATION &amp; CELL DEATH</b>		
1	Introduction of Histopathology	
2	Cellular Adaptation (Atrophy, Hyperplasia Hypertrophy & Metaplasia)	
3	Cell swelling / Fatty Change Necrosis	
4	Problem Base Learning (PBL)	
5	Intracellular accumulation i) Carbon ii) Melanin iii) Hemosiderin iv) Bilirubin Pathological Calcification	
6	Problem Base Learning (PBL)	
<b>UNIT – II</b>		
<b>INFLAMMATION &amp; REPAIR</b>		
7	Acute Inflammation cellular change	
8	Morphological patterns of Acute Inflammation Exudates	
9	Chronic Inflammation & Chronic granulomatous Inflammation	
10	Problem Base Learning (PBL)	
11	Repair, i) Granulation tissue, ii) Fibrosis	
<b>HAEMODYNAMIC DISORDERS</b>		
12	Thrombosis & Infarction	
13	Problem Base Learning (PBL)	
14	Revision	

### MICROBIOLOGY PRACTICAL SCHEDULE (IN GROUPS)

**SUBJECT: GENERAL BACTERIOLOGY**

UNIT - I		
1	Introduction	
2	Microscope	
3	Simple Staining	
4	Gram's Staining	
5	Z.N. Staining	
6	Sterilization	
7	Problem Base Learning (PBL)	
UNIT -II		
8	Culture Media – I	
9	Culture Media – II	
10	Isolation of Micro Organism/Lab diagnosis of infection disease	
11	Parasites (Worms)	
12	Malarial Parasites	
13	Problem Base Learning (PBL)	



**SUBJECT: GENERAL PHARMACOLOGY  
SEMESTER: THIRD**

LEC. #	TOPICS	
	<b>UNIT: I CHAPTER:GENERAL PHARMACOLOGY</b>	
	<b>A: PHARMACOKINETICS</b>	<b>NAME OF TEACHER</b>
1	Introduction of Pharmacology-I	
2	Introduction of Pharmacology-II	
3	Terminology	
4	Routes of Administration of (Enteral) drugs	
5	Routes of Administration of (Par-entral ) drugs	
6	Absorption: Process of absorption	
7	Factors modifying drug absorption	
8	Drug Distribution & Reservoir	
9	Bioavailability of $\frac{1}{2}$ life + 1 <sup>st</sup> Pass Effect	
10	Drug Biotransformation Phase I reactions	
11	Drug Biotransformation Phase II reactions	
12	Drug Excretion	
	<b>B: PHARMACODYNAMICS</b>	
13	Introduction to Dynamics	
14	<b>Drug Receptors</b> A. Relation between drug concentration & response & signaling mechanism	
15	<b>Drug Receptors</b> B. Second messengers & receptor regulation	
16	Mechanism of drug action	
17	Therapeutics Index	
18	Factors Modifying drug action I	
19	Factors Modifying drug action II	
20	Adverse drug reaction (ADR)	
21	Teratogenic drugs	
22	<b>General Pharmacology Test</b>	
	<b>CHAPTER: ANS</b>	
23	Introduction to A.N.S	
24	Cholinomimetics [Directly Acting]	
25	Cholinomimetics [Indirectly Acting]	
26	Anti-cholinergic (Anti-muscarinic)	
27	Neuromuscular blockers Depolarizing	
28	Neuromuscular blockers Non-depolarizing	
	<b>UNIT I TEST</b>	
	<b>TOPICS- UNIT II</b>	
	<b>CHAPTER: ANS</b>	<b>NAME OF TEACHER</b>
29	Sympathomimetics I	



