

# Course Outcomes

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
<b>Complete Denture</b>								
<b>Topic : Applied Anatomy and Physiology                      No of Competencies: 3</b>								
CD 1.1	Describe Applied Anatomy and Physiology related to stomato-gnathic system	K/S	K	MK	Large group (FC) DOAP	Written exam	Anatomy Physiology	-
CD 1.2	Explain Biomechanics of the edentulous state	K	K	MK	Large group (FC)	Written exam Viva voce	-	-
CD 1.3	Describe Patho-physiology and clinical significance of Residual ridge resorption.	K/S	SH	MK	Large group DOAP	OSCE Viva voce	-	-
<b>Topic 2 : communicating with Patient                      No of Competencies: 2</b>								
CD 2.1	Understand the patient's mental attitude and expectations	K/A	P	MK	Role play	DOPS OSCE	-	-

CD 2.2	Instruct the patient and/or relatives	A/C	P	MK	Role play	DOPS OSCE	-	-
<b>Topic32 : Diagnosis and Treatment Planning</b> <span style="float: right;"><b>No of Competencies: 5</b></span>								
CD 3.1	Record Case history, gather relevant information related to systemic status, nutritional status, etc	K/S	P	MK	DOAP	DOPS Skill Assessment	-	Oral Medicine and Radiology
CD 3.2	Perform Clinical examination -Intra-oral and extra-oral	K/S	P	MK	DOAP	DOPS Skill Assessment	-	Oral Medicine and Radiology
CD 3.3	Perform Diagnostic procedures: Investigations, referral to physician if required, diagnostic mounting, etc.	K/S	P	MK	DOAP	DOPS Skill Assessment	-	Oral Medicine and Radiology
CD 3.4	Demonstrate Data interpretation and differential diagnosis	K/S	P	MK	DOAP	DOPS OSCE	-	-
CD 3.5	Select and justify most suitable treatment option taking in account patient's expectations and condition	K/S/A	P	MK	PBL	DOPS OSCE, Viva voce Problem based questions	-	-
<b>Topic 4 : Optimizing denture foundation and ridge relation</b> <span style="float: right;"><b>No of Competencies: 1</b></span>								
CD 4.1	Describe Pre-prosthetic mouth preparations	K	KH	NK	Large group PBL	Written exam Problem based questions	-	Oral surgery, Periodontics , Endodontics

<b>Topic 5 : Optimizing denture foundation and ridge relation</b>									<b>No of Competencies: 2</b>	
CD 5.1	Explain Different types of articulators and their uses	K	K	MK	Large group	Written exam	Pre-clinical prosthodontics	-	-	
CD 5.2	Explain factors affecting Selection of articulator for a specific case	K	K	MK	PBL	Problem based questions	-	-	-	
<b>Topic 6 : Optimizing denture foundation and ridge relation</b>									<b>No of Competencies: 3</b>	
CD 6.1	Explain various factors responsible for retention in CD	K	K	MK	Large group	Written exam	-	-	-	
CD 6.2	Explain various factors responsible for support in CD	K	K	MK	Large group	Written exam	-	-	-	
CD 6.3	Explain various factors responsible for stability in CD	K	K	MK	Large group	Written exam	-	-	-	
<b>Topic 7: Impressions in CD</b>									<b>No of Competencies: 6</b>	
CD 7.1	Biologic considerations for maxillary and mandibular impression including applied anatomy of muscles of facial expressions and mastication, anatomical landmarks and their interpretation.	K	KH	MK	Large group	Written exam	-	-	-	
CD 7.2	Explain Objectives of impression making	K	K/KH	MK	Large group	Written exam Viva voce	-	-	-	
CD 7.3	Describe Materials for impression making	K	K/KH	MK	Large group Flipped classroom	Written exam Viva voce	Dental Materials	-	-	
CD 7.4	Describe Impression theories and techniques	K	K/KH	MK	Large group Flipped	Written exam Viva voce	-	-	-	

					classroom			
CD 7.5	Perform Procedure for impression making for maxillary and mandibular arch - PI &FI	S	P	MK	DOAS	DOPS Skill assessment	-	-
CD 7.6	Perform Laboratory procedures involved with impression making (Beading & Boxing, and cast preparation).	S	P	MK	DOAS	DOPS Skill assessment	Pre-clinical prosthodont ics	-
<b>Topic 8: Jaw Relations      No of Competencies: 6-</b>								
CD 8.1	<b>Record bases and occlusion rims</b> a) Explain materials & techniques. b) Explain useful guidelines and ideal parameters.	K	K/KH	MK	Large group Flipped classroom	Written exam Viva voce	Pre-clinical prosthodont ics	-
CD 8.2	Fabricate record bases and occlusal rims.	S	P	MK	DOAS	DOPS Skill assessment	Pre-clinical prosthodont ics	-
CD 8.3	<b>Describe Biological consideration in jaw relation &amp; jaw movements – cranio-mandibular relations.</b> a) Mandibular movements. b) Maxillo -mandibular relation including vertical and horizontal jaw relations. c) Concept of occlusion	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 8.4	<b>Explain how to relate the patient to the articulator.</b> a) Face bow types & uses b) Face bow transfer procedure	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 8.5	<b>Perform recording maxillo mandibular relation.</b> a) Vertical relations.	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	Pre-clinical prosthodont ics	-

	b) Centric relation records.							
CD 8.6	<b>Describe recording maxillo mandibular relation.</b> c) Eccentric relation records. d) Lateral relation records.	K	K/KH	NK	Large group	Written exam Viva voce	-	-

**Topic 9: Teeth arrangement and occlusion      No of Competencies: 3**

CD 9.1	Describe Tooth selection and arrangement. a) Anterior teeth. b) Posterior teeth. c) Esthetic and functional harmony	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 9.2	Perform teeth selection and arrangement for completely edentulous patient	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	Pre-clinical prosthodontics	-
CD 9.3	Explain Relating inclination of teeth to concept of occlusion a) Neurocentric concept. b) Balanced occlusal concept.	K	K	NK	Large group	Written exam Viva voce	-	-

**Topic 10: Trial dentures      No of Competencies : 2**

CD 10.1	Describe procedural steps and importance of trial denture insertion	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 10.2	Perform trial insertion of complete denture	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	-	-

**Topic 11: Laboratory procedures No of Competencies: 10**

CD 11.1 -10	<p>Perform following procedures:</p> <ul style="list-style-type: none"> <li>a) Wax contouring.</li> <li>b) Investing of dentures.</li> <li>c) Preparing of mold.</li> <li>d) Preparing &amp; packing acrylic resin.</li> <li>e) Processing of dentures.</li> <li>f) Recovery of dentures.</li> <li>g) Lab remount procedures.</li> <li>h) Recovering the complete denture from the cast.</li> <li>i) Finishing and polishing the complete denture.</li> <li>j) Plaster cast for clinical denture remount procedure.</li> </ul>	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	Pre-clinical prosthodontics	-
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**Topic 12: Denture insertion. No of Competencies: 4**

12.1 -4	<p>Perform following procedures</p> <ul style="list-style-type: none"> <li>a) Insertion procedures.</li> <li>b) Clinical errors.</li> <li>c) Correcting occlusal disharmony.</li> <li>d) Selective grinding procedures.</li> </ul>	S	P	MK	DOAS Small group teaching	DOPS Skill assessment`	-	-
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**Topic 13: Treating problems with associated denture use . No of Competencies: 1**

CD 13.1	Perform denture follow up visits and troubleshooting	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	-	-
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**Topic 14: Treating abused tissues . No of Competencies: 1**

CD 14.1	Describe the treatment of abused denture foundation tissues	K	KH	NK	Large group PBL	Written exam Viva voce	-	-
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**Topic 15: Relining and rebasing of dentures. No of Competencies: 1**

CD 15.1	Explain materials, techniques, indications and contraindications of denture relining and rebasing	K	KH	NK	Large group PBL	Written exam Viva voce	-	-
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**Topic 16: Immediate complete dentures construction procedure . No of Competencies: 1**

CD 16.1	Describe indications, contraindications, types, advantages , disadvantages and techniques of fabrication of immediate dentures	K	KH	NK	Large group PBL	Written exam Viva voce	-	-
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**Topic 17: The single complete denture No of Competencies: 1**

CD 17.1	Describe indications, contraindications, advantages , disadvantages and techniques of fabrication of immediate dentures	K	KH	NK	Large group PBL	Written exam Viva voce	-	-
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**Topic 18: Overdentures denture No of Competencies: 1**

CD 18.1	Describe indications, contraindications, advantages , disadvantages and techniques of fabrication of overdentures	K	KH	NK	Large group PBL	Written exam Viva voce	-	-
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<b>DENTAL MATERIALS</b>								
<b>Topic 1: STRUCTURE OF MATTER AND PRINCIPLES OF ADHESION.</b>								
<b>No of Competencies: 1</b>								
DM 1.1	Describe crystalline and non crystalline structure, Various Interatomic bonds and adhesion	K	K	MK	Large group (Lecture)	Written exam		
<b>Topic 2 :IMPORTANT PHYSICAL PROPERTIES APPLICABLE TO DENTAL MATERIALS</b>								
<b>No of Competencies: 1</b>								
DM 2.1	Define the following properties and describe its importance with relation to Dental Materials(Biological, Mechanical, Chemical, Thermal, Rheological, Color )	K	K/KH	MK	Large group (Lecture)	Written exam		-

**Topic 3 :BIOLOGICAL CONSIDERATIONS IN USE OF DENTALMATERIALS****No of Competencies: 2**

DM 3.1	Define Biocompatibility and discuss various hazards resulting from Dental materials	K	K/KH	MK	Large group (Lecture)	Written exam	-	
DM 3.2	Describe toxicity and its levels of evaluation related to Dental Materials	K	K	MK	Large group (Lecture)	Written exam	-	

**Topic 4 :GYPSUM & GYPSUMPRODUCTS****No of Competencies: 06**

DM 4.1	Define Gypsum and classify its different products	K	K	MK	Large group (Lecture)	Written exam	-	
DM 4.2	Describe its manufacturing	K	K	DK	Large group (Lecture)	Written exam		
DM 4.3	Describe in details the various theories of Setting and factors affecting setting of Gypsum Products	K	K	MK	Large group (Lecture)	Written exam		
DM 4.4	Discuss various Properties of Dental Plaster and Dental Stone	K	K	MK	Large group (Lecture)	Written exam		
DM 4.5	Discuss the disinfectants and the methods of disinfecting gypsum products	K	K/KH	NK	Large group (Lecture)	Written exam		

DM 4.6	Perform under assistance the manipulation of dental plaster and dental stone	K/S	KH/SH/ P	MK	Small group, DOAP	Written exam, Practical Examination		
DM 4.6	Enlist the advantages, disadvantages, uses and differences between Dental Plaster and Dental stone	K	K	DK	Large group (Lecture)	Written exam		
<b>Topic 5 : IMPRESSION MATERIALS USED IN DENTISTRY</b>								
<b>No of Competencies: 08</b>								
DM 5.1	Define impression and discuss the purpose of making it	K	K	MK	Large group	Written exam		-
DM 5.2	Classify Impression Materials and discuss in details the ideal requirements of it	K	K	MK	Large group	Written exam	-	-
DM 5.3	Discuss in details the composition and role of ingredients of all Elastic and Inelastic Impression materials used in dentistry	K	K	MK	Large group	Written exam		
DM 5.4	Discuss the chemistry of setting and factors affecting setting of all Elastic and Inelastic Impression materials used in dentistry	K	K	MK	Large group	Written exam		
DM 5.5	Discuss the Working time, setting time, flow, accuracy, strength, flexibility, tear strength, dimensional stability, compatibility with cast & die materials incl., electroplating Biological properties: tissue reaction , Shelf life & storage of material, Infection control – disinfection of all impression materials used in	K	K	MK	Large group	Written exam		

	dentistry							
DM 5.6	Discuss the manipulation with special emphasis on type of impression trays required, Adhesion to tray, instruments & equipments required.	K	K/KH	MK	Large group, Early clinical exposure	Written exam Practical Exam and Viva voce		
DM 5.7	Discuss the recent advances in Impression materials	K	K	NK	Large group	Written exam		
DM 5.8	Discuss the advantages, disadvantages, uses of all the impression materials used in dentistry	K	K	MK	Large group	Written exam, Practical Exam, Viva Voce		
DM 5.9	Perform under supervision the manipulation of Zinc Oxide Eugenol impression paste and Alginate Impression material	K/S	KH/SH/P	MK	Small group, DOAP	Practical exam		

**Topic 6 : SYNTHETIC RESINS USED IN DENTISTRY**

**No of Competencies: 12**

DM 6.1	Define denture base and classify denture base materials	K	K	MK	Large group	Written exam	-	-
DM 6.2	Discuss the ideal requirements of Denture base materials	K	K	MK	Large group	Written exam	-	-
DM 6.3	Classify denture base resins and discuss the ideal requirements of it	K	K	MK	Large group	Written exam	-	-
DM 6.4	Define Polymerization. Discuss in details the types of polymerization, Addition and Condensation Polymerization, inhibition of polymerization	K	K	MK	Large group	Written exam		
DM 6.5	Discuss Crosslinking and copolymerization	K	K	MK	Large group	Written exam		
DM 6.6	Discuss the biological properties & allergic reactions, Physical properties,	K	K	MK	Large group	Written exam		

	Porisities, Polymerization shrinkage, Crazing, Solubility, Thermal properties , aesthetic properties of denture base resins							
DM 6.7	Discuss the modes of polymerisation: Heat activated, Chemically activated, Light activated, Mode of supply, application, composition, polymerisation reaction of each.	K	K	MK	Large group	Written exam		
DM 6.8	Discuss the technical considerations: Methods of manipulation for each type of resin.	K	K/KH	MK	Large group	Written exam, Viva voce		Prosthodontics preclinical
DM 6.9	Discuss the miscellaneous resins & techniques: Repair resins, Relining and rebasing	K	K	MK	Large group	Written exam		
DM 6.10	Define and discuss the short term and long-term soft-liners, temporary crown and bridge resins, Resin impression trays, Tray materials and Resin teeth, denture cleansers.	K	K	DK	Large group	Written exam		
DM 6.11	Discuss in details the infection control of denture base resins	K	K	DK	Large group	Written exam		
DM 6.12	Classify and discuss the Maxillofacial Prostheses materials	K	K	NK	Large group	Written exam		

### Topic 7: RESTORATIVE RESINS No of Competencies: 07

DM 7.1	Classify Restorative Resins.	K	K	MK	Large group	Written exam	-	-
DM 7.2	Classify Composite resins. Discuss in details the composition and role of ingredients of it	K	K	MK	Large group	Written exam	-	-
DM 7.3	Discuss the polymerization mechanisms: Chemically activated, Light activated,	K	K	MK	Large group	Written exam		-

	Dual cure: Degree of conversion, Polymerization shrinkage							
DM 7.4	Discuss the properties ; Physical properties, Polymerization shrinkage, Coefficient of thermal expansion, water sorption, aesthetics, Biocompatibility – microleakage, pulpal reaction, pulpal protection	K	K	MK	Large group	Written exam	-	-
DM 7.5	Discuss the manipulation of composites: Techniques of insertion of Chemically activated, light activated, dual cure Polymerization, Finishing and polishing of restoration, Repair of composites.	K	K	MK	Large group	Written exam	-	-
DM 7.6	Define Bonding and discuss the need for bonding, Acid - etch technique, Enamel bonding, Dentin bonding agents. Mode of bonding, Bond strength	K	K	MK	Large group	Written exam		-
DM 7.7	Enlist the applications of Composite resin and discuss the sandwich technique	K	K	MK	Large group	Written exam		
<b>Topic 8: METAL AND ALLOYS    No of Competencies: 05</b>								
DM 8.1	Discuss the Structure and behaviour of metals, Solidification of metals, mechanism of crystallisation amorphous & crystalline.	K	K	MK	Large group	Written exam		-
DM 8.2	Define and discuss Eutectic and Peritectic alloys.	K	K	MK	Large group	Written exam		-
DM 8.3	Discuss the Solid state reaction of other binary systems: Metallography & Heat treatment.	K	K	MK	Large group	Written exam	-	-
DM 8.4	Define tarnish and Corrosion. Discuss in details the types of corrosion	K	K	MK	Large group	Written exam		

DM 8.5	Discuss the remedial measures to be taken to avoid corrosion	K	K	DK	Large group	Written exam		
<b>Topic 9: Dental Amalgam      No of Competencies: 07</b>								
DM 9.1	Define Amalgam and classify silver alloys	K	K	MK	Large group	Written exam Viva voce	-	-
CD 9.2	Discuss in details the composition, role of ingredients of Low copper, High copper; admixed and unicompositional amalgam alloys	K	K	MK	Large group	Written exam		-
DM 9.3	Discuss in details the setting reaction of Low copper, High copper; admixed and unicompositional amalgam alloys	K	K	MK	Large group	Written exam	-	-
DM 9.4	Define and discuss trituration and condensation with respect to its types, advantages & disadvantages of each type	K	K	MK	Large group	Written exam		
DM 9.5	Discuss the biological, chemical, physical, thermal, rheological properties with special emphasis on Delayed expansion and Mercuroscopic expansion	K	K	MK	Large group	Written exam		
DM 9.6	Discuss the manipulation with special emphasis on selection of alloy and proportioning	K	K/KH	MK	Large group	Written exam, Practical exam		
DM 9.7	Perform under supervision trituration of Silver amalgam	K/S	KH/SH/ P	MK	Small group, DOAP	Practical exam		
DM 9.8	Discuss the uses, advantages, disadvantages of silver amalgam	K	K	MK	Large group	Written exam, Practical exam, viva voce		
DM	Discuss the mercury toxicity	K	K	DK	Large group	Written exam,		

