CERVICO FACIAL-II MODULE

3rd Year BDS

TABLE 1: THEMES

S.no	Themes	Duration in hrs
1.	Swellings of the Neck	35
2.	Neck pain	14
4.	Difficulty in chewing	22
	Total	63

Teaching Hours Allocation

Table 2: Hours allocation for different subjects

S. No	Subject	Hours
1	Oral pathology	21 hours
2	Oral medicine diagnosis and treatment	07 hours
3	Periodontology	12 hours
4	General Medicine	8 hours
5	General Surgery	9 hours
8	Pre-Clinical Prosthodontics	6 hours
	Total	63 hrs

General Learning Objectives

By the end of this Module, 3rd year BDS students will be able to:

1. Define, classify, and describe the etiology, pathogenesis, and clinicopathological features of cysts and tumors involving the cervicofacial region.
2. Describe benign and malignant salivary gland tumors and describe their clinical, histopathological, and radiographic characteristics.
3. Classify and differentiate benign and malignant mesenchymal tumors including vascular, fibrous, muscular, adipose, and neural tissue tumors.
4. Describe the etiology, pathogenesis, and microscopic features of vascular tumors (hemangioma, lymphangioma) and distinguish them from vascular malformations.
5. Describe and describe inflammatory, obstructive, and immune-mediated disorders of the salivary glands including sialadenitis, mucocele, sialolithiasis, and Sjögren's syndrome.
6. Explain the developmental and congenital disorders of salivary glands, including their embryologic basis and clinical implications.
7. Describe hyperplastic lesions of the oral mucosa and connective tissue and distinguish them from neoplastic conditions.
8. Correlate the histopathological and clinical findings to formulate differential diagnoses of cervicofacial swellings.
9. Integrate the knowledge of developmental, inflammatory, neoplastic, and reactive processes to understand pathogenesis of cervicofacial deformities and swellings.
10. Describe and describe inflammatory, obstructive, and immune-mediated salivary gland disorders such as sialadenitis, mucocele, sialolithiasis, and Sjögren's syndrome.
11. Correlate clinical findings of xerostomia, altered salivary flow, or swelling with systemic and local causes.
12. Emphasize interdisciplinary management and referral when systemic diseases present with cervicofacial or salivary manifestations.
13. Discuss preventive and therapeutic strategies for maintaining periodontal health in medically compromised individuals.

14. Recognize neurological, endocrine, and rheumatological disorders presenting with facial or neck pain and swelling.
15. Outline emergency management principles for anaphylaxis, airway obstruction, and bleeding in cervicofacial surgeries.
16. Describe impressions in cast partial dentures.
17. Differentiate between the support mechanisms for different types of Removable partial dentures.
18. Analyze jaw relationships and occlusal contacts in cast partial dentures.

Table 1: Learning Objectives Theme-wise

Theme I: Swellings of the Neck			
S.No	**Topic**	**Hours**	**Learning objectives**
Oral Pathology			
1.	Cysts of cervicofacial region	01	1. Define and enumerate cervicofacial cysts (branchial cleft cyst, thyroglossal duct cyst, dermoid cyst, epidermoid cyst). 2. Describe their clinical features and anatomical locations. 3. Describe the histopathological features of common cervicofacial cysts.
2.	Tumors of muscle, fibrous and adipose tissue	02	4. Enumerate benign and malignant tumors of muscle, fibrous and adipose tissue. 5. Describe their clinical features and histopathological features
3.	Nervous tissue tumors	01	6. Classify benign and malignant tumors of nervous tissue affecting the oral and maxillofacial region (schwannoma, neurofibroma, traumatic neuroma, granular cell tumor). 7. Describe their clinical features. 8. Describe histopathological features characteristic of each tumor.
4.	Benign tumors of salivary gland	02	9. Classify various Benign and malignant salivary gland tumors

			10. Describe the clinical features, histopathology and treatment protocol of monomorphic adenoma, pleomorphic Adenoma, Warthin's Tumor and oncocytoma.
5.	Malignant tumors of salivary glands	02	11. Describe clinical and histopathological features of Mucoepidermoid carcinoma, adenoid cystic carcinoma, acinic cell carcinoma, clear cell carcinoma and polymorphous low-grade adenocarcinoma.
General Medicine			
6.	Thyroid disorders	2 hrs	12. Define hypothyroidism and hyperthyroidism. 13. Enlist the common causes of thyroid disorders. 14. Describe the clinical features of hypothyroidism and hyperthyroidism. 15. Differentiate between hypo- and hyperthyroidism based upon history and clinical examination. 16. Interpret basic laboratory findings (TSH, T3, T4) relevant to thyroid disease. 17. Formulate a treatment plan for hypo and hyperthyroidism
Oral Medicine			
7.	Foreign body aspiration	1	18. Discuss in detail the causes, clinical features, diagnosis, prevention, management and complications of a patient with foreign body aspiration undergoing dental treatment.
	Neck Swellings	1	19. Enlist the causes of neck swelling. 20. Discuss the modalities used to diagnose neck swellings.
Periodontology			

