

BDS Fourth Year Prosthodontics Study Guide

Introduction:

This course intends to teach basic clinical skills to final year BDS students leading to competency in the field of prosthodontics. It will provides them basic science foundation for clinical and technical skills, incorporating studies in diagnosis and treatment planning of partially and completely edentulous arches. It will give the final year students a platform to develop knowledge, skills and attitude, to develop critical thinking in problem solving and treatment planning for prosthodontic patients making them proficient in all elements of prosthodontics including partial, complete, fixed and implant prosthodontics.

Outcome:

By the end of the Prosthodontics course, BDS graduates will be able to demonstrate skills in rehabilitating the oral function of the patients by restoring chewing, esthetics and phonetics through the use of veneers, crowns and/or dental prostheses.

Teaching and learning:

- Flipped Classroom (FC)
- Interactive lectures (IL)
- Demonstration (Demo)
- Tutorials
 - a. Cased Based Learning (CBL)
 - b. Small Group Discussion (SGD)

Assessment tools:

- 1. Multiple Choice Questions: (MCQs)
 - One Correct Type
 - One Best Type
- 2. Mini Clinical Examination (Mini-CEx)
- 3. Observed Structured Clinical Examination (OSCE)



s.n 0.	Торіс	Course Objectives: By the end of 4 th year, students will be able to:	Teaching method	Assessment Tool
1.	Complete	Definitions, applied anatomy and	IL	MCQs (1B)
	Denture	physiology, peripheral tissue attachment	SGD	
		of denture bearing area		
		• Discuss various types of complete		
		dentures: conventional, immediate and		
		single complete dentures, implant-		
		supported complete denture and		
		overdentures.		
		• Discuss extra- and intra-oral landmarks		
		of prosthetic importance		
		• Identify various anatomic landmarks		
		located in maxilla and mandible		
		• Discuss the border structures that limit		
		the periphery of the denture in the		
		maxilla and the mandible		
		• List primary and secondary denture		
		stress bearing areas		
		• Discuss the relief areas		MCQs (1C)
		Classifications of various anatomical structures	IL	mees (ie)
		Classify:	SGD	
		 i. Frontal face form (House classification) and lateral face form (Angle) ii. Residual ridge according to contour (atwood) and morphology (mc garry et al) 		



mobility iv. tongue position v. frenal a attachm vi. hard an Tongue form	nd border muscle	IL	MCQs (1C)
Describe Sel	ection of occlusion		
	n tongue condition:		
	gue position;		
	nination of floor of mouth		
posti			MCQs (1C)
	gue biting.		
Saliva			
• Discuss the	mportance of saliva in		
complete de	nture retention considering	IL	
the following	g:	SGD	
a) salivary	flow and viscosity		
b) medical	conditions affecting the		
salivary	flow and viscosity		
c) xeroston	iia		
• Discuss the	salivary factors contributing		
to complete	denture retention		MCQs (1B)
	ntulous patients with altered		
salivary flow			
	atients and treatment-		
oriented planni	ng		
Obtain comp	plete history based on	IL CBL	



		I
	prescribed format	
	• Perform the following examinations of	
	patient according to the recommended	
	method:	
	a) General Examination (gait,	
	complexion and personality,	
	cosmetic index, mental attitude of	
	patient)	
	b) Extra Oral examination including	
	facial features, facial form, facial	
	profile, lower facial height, muscle	
	tone, complexion, lip competency,	
	Mouth opening, lip length, lip	
	competency, Smile line (low, avg,	
	high)	
	c) TMJ examination (including muscles	
	of mastication, deviation, deflection,	
	clicking/crepitation of TMJ and	
	mouth opening)	
	d) Neuromuscular examination	
	e) Intra Oral Examination	
	f) existing teeth (number of teeth,	
	tilting, drifting, supra-eruption,	
	rotation, undercuts)	
	g) mucosa (color, condition, thickness)	
	h) tongue examination including frenal	
	attachment	
	i) saliva [consistency (normal, thick,	
	ropy), xerostomia]	
	j) Maxillary arch (Shape/ form,	



	Contour/ cross section, Frenal and	
	border muscle attachment, Palatal	
	vault, Soft palate (classification),	
	Tuberosity, Median palatine raphe	
	and tori)	
	k) Mandibular arch (Shape/ form,	
	Contour/ cross section, Frenal and	
	border muscle attachment,	
	retromylohyoid fossa, floor of the	
	mouth and tori)	
	l) others (Inter-arch space, bony	
	prominences, tori, undercuts, Ridge	
	relationships, gag reflex)	
	m) Previous prosthesis evaluation	
	n) Radiographic examination (abutment	
	evaluation (if any), periapical	
	pathology, retained residual roots,	
	thickness of mucosa, bone support	
	and quality)	
	• Discuss the purpose of diagnostic casts	
	• Discuss the materials and methods of	
	recording centric relation.	
	• Discuss the procedure of mounting	
	diagnostic casts according to the correct	
	jaw relation	
	• Mount the diagnostic casts according to	MCQs (1B)
	the correct jaw relation	
	• Plan the correct treatment for patients	
	requiring complete dentures	MCQs (1B)
	• Justify the treatment plan for patients	