9.7						Practical exam		
<p><b>Topic 10: DENTAL CEMENTS</b> <span style="float: right;"><b>No of Competencies: 08</b></span></p>								
DM 10.1	Define dental cements, classify it and discuss its ideal requirements	K	K	MK	Large group	Written exam	-	-
DM 10.2	Discuss the composition and role of ingredients of Zn Oxide Eugenol, Zn Phosphate, Silicate, Glass inomer, Zn polycarboxylate, Silico phosphate, calcium hydroxide cement, cavity liner, cavity varnish, Guttapercha, MTA	S	P	MK	DOAS Small group teaching	DOPS Skill assessment	-	-
DM 10.3	Discuss the setting reaction and factors affecting setting of Zn Oxide Eugenol, Zn Phosphate, Silicate, Glass inomer, Zn polycarboxylate, Silico phosphate, calcium hydroxide cement	K	K	MK	Large group	Written exam		
DM 10.4	Discuss the biological, chemical, physical, rheological, thermal properties, dimensional stability, adhesive properties and biomechanics of caries prevention of Zn Oxide Eugenol, Zn Phosphate, Silicate, Glass inomer, Zn polycarboxylate, Silico phosphate, calcium hydroxide cement, cavity liner, cavity varnish, Guttapercha, MTA	K	K	MK	Large group	Written exam		
DM 10.5	Discuss the manipulation with respect to instruments used, p/l ration, way of mixing of Zn Oxide Eugenol, Zn Phosphate, Silicate, Glass inomer, Zn polycarboxylate, Silico phosphate, calcium hydroxide cement	K	K	MK	Large group	Written exam		
DM	Perform under supervision the	K/S	KH/SH/	MK	Small group,	Practical exam		

10.6	manipulation of Zn Oxide Eugenol and Zn Phosphate cement		P		DOAP			
DM 10.7	Discuss the recent advances in each dental cement	K	K	DK	Large group	Written exam		
DM 10.8	Discuss the uses, advantages, disadvantages of all the dental cements	K	K	DK	Large group	Written exam, Viva Voce		

**Topic 11: Dental Casting Alloys      No of Competencies: 05**

DM 11.1	Define and classify dental casting alloys. Discuss in details its ideal requirements	K	K	MK	Large group	Written exam		-
DM 11.2	Discuss the Composition, role of constituents and application of each alloy both noble and base metal including Titanium alloys	K	K	MK	Large group	Written exam		
DM 11.3	Discuss in details the properties of alloys: Melting range, mechanical properties, hardness, elongation, modulus of elasticity, tarnish and corrosion.	K	K	MK	Large group	Written exam		
DM 11.4	Discuss in details the casting procedure and casting defects	K	K/KH	MK	Large group, Flipped classroom	Written exam		
DM 11.5	Discuss in details the hardening and softening heat treatments	K	K	DK	Large group	Written exam		

**Topic 12: Dental Waxes      No of Competencies: 4**

DM 12.1	Classify dental waxes	K	K	MK	Large group	Written exam		
DM	Discuss ideal requirements, composition,	K	K	MK	Large group	Written exam		

12.2	role of ingredients of Inlay casting wax							
DM 12.3	Discuss the Properties: melting range, thermal expansion, mechanical properties, flow & residual stresses, ductility of Inlay casting wax	K	K	MK	Large group	Written exam		
DM 12.4	Discuss the composition, role of ingredients and uses of Modelling wax, sticky wax, Beading & Boxing wax, Spacer wax, Bite registration wax, impression wax	K	K	MK	Large group	Written exam, Practical exam		

**Topic 13: DENTAL CASTING INVESTMENTS No of Competencies: 03**

DM 13.1	Define Investment. Classify and Discuss the ideal requirements of Dental casting investment materials	K	K	MK	Large group	Written exam	-	-
DM 13.2	Discuss in details the composition, role of ingredients and setting reaction of Gypsum bonded, Phosphate bonded and silica bonded investment materials	K	K	MK	Large group	Written exam		
DM 13.3	Discuss in details the properties with special emphasis on Normal, thermal and hygroscopic setting expansion	K	K	MK	Large group	Written exam		

**Topic 14: Dental Ceramics No of Competencies: 1**

DM 14.1	Define and classify Dental Ceramics	K	K	MK	Large group	Written exam	-	-
DM 14.2	Discuss in details the composition, role of ingredients of Dental ceramics	K	K	MK	Large group	Written exam		
DM	Discuss in details methods of	K	K	MK	Large group	Written exam		

14.3	strengthening dental ceramics							
DM 14.4	Discuss in details the fabrication of Ceramic with special emphasis on coping, condensation, firing and furnaces, glazing and finishing	K	K	MK	Large group, Early laboratory exposure	Written exam		
DM 14.5	Discuss the properties of dental ceramics- Strength and factors affecting, modulus of elasticity, surface hardness, wear resistance, thermal properties, specific gravity, chemical stability, esthetic properties, biocompatibility	K	K	MK	Large group	Written exam		
DM 14.5	Discuss the Recent advances-all porcelain restorations, Manganese core , injection moulded , castable ceramics, glass infiltrated alumina core ceramic (In ceram), ceramic veneers, inlays and onlays, and CAD - CAM ceramic.	K	K	MK	Large group	Written exam		
<b>Topic 15: DIRECT FILLING GOLD</b> No of Competencies: 4								
DM 15.1	Classify direct filling gold. Explain in detail about gold foil	K	K	MK	Large group (Lecture)	Written exam		
DM 15.2	Explain the different properties of direct filling gold.	K	K	MK	Large group (Lecture)	Written exam		
DM 15.3	Write down the indications & contraindications of direct filling gold.	K	K	MK	Large group (Lecture)	Written exam		
DM 15.4	Explain the manipulation technique of direct filling gold.	K	K	MK	Large group (Lecture)	Written exam		

**Topic 16: SOLDERING, BRAZING AND WELDING and WROUGHT BASE METAL ALLOYS****No of Competencies: 10**

DM 16.1	Define the term soldering, welding and brazing. Write down the indications of soldering in dentistry.	K	K	MK	Large group (Lecture)	Written exam		
DM 16.2	Define the term solder. Write in details about its ideal requirement and its types	K	K	MK	Large group (Lecture)	Written exam		-
DM 16.3	Define fluxes & anti fluxes. Write down its Function, Types, commonly used fluxes & their selection.	K	K	MK	Large group (Lecture)	Written exam		
DM 16.4	Explain the techniques of soldering with its technical consideration in details.	K	K	DK	Large group (Lecture)	Written exam		
DM 16.5	Define welding. What are the different methods of it. Explain in short about laser welding.	K	K	MK	Large group (Lecture)	Written exam		
DM 16.6	What are the different alloys used mainly for orthodontics purpose. Discuss in details about Stainless steel alloys..	K	K	MK	Large group (Lecture)	Written exam		
DM 16.7	What are the different properties required for orthodontic wires.	K	K	MK	Large group (Lecture)	Written exam		
DM 16.8	Discuss in details about composition, allocation, properties, heat treatment, physical properties of Wrought cobalt chromium nickel alloys	K	K	NK	Large group (Lecture)	Written exam		
DM 16.9	Write down in detail about Nickel – Titanium alloys.	K	K	NK	Large group (Lecture)	Written exam		
DM	Write down in details about Titanium	K	K	NK	Large group	Written exam		

16.1 0	alloys.				(Lecture)			
<b>Topic 17: ABRASION &amp; POLISHING AGENTS</b>		<b>No of Competencies: 5</b>						
DM 17.1	Define the term abrasion and polishing. Explain the need of abrasion and polishing.	K	K	MK	Large group (Lecture)	Written exam	-	
DM 17.2	Discuss the different Types of abrasives, polishing agents and binders used for it with special emphasis on grading of abrasives..	K	K	MK	Large group (Lecture)	Written exam	-	
DM 17.3	Explain the factors affecting the rate of abrasion. Write down the ideal requirements of abrasive agents.	K	K	MK	Large group (Lecture)	Written exam		
DM 17.4	Write down the different materials and procedure used for abrasion and polishing agents.	K	K	NK	Large group (Lecture)	Written exam		
DM 17.5	What is Electrolytic polishing and burnishing.	K	K	DK	Large group (Lecture)	Written exam		
<b>Topic 18: DENTAL IMPLANTS</b>		<b>No of Competencies: 02</b>						
DM 18.1	What is dental implant? Explain the evolution of dental implant.	K	K	DK	Large group (Lecture)	Written exam	-	
DM 18.2	Write down the different types of dental implants. Discuss the different materials used for dental implants.	K	K	DK	Large group (Lecture)	Written exam		
<b>Topic 19 : MECHANICS OF CUTTING</b>		<b>No of Competencies:1</b>						
DM 19.1	What is dental bur and points. Explain the mechanism of tooth cutting.	K	K	MK	Large group	Written exam		

**Topic 20: DIE AND DIE MATERIALS    No of Competencies:02**

DM 20.1	Define die and classify die materials and discuss the ideal requirements of die materials	K	K	MK	Large group	Written exam		
DM 20.2	Discuss the electroforming of Die	K	K/KH	NK	Large group	Written exam		

## Course Outcomes

<b>Number</b>	<b>COMPETENCY</b> The student should be able to	<b>Domain</b> K/S/A/C	<b>Level</b> K/KH/ SH/P	<b>Must know/</b> <b>Nice to know/</b> <b>Desirable to know</b>	<b>Teaching-Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>REMOVABLE PARTIAL PROSTHODONTICS</b>								
<b>TOPIC 1: INTRODUCTION AND CLASSIFICATIONS IN REMOVABLE PARTIAL PROSTHODONTICS.</b> <b>NUMBER OF COMPETENCIES: 04</b>								
<b>RPD 1.1</b>	<b>Describe the partially edentulous state</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group</b>	<b>Written Exam</b>		
<b>RPD 1.2</b>	<b>Describe the need for classification and classify partially edentulous arches using different systems</b>	<b>K/S</b>	<b>K/SH</b>	<b>MK</b>	<b>Large group. DOAP</b>	<b>Written Exam, Viva Voce, OSCE</b>		
<b>RPD 1.3</b>	<b>Describe indications, Contraindications, advantages and disadvantages of removable partial dentures</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce</b>		
<b>RPD 1.4</b>	<b>Describe types of removable partial dentures and parts of RPDs</b>	<b>K</b>	<b>KH</b>	<b>MK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce</b>		
<b>RPD 1.5</b>	<b>Describe the indications, advantages and disadvantages and types of Interim Removable Partial Dentures</b>	<b>K/S</b>	<b>KH/SH</b>	<b>MK</b>	<b>Large group ., PBL, DOAP</b>	<b>Written Exam, Viva Voce, OSCE, DOPS, Skill assessment</b>	<b>Pre-clinical Prosthodontics</b>	

**TOPIC 2: PARTS OF REMOVABLE PARTIAL DENTURE.****NUMBER OF COMPETENCIES:01**

<b>RPD 2.1</b>	<b>Describe the types, indications, advantages and disadvantages of components of CPDs (Major connectors, minor connectors, Rest and rest seats, Direct retainers, Indirect retainers, Tooth replacement.)</b>	<b>K</b>	<b>KH</b>	<b>MK</b>	<b>Large group ., PBL</b>	<b>Written Exam, Viva Voce, OSCE</b>	<b>Pre-clinical Prosthodontics</b>	
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**TOPIC 3: DIAGNOSIS AND TREATMENT PLANNING IN REMOVABLE PARTIAL PROSTHODONTICS.****NUMBER OF COMPETENCIES: 01**

<b>RPD 3.1</b>	<b>Examine, Diagnose &amp; Evaluate diagnostic data and Plan Treatment</b>	<b>K/S</b>	<b>K/SH</b>	<b>MK</b>	<b>Large group . DOAP, PBL</b>	<b>Written Exam, OSCE</b>	<b>Oral Diagnosis, Medicine &amp; Radiology</b>	
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**TOPIC 4: REMOVABLE PARTIAL DENTURE DESIGN.****NUMBER OF COMPETENCIES: 03**

<b>RPD 4.1</b>	<b>Describe and apply the principles and concepts of Removable partial denture design</b>	<b>K/S</b>	<b>K/SH</b>	<b>MK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce, OSCE</b>		
<b>RPD 4.2</b>	<b>Define, classify surveying, surveyors and describe factors affecting path of insertion</b>	<b>K</b>	<b>KH</b>	<b>MK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce, OSCE</b>		
<b>RPD 4.3</b>	<b>Describe and perform the procedure of surveying</b>	<b>K/S</b>	<b>K/SH</b>	<b>MK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce, OSCE</b>		

**TOPIC 5: MOUTH PREPARATIONS IN REMOVABLE PARTIAL DENTURE FABRICATION.****NUMBER OF COMPETENCIES: 2**

RPD 5.1	Describe the pre-prosthetic corrections to improve oral conditions RPD	K	K/KH	MK	Large group ., PBL	Written Exam, Viva Voce , OSCE	Oral Surgery, Periodontics, Conservative Dentistry	
RPD 5.2	Describe the prosthetic corrections to improve planning and fabrication of RPD	K	K/KH	MK	Large group ., PBL	Written Exam, Viva Voce , OSCE		
<b>TOPIC 6: CLINICAL STEPS IN REMOVABLE PARTIAL DENTURE FABRICATION.</b>								
<b>NUMBER OF COMPETENCIES:</b>								
RPD 6.1	Describe the types of impressions and Impression materials and procedures for removable partial dentures.	K/S	K/S/P	MK	Large group ., DOAP	Written Exam, Viva Voce, DOPS, skill assessment, OSCE	Dental Materials	
RPD 6.2	Describe the techniques of jaw relation and esthetic try-in for anterior replacement teeth.	K/S	K/S	MK	Large group ., DOAP	Written Exam, OSCE		
RPD 6.3	Describe the Laboratory procedures including materials for framework construction.	K	K/KH	NK	Large group .,	Viva Voce	Dental Materials	
RPD 6.4	Describe the fitting and trying in of framework	K	K/KH	NK	Large group .,	Viva Voce		
RPD 6.5	Describe occlusion in Removable Partial dentures	K	K/KH	MK	Large group .,	Viva Voce		
RPD 6.6	Describe the insertion of removable partial denture	K/S/AC	K/SH/P	MK	Large group .,	Written Exam, DOPS, Skill assessment.		
RPD 6.7	Describe the problems encountered after insertion of Removable	K/S	K/SH	MK	Large group ., PBL	Written Exam, Viva		

	Partial Dentures					Voce, OSCE		
<b>TOPIC 7: IMMEDIATE REMOVABLE PARTIAL DENTURES. NUMBER OF COMPETENCIES: 01</b>								
RPD 7.1	Describe the indications, contraindications and steps in fabrication of Immediate Removable Partial Dentures	K	KH	DK	Large group ., PBL	Written Exam, Viva Voce		
<b>TOPIC 8: REMOVABLE PARTIAL DENTURES OPPOSING COMPLETE DENTURES. NUMBER OF COMPETENCIES: 01</b>								
RPD 8.1	Describe the treatment plan considerations and steps in fabrication of Removable Partial Dentures opposing Complete dentures	K	KH	DK	Large group ., PBL	Written Exam, Viva Voce		
<b>TOPIC 9: REPAIRS IN REMOVABLE PARTIAL DENTURES. NUMBER OF COMPETENCIES: 01</b>								
RPD 9.1	Describe the indications, techniques of corrections (relining, rebasing, repairs and reinforcements) of Removable Partial Dentures	K	KH	MK	Large group ., PBL	Written Exam, Viva Voce		
<b>TOPIC 10: ADVANCES IN REMOVABLE PARTIAL DENTURES. NUMBER OF COMPETENCIES: 01</b>								
RPD 10.1	Describe the advantages and digital workflow and materials in CAD CAM Removable Partial dentures	K	KH	DK	Large group .	Written Exam, Viva Voce	Dental Materials	

<b>RPD 10.2</b>	<b>Describe the advantages and laboratory procedures in Flexible Removable Partial dentures</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Large group .</b>	<b>Written Exam, Viva Voce</b>		
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## FIXED PARTIAL PROSTHODONTICS

<b>Number</b>	<b>COMPETENCY</b> The student should be able to	<b>Domain</b> K/S/A/C	<b>Level</b> K/KH/SH/P	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching-Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>TOPIC 1: INTRODUCTION TO FIXED PARTIAL DENTURES.</b> <b>NUMBER OF COMPETENCIES: 02</b>								
<b>FPD 1.1</b>	<b>Define Fixed Partial Dentures</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam</b>	<b>-</b>	<b>-</b>
<b>FPD 1.2</b>	<b>Classify FPDs</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam</b>	<b>-</b>	<b>-</b>
<b>TOPIC 2: COMPONENT OF FPD</b> <b>NUMBER OF COMPETENCIES: 03</b>								
<b>FPD 2.1</b>	<b>Define, classify, identify and describe different Retainers</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	<b>-</b>
<b>FPD 2.2</b>	<b>Define, classify, identify and describe different Pontics</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	<b>-</b>

<b>FPD 2.3</b>	<b>Define, classify, identify and describe different Connectors</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	<b>-</b>
<b>TOPIC 3: DIAGNOSIS AND TREATMENT PLANNING NUMBER OF COMPETENCIES: 10</b>								
<b>FPD 3.1</b>	<b>Take a case History</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>-</b>	<b>Oral Medicine and Radiology</b>
<b>FPD 3.2</b>	<b>Perform a Clinical Examination</b>						<b>-</b>	
<b>FPD 3.3</b>	<b>Make Diagnostic casts and analyse them</b>						<b>-</b>	
<b>FPD 3.4</b>	<b>Describe the importance of a Facebow transfer</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>-</b>	
<b>FPD 3.5</b>	<b>Describe the significance of choice of Articulators</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>-</b>	
<b>FPD</b>	<b>Decide upon type of</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large</b>	<b>Written</b>	<b>-</b>	

