# BANDH VIDANA BANANA BAN

#### Mahatma Gandhi Vidyamandir's

#### Karmaveer Bhausaheb Hiray Dental College & Hospital

Panchavati, Nashik-422003

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### Karmaveer Bhausaheb Hiray Dental College & Hospital

COURSE OUTCOME			
Name of Program	BDS		
Name of Course	Human anatomy, embryology, histology And Medical genetics		

COURSE OUTCOME (CO)	TOPICS
CO1	Knowledge and understanding of the general anatomy and general embryology, scalp, face, salivary glands, cervical region, triangles of neck in head and neck
CO2	Knowledge and understanding of the anterior midline structures of neck, thyroid and parathyroid gland, deep cervical fascia, supra hyoid and infra hyoid muscles, back of neck, cranio-vertebral joints, cranial nerves, blood vessels and lymphatic drainage of neck, pharynx and larynx in head and neck.
CO3	Knowledge and understanding of the temporal and infra temporal regions, teeth, oral cavity, palate, tongue, nose and paranasal air sinuses, orbital cavity and ear in head and neck region
CO4	Knowledge and understanding of the cranial cavity, neuroanatomy, thorax and abdomen, development of head & neck region of the human body
CO5	Competent in identifying the anatomical structures in osteology related to head & neckand its clinical applications
CO6	Competent in identifying the normal anatomical structures in cadaver specimens related to head & neck, thorax & abdomen and its clinical applications
CO7	Competent in identifying the developmental, structural and function correlation of the microscopic anatomy of cells and tissues forming organ systems.
CO8	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the anatomy of head & neck.

CO9	Ability to critically appraise their own performance across multiple formative assessment completed during the course
	assessment completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6, CO7	Apply, Analyze	Level 3 and 4
CO8, CO9	Evaluate and Create	Level 5 and 6

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	COURSE OUTCOME
Name of Program	BDS
Name of Course	Human Physiology And Biochemistry, Nutrition & Dietics

COURSE	Topics
OUTCOME	
(CO)	
CO1	Knowledge and understanding of basics of cell physiology, transport mechanisms, blood cells, their functions, and their applied aspects
CO2	Knowledge and understanding of neurons, degeneration and regeneration changes in neurons, neuromuscular transmission, molecular basis of muscle contraction, organization of central nervous system, functions of sensory and motor systems, physiology of special senses and applied aspects.
CO3	Knowledge and understanding about the physiology of heart and blood vessels, body fluids, formation of urine, countercurrent mechanism, physiology of respiratory system, exercise and high altitude physiology, applied aspects, integrated and clinical physiology
CO4	Knowledge and understanding about the secretion, functions and regulation of digestive juices, gastro-intestinal motility and applied aspects, general endocrinology, physiological actions, regulation and altered secretion of endocrine hormones, physiology of male and female reproductive system.
CO5	Should be competent in interpretation of test results of hematology and recording of blood pressure and pulse rate.
CO6	Should be competent in clinical examination and vital signs, basic life support techniques.
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence- based knowledge to display expertise in physiology.
CO8	Ability to critically appraise their own performance across multiple formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME			
Name of Program	BDS		
Name of Course	Biochemistry, Nutrition And Dietics		

COURSE OUTCOME	Topics
(CO)	
CO1	Knowledge and understanding of basic structure of cell and Chemistry of Biomolecules, Enzymes, Salivary biomarkers and biotransformation of metabolites. Biochemistry of Teeth and Dental Caries
CO2	Knowledge on Metabolism of Carbohydrates, Lipids, Hemoglobin Proteins, its energetics and associated disorders
CO3	Knowledge and understanding of Dietary requirement, Biochemical functions, Deficiency manifestations of Vitamins and Minerals, Assimilation of Nutrients, Obesity and Malnutrition
CO4	Knowledge about Nucleic acid, Nucleotides, Central Dogma, Replication, Transcription, Translation and Genetic code. Disorders of nucleotide metabolism.
CO5	Qualitative and Quantitative Analysis of Normal and Abnormal constituents in Blood and Urine
CO6	Diagnostic tests related to Liver ,Renal function and Analysis of Electrolytes
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display knowledge about the concepts in Biochemistry
CO8	Ability to critically appraise their own performance across multiple formative assessment completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	Dental Anatomy, Oral Physiology, Oral Embryology, Dental Histology	

COURSE OUTCOME CO)	Topics	
CO1	A sound understanding of nomenclature, development and eruption of teeth, topographic anatomy of primary and secondary dentition, anatomy of pulp chambers & canals and comparative anatomy including form & function.	
CO2	An in-depth knowledge of concepts of occlusion, mineral metabolism, theories of mineralization, oral sensation, mastication, deglutition and speech.	
CO3	A thorough understanding of general embryology, embryology of head, face and oral cavity in particular with applied aspects	
CO4	Understanding of histological features of hard tissues of the oral and maxillofacial region with emphasis on histochemical techniques, age changes, eruption and shedding	
CO5	Knowledgeably awareness and understanding of the anatomy, functions and histological features and applied aspects of soft tissues of oral and maxillofacial region	
CO6	Capability to observe and identify the provided cast (type of arch, dentition, number and age) and tooth specimen	
CO7	Display adequate dexterity in carving various types of teeth.	
CO8	Skills in identification of microscopic features of dental lamina, stages of tooth development, hard and soft tissues of oral and maxillofacial region; in particular the named cells and different types of tissues	
CO9	Skills to conduct basic Oral Physiology experiments - Salivary pH, Taste Mapping, Saliva Flow Rate	