requiring complete dentures		
• Document the treatment plan for patients		
requiring complete dentures		
• Discuss the treatment plan with patients		
requiring complete dentures following		
the ethical guidelines		
Refer edentulous patients requiring		
complex prosthodontic treatment		
following the recommended guidelines		
General Conditions		
• Discuss the functional and		
parafunctional considerations of		MCQs (1C)
occlusion	IL	
Systemic Disorders and Applied		
Pathology		
• Discuss the oral and systemic		
considerations/pathologies that may	FC	
influence an adaptive prosthodontic		
experience like:		
 Mucosal conditions 		MCQs (1B)
• (Vesiculoerosive, Systemic lupus		
erythematosus, Burning mouth		
syndrome)		
• Oral movement disorders		
 Salivary dysfunction 		
(Hyposalivation, Hypersalivation)		
o Xerostomia		
 Sjogren's syndrome 		
 Diabetes Mellitus 		
		MCQs (1C)



Muscle Tone and Muscle Development		
• Discuss the movements of oro-facial		
muscles pertinent to complete denture		MCQs (1B)
fabrication	IL	
• Discuss the temporo-mandibular joint,		
its movements and associated muscles		
pertinent to complete denture fabrication		
• Discuss the conditions that affect motor		
function of oro-facial muscles associated		
with complete dentures		
Oral Lesions with Skin Manifestation		
• Discuss various skin conditions with oral		
manifestations:		
• Oral erythroplakia		
• Drug induced lichenoid reaction	FC	
• Oral lichen planus;		
• Systemic lupus erythematosus;		
• Reaction to dentifrices and		
chlorhexidine;		
• Reaction to smokeless tobacco;		
 Benign migratory glossitis; 		
o Leukoedema;		
• White sponge nevus.		
Psychiatric Aspects in Prosthodontics		
• Discuss the different personality types,		
the doctor's behavior, dentist-patient		
communication and patient satisfaction	IL	MCQs (1C)
pertinent to prosthetic dentistry		
Oral Conditions of Denture Bearing Area		



	• Discuss the Direct Sequelae Caused by Wearing Removable Prostheses		MCQs (1C)
	(Mucosal reactions, Oral galvanic	IL	
	currents, altered taste perception,	SGD	
	burning mouth syndrome, Gagging,		
	Residual ridge reduction, Periodontal		
	disease (abutments), Caries (abutments),		
	Denture induced stomatitis, Flabby		
	ridge, Traumatic ulcer, Epulis		
	fissuratrum, Angular cheilitis,		
	Candidiasis)		
	• Describe Denture irritation hyperplasia,		
	its cause mechanism and management		MCQs (1C)
	• List the etiological factors causing		
	traumatic ulcers and cheek biting		
	• Manage traumatic ulcers and cheek		MCQs (1B)
	biting in patients presenting to		
	prosthodontic OPD		
	• Define denture stomatitis.		$MCO_{c}(1\mathbf{R})$
	Classify Denture stomatitis		MCQs (1B)
	• Discuss the management of denture		
	stomatitis		
	• Describe Kelly's Syndrome.		
	• Discuss its features		
	• Discuss Indirect Sequelae Caused by		
	Wearing Removable Prostheses		
	Oral Mucosa: Resistant and Non		
	Resistant		
	• Discuss the types and distribution of oral		
			1



mucous membrane.	COD	
• Describe the mucosal response to oral	SGD	
prosthesis.		
Alveolar Bone Resorption		
• Discuss the importance of preservation		
of natural dentition.		MCQs (1C)
• Discuss alveolar bone resorption after		
tooth extraction	IL	
• Discuss alveolar bone resorption in		
patients wearing complete dentures and		
overdentures		
• Differentiate between bone resorption		
rate and pattern in maxilla and mandible		
Discuss bone conditions (osteoporosis		
and arthritis).		
• Discuss the management of highly		
resorbed ridges		
Face Forms		
Classify patients according to various		
face forms and facial profiles		
• Record lower facial height on patients	SGD	
Fundamentals of Denture Retention and		
Contributing Factors		MCQs (1B)
• Discuss the anatomical, physiological,		
physical, mechanical and muscular		
factors and dislodging forces affecting		
the complete denture retention		
Mouth Preparation for Edentulous		
Patients		