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30	Sympathomimetics II	
31	Sympatholytics-I ( $\alpha$ - blockers)	
32	Sympatholytics-II ( $\beta$ -blockers)	
33	Sympatholytics-III ( $\beta$ -blockers)	
	<b>CHAPTER: CVS</b>	
34	Drug treatment of hypertension I	
35	Drug treatment of hypertension II	
36	Drug treatment of Angina Pectoris I	
37	Drug treatment of Angina Pectoris II	
38	Drug treatment of cardiac failure I	
39	Drug treatment of cardiac failure II	
40	Lipid Lowering Drugs	
	<b>CHAPTER: DIURETICS</b>	
41	Osmotic & loop diuretics	
42	Thiazide, $K^+$ sparing, carbonic anhydrase inhibitor diuretics	
	<b>CHAPTER: BLOOD</b>	
43	Drug treatment of Anemia	
44	Drugs used in disorders of coagulation I	
45	Drugs used in disorders of coagulation II	
	<b>CHAPTER: ANTI-INFLAMMATORY DRUGS</b>	
46	NSAIDs I	
47	NSAIDs II	
48	Drug treatment of Gout	
49	Drug treatment of Rheumatoid Arthritis	
	<b>CHAPTER: AUTOCOIDS</b>	
50	Prostaglandins	
51	HI- Agonist & HI- Antagonist	
	<b>CHAPTER: DENTAL PHARMACOLOGY</b>	
52	Anti septic & disinfectants	
53	Treatment of mouth ulcer	
54	Root canal therapy	
55	Prevention of dental carries	
56	Treatment of herpes simplex	
	<b>UNIT II TEST</b>	





**SUBJECT: PHARMACY (PRACTICALS IN GROUPS)**

Practical #	TOPICS
	<b>UNIT I</b>
1	Introduction to Pharmacology and its various branches -----Pharmacopoeia
2	To prepare & dispense 90ml of carminative mixture
3	To prepare & dispense 30ml of kaolin suspension
4	Weight & measures Abbreviation--Instruments used in Pharmacy practical's
5	Pharmaceutical preparations [ Oral, Rectal]
6	Pharmaceutical preparations [ Paretral]
7	To prepare & Dispense 30ml of castor oil emulsion
8	<b>CBS (Case based session)</b>
	<b>UNIT II</b>
9	To prepare & dispense 50ml of Normal Saline
10	To prepare & dispense 50ml of Potassium per magnate solution
11	To prepare & dispense 20ml of turpentine oil liniment
12	To prepare & dispense 2 gms of sulphur ointment
13	To prepare & dispense phenobarbitone powder
14	<b>CBS (Case based session)</b>



## TAGGED SUBJECTS

SEMESTER: THIRD

### SUBJECT: INFORMATION TECHNOLOGY (IT)

LECTURE/ PRACTICAL #	TOPICS
	<b>Web Page development (MS Front Page)</b>
1	Creating a New Web Site(Introduction)
2	Creating A Web Page
3	Managing Web Pages
4	Formatting Text
5	Creating Lists
6	Changing Background Color
7	Manipulating Table in FrontPage
8	Working with Images and Multimedia Effects
9	<b>Class Test</b>
10	Customizing Images
11	Creating Hyperlinks
12	Creating Web Components
13	Publishing Web
	<b>Searching Tools &amp; Techniques</b>
14	Searching Tools & Techniques
15	Search Engines And Effective Searching
16	Revision Class
17	<b>Class Test</b>

### SUBJECT: BIOMEDICAL ETHICS

LEC. #	TOPICS
1	Eugenesis
2	Informed Consent
3	Euthanasia

## PRE-CLINICAL DENTISTRY

It is not an examination subject will be examined in the subject of operative dentistry and Prosthodontics in final year.

The preclinical dentistry includes the following: -

- A. Junior Prosthodontics Techniques**
- B. Junior Operative Techniques / Dental Materia Medica**



**SUBJECT: JUNIOR PROSTHETICS**  
**SEMESTER: THIRD**

LEC. #	TOPICS
1	Introduction To Prosthodontics
2	Over View Of Complete Denture
3	Steps In Construction Of Complete Denture
4	Biological Consideration Of Impression
5	Continues
6	Impression Theories And Techniques
7	Denture Processing ( Laboratory Steps )
8	Continues
9	Continues
10	Arrangement Of Artificial Teeth
11	Continues
12	Denture Defects
13	Relining , Rebasing
14	Denture Repair
15	Introduction To Immediate Denture
	Test