<b>3.6</b>	<b>prosthesis</b>				<b>group . PBL</b>	<b>exam OSCE Viva voce Problem based questions</b>		
<b>FPD 3.7</b>	<b>Evaluate and select Abutment</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>-</b>	
<b>FPD 3.8</b>	<b>Describe the Biomechanical design considerations in FPD design</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>-</b>	
<b>FPD 3.9</b>	<b>Selection of material (Metal, Metal-Ceramic, All Ceramic) for FPD</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based questions</b>	<b>Dental Materials</b>	
<b>FPD 3.10</b>	<b>Describe and perform the Mouth Preparations needed to be done prior to FPD planning</b>	<b>K/S</b>	<b>K/KH/S/SH</b>	<b>MK</b>	<b>Large group . PBL</b>	<b>Written exam OSCE Viva voce Problem based</b>		<b>Periodontology Conservative dentistry and endodontics</b>

						questions		
<b>TOPIC 4: OCCLUSION IN FIXED PARTIAL DENTURES</b>								
<b>NUMBER OF COMPETENCIES: 1</b>								
<b>FPD 4.1</b>	<b>Describe the Fundamentals of occlusion necessary for FPD planning</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group</b> .	<b>Viva voce OSCE</b>	<b>-</b>	<b>-</b>
<b>TOPIC 5: PRINCIPLES OF TOOTH PREPARATION</b>								
<b>NUMBER OF COMPETENCIES: 5</b>								
<b>FPD 5.1</b>	<b>Describe the Principles of tooth preparation</b>	<b>K/S</b>	<b>K/KH/S/SHP</b>	<b>MK</b>	<b>Large group</b> . <b>DOAP</b>	<b>Written exam DOPS OSCE Skill Assessment Problem based questions</b>	<b>Pre-clinical Prosthodontics</b>	<b>-</b>
<b>FPD 5.2</b>	<b>Describe and perform the Preparation of full veneer crowns – detail</b>	<b>K/S</b>	<b>K/KH/S/SHP</b>	<b>MK</b>	<b>Large group</b> . <b>DOAP</b>	<b>Written exam DOPS OSCE Skill Assessment Problem based questions</b>	<b>Pre-clinical Prosthodontics</b>	<b>-</b>
<b>FPD 5.3</b>	<b>Describe and perform the Preparation for partial veneer crowns</b>	<b>K/S</b>	<b>K/KH/S/SHP</b>	<b>NK</b>	<b>Large group</b> .	<b>Written exam DOPS</b>	<b>Pre-clinical Prosthodontics</b>	<b>-</b>

					<b>DOAP</b>	<b>OSCE Skill Assessment Problem based questions</b>	<b>ntics</b>	
<b>FPD 5.4</b>	<b>Describe and perform the Treatment for extensively damaged teeth</b>	<b>K</b>	<b>K/KH</b>	<b>NK</b>	<b>Large group, PBL</b>	<b>Written exam Viva voce</b>		<b>Conservative dentistry</b>
<b>FPD 5.5</b>	<b>Describe and perform the Treatment for periodontally weakened teeth</b>	<b>K</b>	<b>K/KH</b>	<b>NK</b>	<b>Large group</b>	<b>Written exam Viva voce</b>		<b>Periodontology</b>
<b>TOPIC 6: FLUID CONTROL AND SOFT TISSUE MANAGEMENT</b>								
<b>NUMBER OF COMPETENCIES: 3</b>								
<b>FPD 6.1</b>	<b>Describe the Importance of finish line exposure</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group,</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	<b>Periodontology</b>
<b>FPD 6.2</b>	<b>Describe the Techniques for soft tissue management</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	<b>Periodontology</b>
<b>FPD 6.3</b>	<b>Describe the Various Recent Advances in soft tissue management</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large group</b>	<b>Written exam Viva voce OSCE</b>		
<b>TOPIC 7: IMPRESSION MAKING IN FIXED PARTIAL DENTURES</b>								
<b>NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 7.1</b>	<b>Describe the Various techniques of impression making with a critical evaluation of their merits</b>	<b>K</b>	<b>K/KHS</b>	<b>MK</b>	<b>Large group , DOAP</b>	<b>Written exam Viva voce OSCE,</b>	<b>-</b>	

	and demerits					DOPS		
<b>FPD 7.2</b>	<b>Describe the Various Recent Advances in FPD impressions</b>	<b>K</b>	<b>K/KHS</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam Viva voce OSCE</b>	<b>-</b>	
<b>TOPIC 8: PROVISIONAL RESTORATIONS NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 8.1</b>	<b>Define and describe the rationale of Provisional Restorations</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large Group .</b>	<b>Written exam Viva voce OSCE</b>		
<b>FPD 8.2</b>	<b>Define and describe the techniques of fabricating Provisional Restorations</b>	<b>K</b>	<b>K/KH/S</b>	<b>MK</b>	<b>Large Group .</b>	<b>Written exam Viva voce OSCE</b>	<b>Dental materials</b>	
<b>TOPIC 9: LABORATORY PROCEDURES FOR FIXED PARTIAL DENTURE NUMBER OF COMPETENCIES: 4</b>								
<b>FPD 9.1</b>	<b>Describe the rationale and procedure to make Working casts and dies</b>	<b>K</b>	<b>K/KH/S</b>	<b>NK</b>	<b>Large group .</b>	<b>Written exam Viva voce OSCE</b>	<b>Dental Materials</b>	<b>-</b>
<b>FPD 9.2</b>	<b>Describe the procedure to make Wax Patterns</b>	<b>K</b>	<b>K/KH/S</b>	<b>NK</b>	<b>Large group .</b>	<b>Written exam Viva voce</b>	<b>Dental Materials</b>	<b>-</b>

<b>FPD 9.3</b>	<b>Describe the procedure to Invest and cast patterns</b>	<b>K</b>	<b>KH</b>	<b>NK</b>	<b>Large group .</b>	<b>Written exam Viva voce</b>	<b>Dental Materials</b>	
<b>FPD 9.4</b>	<b>Ceramic build up</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Large group .</b>	<b>Viva voce</b>	<b>Dental Materials</b>	
<b>TOPIC 10: UNCONVENTIONAL FIXED PARTIAL DENTURES NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 10.1</b>	<b>Describe the indications, contraindications, types and techniques of Resin bonded fixed partial dentures</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>Large group , PBL</b>	<b>Written exam Viva Voce, OSCE</b>		
<b>FPD 10.2</b>	<b>Describe the indications, contraindications, types and techniques of Fiber reinforced fixed partial dentures</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>Large group, PBL</b>	<b>Written exam Viva voce, OSCE</b>		
<b>TOPIC 11: ESTHETIC CONSIDERATIONS IN FPD NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 11.1</b>	<b>Describe the Aesthetics considerations in smile designing</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>Large group .</b>	<b>Written exam Viva Voce</b>	<b>-</b>	<b>-</b>
<b>FPD 11.2</b>	<b>Describe the aids and method of Shade selection</b>	<b>K/S</b>	<b>KH/SH</b>	<b>NK</b>	<b>Large group, DOAP</b>	<b>Written exam Viva Voce, OSCE, Skill assessment</b>		
<b>TOPIC 12: LUTING CONSIDERATIONS IN FPD</b>								

<b>NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 12.1</b>	<b>Describe the rationale and selection of luting agent in FPD</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>Large group, PBL</b>	<b>Written exam Viva voce, OSCE</b>	<b>Dental materials</b>	<b>-</b>
<b>FPD 12.2</b>	<b>Describe the technique of luting in FPD</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Large group .</b>	<b>Written exam Viva voce</b>	<b>-</b>	<b>-</b>
<b>TOPIC 13: MAINTENANCE AND FAILURES IN FPD</b>								
<b>NUMBER OF COMPETENCIES: 2</b>								
<b>FPD 13.1</b>	<b>Describe and give instructions after luting FPD</b>	<b>K/A/P</b>	<b>KH/SH/P</b>	<b>MK</b>	<b>Large group, DOAP</b>	<b>Written exam, OSCE, Viva voce, Skill Assessment</b>		
<b>FPD 13.2</b>	<b>Describe the Failures in FPD and their management</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>Large group .</b>	<b>Written exam Viva voce</b>	<b>-</b>	<b>-</b>

# Conservative Dentistry & Endodontics

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Number	Course Outcomes	Domain K/S/A/ C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	- Assessment Methods	Vertical Integration	Horizontal Integration
<b>Conservative Dentistry &amp; Endodontics</b>								
<b>Topic: Introduction to Conservative Dentistry</b>						<b>No of Competencies: 4</b>		
CD 0.1	History & Objectives of Conservative Dentistry	K/C	K	MK	Large group teaching	Written Exam ViVa Voice	-	-
CD 0.2	Defination of Conservative Dentistry	C	K	MK	Large group teaching	Written Exam ViVa Voice	-	-
CD 0.3	Indications	K	K	MK	Large group teaching	Written Exam ViVa Voice	-	-
CD 0.4	Scope of Conservative Dentistry	K/S	K	MK	Large group teaching	Written Exam ViVa Voice	-	-
<b>Topic : Nomenclature of Dentition</b>						<b>No of Competencies: 5</b>		
CD 1.1	Nomenclature	K/S	K	MK	Large group (FC)	Written exam Viva voice	-	-

CD 1.2	Defination	K/C	K	MK	Large group (FC)	Written exam Viva voice	-	-
CD 1.3	Terminology of tooth surfaces	K/C	K	MK	Large group (FC)	Written exam Viva voice	-	-
CD 1.4	Terminology of Caries	K/C	K	MK	Large group (FC)	Written exam Viva voice	-	-
CD 1.5	Tooth numbering systems A.D.A. Zsigmondy Palmer and F.D.I. systems	K/C	K	Mk	Large group (FC)	Written exam Viva voice	-	-

## Topic 2 : . Principles Of Cavity Preparation

No of Competencies: 4

CD 2.1	Explain Steps of cavity preparation	S/A/C	K/P	MK	Large group Small group	Written exam Viva voice OSPE	-	-
CD 2.2	Describe nomenclature of cavity preparation	K/S/A/ C	K/P	MK	Large group Small group	Written exam Viva voice OSPE	-	-
CD 2.3	Explain classification of cavities.	K/C/A	K/P	MK	Large group Small group	Written exam Viva voice OSPE	-	-
CD 2.4	Explain nomenclature of floors angles of cavities	S/A/C	K/P	MK	Large group Small group	Written exam Viva voice OSPE	-	-

## Topic3: Dental Caries

No of Competencies: 6

3.1	Explain Aetiology of Dental Caries	K/S	K	MK	Large group	Written Exam Viva voice	Oral Pathology	-
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3.2	Explain classification of Dental Caries	K/S	K	MK	Large group	Written Exam Viva voice OSPE	-	-
3.3	Describe clinical features of Dental Caries	K/S	K	MK	Large group	Written Exam Viva voice	-	-
3.4	Describe morphological features of Dental Caries	K/S	K	MK	Large group	Written Exam Viva voice	-	-
3.5	Describe microscopic features	K/S	K	MK	Large group	Written Exam Viva voice	Oral Pathology	-
3.6	Describe clinical diagnosis and sequel of dental caries.	K/S	K	MK	Large group	Written Exam Viva voice	-	-

#### Topic 4 : Treatment Planning for Operative Dentistry

No of Competencies: 5

CD 4.1	Detailed clinical examination	K/S/A	KH/SH	MK	Large group PBL	Written Exam Viva Voice	-	-
4.2	radiographic examination	K/S/A	KH/SH	MK	Large group PBL	Written Exam Viva Voice	-	-
4.3	, tooth vitality tests,.	K/S/A	KH/SH	MK	Large group PBL	Written Exam Viva Voice	-	-

4.4	, diagnosis and treatment planning,	K/S/A	KH/SH	MK	Large group PBL	Written Exam Viva Voice	-	-
4.5	, preparation of the case sheet.	K/S/A	KH/SH	MK	Large group PBL	Written Exam Viva Voice	-	-
<b>Topic 5 : Gnathological Concepts of Restoration</b>						<b>No of Competencies: 5</b>		
CD 5.1	Physiology of occlusion,	K	K	MK	Large group	Written exam Viva voice	Pre-clinical Conservative	-
CD 5.2	normal occlusion	K	K	MK	Large group Small group	Written exam Viva voice	- Pre- clinical Conservative	-
CD 5.3	Ideal occlusion,	K	K	MK	Large group Small group	Written exam Viva voice	Pre-clinical Conservative	-
CD 5.4	mandibular movements and occlusal analysis	K/S	SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	Pre-clinical Conservative	-
CD 5.5	Occlusal rehabilitation and restoration.	K/S	SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	Pre-clinical Conservative	-

<b>Topic 6 : Aramamentarium For Cavity Preparation</b>					<b>No of Competencies: 4</b>			
CD 6.1	Explain General classification of operative instruments, and sharpening of instruments.	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	- Pre-clinical Conservative	-
CD 6.2	Explain Hand cutting instruments design formula	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	- Pre-clinical Conservative	-
CD 6.3	Explain Rotary cutting instruments dental bur, mechanism of cutting, evaluation of hand piece and speed current concepts of rotary cutting procedures.	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	- Pre-clinical Conservative	-
CD 6.4	Sterilisation and maintenance of instruments. Basic instrument tray set up.	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	Pre-clinical Conservative	
<b>Topic 7: Control of Operating Field</b>					<b>No of Competencies: 4</b>			
CD 7.1	Light source sterilisation	K	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
CD 7.2	Explain field of operation control of moisture,	K	K/KH	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
CD 7.3	Describe rubber dam in detail,	K	K/KH	MK	Large group Small group	Written exam Viva voice Skill	-	-

						Assessment		
CD 7.4	Describe Cotton rolls & anti sialogagues.	K	K/KH	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
<b>Topic 8: Amalgam Restoration</b> <span style="float: right;"><b>No of Competencies: 4-</b></span>								
CD 8.1	Indication contraindication, clinical behaviour.	K	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	Dental Material
CD 8.2	physical and mechanical properties ,	K	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	- Dental Material
CD 8.3	Cavity preparation for Class I , II, V and III. Step wise procedure for cavity preparation and restoration.	K/S	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	- Dental Material
CD 8.4	Failure of amalgam restoration.	K	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	- Dental Material
<b>Topic 9: Pulp Protection</b> <span style="float: right;"><b>No of Competencies: 5</b></span>								
CD 9.1	Describe Liners, varnishes and bases.	K	K/KH	MK	Large group Small group	Written exam Viva voice	Pre-clinical Conservative	-

						Skill Assessment OSPE	e	
CD 9.2	Zinc phosphate	K/S	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	-
CD 9.3	zinc polycarboxylate	K	K/KH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	-
CD 9.4	zinc oxide eugenol	K/S	K/KH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	-
CD 9.5	glass inomer cements.	K/S	K/KH/P /SH	MK	Large group Small group	Written exam Viva voice Skill Assessment OSPE	Pre-clinical Conservative	-

**Topic 10: Anterior Restorations**

**No of Competencies : 6**

CD 10.1	Describe Selection of cases, ,	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 10.2	selection of material	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 10.3	step wise procedures for using restorations silicate ( theory only)	K	K/KH	MK	Large group Small group	Written exam Viva voce Skill	Pre clinical Conservative	Dental Material

	glass ionomers, composites					Assessment for Glass Ionomer		
CD 10.4	sand witch restorations	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 10.5	Bevels	K	K/KH	MK	Large group	Written exam Viva voce	-	-
CD 10.6	note on status of the dentine bonding agents	K	K/KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 11: Direct Filling Gold Restorations</b>					<b>No of Competencies: 1</b>			
CD 11.1 -10	Types of direct filling gold indications and limitations of cohesive gold. Annealing of gold foil cavity preparation and condensation of gold foils..	K	K	NK	Large group	Written exam Viva voce	-	-
<b>Topic 12: Preventive Measures In Restorative Practice</b>					<b>No of Competencies: 2</b>			
CD 12.1	Plaque Control, Pitand fissure sealants dietary measures restorative procedure and periodontal health	K	K	MK	Large group Small group	Written exam Viva voce		
CD 12.2	. Contact and contour of teeth and restorations matrices tooth separation and wedges	K/S	K/SH/P	MK	Large group Small group	Written exam Viva voce Skill Assessment OSPE	Pre clinical Conservative	-

<b>Topic 13: Temporisation or Interim Restoration. No of Competencies: 1</b>								
CD 13.1	Temporisation or Interim Restoration.	K	K	MK	Large group Small group teaching	Written exam Viva voce	-	-
<b>Topic 14: Pin Amalgam Restoration No of Competencies: 1</b>								
CD 14.1	Describe the Indication Contra Indication : Advantages disadvantages of each types of pin methods of placement use of auto matrix. Failure of pin amalgam restoration.	K	KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 15: Management Of Deep Carious Lesions No of Competencies: 1</b>								
CD 15.1	Explain Indirect And Direct Pulp Capping	K	KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 16: Non Carious Destruction's Tooth Structures Diagnosis and Clinical Management No of Competencies: 1</b>								
CD 16.1	Describe Non Carious Destruction's Tooth Structures Diagnosis and Clinical Management	K	KH	MK	Large group	Written exam Viva voce	Oral Medicine & Radilogy	-
<b>Topic 17: Hyper Sensitive Dentine And Its Management. No of Competencies: 1</b>								
CD 17.1	Describe Hyper Sensitive Dentine And Its Management.	K	KH	MK	Large group PBL	Written exam Viva voce	-	-