 Describe in detail the nonsurgical methods to improve the patient's denture foundation List the preprosthetic surgical methods to improve the patient's denture foundation Discuss the various surgical methods for mouth preparation of patients requiring complete dentures List the Indications for maxillary tori removal Describe the various methods used for the enlargement of the denture bearing areas 	IL SGD	MCQs (1C) MCQs (1B)
 Biomechanics of Complete Denture Prosthodontics List the factors that affect the successful denture fabrication Define Retention Discuss the anatomical, physiological, physical, mechanical and muscular factors and dislodging forces affecting the complete denture retention Define Pascal's law. Discuss the procedure and mechanism of evaluation of retention with considerations to the Pascal's Law. Define stability 		MCQs (1B)



• Discuss the factors affecting the stability		
of complete dentures		
Define support		
• Discuss the factors affecting the support	IL	
of complete dentures	SGD	
Impression Techniques		
• Define impression materials. Discuss the		MCQs (1B)
various materials suitable for recording		
CD impressions		
• List the objectives and principles of an		
impression for complete dentures		
• Justify the selection of impression		
technique for patients requiring		
prosthesis with considerations to the		
relevant theories and materials		
• Explain the selected impression		
technique to patients requiring complete		
dentures following the ethical guidelines		
• Define and classify the impression tray		
used for CD impression		
• Describe requirements of an ideal		
impression tray.		
• Record the impression of jaws using the		
correct technique	IL	
• Discuss the disinfection of various		
impression materials		
Pascal's Law and its Corollaries		
• Define Pascal's law.		
• Discuss the procedure and mechanism of		
	1	



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	evaluation of retention with		
	considerations to the Pascal's Law.		
St	ability		
•	Define stability.		
•	Discuss the factors affecting stability:		
	a) Vertical height of the residual ridge;		
	b) Quality of the soft tissue covering		
	the ridge;		
	c) Quality of the impression;		
	d) Occlusal rims;		
	e) Arrangement of teeth;		
	f) Contour of the polished surface.	IL SGD	
0	cclusion	502	MCQs (1C)
•	Define the basic terminologies of		
	occlusion		
•	Describe the different concepts of		
	occlusion in completely edentulous		
	patient (Bilateral balanced occlusion,		
	Mono plane(non- balance) occlusion,		
	Lingualized occlusion)		
•	Discuss characteristics, importance,		
	general considerations and types of		
	balanced occlusion		
•	Discuss advantages, disadvantages,		
	indications, contraindications of types of		
	occlusion		MCQs (1C)
•	Describe factors influencing balanced		
	occlusion		
•	Describe compensatory curves (Curve of		
	Monsoon, Curve of Spee and Curve of		
	-	IL	MCQs (1B)



Wilson)	SGD	
Maxillomandibular Relations		
• Define maxilla-mandibular relation.		
 Define maxima-mandibular relation. Discuss mandibular movements in the 		
frontal sagittal and horizontal planes.		
(Posselt's Envelope of motion)		
• Discuss the anatomic determinants of		
mandibular movements.		
• Define the Centric relation, Centric		
occlusion, rest position, muscular		
position, intercuspal position, retruded		
contact position, Excursive movements		
(working, non- working)		
• Define rest vertical dimension and		
occlusal vertical dimension.		
• Define the terms record base and		
occlusal rim.		
• List the materials used for record base		
and occlusal rims		
Construct maxillary and mandibular		
occlusal rims for edentulous patients		
according to the correct protocol		
• Establish the labial form of occlusal rims		
considering the facial landmarks,		
fullness of upper lip, philtrum,		
nasolabial fold and oral commissures		
• Define Orientation relations, vertical		MCQs (1B)
relations and horizontal relations		
• Establish the occlusal plane and		



maxillomandibular relations for		MCQs (1C)
edentulous patients		
Classify maxillomandibular relations on		
the basis of orientation, vertical and		
horizontal relations and resting and		
occlusal vertical dimensions	IL	
Articulators; Theories of Articulation	SGD	
Discuss function, types, uses, advantages		
and disadvantages, purpose and		
requirements of an articulator		
• Identify the different types of		MCQs (1B)
articulators		
• Classify articulators on the basis of the		MCQs (1B)
following parameters:		
\circ theories of occlusion		MCO_{2} (1D)
 simulation of jaw movements 		MCQs (1B)
o their adjustability		
Discuss protrusive and lateral		
records.		
Write Hanau's formula	IL	
Facebow	SGD	
Discuss facebow and its types		
Discuss errors in facebow recording		
Describe situations where facebow is		
not required		
• List the steps for recording the		
transverse hinge axis		
Selection And Arrangement Of Teeth		
• Select anterior teeth according to size,		