CO10	Consolidate all above mentioned major competencies acquired during the
	course and integrate newer evidence based knowledge in displaying
	expertise in the science of dental anatomy
CO11	Ability to critically appraise their own performance across multiple
	formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4,CO5	Remember, Understand	Level 1 and level 2
CO6 ,CO7,CO8,CO9	Apply, Analyze	Level 3 and 4
CO10, CO11	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
BDS		
GENERAL PATHOLOGY		
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COURSE	Topics	
OUTCOME		
(CO)		
CO1	Knowledge and Understanding of Basic cell injury, its morphological changes and functional abnormalities, Inflammation, healing and hemodynamic disorders	
CO2	Knowledge and understanding of classification and pathogenesis to analyz Congenital, Environmental, Nutritional and Autoimmune diseases and Neo	
CO3	Knowledge and understanding of pathogenesis of Hematological diseases an systemic pathology.	
CO4	Should be capable of reading and understanding pathological slides as well as proficient in disease grading, staging, and diagnosis.	
CO5	Should be capable of understanding and executing fundamental Laboratory techniques such as tissue processing, staining, blood sample handling and reporting.	
CO6	Should be capable of communicating with other health professionals, laboratories, and technical experts in order to comprehend and interpret the subsequent treatment	
CO7	CO7 Consolidating and applying newly acquired knowledge in evidence-based practices for pathological conditions and disease processes.	
CO8	Ability to critically appraise their own performance across multiple formative assessment completed during the course	

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	GENERAL MICROBIOLOGY	

COURSE	Topics	
OUTCOME		
(CO)		
CO1	Knowledge and understanding of the general aspects of microbiology, infection and immunity with the ability to apply the knowledge relevantly and practically in dental practice.	
CO2	Should be able to understand the virulence, pathogenesis and laboratory diagnosis of gram positive bacteria, gram negative bacteria anaerobic bacteria, spirochetes and acid-fast bacilli	
CO3	Should imbibe the knowledge on the mechanistic pathways behind the pathogenesis and virulence pertained to viral, mycotic and parasitic infec	
CO4	Should be able to follow the aseptic procedures, should be able to demonstrat the proper infection control measures/PPE, hand hygiene measures and biomedical waste management.	
CO5	Should be able to perform staining methods, proper collection of specimens, selection of appropriate culture medium and specific identification of the pathogens.	
CO6	Competent in acquiring patient consent and to interpret the microbiological case reports, serological tests and antimicrobial susceptibility tests	
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the science of Microbiology	
CO8	Ability to critically appraise their own performance across multiple formative assessments completed during the course	

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	GENERAL AND DENTAL	
	PHARMACOLOGY	
	AND THERAPEUTICS	

COURSE	TOPICS	
OUTCOME		
(CO)		
COÍ	Knowledge and understanding on General Principles of Pharmacology - Different dosage forms, various routes of administration, pharmacokinetics, pharmacodynamics and adverse effects of drugs in general and dental practice	
CO2	Knowledge and understanding Systemic Pharmacology (Drugs acting on CNS, PNS, ANS, and CVS	
CO3	Knowledge and understanding Systemic Pharmacology (Drugs acting on respiratory, GIT, endocrine system and blood	
CO4	Knowledge on drugs used for Chemotherapy of Infections (bacterial, fungal, viral), immunomodulators, cancer therapy and chelating agents and Dental Pharmacology	
CO5	Process of making solutions for sterilizing root canals, plaque disclosing solutions, paste for pulp mummification, styptic dusting powder.	
CO6	Preparations of saline and potassium permanganate mouthwashes, gum paint.  Demonstrating the process of making paste for pulp capping, pulp mummification, and dental caries. Demonstrating the process of making powders to reduce hypersalivation, denture cleaning powder, analgesic powder to have a strong foundation on dental pharmacology	
CO7	Pharmacology to Practice in Dental Clinic - To inculcate the knowledge of prescription writing for oral candidiasis, pericoronitis, apical periodontitis, post-extraction medication, xerostomia, and oral ulcers	
CO8	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence-based knowledge to treat patients with appropriate drugs without any side effects for various dental diseases.	
CO9	Ability to critically appraise their own performance across multiple formative assessments completed during the course	

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6, CO7	Apply, Analyze	Level 3 and 4
CO8, CO9	Evaluate and Create	Level 5 and 6

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### Karmaveer Bhausaheb Hiray Dental College & Hospital

COURSE OUTCOME		
BDS		
DENTAL MATERIALS		
	BDS	

COURSE	Topics
OUTCOME	
(CO)	
CO1	Should have knowledge and understanding about basic properties of dental materials and Indications, Composition, Chemistry, Properties and use of auxiliary dental materials (Impression materials, Gypsum products, Waxes, Casting investment and casting procedures, materials for finishing and polishing
CO2	Should have knowledge on the Indications, Composition, Chemistry, Properties and use of direct restorative materials (Bonding, Composites, Cements Direct filling gold and amalgam
CO3	Should have knowledge on the Indications, Composition, Chemistry, Properties and use of indirect restorative materials (Ceramics, Casting alloys, Wrought alloys), denture base resins and oral and maxillofacial prosthetic materials
CO4	Knowledge of scope and use of preventive materials- fluorides, pit and fissure. Sealants, dentifrices, mouthwashes, obtundants and desensitizing agents
CO5	Ability to manipulate and utilize restorative dental materials for clinical procedures
CO6	Ability to manipulate impression materials and gypsum products for diagnostic and laboratory purposes in dentistry
C07	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the application of various dental materials into clinical practice
CO8	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the application of various dental materials into clinical practice

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME	
Name of Program	BDS
Name of Course	PRE CLINICAL CONSERVATIVE DENTISTRY