**SUBJECT: JUNIOR OPERATIVE  
SEMESTER: THIRD**

LEC. #	TOPICS
	<b>MODULE –I (PERSPECTIVE OF OPERATIVE DENTISTRY)</b>
1	Definition and History
2	Indications and Case Selection
3	Scope of Operative Dentistry
4	Future Demands of Operative Dentistry
	<b>MODULE –II (CLINICAL SIGNIFICANCE OF BASIC DENTAL SCIENCES )</b>
5	Dentitions
6	Classes of Human teeth: form & functions
7	Structures of the teeth
8	Periodontal considerations in operative
	<b>Module-I &amp; II Test</b>
	<b>MODULE –III (OCCLUSION)</b>
9	General description
10	Mechanics of mandibular motion
11	Capacity of motion of the mandible
12	Articulators and mandibular movements
	<b>MODULE – I V</b>
13	Tooth contacts during mandibular movement
14	Tempromandibular joint
15	Effect of operative procedure on TMJ
16	Biomechanic
	<b>Module-III &amp; IV Test</b>



**SYLLABUS**  
For  
**4<sup>th</sup> Semester**  
(Second Professional)BDS



**SUBJECT: ORAL BIOLOGY & TOOTH MORPHOLOGY**  
**SEMESTER: FOURTH**

LEC. #	TOPICS
	<b>MODULE – I</b>
	<b>DENTIN-PULP COMPLEX, PHYSIOLOGIC TOOTH MOVEMENT, BONE, PREMOLARS</b>
1	Dentin: Composition, formation and structure
2	Pre-eruptive tooth movement
3	Types of dentin and Dentinogenesis
4	Gross bone histology
5	Eruptive and post-eruptive tooth movement
6	Histology of Dentin
7	Bone development
8	Abnormal tooth movement
9	Bone cells
10	Maxillary and Mandibular Premolars
11	Revision
	<b>Module-I Test</b>
	<b>MODULE – II</b>
	<b>PULP, TOOTH MOVEMENT, BONE, MAXILLARY MOLARS</b>
12	Cells of Pulp
13	Shedding of teeth
14	Endochondral bone formation
15	Lymphatic, vascular supply, Innervations of dentin-pulp complex
16	Orthodontic tooth movement
17	Dentin sensitivity
18	Endochondral bone formation
19	Pulp stone, Age changes in pulp
20	Maxillary Molars
21	Mandibular Molars
22	Revision
	<b>Module-II Test</b>
	<b>MODULE – III</b>
	<b>REPAIR AND REGENERATION OF ORAL TISSUES, SALIVARY GLANDS, TEMPOROMANDIBULAR JOINT, DECIDUOUS TEETH</b>
23	Wound healing in Oral mucosa
24	Function of Saliva
25	Classification of Joint
26	Wound healing at Dentino enamel junction
27	Anatomy and development of Salivary Gland
28	Development of T.M.J
29	Repair of enamel
30	Structure of Salivary glands
31	Bones of T.M.J
32	Introduction to deciduous teeth
33	Difference between primary and secondary teeth
	<b>Module-III Test</b>
	<b>MODULE – IV</b>
	<b>REPAIR AND REGENERATION OF ORAL TISSUES, TEMPOROMANDIBULAR JOINT, SALIVARY GLANDS, CHRONOLOGY</b>
34	Repair of Dentin-Pulp complex
35	Ducts of Salivary glands
36	Muscles of mastication



## BHITAI DENTAL & MEDICAL COLLEGE

37	Dental Caries and cavity preparation
38	Blood and Nerve supply of Salivary glands
39	Cartilages associated with T.M.J
40	Repair of extracted tooth socket and Periodontium
41	Histology of major and minor Salivary glands
42	Capsule, ligament and Disc of Joint , Blood and Nerve supply of joint
43	Revision
44	Types of Chronology, Sequence of eruption
	<b>Module-IV Test</b>