8.	Maintenance phase	1 hr	21. Describe the Rationale for Supportive Periodontal Treatment Discuss different steps of Maintenance Program 22. Classify the post-treatment patients according to risk-assessment 23. Determine the Recall Intervals for Various Classes of Recall Patients
General Surgery			
9.	Congenital Neck swellings	2 hrs	24. Classify neck swellings (congenital, traumatic, inflammatory, neoplastic) 25. List the different types of congenital neck swellings. 26. List the clinical features of each. 27. List the diagnostic investigations. 28. Discuss the surgical management.
10.	Thyroid gland	4 hrs.	29. Discuss the surgical anatomy & physiology of the thyroid gland. 30. List the investigations done for goiter (thyroid swelling). 31. Classify thyroid swellings (euthyroid, toxic, neoplastic & inflammatory) 32. Describe the pathophysiology and management of solitary thyroid nodule. 33. Describe the pathophysiology and management of multinodular goiter. 34. Discuss different types of thyroid cancer. 35. Outline the management plan for malignancies of the thyroid gland. 36. List the indications for thyroidectomy. 37. Discuss the steps of thyroidectomy, patient positioning and incision used. 38. Discuss the postoperative complications of thyroidectomy and their management.
11.	Salivary gland tumors	2 hrs	39. Classify salivary gland tumours. (Minor & major salivary glands) 40. Discuss the diagnostic investigations done for salivary gland tumours. 41. Discuss the pathophysiology and management of parotid gland tumours (pleomorphic adenoma). 42. Explain the steps of superficial parotidectomy. 43. 5. List the complications of surgery & the management of each.
Prosthodontics			
12.	Impressions in RPD	2 hr	44. Describe various materials used for the impressions of partially 2dentate patients.

			45. Describe the steps involved in impression making of partially dentate patients. 46. Explain possible causes of an inaccurate or a weak cast of a dental arch. 47. Differentiate between anatomic and functional impression techniques. 48. Classify different types of final impression techniques in fabrication of cast partial denture, including: 49. McLeans technique 50. Hindles modification of McLeans technique 51. Functional relining method 52. Fluid wax technique 53. Explain altered cast technique for pouring master cast
Lab Work Oral Pathology			
13	Pleomorphic Adenoma	1	54. Interpret the histopathology of Pleomorphic Adenoma
14	Warthin Tumor	1	55. Interpret the histopathology of Warthin Tumor
15	Mucoepidermoid Carcinoma		56. Interpret the histopathology of Mucoepidermoid Carcinoma
16	Adenoid Cystic Carcinoma		57. Interpret the histopathology of Adenoid Cystic Carcinoma
Theme-II: Neck Pain			
Oral Pathology			

21.	Inflammatory disorders of salivary gland	02	58. Classify inflammatory disorders of salivary glands. 59. Explain the etiology of acute and chronic sialadenitis (bacterial, viral, post-radiation, auto immune). 60. Describe clinical features of acute and chronic sialadenitis 61. Describe histopathological features of acute, chronic sialadenitis. 62. Describe the clinical and histopathological features of necrotizing sialometaplasia and differentiate it from salivary malignancy.
22.	Obstructive disorders of salivary gland	02	63. Define and classify obstructive/reactive disorders of salivary glands. 64. Explain the pathogenesis of mucoceles (extravasation vs retention type) and ranula. 65. Describe the clinical and histopathological features of mucoceles and ranulas. 66. Describe the etiology, clinical presentation, radiographic and histopathological features of sialolithiasis. 67. Differentiate obstructive lesions from neoplastic and inflammatory salivary gland disorders.
Oral Medicine			
23.	Salivary Gland Disorders		68. Recall the functions of saliva

		02	69. Discuss the important points in history and examination for salivary gland disorders. 70. Discuss sialometry and its clinical significance. 71. Discuss the types of salivary gland imaging and their importance in diagnosis. 72. Discuss sialo chemistry and its clinical significance. 73. Discuss in detail the causes, clinical features, diagnosis and treatment of Sialadenitis, Sialosis, excessive salivation and necrotizing sialometaplasia. 74. Define xerostomia 75. Discuss the causes, clinical features, investigations and management of xerostomia 76. Define Sjogren's syndrome 77. Discuss the types of Sjogren's syndrome 78. Discuss in detail the etiology, clinical features, diagnosis, management and complications of Sjogren's syndrome.
Periodontology			
24.	PHASE II/ Surgical Periodontal Therapy, General Principals Of Periodontal Surgery	1 hr	79. Define and explain the purpose of Phase II (surgical) periodontal therapy. 80. Identify and describe the main objectives of periodontal surgery. 81. List and discuss the indications and contraindications for surgical intervention. 82. Identify various armamentarium used in periodontal surgeries 83. Evaluate the factors influencing the selection of surgical techniques. 84. Discuss the general principles governing all periodontal surgical procedures.