COURSE	Topics
OUTCOME (CO)	
CO1	Demonstrate knowledge and understanding of operative dentistry, dental anatomy, histology and occlusion.
CO2	Demonstrate knowledge and understanding of various concepts in cariology and explain the etiology and formulate of treatment plan
CO3	Demonstrate knowledge and understanding of restorative materials, hand and rotary cutting instruments and principles
CO4	Understanding the fundamentals of tooth preparation, isolation techniques and identification of basic endodontic instruments
CO5	Demonstrate class I, class I extended, class II,III, V cavity preparations including various methods of tooth separation, pulpal protection and restoration (amalgam, composite, glass ionomer) on plaster models, natural teeth, typodont on phantom heads, including selection of armamentarium for conservative treatment
CO6	Ability to identify various restorative and endodontic instruments and demonstrate their use. Demonstrate rubber dam isolation
CO7	Demonstrate coronal access cavity preparation on extracted incisors, canines, premolars, maxillary and mandibular molars. Perform complete endodontic therapy for maxillary central incisor.
CO8	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of preclinical prosthodontics
CO9	Ability to critically appraise their own performance across multiple formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3 ,CO4	Remember, Understand	Level 1 and level 2
CO5, CO6 ,CO7	Apply, Analyze	Level 3 and 4
CO8, CO9	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	PRE CLINICAL PROSTHODONTICS	

COURSE OUTCOME	Topics
(CO)	
CO1	knowledge and understanding of the anatomy of denture bearing areas, materials used, armamentarium and the process of complete denture fabrication
CO2	Demonstrate knowledge and understanding of various classifications of partial edentulism, surveying, components and the process of removable partial denture fabrication.
CO3	Demonstrate knowledge and understanding of parts of fixed partials dentures, implants and various types of maxillofacial prosthesis including materials used.
CO4	Demonstrate instrument handling and laboratory skills of complete denture fabrication.
CO5	Demonstrate surveying and laboratory skills of removable partial denture fabrication.
CO6	Demonstrate skills in identification of various parts of fixed partial denture, principles of tooth preparation, implants and various maxillofacial prosthesis including the materials used. Demonstrate skill in performing tooth preparation on typhodont model
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of preclinical prosthodontics
CO8	Ability to critically appraise their own performance across multiple formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6,CO7	Apply, Analyze	Level 3 and 4
CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	GENERAL MEDICINE	

COURSE	Topics
OUTCOME	
(CO)	
CO1	A sound understanding of pathophysiology, clinical features, radiographic characteristics (wherever applicable) and Treatment of the viral infections, parasitic infections, bacterial infections with special emphasis on oral
	manifestations, including dental infections, gingival hyperplasia and stomatitis.
CO2	In-depth knowledge of pathophysiology, clinical features, radiographic characteristics
	(wherever applicable) and treatment of dysphagia, peptic ulcer, jaundice, cirrhosis, GERD, malabsorption and inflammatory bowel disease, nephrotic syndrome and renal failure
CO3	Proficiency in understanding and identification of the clinical features, radiographic
	characteristics (wherever applicable) and treatment of facial palsy, facial pains, headaches, cerebrovascular accidents, movement and mood disorders, syncope, short trauma, pneumonia, COPD, asthma, sleep disorders,
	pulmonary diseases and cardiovascular disorders
CO4	Sensitisation to the basics of blood disorders, nutrition, endocrine disorders with special emphasis on oral manifestations and treatment aspects.
CO5	Ability to perform history taking and general examination of all systems and reach a diagnosis with special emphasis on oral manifestations of systemic disorders
C06	Ability to identify various emergencies during dental procedures and perform basic life support procedures and referral.
CO7	Consolidate all above mentioned major competencies acquired during the cours and integrate newer evidence based knowledge in displaying expertise in the science of oral pathology and microbiology
CO8	Ability to critically appraise their own performance across multiple formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3, CO4	Remember, Understand	Level 1 and level 2
CO5,CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	GENERAL SURGERY	

COURSE OUTCOME	Topics
(CO)	
C01	A sound understanding of basic human anatomy, principles of general surgery and various types of orodental diseases and knowledge about the normal wound healing, various types of wounds and its management, complications of wound healing, infectious diseases and its management.
CO2	Understanding the pathophysiology of various types of shock, hemorrhage and their management
CO3	Proficiency in understanding the clinical features, investigations and management of various types of ulcers, tumors, cyst, diseases of the lymphatic and nervous system and salivary gland disorders
CO4	Knowledge about clinical features, investigations and treatment of various fractures affecting the head and neck, diseases of oral cavity, larynx, nasopharynx, thyroid disorders
CO5	Ability to elicit history, perform clinical examination and diagnose the various pathologies.
CO6	Skills in interpreting the radiographic and histologic findings and correlating with clinical findings.
C07	Identify various instruments used in general surgical procedures, and demonstrate first aid steps and correct infection control practices
CO8	Consolidate all above mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in general surgery
CO9	Ability to critically appraise their own performance across multiple formative assessments completed during the course

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3,CO4	Remember, Understand	Level 1 and level 2
CO5 ,CO6	Apply, Analyze	Level 3 and 4
CO7, CO8, CO9	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME	
Name of Program	BDS
Name of Course	ORAL & MAXILLOFACIAL PATHOLOGY AND ORAL MICROBIOLOGY

COURSE	Topics
OUTCOME	•
(CO)	
CO1	A sound understanding of pathophysiology, clinical features, radiographic
	characteristics (wherever applicable), histological features and treatment of the
	preneoplastic and neoplastic lesions affecting the oral and maxillofacial regions with
	special emphasis on the recent concepts in the pathogenesis of neoplasia
CO2	In-depth knowledge of pathophysiology, clinical features, radiographic characteristics
	(wherever applicable), histological features and treatment of developmental disorders
	and and non neoplastic conditions including infectious diseases, injuries and cysts
	affecting the head and neck region.
CO3	Proficiency in understanding and identification of the clinical features, radiographic
	characteristics (wherever applicable), histological features and treatment of oral
	manifestations of systemic diseases.
CO4	Ability to identify and interpret the anomalies in the provided tooth specimen and casts
CO5	Skills in identification of microscopic features of all the diseases and cytological smears
	pertaining to the craniofacial region along with drawing histopathological features with
	legible labeled diagrams.
CO6	Consolidate all above mentioned major competencies acquired during the course and
	integrate newer evidence based knowledge in displaying expertise in the science of oral
	pathology and microbiology.
CO7	Ability to critically appraise their own performance across multiple formative
	assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5	Apply, Analyze	Level 3 and 4
CO6, CO7	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME		
Name of Program	BDS	
Name of Course	FORENSIC ODONTOLOGY	