### SUBJECT: ORAL BIOLOGY & TOOTH MORPHOLOGY (PRACTICALS-IN GROUPS)

DAYS: Monday, Wednesday, Thursday (12:00 TO 01:30 PM) & Friday (08:00 to 10:00 AM)	
PRAC. #	TOPICS
	<b>ORAL BIOLOGY</b>
	Oral Histology slides on: Bone, Periodontium, Salivary glands
	<b>TOOTH MORPHOLOGY</b>
	Tooth morphology practical, teaching to draw the different deciduous and permanent posterior teeth on graph copies
	<b>JUNIOR OPERATIVE</b>
	Junior operative practical: Different classes of caries Class-IV, Class-V and Class-VI on plaster models
	<b>JUNIOR PROSTHETICS</b>
	Setup of complete denture with finishing and polishing



**SUBJECT: COMMUNITY & PREVENTIVE DENTISTRY  
SEMESTER: FOURTH**

LEC. #	TOPICS
	<b>MODULE – I</b>
1	Dental caries
2	Caries activity tests
3	Diet & Plaque control
4	Prevention of periodontal diseases
	<b>Module-I Test</b>
	<b>MODULE – II</b>
5	Fluoride: Human Health & caries prevention
6	Fluoridation in drinking water
7	Dental Fluorosis
8	Tooth surface loss
	<b>Module-II Test</b>
	<b>MODULE – III</b>
9	A traumatic restorative treatment
10	Pits & Fissure sealants
11	Nutrition & human health
12	Prevention of Oral cancer and malocclusion
	<b>Module-III Test</b>
	<b>MODULE – IV</b>
13	Biostatistics
14	Biostatistics
15	Dental survey, planning and evaluation
16	Research projects
17	Evidence-based dentistry / reading dental literature
	<b>Module-IV Test</b>

**SUBJECT: COMMUNITY & PREVENTIVE DENTISTRY (PRACTICALS-IN GROUPS)**

PRAC. #	TOPICS
1	Instruction about Oral Hygiene measures
2	Plaque disclosing agents
3	Mechanical control of dental plaque
4	Chemical control of dental plaque
5	Tooth Brushing demonstration
6	Inter-dental cleaning Aids
7	High fluoride gel application
8	Fissure sealing
9	Dietary counseling





**SUBJECT: GENERAL PATHOLOGY  
SEMESTER: FOURTH**

LEC. #	TOPICS
	<b>UNIT – I</b>
	<b><u>GENERAL PATHOLOGY / IMMUNITY / IMMUNOPATHOLOGY</u></b>
1	Introduction & Innate Immunity
2	Adaptive Immunity
3	Cells of immunity-I
4	Cells of immunity-II
5	Structure and Functions of IG
6	MHC
7	Hyper sensitivity reactions – I
8	Hyper sensitivity reactions – II
9	Grafts and Rejection
10	Tolerance and Autoimmunity
11	Tumour immunity
12	Immunodeficiency
	<b>NEOPLASIA</b>
13	Introduction & Nomenclature
14	Characteristic of benign & Malignant tumor
15	Spread of malignant tumor
16	Epidemiology of cancer
	<b><u>MICROBIOLOGY</u></b>
	<b><u>SPECIAL BACTERIOLOGY</u></b>
	<u>Gram-positive cocci</u>
17	Staphylococci
18	Streptococci and S.pneumoniae
	<u>Gram negative cocci</u>
19	Niesseriae
	<u>Gram positive bacilli (non spore forming)</u>
20	Diphtheria
21	Listeria & Actinomyces
	<u>Gram positive bacilli (spore forming)</u>
22	Bacillus Species + Clostridium tetani
23	Clostridium botulinum + perf.; difficile
	<u>Mycobacteria</u>
24	M. tuberculosis
25	M. Lepae
	<u>Gram negative bacilli</u>
26	Salmonella + Shigella
27	Compylobacter, H. pylori + Vibrio
28	E. coli+ Klebsiella & Aerobacter
29	Enteriobacter & Serratia group
30	Proteus & Providencia + Pseudomonas
31	H. infleuza, B. pertussis
32	<u>Spirochaetes</u>
33	<u>Rickettsia + Chlamydia + Mycoplasma</u>
	<b>Unit - I Test</b>
	<b>UNIT – II</b>
	<b><u>GENERAL PATHOLOGY</u></b>
	<b>NEOPLASIA</b>
34	Molecular basis of cancer, Principles