<b>Topic 18: Cast Restorations</b>		<b>No of Competencies: 1</b>						
CD 18.1	Describe Cast Restorations Indications, contra indications, advantages and disadvantages and materials used for same Class II and Class I cavity preparation for inlays fabrication of wax pattern spurring inverting and casting procedures & casting defects	K	K	MK	Large group	Written exam Viva voce	-	-
<b>Topic 19: Die Materials And Preparation Of Dies.</b>		<b>No of Competencies: 1</b>						
CD 19.1	Die Materials And Preparation Of Dies.	K	K	NK	Large group teaching	Written Exam ViVa Voice	-	-
<b>Topic 20: Gingival Tissue Management For Cast Restoration And Impression Procedures</b>		<b>No of Competencies: 5</b>						
CD 20.1	Gingival Tissue Management For Cast Restoration And Impression Procedures	K	K	MK	Large group	Written exam Viva voce	-	-
<b>Topic 21 : . Recent Cavity Modification Amalgam Restoration.</b>		<b>No of Competencies: 1</b>						
CD 2.1	Recent Cavity Modification Amalgam Restoration.	K	K	MK	Large group	Written exam Viva voce	-	-

**Topic22: Differences between Amalgam And Inlay Cavity preparation**  
**No of Competencies: 1**

22.1	Differences between Amalgam And Inlay Cavity preparation with note on all the types of Bewels used for Cast Restoration.	K	K/SH/P	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
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**Topic 23: Control Of Pain During Operative Procedures. No of Competencies: 1**

CD 23.1	Control Of Pain During Operative Procedures.	K/S/A	KH/SH	MK	Large group Small group	Written Exam Viva Voice Skill Assessment	-	-
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**Topic 24 : Treatment Planning For Operative Dentistry No of Competencies: 5**

CD 24.1	Treatment Planning For Operative Dentistry Detailed Clinical Examination Radiographic Examination	K/S/A	KH/SH	MK	Large group Small group	Written Exam Viva Voice Skill Assessment	-	-
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**Topic 25 : Vitality Tests, Diagnosis And Treatment Planning And Preparation Of Case Sheet.**

**No of Competencies: 4**

CD 25.1	Vitality Tests, Diagnosis And Treatment Planning And Preparation Of Case Sheet.	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	Oral Medicine & Radiology	-
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**Topic 26: Applied Dental Materials      No of Competencies: 4**

CD 26.1	1. Biological Considerations. Evaluation, clinical application and adverse effects of the following materials. Dental cements, Zinc oxide euginol cements zinc phosphate cements, polycarboxylates glass ionomer cements, silicate cement calcium hydroxides varnishes	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
CD 26.2	. 2. Dental amalgam, technical considerations mercury toxicity mercury hygiene	K/S	K/SH	MK	Large group Small group	Written exam Viva voice Skill Assessment	-	-
CD 26.3	3. Composite, Dentine bonding agents, chemical and light curing composites	K	K	MK	Large group	Written exam Viva voice	-	-
CD 26.4	. 4. Rubber base Imp. Materials	K	K	MK	Large group	Written exam Viva voice	-	-
CD 26.5	5. Nobel metal alloys & non noble metal alloys	K	K	MK	Large group	Written exam Viva voice	-	-
CD 26.6	6. Investment and die materials	K	K	MK	Large group	Written exam Viva voice	-	-
CD 26.7	7. Inlay casting waxes	K	K	MK	Large group	Written exam Viva voice	-	-
CD 26.8	8. Dental porcelain	K	K	MK	Large group	Written exam Viva voice	-	-
CD	9. Aesthetic Dentistry	K	K	MK	Large group	Written exam	-	-

26.9						Viva voice		
<b>Topic 27: Endodontics</b>						<b>No of Competencies: 1</b>		
CD 27.1	Introduction definition scope and future of endodontics	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic 28: Clinical diagnostic methods</b>						<b>No of Competencies: 1</b>		
CD 28.1	Clinical diagnostic methods	K	K	MK	Large group Small group	Written exam Viva voice PBL	-	-
<b>Topic 29: Emergency endodontic procedures</b>						<b>No of Competencies : 1</b>		
CD 29.1	Emergency endodontic procedures	K	K	MK	Large group	Written exam Viva voce	-	-
<b>Topic 30: Pulpal diseases</b>						<b>No of Competencies: 1</b>		
CD 30.1	Pulpal diseases causes, types and treatment .	K	K	MK	Large group Small group	Written exam Viva voice PBL	-	Oral Pathology
<b>Topic 31: Periapical diseases</b>						<b>No of Competencies: 1</b>		
CD 31.1	acute periapical abscess, acute periodontal abscess phoeix abscess,	K	K	MK	Large group Small group	Written exam Viva voce	-	-

	chronic alveolar abscess granuloma cysts condensing osteitis, external resorption.							
<b>Topic 32: Vital pulp therapy. No of Competencies: 1</b>								
CD 32.1	indirect and direct pulp capping  pulpotomy  different types and medicaments used.	K	K	MK	Large group Small group teaching	Written exam Viva voce Skill Assessment	Pedodontia	-
<b>Topic 33: Apexogenesis and apexification or problems of open apex. No of Competencies: 1</b>								
CD 33.1	Describe Apexogenesis and apexification or problems of open apex.	K	K	MK	Large group Small group	Written exam Viva voce	-	-
<b>Topic 34: Rationale of endodontic treatment No of Competencies: 1</b>								
CD 34.1	Rationale of endodontic treatment case selection indication and contraindications for root canal treatments.	K	K	MK	Large group	Written exam Viva voce	-	-
<b>Topic 35: Principles of root canal treatment mouth preparation root canal instruments No of Competencies: 1</b>								
CD 16.1	<ul style="list-style-type: none"> <li>Describe Principles of root canal treatment mouth preparation root canal</li> </ul>	K	K	MK	Large group	Written exam Viva voce	-	-

	instruments, hand instruments, power driven instruments, <ul style="list-style-type: none"> <li>• standardisation color coding principle of using endodontic instruments.</li> <li>• Sterilisation of root canal instruments and materials</li> <li>• rubber dam application.</li> </ul>								
<b>Topic 36 Anatomy of the pulp cavity: . No of Competencies: 1</b>									
CD 36.1	Anatomy of the pulp cavity: root canals apical foramen. Anomalies of pulp cavities access cavity preparation of anterior and premolar teeth.	K	K	MK	Large group	Written exam Viva voce	-	-	
<b>Topic 37: Preparation of root canal space No of Competencies: 1</b>									
CD 37.1	Describe Preparation of root canal space . Determination of working length, cleaning and shaping of root canals, irrigating solution chemical aids to instrumentation	K	K	MK	Large group	Written exam Viva voce	-	-	

<b>Topic 38: Disinfection of root canal space</b>		<b>No of Competencies: 1</b>						
CD 38.1	Disinfection of root canal space intra canal medicaments, poly antibiotic paste ross mans paste, mummifying agents. Out line of root canal treatment, bacteriological examinations, culture methods	K	K	NK	Large group teaching	Written Exam ViVa Voice	-	-
<b>Topic 39: Problems during cleaning and shaping of root canal spaces</b>		<b>No of Competencies: 1</b>						
CD 39.1	Problems during cleaning and shaping of root canal spaces. Perforation and its management. Broken instruments and its management, management of single and double curved root canals.	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic 40 : Methods of cleaning and shaping</b>		<b>No of Competencies: 1</b>						
CD 40.1	Methods of cleaning and shaping like step back crown down and conventional methods.	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic41: Obturation of the root canal system</b>		<b>No of Competencies: 1</b>						
41.1	. Obturation of the root canal system. Requirements of an ideal root canal filling material obturation methods using	K	K	MK	Large group	Written exam Viva voice	-	-

	gutta percha healing after endodontic treatment. Failures in endodontics.							
<b>Topic 42: Root canal sealers No of Competencies: 1</b>								
CD 42.1	. Root canal sealers. Ideal properties classification. Manipulation of root canal sealers.	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic 43 : post endodontic restoration fabrication No of Competencies: 1</b>								
CD 43.1	post endodontic restoration fabrication and components of post core preparation.	K	K	MK	Large group	Written exam Viva voice	Prosthodontics	-
<b>Topic 44 : smear layer. No of Competencies: 1</b>								
CD 25.1	smear layer and its importance in endodontics and conservative treatment..	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic 45: Discoloured Teeth And Its Management No of Competencies: 1</b>								
CD 45.1	<ul style="list-style-type: none"> <li>• Discoloured Teeth And Its Management.</li> <li>• Bleaching Agents,</li> <li>• Vital And Non Vital Bleaching</li> </ul>	K	K	MK	Large group	Written exam Viva voice	-	-

	Methods.								
<b>Topic 46: Traumatized teeth</b>					<b>No of Competencies: 1</b>				
CD 46.1	traumatized teeth classification of fractured teeth. Management of fractured tooth and root. Luxated teeth and its management.	K	K	MK	Large group	Written exam Viva voce	-	-	
<b>Topic 47: endodontic surgeries</b>					<b>No of Competencies: 1</b>				
CD 47.1	<ul style="list-style-type: none"> <li>• Endodontic Surgeries Indication</li> <li>• Contraindications,</li> <li>• Pre Operative Preparation.</li> <li>• Pre Medication</li> <li>• Surgical Instruments And Techniques Apicectomy,</li> <li>• Retrograde Filling,</li> <li>• Post Operative Sequale</li> <li>• Trephination</li> <li>• Hemisection,</li> <li>• Radiscetomy</li> <li>• Techniques Of Tooth Reimplantation (Both Intentional And Accidental) Endodontic Implants</li> </ul>	K	K	DK	Large group	Written exam Viva voce	Oral Surgery	-	
<b>Topic 48: root resorption</b>					<b>No of Competencies : 1</b>				
CD 48.1	root resorption	K	K	MK	Large group	Written exam Viva voce	-	-	

<b>Topic 49: emergency endodontic procedures. No of Competencies: 1</b>								
CD 49.1	emergency endodontic procedures.	K	K	MK	Large group	Written exam Viva voice	-	-
<b>Topic 50: lasers in conservative endodontics No of Competencies: 1</b>								
CD 50.1	lasers in conservative endodontics (introduction only) practice management	K	K	DK	Large group	Written exam	-	-
<b>Topic 51: professional association dentist act No of Competencies: 1</b>								
CD 51.1	professional association dentist act 1948 and its amendment 1993	K	K	DK	Large group	Written exam	-	-
<b>Topic 52: duties towards the govt No of Competencies: 1</b>								
CD 52.1	duties towards the govt. Like payments of professional tax, income tax.	K	K	DK	Large group	-	-	-
<b>Topic 53: financial management of practice No of Competencies: 1</b>								
CD 53.1	financial management of practice	K	K	DK	Large group	-	-	-

**Topic 54: dental material and basic equipment management. No of Competencies: 1**

CD 54.1	. dental material and basic equipment management.	K	K	MK	Large group	Written exam Viva voce	-	-
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**Topic 55 Ethics No of Competencies: 1**

CD 55.1	Ethics	K	K	MK	Large group	Written exam Viva voce	-	-
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**DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY**

	<b>COMPETENCY The student should able to</b>	<b>Do ma in K/ S/ A/ C</b>	<b>Lev el K/ KH /SH /P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 1- Temporomandibular joint disorders</b>								
1.1	Discuss anatomy, applied anatomy of TMJ and muscles of mastication	K	K	MK	Large group	Written	-	-
1.2	Classify TMJ disorders.	K	K	MK	Large group	written	-	-
1.2	Discuss etiology, clinical features of TMJ ankylosis.	K	K	MK	Large group	Written	-	-
1.3	Discuss TMJ disc derangements.	K	K	MK	Large group	Written , Viva voce	-	-
1.4	Explain the pathophysiology, clinical features, diagnosis and management of MPDS.	K	K	MK	Large group	Written , OSCE	-	-
1.5	Explain various investigations modality for TMJ .	K	K	MK	Large group	written	-	--
1.6	Explain indications for conventional techniques and describe the technique	K/A /C	K/S H/P	MK	Large group, DOAP	Written, DOPS	-	-
1.7	Demonstrate the techniques of conventional TMJ imaging.	K/A /C	K/S H/P	MK	Large group, DOAP	DOPS, Skill assessment	-	-
1.8	Explain specialized techniques with indications.	K/A /C	K/S H/P	MK	Large group, DOAP	OSCE,D OPS	-	-
1.9	Perform clinical examination of TMJ and muscles of mastication	K/A /C	K/S H/P	MK	Large group, DOAP	DOPS	-	-
1.10	Select and Justify most suitable diagnostic approach and treatment	K/A /C	K	MK	PBL	Proble m based	-	-

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	plan taking in account patient's condition.					questions		
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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain</b>	<b>Level K/KH/SH/P</b>	<b>Must know/ Nice to know/ Desired to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 2- Cysts of Jaw</b>								
2.1	Classify cysts of jaw. Explain the pathophysiology of cyst formation.	K	K	MK	Large group	Written exam	Oral pathology	-
2.2	Discuss the clinical and radiographic features of cyst	K	K	MK	Large group	Written exam, Viva voce	-	-
2.3	Discuss differential diagnosis of the cyst	K	K	MK	Large group, PBL	Written exam Viva voce problem based questions	--	-
2.4	Discuss management of cyst	K	K	MK	Large group	Written exam Viva voce	--	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 3- Tumors of Jaw- Benign and Malignant</b>								
3 1	Classify tumors of jaw. Explain the pathophysiology of tumor formation.	K	K	MK	Large group	Written exam	-	-
3 2	Differentiate between benign and malignant tumors.	K	K	MK	Large group	Written exam	-	-
3 3	Discuss the clinical and radiographic features of tumours of jaws	K	K	MK	Large group	Written exam	-	-
3 4	Discuss differential diagnosis of the tumours	K	K	MK	Large group	Written exam	-	
3 5	Discuss management of tumours	K	K	MK	Large group	Written exam	-	Oral surgery

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic4-Vesiculobullous lesion</b>								
4.1	Classify vesiculobullous lesions of the oral mucosa	K	K	MK	Large group	Written exam Viva voce	-	-
4.2	Discuss etiological factors involved in the causation of oral vesiculobullous lesions	K	K	MK	Large group	Written exam	-	-
4.3	Explain clinical features of the more common types of vesicular and bullous lesions	K	K	MK	Large group	Written exam	-	-
4.4	Discuss investigative methods employed in the diagnosis of vesiculobullous lesions.	K/S	K	MK	Large group	Written exam Viva voce	-	-
4.5	Explain therapeutic management of oral vesiculobullous lesions	K	K	MK	Large group	Written exam	-	Dermatology

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<p><b>Topic 5- Infections of oral and paraoral structures:</b>            Bacterial: Streptococcal, tuberculosis, syphilis, vincent's, leprosy, actinomycosis, diphtheria and tetanus            Fungal: Candida albicans            Virus: Herpes simplex, herpes zoster, ramsay hunt syndrome, measles, herpangina, mumps, infectious mononucleosis, AIDS and hepatitis-B</p>								
5.1	Classify various infections of oral and paraoral structures.	K	K	MK	Large group	Written exam	-	-
5.2	Explain clinical features, differentiating features of one infection from other.	K	K	MK	Large group	Written exam	-	-
5.3	Select and justify the investigation and demonstrate the data interpretation	K/S	K	MK	Large group, PBL	Written exam, problem based question	-	-
5.4	Discuss various treatment options depending on the infection		K	MK	Large group	Written exam	--	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic6- Red and white lesions of oral cavity</b>								
6.1	Classify red and white lesions	K	K	MK	Large group	Written exam	-	-
6.2	Explain clinical features and differential diagnosis of each lesion	K	K	MK	Large group	Written exam	-	-
6.3	Explain the diagnostic procedure	K	K	MK	Large group	Written exam	-	-
6.4	Demonstrate FNAC, Biopsy technique	K/S/A/C	K/SH/P	MK	DOAP	DOPS	-	-
6.5	Discuss the management plan for case	K	K	MK	Large group	Written exam	--	-
6.6	Select the suitable investigation and treatment option depending on the patient	K	K	MK	Large group, PBL	Written exam, problem based question	-	-

**DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY**

<b>No</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desired to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 7- Tongue disorders</b>								
7.1	Describe anatomy, applied anatomy, nerve supply, blood supply of tongue.	K	K	MK	Large group	Written exam	-	-
7.2	Classify tongue disorders.	K	K	MK	Large group	Written exam	-	-
7.3	Explain clinical features, differential diagnosis and investigations for tongue disorders.	K	K	MK	Large group	Written exam	-	-
7.4	Discuss management of tongue disorders	K	K	MK	Large group	Written exam	-	-

<b>No</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desired to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 8- Pigmented lesions</b>								
8.1	Classify oral pigmented lesions	K	K	MK	Large group	Written exam	-	-
8.2	Discuss pathophysiology.	K	K	MK	Large group	Written exam	-	-
8.3	Explain clinical features and differential diagnosis	K	K	MK	Large group	Written exam Viva voce	-	-
8.4	Discuss investigations and management of each case.	K	K	MK	Large group, PBL	Written exam, problem	-	-

**DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY**

						based question		
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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 9- Salivary Glands disorder</b>								
9.1	Discuss anatomy, applied anatomy and physiology of major and minor salivary glands	K	K	MK	Large group	Written exam	-	-
9.2	Classify salivary gland disorders	K	K	MK	Large group	Written exam	-	-
9.3	Perform clinical examination of salivary glands	K/S/A/C	K/P	MK	DOAP	DOPS	-	-
9.4	Discuss the investigations for various salivary gland disorders	K	K	MK	Large group	Written exam	-	-
9.5	Discuss the clinical features of salivary gland disorders	K	K	MK	Large group	Written exam	-	-
9.6	Demonstrate data interpretation and differential diagnosis	K/S	P	MK	DOAP	DOPS, OSCE, problem based questions	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 10- Orofacial pain</b>								
10.1	Discuss the nerve supply in orofacial region.	K	K	MK	Large group	Written exam, viva voce	Human Anatomy	-
10.2	Explain Pain pathways.	K	K	MK	Large group	Written exam, viva voce	-	-
10.3	Classify pain pathways	K	K	MK	Large group	Written exam, viva voce	-	-
10.4	Discuss the characteristic nature of pain in each entity.	K	K	MK	Large group	Written exam, viva voce	-	-
10.5	Discuss the differential diagnosis of orofacial pain	K	K	MK	PBL	OSCE, problem based questions	-	-
10.6	Select and justify most suitable treatment option taking in account patient's disorder	K/S	K	MK	PBL	OSCE, problem based questions	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 11- Oral manifestations of systemic diseases</b>								
11.1	Discuss the systemic conditions which manifests as oral lesions.	K	K	MK	Large group	Written exam	-	-
11.2	Describe clinical features of systemic condition and explain its oral manifestation.	K	K	MK	Large group	Written exam	-	-
11.3	Discuss the differential diagnosis of various conditions	K	K	MK	Large group	Written exam	-	-
11.4	Perform diagnostic procedures, investigations, refer patient to physician if required.	K/A/C	K/P	MK	DOAP	DOPS	-	-
11.5	Select and justify the treatment options for the condition.	K	K	MK	Large group	Written exam	-	-

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<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domai n K/S/A/ C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 12- Bleeding and clotting disorders</b>								
1 2 . 1	Discuss clotting mechanism.	K	K	MK	Large group	Written exam	-	-
1 2 . 2	Classify bleeding and clotting mechanism	K	K	MK	Large group	Written exam	-	-
1 2 . 3	Perform diagnostic procedures, investigations, refer patient to physician if required.	K/S/A/ C	K/P	MK	DOAP	DOPS	-	-
1 2. 4	Select and justify the treatment option taking into account patients condition	K	K	MK	Large group	Written exam	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domai n K/S/A/ C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic13- Pulpal and periapical lesions</b>								
1 3 . 1	Classify pulpal and periapical lesions	K	K	MK	Large group	Written exam	-	-
1	Discuss	K	K	MK	Large	Written	-	-

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3 . 2	pathophysiology of pulpal and periapical lesions				group	exam		
1 3 . 3	Describe the clinical features of pulpal and periapical lesions	K	K	MK	Large group	Written exam	-	-
1 3. 4	Perform diagnostic procedures, investigations, if required.	K/S/A/C	K/P	MK	DOAP	DOPS	-	-
1 3. 5	Select and justify the treatment option taking into account patients condition	K	K	MK	Large group	Written exam	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 14- Oral cancer								
1 4 . 1	Discuss the pathophysiology of cancer development	K	K	MK	Large group	Written exam	-	-
1 4 . 2	Discuss carcinogens	K	K	MK	Large group	Written exam	-	-
1 4 . 3	Discuss the clinical features of oral cancer	K	K	MK	Large group	Written exam	-	-
1 4. 4	Discuss the histopathology of oral squamous cell carcinoma	K	K	MK	Large group	Written exam	-	-
1 4. 5	Record case history, gather relevant information related to systemic status ,nutritional status,	K	K	MK	Large group	Written exam	-	-

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	addictive habits							
1 4. 6	Perform clinical examination- intraoral and extraoral	K/S/A/C	K/P	MK	DOAP	DOPS	-	-
1 4. 7	Demonstrate data interpretation and differential diagnosis	K/S/A/C	K/P	MK	DOAP	DOPS	-	-
1 4. 8	Discuss the treatment modality for oral cancer with its complications and management.	K	K	MK	Large group	Written exam	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic- 15 Diseases of bone and Osteodystrophies								
1 5 1	Classify the diseases of bone and osteodystrophies	K	K	MK	Large group	Written exam	-	-
1 5 2	Discuss pathogenesis of it	K	K	MK	Large group	Written exam	-	-
1 5 3	Describe the clinical feature of bone diseases	K	K	MK	Large group	Written exam	-	-
1 5. 4	Discuss the radiologic appearance of bone diseases.	K	K	MK	Large group	Written exam	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic- 16 Teeth: Developmental abnormalities</b>								
16.1	Discuss development, histology of teeth	K	K	MK	Large group	Written exam	-	-
16.2	Discuss the developmental abnormalities of teeth	K	K	MK	Large group	Written exam	-	-
16.3	Discuss radiographic appearances of developmental abnormalities of teeth	K	K	MK	Large group	Written exam	-	-
16.4	Differentiate radiographic appearances of tooth anomaly	K	K	MK	Large group	Written exam	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 17- Endocrine disorders – Acro-megaly and hyperparathyroidism</b>								
17.1	Discuss the endocrine glands and the hormones	K	K	MK	Large group	Written exam	-	-
17.7	Discuss acromegaly,	K	K	MK	Large group	Written exam	-	-

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2	investigations, oral changes and management.							
173	Discuss hyperparathyroidism, investigations, oral changes and management.	K	K	MK	Large group	Written exam	-	-
174	Record case history , gather relevant information related to the condition	K/S/C	K/P	MK	Small group	OSCE	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 18- Periodontal diseases								
181	Describe periodontium	K	K	MK	Large group	Written exam	-	-
182	Classify periodontal diseases	K	K	MK	Large group	Written exam	-	-
183	Discuss the clinical and radiographic features of periodontal diseases	K	K	MK	Large group	Written exam	-	-
184	Perform the clinical examination of periodontium	K/S/A	K/P	MK	DOAP	DOPS	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
Topic 19- Granulomatous diseases:								
19.1	Discuss the pathogenesis of granulomatous diseases	K	K	MK	Large group	Written exam	-	-
19.2	Classify granulomatous diseases	K	K	MK	Large group	Written exam	-	-
19.3	Record case history , gather relevant information related to the condition	K/S/A/C	K/P	MK	Small group	OSCE	-	-
19.4	Select the appropriate investigation	K	K	MK	Large group	Written exam	-	-
19.5	Select and justify most suitable treatment option considering patients condition	K	K	MK	Large group	Written exam	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 20- Cervico-facial lymphadenopathy</b>								
20.1	Discuss anatomy and applied anatomy of lymph and lymphatic system	K	K	MK	Large group	Written exam	-	-
20.2	Explain cervical lymph nodes	K	K	MK	Large group	Written exam	-	-
20.3	Explain lymphadenopathy and discuss the pathphysiology	K	K	MK	Large group	Written exam	-	-
20.4	Discuss the differential diagnosis of cervical lymphadenopathy	K	K	MK	Large group	Written exam	-	-
20.5	Discuss the investigations required for patient condition	K/S/A	P	MK	PBL	DOPS,O SCE, Vivavoc e, Problem based question	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
Topic 21- Forensic odontology								
21.1	Discuss medicolegal aspects of orofacial injuries	K	K	MK	Large group	Written exam	-	-
21.2	Discuss identification of bite marks	K	K	MK	Large group	Written exam	-	-
21.3	Explain determination of age and sex	K	K	MK	Large group	Written exam	-	-
21.4	Discuss identification of cadavers by dental appliances, Restorations and tissue remnants	K	K	MK	Large group	Written exam	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 22- Drugs commonly used in oral medicine</b>								
22.1	Enumerate various drugs used in oral medicine	K	K	MK	Large group	Written exam	-	-
22.2	Classify and Discuss principle antibiotics.	K	K	MK	Large group	Written exam	-	-
22.3	Classify and Discuss principle chemotherapeutic agent	K	K	MK	Large group	Written exam	-	-
22.4	Classify and Discuss principle NSAIDS	K	K	MK	Large group	Written exam	-	-
22.5	Classify and Discuss principle astringents, mouth washes, styptics, demelucent, local surface anaesthetic, sialogogues, antisialogogues	K	K	MK	Large group	Written exam	-	-
22.6	Classify and Discuss drugs used in the treatment of malignancy	K	K	MK	Large group	Written exam	-	-

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**ORAL RADIOLOGY**

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 1- Scope of the subject and history of origin								
1	Define radiation,Radiology	K	K	MK	Large group	Written exam	-	-
1	Discuss the scope of subject	K	K	MK	Large group	Written exam	-	-
1	Discuss the history of radiology.	K	K	MK	Large group	Written exam	-	-
1.	Discuss history about dental radiology	K	K	MK	Large group	Written exam	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 2- Physics of radiation								
2	Describe the nature and types of radiations	K	K	MK	Large group	Written exam	-	-
2	Explain source of radiations	K	K	MK	Large group	Written exam	-	-
2	Explain production of X- rays	K	K	MK	Large group	Written exam	-	-
2.	Discuss properties of X-rays	K	K	MK	Large group	Written exam	-	-
2.	Explain radiation measuring units.	K	K	MK	Large group	Written exam	-	-

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2.6	Demonstrate parts of x-ray machine and its functions.	K/S/A/C	K/KP	M/KK	Large group	Written exam	-	-
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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 3- Biological effects of radiation</b>								
3.1	Explain cell cycle .	K	K	MK	Large group	Written exam	-	-
3.2	Discuss effects of radiation on organs and on oral cavity.	K	K	MK	Large group	Written exam	-	-
3.3	Discuss most and least sensitive cells of the body	K	K	MK	Large group	Written exam	-	-
3.4	Differentiate stochastic and deterministic effects.	K	K	MK	Large group	Written exam	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 4- Radiation safety and protection measures</b>								

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4 .	Discuss the rationale of radiation safety	K	K	MK	Large group	Written exam	-	-
4 .	Discuss the radiation safety measures for operator	K	K	MK	Large group	Written exam	-	-
4 .	Discuss the radiation safety measures for patients	K	K	MK	Large group	Written exam	-	-
4. 4	Demonstrate the safety and protection measures during radiograph taking.	K/S/A/ C	K/P	MK	DOAP	DOPS	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/ C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 5- Principles of image production								
5 .	Discuss the principle of projection geometry	K	K	MK	Large group	Written exam	-	-
5 .	Demonstrate on the various films the principle of projection geometry	K/S/A	K/P	MK	Large group, DOAP	DOPS	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/ C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
Topic 6- Radiographic techniques:								
6 .	Discuss intraoral radiographic	K	K	MK	Large group	Written exam	-	-

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1	techniques							
6 2	Describe indications and techniques for IOPA.	K	K	MK	Large group	Written exam	-	-
6 3	Describe indications and techniques for Bitewing radiograph	K	K	MK	Large group	Written exam	-	-
6 4	Describe indications and techniques for occlusal radiograph	K	K	MK	Large group	Written exam	-	-

<b>N o</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teachi ng learnin g metho ds</b>	<b>Assess ment Metho ds</b>	<b>Vertic al Integr ation</b>	<b>Horizo ntal integra tion</b>
<b>Topic 7- Radiographic normal anatomical landmarks</b>								
7 1	Discuss the principle of shadow casting.	K	K	MK	Large group	Written exam	-	-
7 2	Enumerate the radiographic normal radiographic landmark	K	K	MK	Large group	Written exam	-	-
7 3	Demonstrate the various landmarks.	K/S/A	K/P	MK	Small group, DOAP	DOPS	-	-
7. 4	Identify radiographic landmarks	K	K	MK	Small group	OSCE	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 8- Faulty radiographs and artefacts in radiographs</b>								
81	Classify faulty radiographs and artifacts in radiographs.	K	K	MK	Large group	Written exam	-	-
82	Discuss the reason for faulty radiographs.	K	K	MK	Large group	Written exam	-	-
83	Demonstrate faults on radiograph	K/S/A	K/P	MK	Small group	OSCE	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 9- Contrast radiography and basic knowledge of radio-active isotopes</b>								
91	Discuss contrast radiography	K	K	MK	Large group	Written exam	-	-
92	Discuss radioactive isotopes	K	K	MK	Large group	Written exam	-	-
93	Classify contrast radiography techniques with indications	K	K	MK	Large group	Written exam	-	-
94	Discuss use of radioactive isotopes	K	K	MK	Large group	Written exam	-	-

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	for imaging							
9.5	Discuss contrast radiographic imaging technique.	K	K	MK	Large group	Written exam	-	-

<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
<b>Topic 10- Principles of radiotherapy of oro-facial malignancies and complications of radiotherapy</b>								
10.1	Discuss principles of radiotherapy of oro-facial malignancies a	K	K	MK	Large group	Written exam	-	-
10.2	Discuss technique of radiotherapy	K	K	MK	Large group	Written exam	-	-
10.3	Discuss complications of radiotherapy	K	K	MK	Large group	Written exam	-	-
10.4	Select and justify most suitable management option of complications of radiotherapy	K	K	MK	Large group	Written exam	-	-

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<b>No</b>	<b>COMPETENCY The student should able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desire d to know</b>	<b>Teaching learning methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal integration</b>
Topic 11- Interpretation of radiographs in various abnormalities of teeth, bones and other orofacial tissues								
11.1	Discuss interpretation of radiographs.	K	K	MK	Large group	Written exam	-	-
11.2	Demonstrate interpretation of intraoral and extraoral radiographs.	K/S/A	K/P	MK	Small group	OSCE	-	-
11.3	Perform intraoral radiograph interpretation	K/S/A	K/P	MK	DOAP	DOPS	-	-

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## Oral Pathology & Microbiology

### Topic: Developmental Disturbances of Oral & Para-oral Structures

<b>Course Outcomes</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
Various types of oral and Dental anomalies in oral cavity	K	K	MK	Written Exam Viva		
Describe and identify the anomaly	K/S	KK	NK	viva		HI
Describe clinical considerations of the dental anomalies	K/S	KH	DK	Written Exam Viva	VI	

**Topic: Benign and malignant tumors of the oral cavity**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/ SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>Classification of Benign tumors of Epithelial and connective tissue of the oral cavity</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>	<b>VI</b>	<b>HI</b>
<b>types of malignant tumors of Epithelial and connective tissue of the oral cavity</b>	<b>K/S</b>	<b>KK</b>	<b>NK</b>	<b>Written Exam Viva</b>		<b>HI</b>
<b>Histology of Benign and malignant tumors of the oral cavity</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Written Exam Viva</b>		

**Topic: Tumors of Salivary Gland**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>Classification of Benign tumors of the salivary gland</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>types of malignant tumors tumors of the salivary gland</b>	<b>K/S</b>	<b>KK</b>	<b>NK</b>	<b>Written Exam Viva</b>		
<b>Histology and treatment of the salivary gland</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Written Exam Viva</b>		<b>HI</b>

**Topic: Dental Caries**

<b>Competency- the student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>Classification of Dental caries</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>	<b>VI</b>	
<b>Theories of Dental Caries</b>	<b>k</b>	<b>K/Kh</b>	<b>MK</b>	<b>Written Exam Viva</b>	<b>VI</b>	<b>HI</b>
<b>Describe zones of Dental caries</b>	<b>K/S/A</b>	<b>KK</b>	<b>NK</b>	<b>viva</b>		
<b>Describe clinical considerations of the dental caries</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Written Exam Viva</b>	<b>VI</b>	

**Topic: cyst and tumors**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>Classification of cyst and tumors of odontogenic origin</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		<b>HI</b>
<b>Radiology and histology of cyst and tumors of odontogenic origin</b>	<b>K/S/A</b>	<b>KK</b>	<b>NK</b>	<b>Written Exam Viva</b>	<b>VI</b>	<b>HI</b>
<b>treatment of cyst and tumors of odontogenic origin</b>	<b>K</b>	<b>KH</b>	<b>DK</b>	<b>Written Exam Viva</b>	<b>VI</b>	

**Topic: Oral Infections of bacterial, viral and fungal origin**

<b>Competency- the student should be able to</b>	<b>Dom ain  K/S/ A/C</b>	<b>Level  K/KH/SH/ P</b>	<b>Must know/Ni ce to know/ Desirable to know</b>	<b>Assessme nt methods</b>	<b>Vertical Integrati on</b>	<b>Horizont al Integrati on</b>
<b>Various types of oral Infections of bacterial ,viral and fungal origin</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Describe lab diagnosis of  bacterial ,viral and fungal origin</b>	<b>K</b>	<b>K</b>	<b>NK</b>	<b>-----</b>	<b>VI</b>	
<b>Treatment of bacterial,viral and fungal lesions</b>	<b>K</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>	<b>VI</b>	

**Topic: Diseases of Pulp and Periodontium**

Competency- the student should be able to	Domain  K/S/A/ C	Level  K/KH/SH/ P	Must know/Nic e to know/ Desirable to know	Assessmen t methods	Vertical Integratio n	Horizontal Integratio n
Various lesions of pulp and periodontiu m	K/S	K	MK	Written Exam Viva		
Describe sequelae of the lesions of pulp and periodontiu m	K	K/S	NK	Written Exam Viva		
Treatment of pup- periodontiu m lesions	K	K	MK	Written Exam Viva	VI	

<b>Competency- the student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
<b>Various hazards related to Physical and chemical injuries of the oral cavity</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Able to differentiate and identify hazards related to Physical and chemical injuries of the oral cavity</b>	<b>K</b>	<b>K/S/A</b>	<b>NK</b>	<b>Viva</b>		<b>HI</b>
					<b>VI</b>	