COURSE	Topics
OUTCOME	
(CO)	
CO1	Obtain comprehensive knowledge about Forensic Odontology and its
	implementation in
	practice of dentistry.
CO2	Ability to apply knowledge of facial reconstruction techniques using manual methods and recent softwares.
CO3	Thorough knowledge on identifying the age and gender of an individual using recent forensic identification methods.
CO4	Knowledge about the molecular analyses of blood, saliva and pulpal tissue for post mortem identification
CO5	Ability to assist and solve cases of forensic sciences with specific requirements of dental aids
CO6	Ability to identify cases of domestic violence including child abuse, elderly abuse and spousal abuse using the knowledge of oral clinical signs including bite marks and behavioural changes.
C07	Consolidating and applying newly acquired knowledge in evidence-based practices in  Forensic Dental Investigation and Medico Legal Cases.
C08	Ability to critically appraise their own performance across multiple formative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6	Apply, Analyze	Level 3 and 4
CO7, CO8	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME	
BDS	
Public Health Dentistry	
	BDS

COURSE	Topics
OUTCOME	
(CO)	
CO1	Demonstrate knowledge on Health, disease and its psychosocial and ecological
	dimensions, epidemiology, Health care delivery system and administration
CO2	Demonstrate knowledge on Epidemiology of oral diseases, dental health care delivery,
	Finance and practice management, biostatistics and research methodology pertaining to dental public health.
CO3	Demonstrate knowledge on prevention of oral diseases and also to be competent enough to interpret signs and symptoms and also to investigate and diagnose
	common oral diseases
CO4	Demonstrate segregation of Biomedical waste and its management and related regulations, Preparedness to be part of disaster relief team
CO5	Demonstrate skills for recording indices for oral diseases formulating surveys, analyzing and publishing research, recording a comprehensive case history and formulate treatment plan at individual level and community.
CO6	Demonstrate skills for performing preventive dentistry procedures like pit and fissure sealant, PRR, Topical Fluoride and also to carry out counseling sessions
C07	Integrate the knowledge acquired in the entire program and apply it towards newer modifications as evidence based concepts in practicing principles of public health dentistry and preventive care.
C08	Ability to critically appraise their own performance across multiple formative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6	Apply, Analyze	Level 3 and 4
CO7	Evaluate and Create	Level 5 and 6

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COURSE OUTCOME	
BDS	
Oral Medicine and Radiology	
	BDS

COURSE OUTCOME (CO)	Topics
CO1	Knowledge and diagnosis of the etiology, pathogenesis, clinical presentation and diagnosis of, bone and soft tissue lesions
CO2	Knowledge and applications of Radiography in dental practice along with radiation protection and effective clinical usage of the different radiographic techniques
CO3	Knowledge and understanding of the systemic diseases and impact on oral health
CO4	Demonstration of clinical skills in the management of mucosal lesions
CO5	Methodology of exposure and interpretation of dental radiographs
CO6	Knowledge and application of dental treatment planning in patients with systemic disorders
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based principles in displaying expertise in the science of oral medicine
C08	Ability to critically appraise their own performance and articulate the improvements required to attain perfection performed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO3	Remember, Understand	Level 1 and level 2
CO2 ,CO4,CO7	Apply, Analyze	Level 3 and 4
CO5,CO6	Evaluate and Create	Level 5 and 6

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# Karmaveer Bhausaheb Hiray Dental College & Hospital

COURSE OUTCOME	
BDS	
Periodontology	
	BDS

COURSE OUTCOME (CO)	Topics
CO1	Knowledge and understanding of basic tissues of periodontium, age changes and defense mechanisms.
CO2	Knowledge and understanding of diseases of periodontium, etiopathogenesis, risk factors associated with periodontal disease and various diagnostic aids for diagnosis of periodontal disease.
CO3	Knowledge about the treatment plan, various modes of periodontal therapy(including laser therapy) and implant therapy.
CO4	Should be competent in periodontal charting, interpretation of radiographs and other investigations
CO5	Should be competent in correct diagnosis, prognosis and framing a comprehensive treatment plan for various periodontal and peri-implant diseases. Also should be able to convince patients of the need for therapy and obtain consent.
CO6	Competent in acquiring patient consent and executing nonsurgical periodontal therapy and minor surgical procedures (including laser assisted procedures)
C07	Able to educate patients regarding oral hygiene maintenance and successful followup to maintain and improve periodontal health.
C08	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the science of Periodontology.
CO9	Ability to critically appraise their own performance across multiple formative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO4 ,CO5,CO6,CO7	Apply, Analyze	Level 3 and 4
CO8,CO9	Evaluate and Create	Level 5 and 6

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# Karmaveer Bhausaheb Hiray Dental College & Hospital

	COURSE OUTCOME	
Name of Program	BDS	
Name of Course	Oral and Maxillofacial Surgery	