	form and color of teeth on the basis of		
	various patient factors for edentulous		
	patients		
	• Select posterior teeth according to size,		
	form and color of teeth on the basis of		
	various patient factors for edentulous		
	patients		
	• Discuss the nine parameters of smile		
	• Discuss advantages and disadvantages of		
	anatomic, non-anatomic and cusp less		
	teeth		
	• Justify the teeth selection for complete		
	dentures considering various patient		
	factors		
	• Discuss the ten landmarks for CD teeth		$MCO_{2}(1D)$
	setup.		MCQs (1B)
	• Arrange artificial teeth on edentulous		
	models		
	• Justify the arrangement of artificial teeth		
	considering various patient factors		
	• Discuss the setup for retrognathic and		
	prognathic facial skeletons.		
	Speech Considerations For Complete		
	Speech Considerations For Complete Dentures		
	Discuss phonetical considerations		
	relevant to complete dentures		
	Try-In Complete Denture Fabrication	IL	
	Conduct preliminary evaluation of		
	complete denture on articulator		
	Conduct complete denture try-in		



considering the following:	
• individual trial denture	in MCQs (1B)
mouth	
○ lip and cheek support	
◦ occlusal plane	
○ vertical height	
• centric relation	
• posterior palatal seal	
Insertion of Complete Denture,	
	IL
Management of Post Insertion	
	SGD
Complaints and Recall	
Discuss in detail the final pro	ocessing
of the complete dentures.	MCQs (1B)
Discuss in detail the materials	s used
as denture base	
Describe different types of cu	uring MCQs (1B)
cycles.	
Describe the role of Pressure	
indication paste in adjustmen	t of
denture base	
• Insert the finished denture on	n the
patient according to the	
recommended protocol.	
Assess the fitting and function	ning of
complete denture at insertion	
considering various factors pe	



to the prosthesis and the patient		
• Manage the fitting and functioning		
of complete denture at insertion		
considering various factors pertinent		
to the prosthesis and the patients		
Communicate post-insertion		
instruction to the complete denture		
patients effectively		
• Manage post-insertion complaints on		
complete denture patients on recall		
visit following the recommended		
guidelines		
• Justify the management of post-		
insertion complaints of complete	SGD	
denture patients		
Immediate/ Replacement Dentures and		
Overdentures		
• Discuss the classification, purpose,		
indications, contraindication, clinical		
and laboratory procedures for		
immediate/replacement dentures and		
overdentures		
• Discuss the importance of		
Discuss the importance of		
multidisciplinary approach in the		
multidisciplinary approach in the management of patients requiring		
multidisciplinary approach in the management of patients requiring immediate/replacement dentures and		
multidisciplinary approach in the management of patients requiring immediate/replacement dentures and overdentures		
 multidisciplinary approach in the management of patients requiring immediate/replacement dentures and overdentures Demonstrate the insertion, follow-up and 		



• Describe the criteria for abutment	SGD	
selection in overdenture	500	
Single Complete Denture		
• Discuss the management of problems		
associated with single complete		
dentures considering all the clinical		
and laboratory procedures and		
various patient factors		
• Discuss the common occlusal		
disharmonies and ways to adjust		
them.		
• Discuss the methods to achieve		
balanced occlusion in single CD		
• Explain the tooth modifications		
techniques to harmonize occlusion in		
single CD patient		
	IL SGD	
Combination Syndrome	200	
Discuss the etiology, features and		
management of combination syndrome		
Complete Denture Relining, Rebasing	IL	
and Copy Dentures	IL	
Discuss the principles, indications,		
contraindications and clinical and laboratory		
procedures for complete denture relining,		
rebasing and repair, and copy dentures		



2.	Crowns	Basics of Crowns and Fixed Partial		
	and Fixed	Dentures	IL	MCQs (1B)
	Partial	• Define the basic terminologies pertinent	SGD	
	Denture	to crowns and fixed partial dentures		
		• Discuss the various components of fixed		
		partial dentures		
		• Discuss the various types of crowns and		
		fixed partial dentures		
		• Discuss the indications and		
		contraindications for fixed partial		
		dentures		
		• Discuss the applied anatomy and		
		physiology for temporomandibular joint,		
		muscles of mastication and dentition		
		pertinent to crown and fixed partial		
		denture treatment		
		Describe Posselt's Envelop of Motion		
		Evaluation of Patients and Patient		
		Oriented Treatment Planning		MCQs (1B)
		• Obtain as mulata history based on		
		Obtain complete history based on prescribed format	CBL	
		 prescribed format Perform the following examinations		
		• Perform the following examinations of patient according to the		
		recommended method:		
		a) General Examination (gait,		
		complexion and personality,		
		cosmetic index, mental attitude of		
		patient)		
		b) Extra Oral examination including		
		,		