			85. Describe the various surgical techniques used in periodontal therapy. 86. Assess prognosis and limitations of surgical outcomes. 87. Plan and implement appropriate postoperative care and maintenance protocols.
25.	Gingival Incisions	1 hr	88. Define the purpose and principles of incisions in periodontal surgery. 89. Classify the types of incisions — 90. Differentiate internal bevel, crevicular, and interdental incisions. 91. Identify indications and ideal locations for each incision type. 92. Describe the technique for precise and atraumatic incision making. 93. Explain factors influencing incision design and healing.
26.	Gingivectomy	1 hr	94. Explain the concept and objectives of gingivectomy in periodontal therapy. 95. Discuss the indications and contraindications for performing a gingivectomy. 96. Identify and outline the instruments, armamentarium, and techniques used for gingivectomy. 97. Explain the step-by-step surgical procedure, including incision design and wound management. 98. Discuss and evaluate the healing process and possible postoperative complications. 99. Describe the importance of plaque control and maintenance following gingivectomy to ensure long-term success.
Pre-clinical Prosthodontics			

27.	Support for distal extension RPDs	1 hr	100. Differentiate between tooth-supported and distal extension removable partial dentures in terms of support mechanisms. 101. Explain the factors influencing support of a distal extension denture base, including: • Residual ridge contour and quality • Extent of denture base coverage • Impression type and accuracy • Denture base fit • Framework design • Total occlusal load applied
General Medicine			
28.	Meningitis	1 hr	102. Define meningitis, and encephalitis 103. Classify Meningitis based on etiology 104. Enlist the common causative organisms of meningitis in different age groups. 105. Discuss the predisposing factors and risks leading to meningitis. 106. Identify clinical features of meningoencephalitis 107. Differentiate between different etiologies of meningitis based on history, clinical examination, and laboratory investigations. 108. Outline the diagnostic approach and laboratory investigations used to identify the causative organism. 109. Describe the principles of management and prophylaxis according to the etiological type of meningitis. 110. Enlist the complications and prognosis in relation to the underlying etiology
29.	Ankylosing spondylitis (AS)	1	111. Discuss the Pathophysiology of AS 112. Recognize the main clinical features through history and clinical examination

			113. Enlist the extra-articular manifestations of AS 114. Formulate a diagnostic workup for AS 115. Formulate a stepwise plan for the management of AS 116. Identify the common side effects of drugs used in AS.
General Surgery			
30.	Inflammatory & obstructive disorders of the Salivary glands.	1	117. Classify salivary gland disorders (cysts, inflammatory, obstructive, neoplastic). 118. Discuss the etiology of sialadenitis. 119. List the clinical features and diagnostic investigations for submandibular gland stones (sialolithiasis). 120. Describe the various surgical techniques employed in the management of salivary gland stones.
Lab Work Oral Pathology			
31.	Mucocele	1	121. Interpret the histopathology of Mucocele
Theme III: Difficulty in Chewing			
Oral Pathology			
31.	Developmental disorders of salivary glands	01	122. Describe the etiology and embryological basis of developmental salivary gland anomalies. 123. Describe the clinical features of salivary gland agenesis/hypoplasia. 124. Explain the functional implications of developmental salivary disorders on mastication, swallowing, and speech

32.	Hyperplastic disorders of oral mucosa excluding epulides	01	125. Define inflammatory fibrous hyperplasia and papillary hyperplasia of palate and traumatic neuroma. 126. Describe clinical features of inflammatory fibrous hyperplasia, papillary hyperplasia of palate and traumatic neuroma 127. Interpret histopathological features of inflammatory fibrous hyperplasia, papillary hyperplasia of palate and traumatic neuroma 128. Briefly describe remaining hyperplastic disorders of connective tissue
33.	Immune mediated salivary gland disorders	02	129. Define Sjogren syndrome, lymphoepithelial sialadenitis and sialadenosis. 130. Discuss the diagnostic findings, clinical Features, and histopathological features of Sjogren Syndrome. 131. Discuss the diagnostic criteria, including serological tests (anti-Ro/SSA, anti-La/SSB), salivary gland biopsy, Sialography, siolometry and Schirmer's test. 132. Briefly describe sialadenosis.
Oral Medicine			
34.	Trismus	1 hr	133. Define trismus 134. Enlist the common causes of trismus 135. Describe the clinical examination of a patient with trismus 136. Discuss the investigations used in evaluating trismus