COURSE OUTCOME (CO)	Topics
CO1	Knowledge and understanding basic concepts of sterilization and asepsis and its clinical implications; pathophysiology, management and prevention of medical emergencies; neurophysiology, pharmacology, applied anatomy, armamentarium, techniques and complications of local anesthesia, conscious sedation and general anesthesia, Emergency management.
CO2	Knowledge and understanding of principles and techniques of extractions and transalveolar extractions, pathophysiology and management of odontogenic infections, maxillofacial space infections, pathophysiology of maxillary sinus diseases and management, basics of dental implantology, basics of preprosthetic surgery, biopsy techniques.
CO3	Understanding clinical features, radiological diagnosis and management of maxillofacial trauma; Understanding treatment planning and procedures performed in orthognathic surgery; diagnosis and management of Temporomandibular Disorders
CO4	Understanding and describing the theories, classification and management of cleft lip, alveolus and palate, clinical features and management of cysts of jaws, benign tumors, salivary gland pathologies, precancerous conditions and lesions, Oral cancer, neurological disorders and head and neck pain
CO5	Should be competent in oral and maxillofacial surgery case history taking, interpretation of radiographs and other investigations, diagnosing and formulating appropriate treatment plan.
CO6	Should be competent in identification of basic surgical armamentarium, perform suturing, incision, flap elevation, local anesthesia, basic dental wiring techniques.
CO7	Competent in executing minor oral surgical procedures -atraumatic dental extraction
C08	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of Oral and Maxillofacial Surgery.

CO9 Ability to critically appraise their own performance across mu	tiple formative
assessments completed during the course.	

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3,CO4	Remember, Understand	Level 1 and level 2
CO5,CO6,CO7	Apply, Analyze	Level 3 and 4
CO8.CO9	Evaluate and Create	Level 5 and 6

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# Karmaveer Bhausaheb Hiray Dental College & Hospital

	COURSE OUTCOME
Name of Program	BDS
Name of Course	Conservative Dentistry and Endodontics

COURSE	Topics
OUTCOME	
(CO)	
CO1	Knowledge and understanding of aetiopathogenesis, risk assessment, minimally invasive management and prevention of dental caries. Deep caries management. Understanding the importance of infection control in the operating area and the instruments used. Knowledge about the isolation protocols and gingival tissue management during restorative procedures.
CO2	Knowledge and understanding of the use of tooth colored restorative materials for anterior teeth (glass ionomer restoration or composite restoration). Knowledge and understanding of the use of restorative materials for posterior teeth (amalgam, pinretained amalgam, composite, direct filling gold and indirect restoration). Non carious disfigurement of teeth and dentin hypersensitivity.
CO3	Knowledge and understanding about pulpal and periapical diseases, diagnosis, patient management for root canal procedure. Materials, instruments and equipment used for endodontic procedures. Knowledge and understanding about the mishaps, re-treatment procedures and the surgical endodontic management of teeth.
CO4	Knowledge and understanding about the diagnosis and the treatment planning for post endodontic restoration. Management of teeth with open apex, root resorption, endodontic emergencies, traumatic injuries and management of discolored teeth. Knowledge about management of medically compromised patients, pediatric, geriatric endodontics, use of lasers, financial management and ethics in endodontics
CO5	Skill development on the risk assessment and diagnosis of dental caries. Perform direct/indirect pulp capping for deep caries management
CO6	Demonstrate the skill in the restoration of anterior teeth with tooth colored restorative materials like glass ionomer or composite restorations including tooth whitening procedures.
CO7	Demonstrate the skill in the restoration of posterior teeth with amalgam or composite or indirect restoration including hypersensitivity.
CO8	Skill development in diagnosis, access cavity preparation, working length determination, biomechanical preparation and obturation of root canal system.
CO9	Skill development in the restoration of endodontically treated teeth.

CO10	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the science of Conservative Dentistry & Endodontics.
CO11	Ability to critically appraise their own performance across multiple formative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3,CO4	Remember, Understand	Level 1 and level 2
CO5,CO6,CO7, CO8,CO9	Apply, Analyze	Level 3 and 4
CO10,CO11	Evaluate and Create	Level 5 and 6

Dr. Meeral Gulve
PRINCIPAL
MGV's KBH Dental College & Machital
Panchavati Machital



# Karmaveer Bhausaheb Hiray Dental College & Hospital

Panchavati, Nashik-422003

	COURSE OUTCOME
Name of Program	BDS
Name of Course	Orthodontics and Dentofacial Orthopaedics

COURSE	Topics
OUTCOME	
(CO)	
CO1	Knowledge and understanding of Instruments & Materials used in Orthodontics.
CO2	Understand the impact of Growth & development of craniofacial structures, dental arches / occlusion and predict their impact on malocclusion.
CO3	Etiology of various malocclusions, diagnostic aids used and the principles used in the treatment planning of the malocclusions.
CO4	Knowledge about the biology and biomechanics behind the orthodontic tooth movement.
CO5	Able to communicate with patients, in diagnosing various skeletal and dental malocclusions, self correcting anomalies, TMJ conditions, deforming Habits and other craniofacial deformities.
CO6	Should be competent in interpreting an OPG, cephalograms for diagnosis of malocclusions, assess the growth status and dental eruptive status,
CO7	Should be competent in different procedures performed in preventive, interceptive and corrective orthodontics and be able to create awareness and convince patient for treatment with their consent.
CO8	Should demonstrate skills for wire bending and fabrication of removable appliances. Independently perform procedures like impression making, fabrication and clinical management of removable appliances, bonded and removable retainers and orthodontic emergencies
CO9	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge to display expertise in the science of Orthodontics
CO10	Ability to critically appraise their own performance across multiple informative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3,CO4	Remember, Understand	Level 1 and level 2
CO5,CO6,CO7, CO8	Apply, Analyze	Level 3 and 4
CO9,CO10	Evaluate and Create	Level 5 and 6

Dr. Meenal Guive
PRINCIPAL
MGV's KBH Dentel College & Hospital
Panchavati, Nashik-422 003