	0 1 1 0 1 1 0 1 1 0 1 1	
	facial features, facial form, facial	
	profile, lower facial height, muscle	
	tone, complexion, lip competency,	
	Mouth opening, lip length, smile line	
	(low, avg, high)	
c) '	TMJ examination (including muscles	
	of mastication, deviation, deflection,	
	clicking/crepitation of TMJ and	
	mouth opening)	
d)	Neuromuscular examination	
e)	Intra Oral Examination	
f)	existing teeth (number of teeth,	
	tilting, drifting, supra-eruption,	
	rotation, undercuts)	
g) :	mucosa (color, condition, thickness)	
h)	tongue examination including frenal	
	attachment	
i)	saliva [consistency (normal, thick,	
	ropy), xerostomia]	
j) -	occlusion (canine guided, group	
	function, mutually protective, inter-	
	arch space)	
k)	others (midline mouth opening,	
	occlusal stops, periodontal condition,	
	residual alveolar ridge classification,	
	residual roots, tooth surface loss,	
	prosthesis, gag reflex)	
1)	Radiographic examination (crown to	
	root ratio, periapical pathology,	
	retained residual roots, thickness of	



mucosa, bone support and quality,
root configuration of abutment teeth)
Discuss the purpose of diagnostic
casts
• Discuss the materials and methods of
recording centric relation.
Discuss the procedure of mounting
diagnostic casts according to the
correct jaw relation
Mount the diagnostic casts according
to the correct jaw relation
• Discuss the various fixed treatment
options
• Discuss the various factors involved
in the treatment planning of FDP
Discuss the Design consideration for
individual conditions in FDP
Plan the correct treatment for
patients requiring fixed partial
dentures
• Justify the treatment plan for patients
requiring fixed partial dentures
• Document the treatment plan for
patients requiring fixed partial
dentures
• Discuss the treatment plan with
patients requiring fixed partial
dentures following the ethical
guidelines
Refer partially edentulous patients



requiring complex prosthodont	ic	
treatment following the		
recommended guidelines		
Biomechanics of Oral Cavity and		
Contributory Factors	IL	MCQs (1B)
Discuss the bio mechanical	IL	
consideration for fixed partial		
dentures		
Oral Manifestations of Local and		
Systemic Diseases		
Discuss the oral and systemic	FC	
considerations/pathologies that	may	
influence an adaptive prosthod	ontic	
experience		
Fixed Partial Denture and Its Types		
• Discuss the various partial and	full	
coverage indirect restorations		
Describe the principles of tooth	1	
preparation for indirect prosthe	esis	
Discuss the indications,		
contraindications, required clin	ical	MCQs (1B)
assessment and steps of prepara	ation	
for provision of inlay, onlay an	ıd	
different types of veneer		
Discuss the materials, impressi	on	
techniques, clinical and laborat		
procedures for the fabrication of		
indirect prosthesis		
 Describe the latest innovations 		
including CAD-CAM Technolo		
	رم [.]	MCQs (1B)



R	Resin Bonded Bridges		
	• Discuss and classify resin-bonded		
	bridges		
	• Discuss the indications and		
	contraindications of resin-bonded		
	bridges.		
	• Discuss the preparation design of		MCQs (1B)
	resin-bonded bridges.		
F	Fixed Partial Denture and its Types	IL	
	• Discuss the various partial and full coverage indirect restorations	SGD	
	 Describe the principles of tooth 		
	• Describe the principles of tooth preparation for indirect prosthesis in		
	reference to:		
	a) Biological consideration		
	b) Mechanical consideration		
	c) Esthetic consideration		
E	Endodontic Considerations		
	• Discuss the endodontic		
	considerations of abutment tooth.		
	• Discuss and classify post and core.		MCQs (1B)
	• Discuss the selection criteria of post.		MCQ8 (ID)
Α	Aesthetic Considerations		
	• Discuss the aesthetic considerations		
	of FPD		
	• Describe Smile design		
	• Discuss the Role of CAD-CAM in		
	aesthetics		
P	Pontic Design		



	 Classify pontic designs Classify ridge defects according to siberts Discuss the factors effecting pontic design 	IL SGD	MCQs (1B)
	 (available space, contour of ridge, amount of occlusal load) Discuss various biological, mechanical and esthetics considerations for successful pontic design Discuss the general and material considerations of pontic design 		MCQs (1B)
	 Tooth Preparation and Crown Design Describe the indications and contraindications of different types of crowns based on material (Porcelain fused to metal crown, All metal crown, All ceramic crown) Prepare teeth for crown placement for partially dentate patients considering various patient factors 	IL	MCQs (1B)
	 Justify the tooth preparation design pertinent to different types of crown for various patients Temporization Discuss the biological, mechanical and esthetic considerations for 	IL SGD	MCQs (1B)



	temporization		
	 Describe different materials used 	d to	
	fabricate provisional restoration		
	• Discuss different techniques use	d to	
	fabricate provisional restorations	5	
	Tissue Management and Recording		
	Impression for Fixed Prosthesis		
	• Discuss the various techniques f	~~~	MCQs (1B)
	Discuss the various techniques for finite control and as for tissues	01	
	fluid control and soft tissue		
	managementDiscuss various methods of tissu		
		ie	
	displacement in detail	FC	
	• Justify the impression technique		
	employed for fixed prosthesis in		
	various patients		
	• Record the impression of jaws at	fter	
	tooth preparation using the		
	recommended technique		
	• Discuss disinfection of various		
	impression materials		
	Shade selection		
	• Discuss factors influencing shad	e	
	selection.		
	• Describe guidelines for accurate		
	shade matching.		
	• Discuss various methods of shad	le	
	selection.		
	Cementation		



