

8.1.8

LIST AND STEPS TAKEN BY THE COLLEGE TO MEASURE ATTAINMENT OF SPECIFIC COMPETENCIES BY THE BDS STUDENTS/INTERNS STATED IN THE UNDERGRADUATE CURRICULUM DURING THE LAST FIVE YEARS

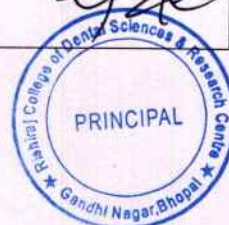
Sr No	Subject	Specific Competencies	Steps taken to attain the specific competencies
1	ANATOMY	<ul style="list-style-type: none">• To acquire knowledge about structural components of the body (macroscopic and microscopic) and correlate it with normal body functions.• To emphasize development and developmental anomalies of oral, dental and maxillofacial structures	<ul style="list-style-type: none">• Dissection of human cadavers• Study of preserved specimens• Demonstrations
2	PHYSIOLOGY	<ul style="list-style-type: none">• To acquire adequate knowledge and develop skill to perform physiology laboratory tests.• To interpret these normal functions with a view to differentiate from abnormal functions• To demonstrate the knowledge and understanding of biomolecules	<ul style="list-style-type: none">• Estimation of Hb concentration.• Determination of differential count of white blood cell (WBC).• Determination of bleeding time & clotting time.• Determination of blood grouping & cross matching.• Determination of Erythrocyte Sedimentation Rate (ESR). <p>OSPE:</p>

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			<p>Recording BP by palpatory and auscultatory method</p> <ul style="list-style-type: none"> • Examination of radial pulse
3-	BIOCHEMISTRY	<ul style="list-style-type: none"> • To apply the knowledge and understanding of biochemistry in dentistry • To demonstrate the knowledge and understanding of biomolecules forming the structure of the human body, their functions and role in health and disease • To learn the normal biochemical values in conventional and SI. Units 	<ul style="list-style-type: none"> • To Estimate blood glucose • To Estimate abnormal constituents of urine(sugar, protein & ketone bodies) and their clinical significance
4.	Dental Anatomy, Embryology And Oral Histology	<ul style="list-style-type: none"> • To identify different teeth in different dentition • To explain any tooth by its morphology • To acquire the clinical importance of teeth and oral tissues. • To mention the histological structures of tooth and associated oral structures • To differentiate between normal and pathological state of oral structures. • Able to understand the age changes of normal oral structures • Able to learn the chronology and pattern of tooth eruption and its clinical significance • To learn the physiologic process of tooth development. • To learn in detail the formation of enamel, dentine, 	<ul style="list-style-type: none"> • Wax carving of permanent tooth • Microscopic examination and study of dental and oral structures, salivary glands



		<p>cementum, pulp, periodontal ligament, salivary glands and Temporo-mandibular joint.</p> <ul style="list-style-type: none"> To learn the mechanisms and theories of tooth eruption 	
5.	General Pathology	<ul style="list-style-type: none"> To learn about the causes & pathogenesis of diseases To demonstrate the knowledge and understanding of general pathological and preventive knowledge about diseases To apply pathological knowledge in practising dental surgery to improve the oral and dental health 	<ul style="list-style-type: none"> Test for abnormal constituents of urine like sugar, albumin, ketone bodies Demonstration of specimens. <p>OSPE:</p> <ul style="list-style-type: none"> Hematological investigation –total and differential count
6.	MICROBIOLOGY	<ul style="list-style-type: none"> To have knowledge & understanding about sterilization, asepsis and infection prevention To learn about the characteristics of different types of disease causing microorganisms 	<ul style="list-style-type: none"> To study different types and parts of microscope <p>OSPE:</p> <ul style="list-style-type: none"> Gram staining Biomedical waste segregation Handwashing technique
7	General Pharmacology	<ul style="list-style-type: none"> Describe indications, contraindications and side effects of medicines related to dental practice. To manage dental pain To learn about the proper use of local anaesthetic agents To prescribe drugs for common dental problems To learn therapeutic decision making 	<p>OSPE:</p> <ul style="list-style-type: none"> Preparation of tooth powder Preparation of tooth paste Writing prescription



		<ul style="list-style-type: none"> • To write rational prescription 	
8	Dental materials	<ul style="list-style-type: none"> • To have knowledge about physical and chemical properties of dental materials • A student must learn to manipulate dental materials to be used in clinical practice 	<ul style="list-style-type: none"> • Making of impression with impression compound • Manipulation of gypsum products • Manipulation of dental cements
9	Pre-clinical Conservative Dentistry	<ul style="list-style-type: none"> • To develop skills in cavity preparation and restorative procedures • To develop skills in the manipulation of dental materials used in conservative dentistry 	<ul style="list-style-type: none"> • Cavity preparation in plaster models • Cavity preparation and restoration in phantom models
10	Pre-clinical Prosthodontics	<ul style="list-style-type: none"> • To develop skills for fabrication of complete dentures and removable partial dentures • To develop skills in manipulation of various impression materials for clinical practice 	<ul style="list-style-type: none"> • Preparation of special trays • Preparation of occlusal rims and teeth setting in articulator
11	General Medicine	<ul style="list-style-type: none"> • The student should be able to perform general physical examination and look for anaemia, cyanosis, clubbing, jaundice and to record vital signs- pulse, BP, temperature. • To know history taking from the patient and writing • To diagnose various systemic diseases from history and physical findings 	<ul style="list-style-type: none"> • Patient examination and case presentation • Case discussions of diagnosis of various systemic diseases and investigations.