# Karmaveer Bhausaheb Hiray Dental College & Hospital

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	COURSE OUTCOME
Name of Program	BDS
Name of Course	Oral and Maxillofacial Prosthodontics

COURSE	Topics
OUTCOME	
(CO)	
CO1	Knowledge and understanding of orofacial applied anatomy, pathophysiology & biomechanics of stomatognathic system, patient's mental attitude, diagnosis, treatment planning and rehabilitation of various completely edentulous clinical scenarios including the materials and armamentarium prescribed.
CO2	Knowledge and understanding of various classifications of partial edentulism, surveying, types of removable partial dentures, components of cast partial dentures, diagnosis, treatment planning and rehabilitation of partial edentulous state including the
	laboratory procedures. Demonstrate knowledge of various maxillary and mandibular defects and its rehabilitation.
CO3	Knowledge and understanding of various terminologies, components of fixed partial dentures, principles of tooth preparation of various clinical scenarios including the materials and armamentarium used. Demonstrate knowledge on implant biomaterials, implant designs and treatment options of various clinical scenarios. Knowledge and understanding of principles of digital dentistry and its uses in prosthodontics.
CO4	Able to communicate with patients and acquire informed consent, record case history, treatment plan, perform clinical skills like Impression making, Jaw relation, Trial or Insertion skills in the rehabilitation of completely edentulous state including the troubleshoot management.
CO5	Patient evaluation, clinical diagnosis, treatment planning and perform clinical and laboratory procedures for the fabrication of removable partial dentures including surveying and designing of the prosthesis.
CO6	Able to perform clinical examination, diagnosis, treatment planning, clinical and laboratory procedures for the fabrication of fixed partial denture including shade selection and luting agents. Demonstrate skill on identification of various implant superstructure components and able to assist in implant prosthetic restoration.
CO7	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of prosthodontics.

CO8	Ability to critically appraise their own performance across multiple formative
	assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO5,CO6,CO7	Apply, Analyze	Level 3 and 4
CO8	Evaluate and Create	Level 5 and 6

Dr. Meenal Guive PRINCIPAL MGV's KBH Dental College & Hospital Panchavati, Nashik-42200



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	COURSE OUTCOME	
Name of Program	BDS	
Name of Course	Paediatric and Preventive Dentistry	

COURSE	Topics
OUTCOME	
(CO)	
CO1	Demonstrate knowledge on essentials of Pediatric Dentistry, theoretical basis of Child Psychology and Behaviour management
CO2	Demonstrate knowledge on growth and development, preventive and interceptive orthodontics, trauma management and surgical pediatric dentistry
CO3	Demonstrate knowledge on diagnosis, management and prevention of dental caries
CO4	Demonstrate skills on diagnosing dental problems in children, fabricating comprehensive treatment plan, assessing the attitude of child's behaviour towards dental practice, judge the required behaviour management protocol and obtain consent.
CO5	Demonstrate skills on assessing growth & development and provide preventive & interceptive orthodontics, management of dental trauma & surgical pedodontics.
CO6	Demonstrate skills on diagnosis, management and prevention of dental caries.
C07	Consolidate all above-mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of Pedodontics.
CO8	Ability to critically appraise their own performance across multiple formative assessments completed during the course.

Course outcome	Blooms Taxonomy	Level
CO1,CO2,CO3	Remember, Understand	Level 1 and level 2
CO5,CO6,CO7	Apply, Analyze	Level 3 and 4
CO8	Evaluate and Create	Level 5 and 6

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# COURSE OUTCOMES FOR M.D.S CONSERVATIVE DENTISTRY AND ENDODONTICS

At the end of 3 years of training the candidate should be able to acquire following outcomes-

### **COURSE OUTCOMES- PART 1**

### **PART I- Applied Basic Sciences:**

Course Outcome (CO)	DESCRIPTION
CO1	Demonstrate understanding of basic sciences as relevant to conservative / restorative dentistry and Endodontic
CO2	Should have proper knowledge of sterilization procedures
CO3	Provide basic life saving support in emergency situations

### COURSE OUTCOMES- PART II

Part II- Paper 1-Conservative Dentistry

Paper II- Endodontics

Paper III- Descriptive & Analysing Type Question

COURSE	DESCRIPTION
OUTCOMES (CO)	
CO1	Describe etiology, pathophysiology, periapical diagnosis and management of common restorative situations, endodontic situations that will include

	contemporary management of dental caries, management of trauma and
	pulpal pathosis including periodontal situations
CO2	Perform all levels of restorative work, surgical and non-surgical Endodontics as well as endodontic-periodontal surgical procedures as part of multidisciplinary approach to clinical condition
CO3	Manage acute pulpal and pulpo periodontal situations.
CO4	Ability to master differential diagnosis and recognize conditions that may require multi disciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist.
CO5	Take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret to them to come to a reasonable diagnosis about the dental condition in general and Conservative Dentistry – Endodontics in particular. And undertake complete patient monitoring including preoperative as well as post operative care of the patient
CO6	Adopt ethical principles in all aspects of restorative and contemporary  Endodontics including non-surgical and surgical Endodontics.  Professional honesty and integrity should be the top priority. Apply high moral and ethical standards while carrying on human or animal research
CO7	Develop communication skills in particular to explain various options available for management and to obtain a true informed consent from the patient.