		• Discuss factors to assess at try-in		
		stage	IL	
		• Classify different luting agents	SGD	
		• Select the suitable material for		
		cementation of fixed prosthesis		
		• Justify the selection of material used		
		for cementation of fixed prosthesis		
		• Discuss cementation protocol for		
		different types of fixed partial		
		dentures		
		Follow-Up And Repair		
		• Discuss the follow-up and repair of		
		FPD		
		• Discuss the possible complications		
		and management		
		• Explain failures in fixed partial		
		dentures		
3.	Implantolo	Basics Of Implantology		
	gу	• Define the basic terminologies		
		pertinent to implantology	IL SGD	MCQs (1C)
		• Discuss the various components and	500	
		types of implants		
		• Discuss the advantages,		
		disadvantages, indications and		
		contraindications of implants		
		Impression Techniques		MCQs (1B)
		• Discuss the various impression		
		techniques in implantology	IL SGD	MCQs (1B)
		Osseointegration and Biocompatibility	500	



		• Discuss osteointegration, bio-		
		integration and pertinent factors and		
		theories		
		 Describe the various Factors influencing the osteointegration (patients and surgical related) Discuss various methods of assessing 		
		osteointegration		MCQs (1B)
		Prosthodontic Options		
		• Discuss the various prosthodontics	IL	
		options for partially dentate and		
		edentulous patients requiring implant		
		prosthesis		
		• Discuss the advantages and		
		disadvantages of screw- and cement-		
		retained prosthesis		
		• Discuss indications and		
		contraindications of implant		MCQs (1B)
		supported restorations.		
		Limitations Of Implants		MCQs (1B)
		• Discuss the limiting factors pertinent	IL/ SGD	
		to the placement of implants		
		Clinical and Laboratory Procedures in		
		Implantology		
		• Discuss the clinical and laboratory	IL	
		procedures pertinent to fabrication of		
		implant restorations		
4	Maxillofac	Classification of Congenital and Acquired		
	ial	Defects		MCQs (1C)
	Prosthodo	• Discuss the classification of various		
	ntics	congenital and acquired defects in		
L	L			1



	patients requiring maxillofacial		
	prosthesis		
]]]	Principles of Governing Management of	IL	
	Patients Presenting with Various Defects	SGD	
	 Discuss the management of mandibular defects and mandibular guidance prosthesis Discuss the management of soft and hard palate defects 		MCQs (1B)
	Obturators		
	 Define obturators Discuss the different types of obturators Discuss different methods of retention of an obturator Discuss the advantages and retention 		
	of surgical obturator prosthesis		
	Cleft Palate Prosthesis		
	 Describe various cleft palate prosthesis Discuss presurgical nasoalveolar molding appliance 	IL	MCQs (1C)
	 Speech Aid Prosthesis Discuss the classification of speech aid prosthesis based on various 	SGD	
	parameters		
	• Discuss advantages of speech aid prosthesis		MCQs (1B)
	Facial Prosthesis		$MCO_{0}(1C)$
	• Discuss the prosthodontic		MCQs (1C)



management for patients presenting	
with auricular, nasal, ocular, lip and	MCQs (1B)
cheek defects	
TMD Splints	MCQs (1C)
• Discuss the various types and	
indications of splints	
Bite Raising Appliances	
• Discuss the Dahl Appliance and	
anterior bite plane	
Splints And Stents	
• Describe the shielding and	
positioning stents	
Occlusion Including Tmd/Mpd	
• Discuss anatomy and physiology of	
temporomandibular joint and related	
tissues	
• Discuss the classification of	
temporomandibular joint disorders.	
Discuss optimum functional	
occlusion	
• Discuss canine guided, group	
function and mutually protected	
occlusal schemes	
• Discuss various determinants of	
occlusal morphology	
• Discuss the etiology of TMDs.	
• Discuss the strategy to formulate	
provisional and definitive diagnosis	
of TMDs	



		• Formulate the management plans for		
		various patients presenting with		
		TMDs including supportive and		
		definitive therapies		
		• Justify the management plans for		
		various patients presenting with		
		TMDs		
5	Gerodonto	Discuss the Impact of edentulism in		
	logy	old age (Mucosa, Bone, Saliva, Jaw	IL SGD	MCQs (1B)
		movement, Taste and smell	200	(1D)
		sensations, Nutrition)		
		• Discuss the consequences of bone		
		loss in edentulous patients		
		(anatomical, soft tissue, esthetics,		
		psychological)		
		 Discuss the effects of various 		
		medications on oral health of		
		geriatric patients		
		 Discuss the various medical 		
		conditions with oral manifestations		
		in geriatric patients		
		 Discuss the causes, clinical features, 		
		diagnosis and management of		
		patients with xerostomia		
		-		
		Discuss the problems encountered in		
		denture patients with xerostomia		
		Discuss microbiology, predisposing		
		factors, clinical features, and		
		diagnosis of root caries in		
		prosthodontic patients		