**Topic: physical and chemical injuries**

**Topic: Oral Wound Healing**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
<b>Define &amp; explain types of healing</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Explain in detail about healing of extraction socket</b>	<b>K</b>	<b>K/S/A</b>	<b>NK</b>	<b>Viva</b>		<b>HI</b>
<b>Write the factors affecting wound healing.</b>	<b>K</b>	<b>K/S/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>	<b>VI</b>	
<b>Explain the differential diagnosis of dry socket and treatment modalities for the same.</b>	<b>K</b>		<b>Must know</b>	<b>Written Exam Viva</b>		

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
<b>Define &amp; explain types of Blood Dyscrasias</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Lab diagnosis of various types of Blood Dyscrasias</b>	<b>K</b>	<b>K/S</b>	<b>NK</b>	<b>Viva</b>	<b>VI</b>	
<b>The differential diagnosis of Metabolic/ immunologic disorders</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>		<b>HI</b>

**Topic: Blood/metabolic/immunologic disorders**



**Topic: Diseases of Bones and Joints**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
<b>Classification of diseases of bone</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Describe in detail about Fibrous Dysplasia</b>	<b>K</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>		<b>HI</b>
<b>Describe in detail about Paget's Disease</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>		

**Topic: Diseases of Skin**

<b>Competency- the student should be able to</b>	<b>Domain  K/S/A/C</b>	<b>Level  K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>	<b>Vertical Integration (VI)</b>	<b>Horizontal Integration (HI)</b>
<b>Enumerate diseases of skin</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Describe in detail about clinical ,histological  Features of skin lesions</b>	<b>K/S</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>		<b>HI</b>
<b>Treatment of skin lesions</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>	<b>VI</b>	

**Topic: Forensic Odontology**

<b>Competency- the student should be able to</b>	<b>Domain</b>  <b>K/S/A/C</b>	<b>Level</b>  <b>K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Various identification methods of forensic odontology</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>
<b>Importance and application of forensic odontology</b>	<b>K/S</b>	<b>K/S</b>	<b>DK</b>	<b>Viva</b>

**Competency Based Undergraduate Curriculum  
in**

**Dental anatomy & Dental histology**

**TOPIC- Developmental of tooth**

<b>Competency- the student should be able to</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Write in short about Dental Lamina</b>	K/S	K	MK	<b>Written Exam Viva</b>
<b>Describe &amp; draw well label diagram of Histological stages of tooth development</b>	K	K/S	MK	<b>Viva</b>
<b>Write in short about Root development</b>	K	K/A	<b>Must know</b>	<b>Written Exam Viva</b>
<b>Describe in detail Physiological stages of tooth development</b>	K/S		Mk	
<b>Applied aspect</b>	K/A		NK	

## TOPIC- Enamel

<b>Competency- the student should be able to</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Describe structure of Enamel</b>	K/S	K	MK	Written Exam Viva
<b>Life cycle of ameloblast</b>	K	K/S	MK	Viva
<b>Describe in detail amelogenesis</b>	K	K/A	Must know	Written Exam Viva
<b>Clinical Considerations</b>	K/S	K/KH	DK	Written Exam Viva

## TOPIC- Dentin

<b>Competency- the student should be able to</b>	<b>Domain</b>  <b>K/S/A/C</b>	<b>Level</b>  <b>K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Enumerate the physical and chemical composition of dentin</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>
<b>Histology of dentinal tubules.</b>	<b>K</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>
<b>Types of dentine</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>

**TOPIC- Cementum**

<b>Competency- the student should be able to know</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Classification of Cementum</b>	K/S	K	MK	Written Exam Viva
<b>Describe in types of CEJ</b>	K	K/S	MK	Viva
<b>Describe in detail about Cementogenesis</b>	K/S	K/A	Must know	Written Exam Viva
<b>Applied aspects</b>	K	K/SH	DK	Written Exam Viva

**Topic : Pulp**

<b>Competency- the student should be able to</b>	<b>Domain</b>  <b>K/S/A/C</b>	<b>Level</b>  <b>K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Describe functions of Pulp</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>
<b>Describe in detail about age changes in pulp</b>	<b>K</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>
<b>Describe in detail about cellular elements of Pulp</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>

**Topic : Bone**

<b>Competency- the student should be able to</b>	<b>Domain</b>  <b>K/S/A/C</b>	<b>Level</b>  <b>K/KH/SH/P</b>	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Classification of types of bone</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>
<b>Describe in detail about histology of bone</b>	<b>K</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>
<b>Describe in detail about development of bone</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>

## TOPIC-Periodontal Ligament

<b>Competency- the student should be able to</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Principle fibers of PDL</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>
<b>Cells of PDL</b>	<b>K</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>

## TOPIC-Salivary Gland

Competency- the student should be able to know	Domain  K/S/A/C	Level  K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods	Vertical Integration	Horizontal Integration
<b>types of salivary Gland</b>	<b>K/S</b>	<b>K</b>	<b>MK</b>	<b>Written Exam Viva</b>		
<b>Describe in detail histology of salivary gland</b>	<b>K/S</b>	<b>K/S</b>	<b>MK</b>	<b>Viva</b>		
<b>Histogenesis of salivary gland</b>	<b>K</b>	<b>K/A</b>	<b>Must know</b>	<b>Written Exam Viva</b>	<b>VI</b>	
<b>Applied aspects</b>	<b>K</b>	<b>KH</b>	<b>Dk</b>	<b>Written Exam Viva</b>	<b>VI</b>	

## TOPIC-Oral Mucous Membrane

<b>Competency- the student should be able to know</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/Desirable to know</b>	<b>Assessment methods</b>
<b>Definition of Oral Mucous Membrane</b>	K/S	K	MK	Written Exam Viva
<b>Classification of Oral Mucous Membrane</b>	K/S	K/S	MK	Viva
<b>Histology of Gingiva,hard palateand lining mucosa</b>	K	K/A	Must know	Written Exam Viva
<b>Applied aspects</b>	K	KH	Dk	Written Exam Viva

## TOPIC-Temporomandibular Joint (TMJ)

Competency- the student should be able to know	Domain  K/S/A/C	Level  K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods	Vertical Integration	Horizontal Integration
Definition of TMJ	K/S	K	MK	Written Exam Viva		
Anatomy of TMJ	K/S	K/S	MK	Viva		
Muscle,blood supply,nerve supply of TMJ	K	K/A	Must know	Written Exam Viva	VI	
Applied aspects	K	KH	Dk	Written Exam Viva		

## TOPIC-Eruption and Shedding

<b>Competency- the student should be able to know</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Definition of Eruption and Shedding</b>	K/S	K	MK	<b>Written Exam Viva</b>
<b>Physiology of Eruption and Shedding</b>	K/S	K/S	MK	<b>Viva</b>
<b>Applied aspects</b>	K	KH	Dk	<b>Written Exam Viva</b>

## TOPIC-Dental Anatomy

<b>Competency- the student should be able to know</b>	<b>Domain</b>  K/S/A/C	<b>Level</b>  K/KH/SH/P	<b>Must know/Nice to know/ Desirable to know</b>	<b>Assessment methods</b>
<b>Definition of ridge, cusp, fossa</b>	K/S	K	MK	<b>Written Exam Viva</b>
<b>Describe Line angles, point angles</b>	K/S	K/S	MK	<b>Viva</b>
<b>Tooth morphology of Deciduous and permanent teeth</b>	K	KH	MK	<b>Written Exam Viva</b>
<b>Teeth numbering systems</b>	k	KH	MK	<b>Written Exam Viva</b>

# Oral Surgery

1. Introduction, definition, scope, aims and objectives.

Number	Course outcomes	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define oral and maxillofacial surgery	K	K	MK		Written exam Viva		
2	List scope of oral and maxillofacial surgery	K	K	MK		Written exam Viva		
3	Discuss aims and objectives of oral and maxillofacial surgery	K	K	MK		Written exam Viva		

2. Diagnosis in oral surgery:

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
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1	Present history taking	K/S	K	MK		Written exam Viva		
2	Demonstrate clinical examination	K/C	K	MK		Written exam Viva		
3	Record investigation	K/S	K	MK		Written exam Viva		

3. Principles of infection control and cross-infection control with particular reference to HIV/AIDS and Hepatitis.

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Describe Principles of infection control and cross-infection control with particular reference to HIV/AIDS	K	K	MK		Written exam Viva		

2	Describe principles of infection control and cross-infection control with particular reference to Hepatitis.	K	K	MK		Written exam Viva		
3	Counsel control of cross infection of HIV and Hepatitis	K/C	SH	MK		Written exam Viva		

#### 4. Principles of Oral Surgery

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Demonstrate preparation of patient during surgery	K/S/C	SH	MK		Written exam Viva		
2	Enumerate various methods of sterilization	K	K	MK		Written exam Viva		

3	Elicit various extra-oral incision to expose facial skeleton	K	K	MK		Written exam Viva		
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### 5. Exodontia

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define Ideal Extraction.	K	K	MK		Written exam Viva		
2	Enumerate Methods of extraction	K	K	MK		Written exam Viva		
3	Demonstrate Forceps Extraction	K\S\C	K\KH\ SH\P	MK		Written exam Viva Skill Assessment		

4.	Inform post-extraction care	K\C	K\KH\SH\P	MK		Viva Skill Assessment		
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6. Impacted teeth:

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Classify Impacted mandibular third molar and , reasons for removal, Assessment - both clinical & radiological	K/S	KH	MK		Written exam Viva		
2	Describe Surgical procedure for removal of impacted tooth	K	K	MK		Written exam Viva		
3	Discuss reasons for canine impaction, Localization, indications for removal, Methods of management	K	K	MK		Written exam Viva		

7. . Pre-prosthetic Surgery

<b>Number</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching- Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
1	Define Pre-prosthetic Surgery and classification of procedures	K	K	MK		Written exam Viva		
2	Enumerate Corrective procedures, Ridge extension or Sulcus extension procedures ,Ridge augmentation and reconstruction	K	K	MK		Written exam Viva		
3	List various types of implants and surgical procedure to place implants.	K	K	MK		Written exam Viva		

8. . Diseases of the maxillary sinus

<b>Number</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching- Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
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1	Discuss surgical anatomy of maxillary sinus	K	K	MK		Written exam Viva		
2	Differentiate Sinusitis both acute and chronic	K	K	MK		Written exam Viva		
3	List the steps of removal of root from the sinus	K	K	MK		Written exam Viva		

9. . Disorders of T.M. Joint

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define ankylosis, etiology, clinical features and management of ankylosis	K	K	MK		Written exam Viva		

2	Discuss myofacial pain dysfunction syndrome	K	K	MK		Written exam Viva		
3	Elicit applied surgical anatomy of TMJ joint	K\S	K	MK		Written exam Viva		

10. Infections of the Oral cavity

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Enumerate factors responsible for infection	K	K	MK		Written exam Viva		
2	Define ludwigs angina,etiology	K	K	MK		Written exam Viva		

3	Classify osteomyelitis of jaw	K	K	MK		Written exam Viva		
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#### 11. Benign cystic lesions of the jaws

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define and classify benign cystic lesions of jaw	K	K	MK		Written exam Viva		
2	Describe Clinical features, of OKC	K	K	MK		Written exam Viva		
3	Enumerate The type of surgical procedures and its complications	K	K	MK		Written exam Viva		

#### 12. Tumours of the Oral cavity

<b>Number</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching- Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
1	Classify non odontogenic benign tumour in oral cavity	K	K	MK		Written exam Viva		
2	Define ameloblastoma and discuss clinical features ,radiographic appearance and methods of management	K	K	MK		Written exam Viva		
3	Elicit Role of dental surgeons in the prevention and early detection of oral cancer.	K\S	K	MK		Written exam Viva		

### 13. Fractures of the jaws

<b>Number</b>	<b>COMPETENCY The student should be able to</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching- Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
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1	Describe types of fractures	K	K	MK		Written exam Viva		
2	Describe Fractures of the condyle	K	K	MK		Written exam Viva		
3	List Complications of fractures	K	K	MK		Written exam Viva		

14.Salivary gland diseases

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Enumerate procedure for Diagnosis of salivary gland diseases	K	K	MK		Written exam Viva		

2	Define Sialolithiasis and discuss Clinical features, management	K	K	MK		Written exam Viva		
3	Enumerate Common tumours of salivary glands	K	K	MK		Written exam Viva		

15. Jaw deformities

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define Prognathism, Retrognathism and open bite	K	K	MK		Written exam Viva		
2	Discuss reasons for correction	K	K	MK		Written exam Viva		

3	Record Outline of surgical methods carried out on mandible and maxilla.	K\S	K	MK		Written exam Viva		
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#### 16. Neurological disorders

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Define Trigeminal neuralgia	K	K	MK		Written exam Viva		
2	Discuss Facial paralysis - Aetiology, clinical features	K	K	MK		Written exam Viva		
3	Classify Nerve injuries - neurorrhaphy etc	K	K	MK		Written exam Viva		

#### 17. Cleft Lip and Palate

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Discuss Aetiology of the clefts	K	K	MK		Written exam Viva		
2	Classify cleft lip and cleft palate and outline the closure procedure	K	K	MK		Written exam Viva		
3	Describe Role of dental surgeon in the management of cleft patients.	K	K	MK		Written exam Viva		

#### 18. Medical Emergencies in dental practice

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Performe under supervision Primary care of medical emergencies in dental practice particularly - (a) Cardio vascular (b) Respiratory	K\S\C	KH	MK		Written exam viva		

2	d)Anaphylactic reaction (e) Epilepsy f)endocrine	K	K	MK		Written exam Viva		
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19. Emergency drugs & Intra muscular I.V. Injections

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Enumerate emergency drugs	K	K	MK		Written exam Viva		
2	Discuss Applied anatomy, Ideal location for giving these injections, techniques	K	K	MK		Written exam Viva		

20. Oral Implantology

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
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1	Define oral implantology	K	K	MK		Written exam Viva		
2	Enumerate parts of implants	K	K	MK		Written exam Viva		
3	Discuss the indications, contraindications and procedure of implant	K	K	MK		Written exam Viva		

21 Anaesthesia

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching-Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1	Discuss and perform concept of L.A	K\S\C	K	MK		Written exam Viva		

2	Discuss Concept of general anaesthesia.	K	K	MK		Written exam Viva		
3	Describe and discuss procedure of tracheostomy.	K	K	MK		Written exam Viva		

Course outcomes	Domain K/S/A/C	Must know/ Nice to know/ Desirable to know MK/NK/DK	Teaching- Learning Methods	Assessment Methods	Vertical integration	Horizontal integration
<b>Classification of Malocclusion</b>						
Understand the need for classification	K	DK	lecture	Theory		
Enumerate various classification systems  Describe Angle's , Bennet' s , Lischer's, Simons, Ackerman-Proffit Classifications Dewey's Modification with diagrams	K  K and S	MK  MK	Demonstration  lecture	Theory and viva voce		
Classify different methods of malocclusion.  WHO classification, Katz Classification, Incisor Classification, Canine Classification.	K  K	MK  NK	lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal integration
<b>Introduction to Orthodontics</b>						
1. Understand and explain the term Orthodontics.	K	MK	lecture	Theory		
2. Describe History of Orthodontics	K	MK	lecture	Theory		
3. Describe the aims and objectives achieved in orthodontics. ( Schematic diagram of Jackson's Triad)	K/ S	MK	lecture	Theory and viva voce		
4. Describe the scope of Orthodontics.	K	M	lecture	Theory		
Draw the schematic Venn diagram	K S	MK	lecture and demonstration	Theory		
Explain in detail importance of each group	K	MK	Lecture	Theory		
Explain co-relation of groups	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>General Principles in Orthodontic Treatment Planning of Dental and Skeletal Malocclusions</b>						
Enumerate and describe its branches.	K	MK	Lecture	Theory		
Scope of various branches	K	MK	Lecture	Theory		
Identify the need for prevention, interception and correction as per the malocclusion.	K  K	MK  MK	Lecture  Lecture	Theory  Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Classification of malocclusion</b>						
Explain the basis of Angle's classification.	K	MK	Lecture	Theory		
Explain the various types of malocclusion given by Angle with help of well labeled diagrams.	K & S	MK	Lecture	Theory		
Differentiate between true and pseudo class III	K	MK	Lecture	Theory		
Explain the drawbacks of this classification.	K	MK	Lecture	Theory		
Explain Angle's class IV type of malocclusion	K	NK	Lecture	Theory		

Explain Dewey's modification to Angle's class I and class III and draw appropriate diagrams	K S	MK	Lecture	Theory		
Explain Lischer's classification and draw appropriate diagrams	K S	MK	Lecture	Theory		
Explain Bennet's classification and draw appropriate diagrams	K S	MK	Lecture	Theory		
Explain Simons Classification and draw appropriate diagrams	K S	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Etiology of malocclusion</b>						
Describe and explain the causes of a malocclusion	K	MK	Lecture	Theory		
Describe the classification based on causes	K	MK	Lecture	Theory		
Identify the situations that can be either prevented or intervened	K	MK	Lecture	Theory		
Describe measures to avoid the severity of malocclusion	K	MK	Lecture	Theory		
Enumerate and explain all the general factors considered responsible for the malocclusion	K	DK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Habits</b>						
<b>Mouth breathing</b>						
Describe the mouth breathing habit in detail with its effect and management	K	MK	Lecture	Theory		
Enumerate and describe all the other miscellaneous habit with their prevention and management.	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Bruxism</b>						
Describe Bruxism its causes and effects.	K	NK	Lecture	Theory		