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### COURSE OUTCOMES FOR M.D.S PROSTHODONTICS & CROWN AND BRIDGE

At the end of 3 years of training the candidate should be able to acquire following outcomes-

### COURSE OUTCOMES- PART I

### **PART I- Applied Basic Sciences:**

COURSE	DESCRIPTION
<b>OUTCOMES</b>	
(CO)	
CO1	Should possess knowledge of applied basic and systemic medical sciences.
	On human anatomy, embryology, histology, applied in general and
	particularly to head and neck, Physiology & Biochemistry, Pathology
	Microbiology & virology; health and diseases of various systems of the
	body (systemic) principles in surgery and medicine, pharmacology,
	nutrition, behavioral science, age changes, genetics, Immunology,
	Congenital defects & syndromes and Anthropology, Bioengineering, Bio-
	medical & Biological PrincipleS
CO2	To have adequate acquired knowledge, and understanding of applied basic,
	and systemic medical science knowledge in general and in particular to
	head and neck regions.
CO3	The student shall acquire knowledge of various Dental Materials used in
	the specialty and be able to provide appropriate indication, understand the
	manipulation characteristics, compare with other materials available, be
	adept with recent advancements of the same

CO4	To adopt ethical principles in Prosthodontic practice, Professional honesty, credibility and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient
CO5	Should have an essential knowledge of personal hygiene, infection control, prevention of cross infection and safe disposal of waste, keeping in view the risk of transmission of potential communicable and transmissible infections like Hepatitis and HIVand apply the knowledge in day to day practice
CO6	To develop the ability to communicate with professional colleagues through various media like Internet, e-mails, videoconferences etc. to render the best possible treatment

# COURSE OUTCOMES- PART II

**Paper I-**Removable Prosthodontics And Implant Supported Prosthesis(Implantology), Geriatric Dentistry And Cranio Facial Prosthodontics

Paper II- Fixed Prosthodontics, Occlusion, TMJ And Esthetics

Paper III--Descriptive & Analysing Type Question

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Should have the ability for comprehensive rehabilitation concept with pre prosthetic treatment plan including surgical re-evaluation and prosthodontic treatment planning, impressions, jaw relations, utility of face bows, articulators, selection and positioning of teeth, teeth
	arrangement for retention, stability, esthetics, phonation, psychological comfort, fit and insertion. Instructions for patients in after care and preventive Prosthodontics and management of failed restorations shall be possessed by the students.
CO2	Should have knowledge of Tooth and tooth surface restorations, Complete denture Prosthodontics, removable partial denture Prosthodontics, fixed prosthodontics and maxillofacial and Craniofacial Prosthodontics, implants and implant supported Prosthodontics, T.M.J. and occlusion, craniofacial esthetics, and biomaterials, craniofacial disorders, problems of psychogenic origin.
CO3	Should identify cases, which are outside the area of his specialty / competence, refer them to appropriate specialists and perform interdisciplinary case management

CO4	To identify target diseases and create awareness amongst the population regarding Prosthodontic therapy
CO5	The candidate should be able to examine the patients requiring Prosthodontic therapy, investigate the patient systemically, analyze the investigation results, radiographs, diagnose the ailment, plan the treatment, communicate it with the patient and execute it.
CO6	The candidate should be able to demonstrate good interpersonal, communication skills <i>and</i> team approach in interdisciplinary care by interacting with other specialties including medical specialty for planned team management of patients for craniofacial & oral acquired and congenital defects, temporomandibular joint syndromes, esthetics, Implant supported Prosthetics and problems of Psychogenic origins.
CO7	Should be able to demonstrate the clinical competence necessary to carry out appropriate treatment at higher level of knowledge, training and practice skills currently available in their specialty area with a patient centered approach.
CO8	Should be willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which are in patient's best interest. And Should respect patient's rights and privileges, including patient's right to information and right to seek second opinion.
CO9	Should be able to communicate in simple understandable language with the patient and explain the principles of prosthodontics to the patient.  He/She should be able to guide and counsel the patient with regard to various treatment modalities available

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### CCOURSE OUTCOMES FOR MDS ORAL MEDICINE AND RADIOLOGY

At the end of 3 years of training the candidate should be able to acquire following outcomes-

# COURSE OUTCOMES- PART I

#### **PART I- Applied Basic Sciences:**

COURSE	DESCRIPTION
OUTCOMES (CO)	
CO1	Should possess Theoretical, Clinical and practical knowledge of all oral mucosal lesions, skeletal involvement of maxillofacial region
CO2	The positive mental attitude and the persistence of continued learning need to be inculcated

### COURSE OUTCOMES- PART II

Paper I- Oral and Maxillofacial Radiology

Paper II -Oral Medicine, therapeutics and laboratory investigations

Paper III- Descriptive and analysing type question

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Should possess diagnostic skill in recognition of oral diseases with radiographic diagnosis and their management.
CO2	Research skills in handling scientific problems pertaining to oral treatment.
CO3	The positive mental attitude and the persistence of continued learning need to be inculcated

Dr. Meenal Gulve PRINCIPAL

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# COURSE OUTCOMES FOR MDS ORAL & MAXILLOFACIAL PATHOLOGY AND ORAL MICROBIOLOGY

At the end of the program, a postgraduate student should be able to achieve the following outcomes.

### **COURSE OUTCOMES- PART I**

### **PART I- Applied Basic Sciences:**

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Understanding of histological features of hard tissues of the oral and maxillofacial region with emphasis on histochemical techniques.
CO2	Knowledgeably awareness and understanding of the anatomy, functions and histological features and applied aspects of soft tissues of oral and maxillofacial region