CLINICAL SKILLS By the end of the year student will be able to:	Teaching method	Assessment Tool
 prosthodontics Discuss the etiology and classification of tooth wear. Discuss the general and prosthodontic management of tooth wear. Discuss the impact of edentulism in old age. Prosthodontic considerations to the mucosa, bone, saliva, jaw movements, taste and smell sensations, teeth and nutrition related to ageing. 		Assessment
Discuss the nutritional balance in geriatric patients requiring		



1	Complete	Definitions, Applied Anatomy and		
	Denture	Physiology, Peripheral Tissue Attachment		
		of Denture Bearing Area		
		• Identify extra- and intra-oral		
		landmarks of prosthetic importance		
		• Identify the border structures that		
		limit the periphery of the denture in		
		the maxilla and the mandible		
		Saliva		
		• Manage edentulous patients with	Demo	
		altered salivary flow		
		Evaluation Of Patients And Treatment		MiniCEx/
		Oriented Planning		OSCE
		• Obtain complete history based on		
		prescribed format		
		• Perform the following examinations		
		of patient according to the		
		recommended method:		
		a) General Examination (gait,		
		complexion and personality,		
		cosmetic index, mental attitude of		
		patient)		
		b) Extra Oral examination including		
		facial features, facial form, facial		
		profile, lower facial height, muscle		
		tone, complexion, lip competency		
		c) TMJ examination (including muscles		
		of mastication, deviation, deflection,		
		clicking/crepitation of TMJ and		
		mouth opening)		



	d)	Neuromuscular examination	
	e)	Intra Oral Examination	
	f)	existing teeth (number of teeth,	
		tilting, drifting, supra-eruption,	
		rotation, undercuts)	
	g)	mucosa (color, condition, thickness)	
	h)	tongue examination including frenal	
		attachment	
	i)	saliva [consistency (normal, thick,	
		ropy), xerostomia]	
	j)	occlusion (canine guided, group	
		function, mutually protective, inter-	
		arch space)	
	k)	others (midline mouth opening,	
		occlusal stops, periodontal condition,	
		residual alveolar ridge classification,	
		residual roots, tooth surface loss,	
		prosthesis, gag reflex)	
	1)	Radiographic examination (crown to	
		root ratio, periapical pathology,	
		retained residual roots, thickness of	
		mucosa, bone support and quality,	
		root configuration of abutment teeth)	
	•	Mount the diagnostic casts according	
		to the correct jaw relation	
	•	Plan the correct treatment for	
		patients requiring complete dentures	
	•	Justify the treatment plan for patients	
		requiring complete dentures	
	•	Document the treatment plan for	MiniCEx/ OSCE



• Establish the labial form of occlusal		
		OSCE
according to the correct protocol		
occlusal rims for edentulous patients		
Construct maxillary and mandibular		
Maxillomandibular Relations	Demo	
the correct technique		
• Record the impression of jaws using		
ethical guidelines		
complete dentures following the		
technique to patients requiring		
Explain the selected impression		
Impression Techniques		
• Manage the oral nucosal conditions associated with denture bearing area		
 Manage the oral mucosal conditions 		
correct protocol Oral Conditions of Denture Bearing Area		OSCE
occlusal schemes according to the	Demo	
patients considering the various	_	
Record the occlusion of edentulous		
Occlusion		
patients		
• Record lower facial height on		
guidelines		
following the recommended		
complex prosthodontic treatment	Demo	
• Refer edentulous patients requiring		OSCE
following the ethical guidelines		
patients requiring complete dentures		
• Discuss the treatment plan with		
patients requiring complete dentures		



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	rims considering the facial		
	landmarks, fullness of upper lip,		
	philtrum, nasolabial fold and oral		
	commissures		
•	Establish the occlusal plane and		
	maxillomandibular relations for		
	edentulous patients		
Artic	culators; Theories Of Articulation		OSCE
•	Identify the different types of		
	articulators	Demo	
Selec	tion and Arrangement of Teeth		
•	Select anterior teeth according to		
	size, form and color of teeth on the		
	basis of various patient factors for		
	edentulous patients		
•	Select posterior teeth according to		
	size, form and color of teeth on the		
	basis of various patient factors for		
	edentulous patients		
•	Arrange artificial teeth on edentulous		
	models	Demo	
•	Justify the arrangement of artificial		
	teeth considering various patient		
	factors		
Try-	In Complete Denture Fabrication		
•	Conduct preliminary evaluation of		
	complete denture on articulator		
•	Conduct complete denture try-in		
	considering the following:		
a) individual trial denture in mouth		