## BHITAI DENTAL & MEDICAL COLLEGE

35	Molecular Basis of cancer-II
36	Etiology of cancer, Chemical carcinogenesis
37	Etiology of cancer, radiation carcinogenesis
38	Etiology of cancer, viral carcinogenesis
39	Clinical features of neoplasia
40	Grading and staging of cancer
41	Lab Diagnosis of Neoplasia – I
<b>MICROBIOLOGY &amp; General Pathology</b>	
<b>MYCOLOGY</b>	
42	Basic mycology
43	Cutaneous & subcutaneous mycoses
44	Systemic mycoses
45	Opportunistic mycoses
<b>SPECIAL VIROLOGY</b>	
46	Tumor viruses
47	Human immunodeficiency virus
48	Hepatitis viruses
49	Polio virus
<b>GENETIC DISEASES</b>	
50	Classification of Genetic Diseases
51	Mutations & their mechanisms
52	Chromosomal disorders
53	Chromosomal disorders
54	Chromosomal disorders
55	Mendelian disorders
56	Mendelian disorders
57	Mendelian disorders
58	Diagnosis of Genetic diseases
<b>ENVIRONMENTAL &amp; NUTRITIONAL PATHOLOGY</b>	
59	Environment and Disease
60	Common environmental and occupational exposures
61	Common environmental and occupational exposures
62 & 63	Nutrition and disease
<b>Unit - II Test</b>	

**Subject: GENERAL PATHOLOGY (PRACTICALS-IN GROUPS)**

**DAYS: Monday & Saturday 10:00 AM To 12:00 Noon AND Friday 08:00 AM to 09:00 AM**

PRAC. #	TOPICS	TEACHER
<b>UNIT – I</b>		
<b>GENERAL PATHOLOGY</b>		
1	Neoplasia (Introduction) Nomenclature, characteristic of benign and malignant tumors	
2	Benign epithelial tumors. (Papillomas, including squamous cell papilloma & Duct cell papilloma, Adenomas)	
3	Benign connective tissue tumors: - Fibroma - Lipoma Osteoma	
4	Problem Base Learning (PBL)	
5	Clinical features, grading and staging of neoplasia	
6	Laboratory diagnosis of neoplasia	
7	Diagnosis of genetic diseases	
8	Problem Base Learning (PBL)	
<b>UNIT II</b>		
9	<b>Malignant epithelial tumors</b> Squamous cell carcinoma, Basal cell carcinoma	



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10	Mixed tumors and teratoma	
11	Metastatic tumors	
12	Problem Base Learning (PBL)	
13	Immunoassay techniques	
14	Molecular Techniques	
15	Problem Base Learning (PBL)	
16	Revision	
<b>MICRO BIOLOGY PRACTICAL SCHEDULE (IN GROUPS)</b>		
1	Staphylococcus	
2	Streptococcus	
3	Pneumococcus	
4	Nisseria	
5	Mycobacteria	
6	Coryne bacteria	
7	Problem Base Learning (PBL)	
<b>UNIT – II</b>		
<b>MICROBIOLOGY</b>		
8	Anaerobic bacteria	
9	E. Coli / Klebsiella	
10	Salmonella / Shigella	
11	Proteus / Pseudomonas	
12	H. Pylori / Compylobacter	
13	Candidia	
14	Problem Base Learning (PBL)	