Describe masochistic habit its causes and effects	K	NK	Lecture	Theory		
Describe frenum thrusting , bobby pin opening habits , its causes and management.	K	NK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Removable orthodontic appliances</b>						
Define the term removable appliance	K	MK	Lecture	Theory		
Enumerate and discuss in detail various classification of the removable appliance	K	MK	Lecture	Theory		
Explain the action or principle of removable appliance	K	MK	Lecture	Theory		
Enumerate all the components in passive and active appliances, with their importance	K	MK	Lecture Demonstration	Theory Spotting Viva voce		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical integration	Horizontal Integration
<b>Components of removable appliances</b>						
<b>Different types of clasps and their uses</b>						
Enumerate different types of clasp	K	MK	Lecture Demonstration	Theory		
Understand their fabrication and fabricate	K S	MK	Lecture Demonstration	Theory		
Explain their mode of action	K	MK	Lecture Demonstration	Theory		
Indicate specific clasp for specific malocclusion	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal integration
<b>Different types of springs and their uses</b>						
Enumerate different types of springs	K	MK	Lecture	Theory		
Understand their fabrication and fabricate	K S	MK	Lecture Demonstration	Theory		
Explain their mode of action	K	MK	Lecture Demonstration	Theory		
Indicate specific spring for specific malocclusion	K	NK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Diagnosis And Diagnostic Aids</b>						
<b>Importance of case history and clinical examination in orthodontics</b>						
Describe the case history, and identify the problem	K	MK	Lecture Demonstration	Theory		
Describe the etiology	K	MK	Lecture	Theory		
Describe the database of pertinent information	K	MK	Lecture Demonstration	Theory		
Council the patient for his/her problem	K	MK	Lecture Demonstration	Theory		
Enumerate the treatment planning steps	K	MK	Lecture	Theory		
Describe the protocol for patient's clinical examination	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Study Models</b>						
Define and explain the importance of model analysis.	K	MK	Lecture	Theory Practical		
Describe the procedure for Pont's index, Linder Harth's index, Chadda's index	K	MK	Lecture Demonstration	Theory Practical		
Interpret inter maxillary symmetry. Analyze antero posterior symmetry.	K	MK	Lecture Demonstration	Theory		
Describe palatal height index.	K	MK	Lecture Demonstration	Theory Practical		
Know bolton's analysis.	K	MK	Lecture Demonstration	Theory Practical		
Do space analysis in permanent dentition. Do space analysis in mixed dentition.	K	MK	Lecture Demonstration	Theory Practical		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Methods of gaining space in the arch</b>						
Explain various methods of expansion of the dental arches	K	MK	Lecture Demonstration	Theory Viva voce spotting		
Explain the schedule for activation in RME	K	MK	Lecture	Theory		
Explain the various methods for distalization of molars	K	MK	Lecture Demonstration	Theory		

Enumerate the various methods of gaining space	K	MK	Lecture	Theory		
Explain in detail the procedure of proximal stripping	K	MK	Lecture Demonstration	Theory		
Explain in detail the need for extraction as a method of gaining space	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Interceptive Orthodontics</b>						
Define interceptive orthodontics	K	MK	Lecture	Theory		
Enumerate and explain the procedures undertaken in interceptive orthodontics	K	MK	Lecture	Theory		
Define serial extraction, indications, contraindication, advantages, disadvantages	K	MK	Lecture	Theory		
Explain the methods of serial extraction.	K	MK	Lecture	Theory		
Enumerate and explain the methods of space regaining.	K	MK	Lecture	Theory		
Describe correction of crossbite and abnormal habits.	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Preventive Orthodontics</b>						
Enumerate various preventive measures undertaken in orthodontics	K	MK	Lecture	Theory		
Understand the importance of parental counseling	K	MK	Lecture	Theory		
Define and explain various methods of space maintenance	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
<b>Principles of welding and soldering</b>						
Define liquidus, solidus temperature, soldering, brazing.	K	MK	Lecture	Theory		
Various heat sources and fuels used in soldering.	K	MK	Lecture	Theory		
Should be able to explain substrate material.	K	MK	Lecture	Theory		
Flux and its types.	K	MK	Lecture	Theory		
Various soldering material.	K	MK	Lecture	Theory		

Objective	Domain	Level of Competency	Teaching learning methods	Assessment methods	Vertical Integration	Horizontal Integration
Enumerate steps in soldering	K	MK	Lecture	Theory		
Explain quenching	K	MK	Lecture	Theory		
Define welding and various methods of welding	K	MK	Lecture	Theory		

Pediatric and Preventive dentistry

<b>Number</b>	<b>Course outcomes</b>	<b>Domain K/S/A/C</b>	<b>Level K/KH/ SH/P</b>	<b>Must know/ Nice to know/ Desirable to know</b>	<b>Teaching- Learning Methods</b>	<b>Assessment Methods</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
<b>Pediatric dentistry</b>								
<b>Topic 1 : Introduction to pediatric dentistry</b>					<b>No of Competencies: 4</b>			
1.1	Define Pediatric dentistry	K	K	MK	Large group	Written exam Viva voce	-	-
1.2	Discuss scope of pediatric dentistry	K	K	NK	Large group	Written exam Viva voce	-	-
1.3	List objectives of pediatric dentistry	K	K	NK	Large group	Written exam Viva voce	-	-
1.4	Describe the importance of pediatric dentistry	K	K	NK	Large group	Written exam Viva voce	-	-
<b>Topic 2 : Growth and development</b>					<b>No of Competencies: 4</b>			
2.1	Discuss importance of study of growth and development in Pedodontics.	K	K	MK	Large group	Written exam Viva voce	-	-

2.2	List Prenatal and Postnatal factors in growth & development.	K	K	MK	Large group	Written exam Viva voce	-	-
2.3	Discuss theories of growth & development.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
2.4	Document Development of maxilla and mandible and related age changes.	K/S	K/KH/S	MK	Large group	Written exam Viva voce	-	-
<b>Topic 3 : DEVELOPMENT OF OCCLUSION FROM BIRTH THROUGH ADOLESCENCE.</b>						<b>No of Competencies: 1</b>		
3.1	Discuss variations and abnormalities.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 4 : DENTAL ANATOMY AND HISTOLOGY</b>						<b>No of Competencies: 7</b>		
4.1	Describe development of teeth and associated structures.	K	K	MK	Large group	Written exam Viva voce	-	-
4.2	Discuss Eruption and shedding of teeth.	K	K	MK	Large group	Written exam Viva voce	-	-
4.3	Describe Teething disorders and their management.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
4.4	Describe Chronology of eruption of teeth.	K	K	MK	Large group	Written exam Viva voce	-	-
4.5	Identify Differences between deciduous and permanent teeth.	K	K/KH/S	MK	Large group	Written exam Viva voce	-	-

						OSCE		
4.6	Present development of dentition from birth to adolescence.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
4.7	Discuss Importance of first permanent molar.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 5 : DENTAL RADIOLOGY RELATED TO PEDODONTICS.</b>						<b>No of Competencies: 1</b>		
5.1	Discuss dental radiology related to pedodontics	K	K	NK	Large group	Written exam Viva voce	-	-
<b>Topic 6 : ORAL SURGICAL PROCEDURES IN CHILDREN.</b>						<b>No of Competencies: 3</b>		
6.1	List Indications and contraindications of extractions of primary and permanent teeth in children.	K	K/KH/S H/P	MK	Large group DOAP	Written exam Skill assessment	-	-
6.2	Knowledge of Local and General Anaesthesia.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
6.3	Describe Minor surgical procedures in children.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 7: DENTAL CARIES:</b>						<b>No of Competencies: 7</b>		
7.1	Describe Historical background	K	K	MK	Large group	Written exam	-	-
7.2	Definition, aetiology & pathogenesis	K	K	MK	Large group	Written exam	-	-
7.3	Discuss Caries pattern in primary, young permanent and permanent teeth in children	K	K	MK	Large group	Written exam	-	-

7.4	Clinical features, Complications & Management of Rampant caries, early childhood caries and extensive caries	K	K/KH/S/SH	MK	Large group Small group discussion	Written exam	-	-
7.5	Discuss Role of diet and nutrition in Dental Caries	K	K	MK	Large group	Written exam	-	-
7.6	Describe Dietary modifications & Diet counselling	K	K/KH/S/SH	MK	Large group Small group discussion	Written exam	-	-
7.7	Describe Caries activity, tests, caries prediction, caries susceptibility & their clinical application	K	K	MK	Large group	Written exam	-	-
<b>Topic 8: GINGIVAL &amp; PERIODONTAL DISEASES IN CHILDREN.</b>					<b>No of Competencies: 3</b>			
8.1	Describe features of Normal gingiva & periodontium in children.	K	K	NK	Large group	Written exam Viva voce	-	-
8.2	Definition, aetiology & Pathogenesis.	K	K	NK	Large group	Written exam Viva voce	-	-
8.3	Discuss Prevention & Management of gingival & Periodontal diseases.	K	K	NK	Large group	Written exam Viva voce	-	-
<b>Topic 9: CHILD PSYCHOLOGY:</b>					<b>No of Competencies: 6</b>			
9.1	Define child psychology	K	K	MK	Large group	Written exam Viva voce	-	-
9.2	Discuss Theories of child psychology.	K	K	MK	Large group	Written exam Viva voce	-	-
9.3	Describe Psychological development of children with age.	K	K	MK	Large group	Written exam Viva voce	-	-
9.4	Discuss Principles of psychological growth & development while managing child patient.	K	K	MK	Large group	Written exam Viva voce	-	-
9.5	Discuss Dental fear and its management	K	K	MK	Large group	Written exam Viva voce	-	-
9.6	List Factors affecting child's reaction to dental treatment	K	K	MK	Large group	Written exam Viva voce	-	-

<b>Topic 10: BEHAVIOUR MANAGEMENT: No of Competencies : 3</b>								
10.1	Define behaviour management	K	K	MK	Large group	Written exam Viva voce	-	-
10.2	Discuss Types of behaviour encountered in the dental clinic.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
10.3	Describe Non-pharmacological & pharmacological methods of Behaviour Management.	K	K/KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 11: PEDIATRIC OPERATIVE DENTISTRY: No of Competencies: 4</b>								
11.1	Describe Principles of Pediatric Operative Dentistry.	K/S	K/KH/S	MK	Large group	DOPS Skill assessment	Pre-clinical	-
11.2	Discuss Modifications required for cavity preparation in primary and young permanent teeth.	K	KH	MK	Large group	Written exam Viva voce	-	-
11.3	Describe Various Isolation Techniques.	K	KH	MK	Large group	Written exam Viva voce	-	-
11.4	Demonstrate Restorations of decayed primary, young permanent and permanent teeth in children using various restorative materials like Glass Ionomer, Composites & Silver Amalgam. Stainless steel, Polycarbonate & Resin Crowns.	K/S	K/KH/S	MK	Large group	DOPS Skill assessment	Pre-clinical	-
<b>Topic 12: PEDIATRIC ENDODONTICS No of Competencies: 3</b>								
12.1	Discuss Principles & Diagnosis.	K	KH	MK	Large group	Written exam Viva voce	-	-
12.2	Classification of Pulpal Pathology in primary, young permanent & permanent teeth.	K	KH	MK	Large group	Written exam Viva voce	-	-
12.3	Describe Management of Pulpally involved primary, young permanent & permanent	K	KH	MK	Large group	Written exam Viva voce	-	-

	teeth.							
	<ul style="list-style-type: none"> <li>• Pulp capping – direct &amp; indirect.</li> <li>• Pulpotomy</li> <li>• Pulpectomy</li> <li>• Apexogenesis</li> <li>• Apexification</li> <li>• Obturation Techniques &amp; material used for primary, young permanent &amp; Permanent teeth in children.</li> </ul>							
<b>Topic 13: TRAUMATIC INJURIES IN CHILDREN.</b>		<b>No of Competencies: 3</b>						
13.1	Classifications & Importance.	K	KH	MK	Large group	Written exam Viva voce	-	-
13.2	Discuss Sequelae & reaction of teeth to trauma.	K	KH	MK	Large group	Written exam Viva voce	-	-
13.3	Describe Management of Traumatized teeth.	K	KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 14: PREVENTIVE &amp; INTERCEPTIVE ORTHODONTICS:</b>		<b>No of Competencies: 4</b>						
14.1	Define preventive & interceptive orthodontics	K	KH	MK	Large group	Written exam Viva voce	-	-
14.2	Describe Problems encountered during primary and mixed dentition phases & their management.	K	KH	MK	Large group	Written exam Viva voce	-	-
14.3	Discuss Serial extractions.	K	KH	MK	Large group	Written exam Viva voce	-	-
14.4	Describe Space management and identify space problems in children	K	KH/S	MK	Large group Small group teaching	Written exam Viva voce OSCE	-	-

<b>Topic 15: ORAL HABITS IN CHILDREN.</b>					<b>No of Competencies: 5</b>			
15.1	Definition, Aetiology & Classification of oral habits	K	KH	MK	Large group	Written exam Viva voce	-	-
15.2	Discuss and identify clinical features of digit sucking	K/S	KH/SH	MK	Large group DOAP PBL	Written exam Viva voce Skill assessment	Orthodontics	-
15.3	Discuss and identify tongue thrusting,	K/S	KH/SH	MK	Large group DOAP PBL	Written exam Viva voce Skill assessment	-	-
15.4	Discuss and identify mouth breathing & various other secondary habits	K/S	KH/SH	MK	Large group DOAP PBL	Written exam Viva voce Skill assessment	-	-
15.5	Describe Management of oral habits in children	K	KH	MK	Large group	Written exam Viva voce	-	-
<b>Topic 16: DENTAL CARE OF CHILDREN WITH SPECIAL NEEDS</b>					<b>No of Competencies: 5</b>			
16.1	Definition, Aetiology, Classification, Behavioural and Clinical features & Management of children with	K	KH	NK	Large group	Written exam Viva voce	-	-
16.2	Definition, Aetiology, Classification, Behavioural and Clinical features & Management of children with Physically handicapping conditions.	K	KH	NK	Large group	Written exam Viva voce	-	-
16.3	Definition, Aetiology, Classification, Behavioural and Clinical features & Management of children with Mentally compromising conditions.	K	KH	NK	Large group	Written exam Viva voce	-	-
16.4	Definition, Aetiology, Classification, Behavioural and Clinical features & Management of children with Medically compromising conditions.	K	KH	NK	Large group	Written exam Viva voce	-	-
16.5	Definition, Aetiology, Classification,	K	KH	NK	Large group	Written exam	-	-

	Behavioural and Clinical features & Management of children with Genetic disorders.					Viva voce		
<b>Topic 17: CONGENITAL ABNORMALITIES IN CHILDREN:</b>						<b>No of Competencies: 1</b>		
17.1	Definition, Classification, Clinical features & Management.	K	KH	NK	Large group	Written exam Viva voce	-	-
<b>Topic 18: DENTAL EMERGENCIES IN CHILDREN &amp; THEIR MANAGEMENT.</b>						<b>No of Competencies: 1</b>		
18.1	Discuss dental emergencies in children & their management	K	KH	NK	Large group	Written exam Viva voce	-	-
<b>Topic 19: DENTAL MATERIALS USED IN PEDIATRIC DENTISTRY.</b>						<b>No of Competencies: 1</b>		
19.1	Discuss dental materials used in pediatric dentistry <ul style="list-style-type: none"> <li>• Glass ionomer cement</li> <li>• Composite resins</li> </ul>	K	KH	NK	Large group	Written exam Viva voce	-	-
<b>Topic 20: PREVENTIVE DENTISTRY</b>						<b>No of Competencies: 4</b>		
20.1	Define preventive dentistry.	K	K	MK	Large group	Written exam	-	-
20.2	Discuss Principles & Scope	K	K	MK	Large group	Written exam	-	-
20.3	Describe Types of prevention.	K	K	MK	Large group	Written exam		
20.4	Perform Different preventive measures used in Pediatric Dentistry including pit and fissure sealants and caries vaccine.	K/S	K/KH/P	MK	Small group discussion Skill assessment	Written exam OSCE Viva voce	-	-

<b>Topic 21: DENTAL HEALTH EDUCATION &amp; SCHOOL DENTAL HEALTH PROGRAMMES</b>						<b>No of Competencies: 1</b>		
21.1	Counselling for Dental health education & school dental health programmes	K/S/A	K/KH/P	DK	Small group discussion	OSCE Viva voce	-	-
<b>Topic 22: FLUORIDES:</b>						<b>No of Competencies: 5</b>		
22.1	Discuss Historical background.	K	K	MK	Large group	Written exam	-	-
22.2	Demonstrate use of Systemic & Topical fluorides.	K/S	K/KH/P	MK	Small group discussion Skill assessment	Written exam OSCE Viva voce	-	-
22.3	Discuss Mechanism of action.	K	K	MK	Large group	Written exam	-	-
22.4	Describe Toxicity & Management.	K	K	MK	Large group	Written exam	-	-
22.5	Describe Defluoridation techniques.	K	K	MK	Large group	Written exam	-	-
<b>Topic 23: CASE HISTORY RECORDING:</b>						<b>No of Competencies: 3</b>		
23.1	Perform examination of child in dental operatory	K/S/A/C	P	MK	Large group DOAP	OSCE Viva voce	-	-
23.2	Interpret diagnosis	K/S/A/C	P	MK	Small group discussion Skill assessment	OSCE Viva voce	-	-
23.3	Inform treatment planning	K/S/A/C	P	MK	Small group discussion Skill assessment PBL	OSCE Viva voce	-	-

<b>Topic 24: SETTING UP OF PEDODONTIC CLINIC.</b>		<b>No of Competencies: 1</b>						
24.1	Discuss Setting up of pedodontic clinic with respect to play area, Zones, sterilization, machinery and consultation area	K	K	DK	Large group	Written exam	-	-
<b>Topic 25: ETHICS.</b>		<b>No of Competencies: 1</b>						
25.1	Discuss ethical aspects in pediatric dentistry	K	K	DK	Large group	Written exam	-	-