2	Crowns	Evaluation of Patients and Patient	Demo	MiniCEx OSCE
		denture patients		
		insertion complaints of complete		
		• Justify the management of post-		
		guidelines		
		visit following the recommended		
		complete denture patients on recall		
		• Manage post-insertion complaints on		
		patients effectively		
		instruction to the complete denture		
		Communicate post-insertion		
		to the prosthesis and the patients		
		considering various factors pertinent		
		of complete denture at insertion		
		• Manage the fitting and functioning		
		to the prosthesis and the patient		
		considering various factors pertinent		
		complete denture at insertion		
		• Assess the fitting and functioning of		
		recommended protocol.		
		patient according to the		
		• Insert the finished denture on the		
		Complaints and Recall		
		Management of Post Insertion		
		f) posterior palatal sealInsertion of Complete Denture,		
		e) centric relationf) posterior polatel cool		
		d) vertical height		
		c) occlusal plane		
		b) lip and cheek support		
		b) lin and cheek support		



and Fixed	Oriented Treatment Planning		
Partial	• Obtain complete history based on		
Denture	prescribed format		
	• Perform intra-oral and extra oral		
	examination of patients presenting to		
	the prosthodontics OPD following		
	the recommended guidelines		
	• Mount the diagnostic casts according		
	to the correct jaw relation		
	• Plan the correct treatment for		
	patients requiring fixed partial		
	dentures		
	• Document the treatment plan for		
	patients requiring fixed partial		
	dentures		
	• Discuss the treatment plan with		
	patients requiring fixed partial		
	dentures following the ethical		
	guidelines		
	• Refer partially edentulous patients		
	requiring complex prosthodontic		
	treatment following the		
	recommended guidelines		
	Tooth Preparation and Crown Design		
	• Prepare teeth for crown placement		
	for partially dentate patients		
	considering various patient factors		
	Recording Impression For Fixed	Demo	OSCE
	Prosthesis		
	• Record the impression of jaws after		
			1



tooth preparation using the	
recommended technique	

Reading Sources:

Text Books:

- Prosthodontics Treatment for Edentulous Patient Zarb (latest edition)
- Complete Denture Prosthodontics by John J Manaplill (latest edition)
- Fundamentals Of Fixed Prosthodontics (Herbert T.Shillinburg) (latest edition)
- Contemporary Fixed Prosthodontics Rosenstiel (latest edition)
- Removable Partial Denture McCracken's (latest edition)
- Stewart's Clinical Removable Partial Denture (latest edition)

Internet resources: With easy excess to digital library students will use internet resources with added time flexibility to enrich and update their knowledge and its application.

Library: It provides wealth of resources, space to study alone or in a group. It also provide world of books to discover and borrow.

<u>Assessment Criteria :</u>

<u>Please Note:</u> Removable partial denture that was taught in third professional year will be assessed in 4th professional examination

Knowledge: MCQs (Multiple Choice Questions) are used to asses objectives covered in each module.

- A MCQ has a statement or clinical scenario followed by four options (likely answer).
- Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
- Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.
- Students mark their responses on an answer sheet provided by examination department.

Skills:

• OSCE: Objective Structured Clinical Examination:



- Each student will be assessed on the same content and have same time to complete the task.
- Comprise of 12-25 stations.
- Each station may assess a practical tasks include practical skills and application of knowledge
- Stations are observed, interactive, application of knowledge based and rest.
- In Observed and Interactive Stations these will be assessed by internal or external examiners through structured viva or a task.
- Application of knowledge Stations: it will be static stations in which there will be pictures, clinical scenarios with related questions for students to answer on the provided answer copy.
- Rests: It is a station where there is no task given and in this time student can organize his/her thoughts.

AIDM Internal Assessment Policy

Students will be assessed to determine achievement of learning objectives through the following:

- Midterm Examination will be scheduled on completion of half of the course and OPD rotations
- Mock Examination will be scheduled on completion of whole course and OPD rotations
- The method of examination comprises theory exam which includes MCQs, and practical examination by OSCE (Objective Structured Clinical Examination).
- Student's behaviors and attitudes will be observed during all academic activities.

Annual Examination:

- Marks of both internal assessments will constitute 20% weightage as per JSMU policy.
- University Annual examination carries 90% marks. Theory exam will be based on MCQs and Clinical / Professional /communication skills will be assessed by OSCE.



<u>Attempts:</u> There are 2 attempts in the fourth professional examination only. 2^{nd} attempt is the supplementary examination which if not passed student has to repeat the year.

Course Evaluation:

- Pass/fail ratio of continuous and summative assessments will be evaluated.
- 75% attendance is mandatory to be eligible for annual professional examination
- Feedback will be taken
 - Regarding course from students and faculty
 - Student feedback regarding faculty
 - ➢ Faculty feedback of students

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