**SUBJECT: GENERAL PHARMACOLOGY**  
**SEMESTER: FOURTH**

LEC.	TOPICS	UNIT: I
	<b>CHAPTER: CNS</b>	<b>NAME OF TEACHER</b>
01	Introduction (CNS Neurotransmitter)	
02	Sedative & Hypnotics[Barbiturates]	
03	Sedative & Hypnotics (BDZ, Anxiolytics & Z drugs)	
04	The Alcohols I	
05	The Alcohols II	
06	Opioids Agonist	
07	Opioids Antagonist	
08	Anti Epileptics I	
09	Anti Epileptics II	
10	General Anaesthetics I	
11	General Anaesthetics II	
12	Local Anaesthetics	
13	Drug treatment of Parkinsonism	
	<b>CHAPTER: GIT</b>	
14	Emetics & Antiemetics	
15	Drug treatment of Acid peptic disease I	
16	Drug treatment of Acid peptic disease II	
17	Laxative & purgatives	
	<b>UNIT I TEST</b>	
	<b>UNIT II</b>	
	<b>TOPICS</b>	
	<b>CHAPTER: RESPIRATORY SYSTEM</b>	<b>NAME OF TEACHER</b>
18	Drug treatment of Bronchial Asthma & COPD I	
19	Drug treatment of Bronchial Asthma & COPD II	
	<b>CHAPTER: DRUGS ACTING ON ENDOCRINE SYSTEM</b>	
20	Pancreatic hormones & antidiabetic drugs (Insulin)	
21	Oral Hypoglycemic drugs	
22	Corticosteroids I	
23	Corticosteroids II	
24	Drug treatment of Thyroid disorders	
	<b>CHAPTER: ANTI-MICROBIAL THERAPY</b>	
25	Principles of Antimicrobial Therapy	
26	Cell wall synthesis inhibitors (Penicillin & Cephalosporin)	
27	Amino glycosides	
28	Quinolones	
29	Macrolides	
30	Anti-Viral Influenza Virus Therapy	



## BHITAI DENTAL & MEDICAL COLLEGE

31	Anti-Viral Hepatitis Therapy	
32	Anti-Retroviral Therapy	
33	Anti- tubercular drugs I	
34	Anti- tubercular drugs II	
35	Sulfonamide & Trimethoprin	
36	Tetracycline & Chloramphenicol	
37	Chemotherapy of Malignancy I	
38	Chemotherapy of Malignancy II	
39	Chemotherapy of Malaria	
40	Anti-Helminthes	
41	Chemotherapy of Amoebiasis	
<b>UNIT II TEST</b>		

### SUBJECT: PHARMACY PRACTICALS (IN GROUPS)

PRACTICAL #	TOPICS
<b>UNIT I</b>	
1	Introduction to prescription writing & Model of Prescription
2	Prescription writing of Malaria
3	Prescription writing of pulmonary Tuberculosis
4	Prescription writing of Typhoid fever
5	Prescription writing of Amoebic Dysentery
<b>UNIT II</b>	
6	Prescription writing of Bacillary dysentery
7	Prescription writing of Bronchial Asthma
8	Prescription writing of Angina Pectoris
09	Prescription writing of Hypertension
10-16	<b>CBS (Case based session)</b>



## TAGGED SUBJECTS

SEMESTER: FOURTH

### SUBJECT: INFORMATION TECHNOLOGY (IT)

LECT / PRACT#	TOPICS
	<b>Data Processing and Database Concepts</b>
1	Database concepts
2	Methods of organizing data
3	File Management System
4	Database Management System
	<b>Office Database Package (MS Access)</b>
5	Fundamental of Ms Access
6	Database window (Introduction)
7	Records, Entering, Editing, Navigating Records
8	Database, Tables, Queries, Forms, Reports
9	<b>Class Test</b>
10	Tables
11	Primary keys, Indexes, Relationships
12	Queries
13	Forms
14	Reports
	<b>Statistical Package (SPSS)</b>
15	Statistical Package - Basic Components
16	Revision class

### SUBJECT: BIOMEDICAL ETHICS

LEC. #	TOPICS
1	Ethical Issues in Organ Transplantation
2	Ethics and Medical Research
3	Medical Errors: Should they be disclosed to the patient?

## PRE-CLINICAL DENTISTRY

It is not an examination subject will be examined in the subject of operative dentistry and Prosthodontics in final year.