## Periodontics & Implantology

Number	Course outcomes	Domain K/S/A/ C	Level K/KH/ SH/P	Must know/ Nice to know/ Desirable to know	Teaching- Learning Methods	Assessment Methods	Vertical Integration	Horizontal Integration
1.	Discuss & Define Periodontology, Periodontics, Periodontia, Brief historical background, Scope of Periodontics	K/A	K	MK	PBL			
2.	Describe Development of periodontal tissues, micro-structural anatomy and biology of periodontal tissues in detail Gingiva. Junctional epithelium in detail, Epithelial Mesenchymal interaction, Periodontal, ligament Cementum, Alveolar bone.	K/A	KH	MK	PBL			
3.	Describe Defensive mechanisms in the oral cavity: Role of- Epithelium, Gingival fluid, Saliva and other defensive mechanisms in the oral environment.	K/A	K	MK	PBL			
4.	Discuss age changes in teeth and periodontal structures and their association with periodontal diseases	K/S	KH	MK	PBL			
5.	Discuss classification of periodontal disease.  Need for classification, Scientific basis of classification.  Classification of gingival and periodontal diseases as described in World Workshop 1989	K/S	K	MK	PBL			

6.	<p>Enumerate Gingival diseases.</p> <p>Identify Localized and generalized gingivitis, Papillary, marginal and diffuse gingivitis</p> <p>Discuss Etiology, pathogenesis, clinical signs, symptoms and management of</p> <p>i) Plaque associated gingivitis  ii) Systemically aggravated gingivitis(sex hormones, drugs and systemic diseases)  iii) ANUG  iv) Desquamative gingivitis- Gingivitis associated with lichen planus, pemphigoid, pemphigus, and other vesiculobullous lesions  v) Allergic gingivitis  vi) Infective gingivitis-Herpetic, bacterial and candidial  vii) Pericoronitis  viii) Gingival enlargement (classification and differential diagnosis)</p>	K/S/ A	K	MK	PBL			
7.	<p>Describe Epidemiology of periodontal diseases.</p> <p>Definition of index, incidence, prevalence,epidemiology,endemic, epidemic, and pandemic</p> <ul style="list-style-type: none"> <li>- Classification of indices(Irreversible and reversible)</li> <li>- Deficiencies of earlier indices used in Periodontics</li> <li>- Detailed understanding of Silness &amp; Loe Plaque Index ,Loe&amp;Silness Gingival Index, CPITN &amp; CPI.</li> <li>- Prevalence of periodontal diseases in India and other countries.</li> <li>- Public health significance(All</li> </ul>	K/S	K	MK	PBL			

	these topics are covered at length under community dentistry. Hence, the topics may be discussed briefly. However, questions may be asked from the topics for examination							
8.	Discuss Extension of inflammation from gingival. Mechanism of spread of inflammation from gingival area to deeper periodontal structures Factors that modify the spread	K/S	KH	MK	PBL			
9.	Classify Pocket.  Discuss Definition, signs and symptoms, classification, pathogenesis, histopathology, root surface changes and contents of the pocket	K/S/ A	KH	MK	PBL			
10.	Discuss Etiology. Dental Plaque (Biofilm) - Definition, New concept of biofilm - Types, composition, bacterial colonization, growth, maturation & disclosing agents - Role of dental plaque in periodontal diseases - Plaque microorganisms in detail and bacteria associated with periodontal diseases - Plaque retentive factors - Materia alba - Food debris - Calculus - Definition - Types, composition, attachment, theories of formation - Role of calculus in disease Food Impaction - Definition - Types, Etiology - Hirschfelds' classification - Signs, symptoms & sequelae of	K/S	KH	MK	PBL			

	<p>treatment</p> <p>Trauma from occlusion</p> <ul style="list-style-type: none"> <li>- Definition, Types</li> <li>- Histopathological changes</li> <li>- Role in periodontal disease</li> <li>- Measures of management in brief</li> </ul> <p>Habits</p> <ul style="list-style-type: none"> <li>- Their periodontal significance</li> <li>- Bruxism &amp; parafunctional habits, tongue thrusting, lip biting, occupational habits</li> </ul> <p>IATROGENIC FACTORS</p>							
11.	<p>Discuss Risk Factors for periodontal diseases</p>	K/S/A	K	MK	PBL			
12.	<p>Describe Host response. Mechanism of initiation and progression of periodontal diseases</p> <ul style="list-style-type: none"> <li>- Basic concepts about cells, Mast cells, neutrophils, macrophages, lymphocytes, immunoglobulins, complement system, immune mechanisms &amp; cytokines in brief</li> <li>- Stages in gingivitis-Initial, early, established &amp; advanced</li> <li>- Periodontal disease activity, continuous paradigm, random burst &amp; asynchronous multiple burst hypothesis</li> </ul>	K/S	K	MK	PBL			
13.	<p>Discuss Periodontitis. Etiology, histopathology, clinical signs &amp; symptoms, diagnosis and treatment of adult periodontitis</p> <ul style="list-style-type: none"> <li>- Periodontal abscess; definition, classification, pathogenesis, differential diagnosis and treatment</li> <li>- Furcation involvement, Glickmans' classification, prognosis and management</li> <li>- Rapidly progressive periodontitis</li> <li>- Juvenile periodontitis: Localized and generalized</li> <li>- Post-juvenile periodontitis</li> <li>- Periodontitis associated with systemic diseases</li> <li>- Refractory periodontitis</li> </ul>	K/S/A	KH	MK	PBL			

14.	<p>Record Diagnosis.</p> <p>Perform under supervision routine procedures, methods of probing, types of probes,(According to case history)</p> <p>Record Halitosis</p> <p>Discuss Etiology and treatment. Mention advanced diagnostic aids and their role in brief.</p>	P	P	MK	DOAP			
15.	<p>Record Prognosis.</p> <p>Types, purpose and factors to be taken into consideration</p>	P	P	MK	DOAP			
16.	Record Treatment plan	P	P	MK	DOAP			
17.	<p>Discuss Periodontal therapy &amp; General principles of periodontal therapy. Phase I,II, III, IV therapy.</p> <p>Define periodontal regeneration, repair, new attachment and reattachment.</p> <p>Discuss Plaque control</p> <p>i. Mechanical tooth brushes, interdental cleaning aids, dentifrices</p> <p>ii. Chemical; classification and mechanism of action of each &amp; pocket irrigation</p>	K/S	KH	MK	PBL			
18.	<p>Perform under supervision Pocket eradication</p> <p>Procedures:-</p> <p>Scaling and root planning</p> <p>Discuss Indications</p> <p>- Aims &amp; objectives</p> <p>- Healing following root planning</p> <p>- Hand instruments, sonic, ultrasonic &amp; piezo-electric scalers</p> <p>Curettage &amp; present concepts</p> <p>- Definition</p> <p>- Indications</p> <p>- Aims &amp; objectives</p>	P	P	MK	DOAP			
		K/S /A	KH					
		K/S/ A	KH					

	<ul style="list-style-type: none"> <li>- Procedures &amp; healing response</li> <li>Flap surgery</li> <li>- Definition</li> <li>- Types of flaps, Design of flaps, papilla preservation contraindications</li> <li>- Armamentarium</li> <li>- Surgical procedure &amp; healing response</li> </ul>	K/S/ A	KH					
19.	<p>Describe Osseous Surgery</p> <ul style="list-style-type: none"> <li>- Definition</li> <li>- Classification</li> <li>- Surgery: resective, additive osseous surgery (osseous grafts with classification of grafts)</li> <li>- Healing responses</li> <li>- Other regenerative procedures; root conditioning</li> <li>- Guided tissue regeneration</li> </ul>	K/S	K	MK	PBL			
20.	<p>Discuss Mucogingival surgery &amp; periodontal plastic Surgeries.</p> <p>Mucogingival problems: etiology, classification of gingival recession (P.D.Miller Jr. and Sullivan and Atkins)</p> <p>Indications &amp; objectives</p> <p>Gingival extension procedures: lateral pedicle graft, frenectomy, frenotomy</p> <p>Crown lengthening procedures</p>	K/S	K	MK	PBL			
21.	<p>Discuss Splints.</p> <p>Periodontal splints</p> <ul style="list-style-type: none"> <li>- Purpose &amp; classification</li> <li>- Principles of splinting</li> </ul>	K/S/ A	KH	MK	PBL			
22.	<p>Discuss Hypersensitivity</p> <p>Causes, Theories &amp; management</p>	K/S/ A	KH	MK	Role Play			
23.	<p>Discuss Implants</p> <p>Definition, types, scope &amp; biomaterials used.</p> <p>Periodontal considerations: such as implant-bone interface, implant-gingiva interface, implant failure, peri-implantitis &amp; management</p>	K/S	K	NK	PBL			

24.	Discuss Maintenance phase Importance - Procedures - Maintenance of implants	K/S	KH	MK	PBL			
25.	Describe Pharmaco-therapy Periodontal dressings - Antibiotics & anti-inflammatory drugs - Local drug delivery systems	K/S/ A	KH	MK	PBL			
26.	Discuss Periodontal management of medically compromised patients  Topics concerning periodontal management of medically compromised patients	K/S	K	MK	PBL			
27.	Discuss Inter-disciplinary care Pulpo-periodontal involvement - Routes of spread of infection - Simons' classification - Management	K/S	SH	NK	PBL			
28.	Describe Systemic effects of periodontal diseases in brief Cardiovascular diseases, Low birth weight babies etc.	K/S/ A	KH	DK	PBL			
29.	Discuss Infection control protocol Sterilization and various aseptic procedures	K/S/ A	KH	MK	PBL			
30.	Discuss Ethics	K/S	K	MK	PBL			

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# Public Health Dentistry

## Introduction to Dentistry

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define Dentistry	K	K	MK	Written Exam Viva
2	Describe History of dentistry	K	K	NK	-----
3	Describe Scope, aims and objective dentistry.	K	K	MK	Written Exam Viva

## Public Health

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define Public Health & discuss Concepts of public health.	K	K	MK	Written Exam Viva
2	Describe History of Public Health	K	K	NK	--

**Public Health :- Health & Diseases**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Describe Concepts of Health & Diseases.	K	K	MK	Written Exam Viva
2	Describe Philosophy of Health & Diseases.	K	K	NK	-----
3	Define Health & Diseases and enumerate Characteristics	K	K	MK	Written Exam Viva

**Public Health :- General Epidemiology**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define epidemiology, objectives, methods	K	K	MK	Written Exam Viva
2	Describe objective of epidemiology.	K	K	MK	Written Exam Viva
3	Classify epidemiology and describe in detail (Any1).	K	K	MK	Written Exam Viva

**Public Health :- Environmental Health**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Describe Concepts of environmental health.	K	K	MK	Written Exam Viva
2	Describe principles of environmental health protection.	K	K	MK	Written Exam Viva

3	List the sources of water.	K	K	MK	Written Exam Viva
4	Discuss various Environmental sanitation methods.	K	k	MK	Written Exam Viva
5	Discuss purification of water disposal. (Field visit)		k/kh	MK	Written Exam Viva
6	Describe role of dentist in mass disorder.	K	k	MK	Written Exam Viva

**Public Health :-** Health Education

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define health education	K	K	MK	Written Exam Viva
2	Discuss Concepts of health education	K	K	MK	Written Exam Viva
3	Describe Principles of health education	K	K	MK	Written Exam Viva
4	Enumerate various Methods	K	K	MK	Written Exam Viva
5	Describe various Health education aids	K	K	MK	Written Exam Viva

**Public Health :-** Public health administration

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss goals of practice management	K	K	NK	Written Exam Viva
2	Discuss private practice management in detail	K	K	NK	Written Exam
3	Discuss management of dental office & patient.	K/S/A/C	K/KH/SH/P	MK	Written Exam , Viva, OSCE.

**Public Health :-** Ethics and Jurisprudence

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Enumerate various Professional liabilities	K	K	NK	Written Exam Viva
2	Discuss dental negligence in detail	K	K	NK	Written Exam Viva
3	Describe various consent methods	K	K	MK	Written Exam Viva
4	Enumerate methods of identification in forensic dentistry.	K	K	MK	Written Exam Viva

**Public Health :-** Nutrition in oral diseases

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss ideal Balance diet	K	K	MK	Written Exam
2	Describe Oral manifestation of Vit Deficiencies	K	K	DK	Written Exam Viva

**Public Health :-** Behavioural science

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define sociology, anthropology and psychology	K	K	MK	Written Exam Viva
2	Discuss role of behavioral sciences in dental practice and community	K	K	MK	Written Exam Viva

**Public Health :-** Health care delivery system

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Describe health delivery system at Centre and state level	K	K	MK	Written Exam
2	Describe various oral health policy	K	K	DK	Written Exam Viva
3	Discuss Primary health care in India	K	K	MK	Written Exam Viva
3	Discuss various National health programmers'.	K	K	NK	Written Exam Viva

**Dental Public Health :-**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define epidemiology and list differences between community and clinical health services,	K	K	MK	Written Exam Viva
2	Describe Epidemiology of dental caries	K	K	DK	Written Exam Viva
3	Describe Epidemiology of periodontal diseases	K	K	DK	Written Exam Viva
4	Describe Epidemiology of malocclusion	K	K	DK	Written Exam Viva
5	Describe Epidemiology of dental fluorosis	K	K	DK	Written Exam Viva
6	Describe Epidemiology of oral cancer	K	K	DK	Written Exam Viva

**Dental Public Health :-** Survey procedures

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Describe in detail about Planning, implementation and evaluation of survey	K	K/KH/SH/P	MK	Written Exam Viva, OSCE
2	Discuss WHO oral health survey	K	K	NK	Viva

	methods of 1997				
3	Discuss Indices for dental diseases	K/S/A	KH/SH/P	MK	Written Exam Viva, OSCE
4	Discuss OHIS index	K/S/A	KH/SH/P	MK	Written Exam Viva, OSCE

**Dental Public Health :-** . Delivery of dental care

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define dental auxiliaries	K	K	MK	Written Exam Viva
2	Classify dental auxiliaries	K	K	DK	Written Exam Viva
3	Describe incremental and comprehensive health care.	K	K	DK	Written Exam Viva

**Dental Public Health :-** Payments of dental care

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Describe methods of payments in dental care	K	K	DK	Written Exam Viva
2	Discuss third party payment	K	K	DK	Written Exam Viva

**Dental Public Health :-** Preventive Dentistry

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
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1	Define preventive dentistry	K	K	DK	Written Exam Viva
2	Describe fluorides in dentistry	K	K	MK	Written Exam Viva
3	Discuss various Plaque control programmes.	K/S/A/C	K/KH/SH/P	MK	Written Exam , Viva, OSCE

**Research Methodology and Dental Statistics :- Research Methodology**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define research Methodology	K	K	DK	Written Exam Viva
2	Describe in detail types of research, designing and written protocol	K	K	MK	Written Exam Viva

**Research Methodology and Dental Statistics :- Bio-Statistics**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss in detail about collection of data	K	K/KH/SH	MK	Written Exam Viva
2	Discuss presentation of data in detail	K	K/KH/SH	MK	Written Exam Viva
3	Discuss measures of Central tendency	K	K	MK	Written Exam Viva
4	Discuss measures of dispersion.	K	K	MK	Written Exam Viva
5	Describe test of significance.	K	K	MK	Written Exam Viva
6	Discuss various sampling methods and	K	K	MK	Written Exam Viva

	sampling techniques				
7	Define bias and types of bias	K	K	DK	Written Exam Viva
	Discuss blind trails and calibration in detail.	K	K	DK	Written Exam

**Dental Public Health :- Pit and Fissure sealants.**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Define Pit and Fissure sealants	K	K	MK	Written Exam Viva
2	Discuss Classification of Pit and Fissure sealants	K	K	MK	Written Exam Viva
3	Describe procedure Pit and Fissure sealants application.	K/S/A	K/KH/SH/P	MK	Written Exam Viva, OSCE.

**Dental Public Health :- IDA & DCI**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss duties of Dental Council of India and State Dental Councils	K	K	NK	Written Exam Viva
2	Discuss Composition of IDA & DCI	K	K	NK	Written Exam

**Dental Public Health :- Case History**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss Case history in detail	K/S/A	K/KH/SH/P	MK	Written Exam Viva, OSCE
2	Discuss treatment planning in detail.	K/S/A	K/KH/SH/P	MK	Written Exam Viva, OSCE

**Health Education**

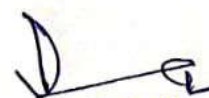
Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Demonstrate oral hygiene procedures with Audio visual aid	K/S/A/C	K/KH/SH/P	MK	OSCE
2	Present a health talk	K/S/A/C	K/P	MK	OSCE
3	Presentation of posters, models, lecturers, play acting skits on health education	K/S/A/C	K/KH/SH/P	NK	--
4	NSS program (Perform under supervision):- visit & social work in rural areas.	K/S/A/C	K/KH/SH/P	MK	--

**Dental Public Health :- Case History**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Discuss Case history in detail	K/S/A	K/KH/SH/P	MK	Written Exam Viva, OSCE
2	Discuss treatment planning in detail.	K/S/A	K/KH/SH/P	MK	Written Exam Viva, OSCE

**Health Education**

Sr No.	Competency- the student should be able to	Domain K/S/A/C	Level K/KH/SH/P	Must know/Nice to know/ Desirable to know	Assessment methods
1	Demonstrate oral hygiene procedures with Audio visual aid	K/S/A/C	K/KH/SH/P	MK	OSCE
2	Present a health talk	K/S/A/C	K/P	MK	OSCE
3	Presentation of posters, models, lecturers, play acting skits on health education	K/S/A/C	K/KH/SH/P	NK	--
4	NSS program (Perform under supervision):- visit & social work in rural areas.	K/S/A/C	K/KH/SH/P	MK	--

**DEAN**

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