### COURSE OUTCOMES- PART II

**Paper I-** Oral pathology, Oral Microbiology and Immunology and Forensic Odontology.

Paper II - Laboratory techniques and Diagnosis and Oral Oncology

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	A sound understanding of pathophysiology, clinical features, radiographic

	characteristics (wherever applicable), histological features and treatment of the preneoplastic and neoplastic lesions affecting the oral and maxillofacial regions with special emphasis on the recent concepts in the pathogenesis of neoplasia
CO2	Proficiency in understanding and identification of the clinical features,
	radiographic characteristics (wherever applicable), histological features and
	treatment of oral manifestations of systemic diseases
CO <sub>3</sub>	Skills in identification of microscopic features of all the diseases and
	cytological smears pertaining to the craniofacial region along with drawing
	histopathological features with legible labeled diagrams
CO4	An oral pathologist is expected to perform routine histopathological evaluation of specimens relating to oral and perioral tissues, to carry out routine diagnostic procedures including hematological, cytological, microbiological, Immunological and ultra structural investigations.
CO5	Is expected to have an understanding of current research methodology, collection and interpretation of data, ability to carry out research projects on clinical and or epidemiological aspects

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# COURSE OUTCOMES FOR MDS ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS

At the end of the Program, a postgraduate student should be able to achieve following outcomes

# **COURSE OUTCOMES- PART 1**

### PART I- Applied Basic Sciences:

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Knowledge of Basic sciences relevant to the practice of Orthodontics
CO2	Basic knowledge of Personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste, keeping in view the high prevalence of Hepatitis and HIV and other highly contagious diseases
CO3	Develop an attitude to adopt ethical principles in all aspects of Orthodontic practice
CO4	Develop attitude to seek opinion from allied medical and dental specialists as and when required

# COURSE OUTCOMES- PART II

**Paper I-** Orthodontic history, Concepts of occlusion and esthetics, Child and Adult Psychology, Etiology and classification of malocclusion, Dentofacial Anomalies, Diagnostic procedures and treatment planning in Orthodontics, Practice management in Orthodontic

Paper II - Clinical Orthodontics

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Knowledge of the dynamic interaction of biologic processes and mechanical
	forces acting on the stomatognathic system during orthodontic treatment
	The etiology, pathophysiology, diagnosis and treatment planning of various common Orthodontic problem
500	
CO2	Various treatment modalities in Orthodontics – preventive, interceptive and corrective.
CO3	Factors affecting the long-range stability of orthodontic correction and their management
CO4	To be competent to fabricate and manage the most appropriate appliance – intra or extra oral, removable or fixed mechanical or functional, and active or passive – for the treatment of any orthodontic problem to be treated singly or as a part of multidisciplinary treatment of oro-facial deformities.
CO5	Willingness to adopt, after a critical assessment, new methods and techniques
	of orthodontic management developed from time to time based on scientific research, which are in the best interest of the patient
CO6	Develop adequate communication skills particularly with the patients giving them the various options available to manage a particular Dento-facial problem and to obtain a true informed consent from them for the most appropriate treatment available at that point of time.

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#### COURSE OUTCOMES FOR MDS PAEDIATRIC AND PREVENTIVE DENTISTRY

At the end of 3 years of training the candidate should be able to possess the following outcomes

### **COURSE OUTCOMES- PART 1**

### **PART I- Applied Basic Sciences:**

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Knowledge of Basic science related to the practice of paediatric dentistry
CO2	Create not only a good oral health in the child but also a good citizen tomorrow.

### COURSE OUTCOMES- PART II

Paper I- Clinical Pedodontics

Paper II - Preventive and Community Dentistry as applied to paediatric dentistry

COURSE OUTCOMES (CO)	DESCRIPTION
C01	Understand the principles of prevention and preventive dentistry right from birth to adolescence
CO2	Be competent to treat dental diseases which are occurring in child patient.

CO3	Manage to repair and restore the lost / tooth structure to maintain harmony between both hard and soft tissues of the oral cavity
CO4	To acquire skills in managing efficiently life threatening conditions with emphasis on basic life support measures managing disabled children efficiently.
CO5	Respect child patient's rights and privileges, including child patients right to information and right to seek a second opinion.
CO6	Willingness to adopt, after a critical assessment, new methods and techniques of Pedodontic management developed from time to time, based on scientific research, which are in the best interest of the child patient.

Pr. Meenal Gaive Principal MGV's KBH Dental College & Hospital Panchavati, Nashik-422 093



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### COURSE OUTCOMES FOR M.D.S PERIODONTOLOGY

On completion of the Program, a Post-graduate student should be able to achieve the following ourtcomes

# COURSE OUTCOMES- PART 1

#### **PART I- Applied Basic Sciences:**

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Knowledge of Basic sciences relevant to the practice of periodontics
CO2	Basic knowledge of Personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste, keeping in view the high prevalence of Hepatitis and HIV and other highly contagious diseases
CO3	Develop an attitude to adopt ethical principles in all aspects of periodontic practice
CO4	Develop attitude to seek opinion from allied medical and dental specialists as and when required

# COURSE OUTCOMES- PART II

**Paper I-** Normal Periodontal structure, Etiology and Pathogenesis of Periodontal diseases, epidemiology as related to Periodontics

Paper II - Periodontal diagnosis, therapy and Oral implantology

COURSE OUTCOMES (CO)	DESCRIPTION
CO1	Familiarize with the biochemical, microbiologic and immunologic genetic aspects of periodontal pathology.
CO2	Describe etiology, pathogenesis, diagnosis and management of common periodontal diseases with emphasis on Indian population
CO3	Describe various treatment modalities of periodontal disease from historical aspect to currently available ones.
CO4	Describe interrelationship between periodontal disease and various systemic conditions
CO5	Perform both non-surgical & education regarding periodontal disease, maintenance after the treatment. Perform both non-surgical and surgical procedures independently
CO6	Develop Communication skills to make awareness regarding periodontal disease Apply high moral and ethical standards while carrying out human or animal research, Be humble, accept the limitations in his/her knowledge and skill, and ask for help from colleagues when needed,
CO7	Provide Basic Life Support Service (BLS) recognizes the need for advance life support and do the immediate need for that.

Dr. Meenal Guive PRINCIPAL MGV's KBH Dental College & Hospital Panchavati, Nashik-422 008