The preclinical dentistry includes the following: -

- A. Junior Prosthodontics Techniques
- B. Junior Operative Techniques / Dental Materia Medica



**SUBJECT: JUNIOR PROSTHETICS  
SEMESTER: FOURTH**

LEC. #	TOPICS
1	Introduction, Objectives, Terminology Of RDP
2	Indications, Contraindications & Classification
3	Parts Of Partial Removable Dental Prostheses
4	Impression Materials
5	Impression Procedures For RDP
6	Surveying
7	Lab Procedures For Casting
8	Types Of Removable Partial Denture
9	Introduction To Crown
10	Indication , Contraindication And Types
11	Introduction To Bridge
12	Indication , Contraindication
13	Types Of Bridge
14	Soldering And Welding Technique
15	Introduction To Dental Implant
	<b>Test</b>

**SUBJECT: JUNIOR OPERATIVE  
SEMESTER: FOURTH**

LEC. #	TOPICS
	<b>MODULE –I (DENTAL CARIES)</b>
1	Definition & mechanism
2	Etiology
3	Bacterial plaque
4	Pathophysiology of dental caries
	<b>MODULE – II</b>
5	Clinical sites for caries initiation & progression of carious lesions
6	Enamel caries
7	Dentine caries
8	Advanced carious lesions
	<b>Module-I &amp; II Test</b>
	<b>MODULE – III (CARIES DIAGNOSIS)</b>
9	Assessment of caries risk and activity
10	Caries diagnosis for pits and fissures
11	Caries diagnosis for smooth surfaces
12	Caries diagnosis for root surfaces
	<b>MODULE – IV (CARIES PREVENTION)</b>
13	Fluoride exposure
14	Salivary functioning
15	Diet
16	Oral Hygiene
	<b>Module-III &amp; IV Test</b>



## NOTE / INSTRUCTIONS

- 75% ATTENDANCE IS MANDATORY FOR ELIGIBILITY OF EXAMINATION FORM
- IN CASE OF LECTURE IS NOT DELIVERED IT WILL BE COVERED AS EXTRA LECTURE WITH OTHER TOPIC
- ALL THE GROUPS WILL BE TAUGHT THE SAME TOPICS BY SEPRATE GROUP TEACHER
- AFTER EIGHT WEEKS THERE WILL BE UNIT TEST IN ALL SUBJECTS SEPRATELY
  - COMPRISING OF A THEORY PAPER BCQ's AND SHORT ESSAY
  - FOLLOWED BY VIVA VOCE/OSPE EXAMIANTION
- AFTER SIXTEEN WEEKS AND TWO WEEKS PREAPRATION LEAVE THERE WILL BE SEMSTER EXAMIANTION IN ALL SUBJECTS SEPRATELY+THREE TAGED SUBJECTS
  - COMPRISING OF A THEORY PAPER 35-BCQ's AND 6/8 SHORT ESSAY QUESTIONS
  - FOLLOWED BY VIVA VOCE/OSPE EXAMIANTION





## **BOOKS RECOMMENDED**

### **ORALBIOLOGY & TOOTH MORPHOLOGY**

- 1- Orban's Oral Histology and Embryology, S.N. Bhaskar
- 2- Oral Histology (Development, Structure and Function), A.R. Tencate
- 3- Oral Development and Histology, James K. Avery
- 4- Introduction to Oral Biology and Tooth Morphology, Scott & Symons
- 5- Wheeler's Oral Biology and Tooth Morphology and Morphology, MajorM. Ash
- 6- Concise Oral Biology and Tooth Morphology and Morphology, James L.Fuller
- 7- Oral Embryology, Sperber
- 8- Oral Physiology, Cristopher Lavelle
- 9- Physiology of Mouth, Jenkins
- 10- An Atlas of Oral Anatomy, Berkoritz, G.R.Holland

### **COMMUNITY & PREVENTIVE DENTISTRY**

- 1- Community Dentistry by Soben Petter
- 2- Community & Preventive Dentistry by Joseph John

### **GENERAL PATHOLOGY**

- 1- Pathologic Basis of Disease by Robinson's
- 2- Pathology Basic of Disease by Robinson's

### **GENERAL PHARMACOLOGY**

- 1- Basic and clinical Pharmacology by Benteng-Katzung
- 2- Illustrated Pharmacology by Lippincott.

### **JUNIOR PROSTHETICS**

- 1- Complete Denture Prosthodontics Clinical and Laboratory Procedure (Bernard Levin, Glenn D. Richardson,)
- 2- McCracken Removable Partial Prosthodontics

### **JUINOR OPERATIVE**

- 1- Atlas of Operative Dentistry