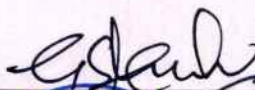

		<ul style="list-style-type: none"> • Interpret and correlate physical findings with investigations like x-ray, hematology, urine and stool examination • • To learn intramuscular and intravenous injections 	
12	General Surgery	<ul style="list-style-type: none"> • To identify the common surgical problems, consider the differential diagnosis and complications • • The student must be able to learn and mention benign and malignant tumors of soft and hard tissue of head and neck • • To be able to perform minor surgical • procedures like incision and drainage of abscess • • To take biopsy under local anaesthesia • • Understanding about personal and patient safety in OPD and OT through proper asepsis and infection prevention • • Knowledge and management of shock and appropriate referral in potential emergency situations during dental procedures. • • 	OSCE: Patient care- diagnosis and treatment planning Case discussions
13	Oral Pathology and Oral Microbiology	<ul style="list-style-type: none"> • To learn the oral manifestations of systemic diseases • • To learn the etiology, clinical features, radiographic and histopathological features of common developmental disturbances of teeth and jaws • • To acquire knowledge 	<ul style="list-style-type: none"> • Microscopic examination of histopathologic slides, • • Demonstration of specimens • • Demonstration of models



		<p>about clinical and histopathologic features of odontogenic, non-odontogenic and salivary gland tumours</p> <ul style="list-style-type: none"> • Basic knowledge about biopsy and frozen section in diagnosis of oral disease • 	
14	Oral Medicine and Radiology	<ul style="list-style-type: none"> • Knowledge about red and white lesions of oral cavity • To know about clinical features and laboratory investigations for common infective and non-infective ulcers of the oral cavity • Knowledge about radiation safety, hazards, • Must be able to take and interpret intraoral radiographs • Knowledge about clinical features and pathogenesis of vesiculobullous lesions of oral mucosa • 	<ul style="list-style-type: none"> • Oral cavity examination with detailed recording of case history • Taking of intraoral periapical radiographs and its interpretation
15	Conservative Dentistry and Endodontics	<ul style="list-style-type: none"> • To be able to diagnose all types of carious lesions • To prepare class I and class II cavities and restore with amalgam • Competent to carry out small composite restorations • To understand the principles of aesthetic dental procedures • The student should learn about patient assessment and diagnostic procedures for endodontic therapy • Able to perform RCT for 	<ul style="list-style-type: none"> • Class I and class II amalgam restorations • Composite restorations • Deep caries management • Endodontic procedures of anterior teeth



		anterior teeth	
16	Oral and Maxillofacial Surgery	<ul style="list-style-type: none"> • Able to diagnose, manage and treat patients with oral surgical problems <ul style="list-style-type: none"> • Understand and practice the basic principles of sterilization • Should be competent in the extraction of teeth • Able to provide primary care and manage medical emergencies in dental office <ul style="list-style-type: none"> • Have a broad knowledge of maxillofacial surgery and oral implantology • Should be familiar with legal, ethical and moral issues pertaining to the patient care and communication skills 	<ul style="list-style-type: none"> • Extraction of teeth under local anaesthesia <ul style="list-style-type: none"> • Assisting surgical procedures • Patient history taking • Case discussions
17	Orthodontics and Dentofacial Orthopaedics	<ul style="list-style-type: none"> • To understand about the normal growth and development of facial skeleton and dentition <ul style="list-style-type: none"> • To diagnose different types of malocclusion • To manage and treat simple malocclusion like anterior spacing using removable appliances • Treatment planning and execution of preventive and interceptive orthodontics 	<ul style="list-style-type: none"> • Cephalometric tracing <ul style="list-style-type: none"> • Orthodontic wire bending • Fabrication of simple orthodontic appliances
18	Paediatric and Preventive Dentistry	<ul style="list-style-type: none"> • Knowledge about management of dental diseases in children <ul style="list-style-type: none"> • Able to manage physically and mentally disabled children efficiently according to their treatment needs • Able to guide and counsel the parents about the various 	<ul style="list-style-type: none"> • Scaling and restorative procedures <ul style="list-style-type: none"> • Case history taking



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		<p>paediatric dental treatment modalities available</p> <ul style="list-style-type: none"> To understand the principles of prevention and preventive dentistry in children 	
19	Periodontology	<ul style="list-style-type: none"> To diagnose and manage common periodontal diseases <ul style="list-style-type: none"> To learn the basic principles of periodontal instrumentation and perform it Identification of periodontal instruments To perform scaling and root planning with full aseptic precautions To provide oral hygiene instructions to patients To learn appropriate investigations to diagnose periodontal diseases To have an understanding of prevention of periodontal diseases Must be able to furnish initial treatment plan and treat gingivitis and periodontitis cases To be able to perform minor surgical procedures like abscess drainage, operculectomy etc. 	<ul style="list-style-type: none"> Case history and case discussion <ul style="list-style-type: none"> Assisting surgical procedures Oral prophylaxis
20	Prosthodontics and Crown Bridge	<ul style="list-style-type: none"> Competent to carry out conventional complete and partial removable dentures, fixed partial dentures <ul style="list-style-type: none"> Able to understand and use various dental materials Competent to carry out routine prosthodontic procedures 	<ul style="list-style-type: none"> Fabrication of removable and fixed partial dentures <ul style="list-style-type: none"> Fabrication of complete dentures

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21	Public Health Dentistry	<ul style="list-style-type: none"> • Apply the principles of health promotion and disease prevention • To have knowledge about provision of community dental health care • To have community based preventive measures • To administer oral hygiene instructions, topical fluoride therapy, pit and sealant application 	<ul style="list-style-type: none"> • Conducting Dental health education campaigns • Recording of Indices • Prevention dental restorative procedures
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