			137. Establish differential diagnosis of restricted mouth opening 138. Discuss management options for trismus
35.	Tmj disorders	2	139. Discuss in detail the relevant points in history and examination for patients with TMJ disorders. 140. Discuss the imaging techniques (arthroscopy) used to diagnose TMJ disorders 141. Define TMPDS 142. Outline the causes of TMPDS 143. Discuss the clinical features of TMPDS 144. Explain the management of TMPDS 145. Define internal derangement of disc 146. Classify internal derangement of disc 147. Differentiate between disc displacement with and without reduction 148. Discuss the management of each type of displacement 149. Discuss the causes, clinical features, and management option of masseteric hypertrophy
Periodontology			
36.	Resective Periodontal Surgery	1	150. Define and explain the concept, objectives, and rationale of resective periodontal surgery. 151. Describe and differentiate the various types of resective procedures, including gingivectomy, apically positioned flap, and osseous resective surgery

37.	Flaps	1	152. Define and describe the concept and purpose of different types periodontal flap surgery. 153. Classify and differentiate various types of periodontal flaps based on design, placement, and purpose (e.g.,*full thickness, partial thickness, displaced, non-displaced, papilla preservation)* 154. Explain the biologic and surgical principles underlying flap reflection and repositioning. 155. Describe and illustrate the steps involved in flap surgery — incisions, reflection, debridement, closure, and suturing. 156. Identify and discuss the indications, advantages, and limitations of different flap techniques. 157. Evaluate healing responses and clinical outcomes following flap surgery. 158. Discuss the role of asepsis, tissue management, and postoperative care in successful flap outcomes.
38.	Regenerative surgeries	3 hrs.	159. Define and explain the concept and biological basis of periodontal regeneration. 160. Differentiate between regeneration, new attachment, and repair. 161. Identify and discuss the clinical indications and objectives of regenerative therapy. 162. Evaluate the factors influencing regenerative success, including defect morphology, patient factors, and surgical technique. 163. Appraise the clinical outcomes, limitations, and evidence supporting regenerative procedures.
39.	Bone Grafts	1 hr.	164. Define and classify the types of bone grafts used in periodontics — autografts, allografts, xenografts, and alloplasts.

			165. Explain the biological mechanisms of bone grafting — osteogenesis, osteoinduction, and osteoconduction. 166. Describe the indications, advantages, and limitations of each graft material. 167. Illustrate the surgical steps for graft placement and stabilization within the defect. 168. Evaluate healing patterns and outcomes following bone graft procedures.
40.	Guided Tissue Regeneration (GTR)	2hrs	169. Define and explain the concept and principle of guided tissue regeneration. 170. Describe the role of barrier membranes in selective cell repopulation. 171. Classify the types of barrier membranes — non-resorbable and resorbable — and discuss their characteristics. 172. Identify the indications, advantages, and limitations of GTR in periodontal therapy. 173. Outline the surgical steps of GTR, including flap design, membrane placement, and closure. 174. Evaluate clinical outcomes and possible complications such as membrane exposure or infection.
General Medicine			
41.	Rheumatoid Arthritis	1 hr	175. Define rheumatoid arthritis 176. Differentiate arthritis from arthralgia. 177. Describe the pathophysiology of Rheumatoid Arthritis 178. Describe the diagnostic criteria and their clinical implications 179. Identify articular and extra-articular manifestations of RA 180. Recognize the complications of RA. 181. Formulate treatment plan for RA
42.	Seronegative arthritis	1 hr	182. Enlist seronegative arthritis. 183. Describe clinical manifestations of reactive arthritis, psoriatic arthritis, and enteropathic arthritis.

			184. Formulate a diagnostic plan for reactive arthritis, psoriatic arthritis, and enteropathic arthritis. 185. Differentiate among different types of arthritis based on clinical, radiological, and laboratory features. 186. Formulate the treatment plan for reactive arthritis, psoriatic arthritis, and enteropathic arthritis.
43.	Parkinsons disease (PD)	1 hr	187. Define Parkinsonism and list its types 188. Take an appropriate history and and clinical examination to reach the diagnosis of PD 189. Identify clinical features of PD 190. Discuss the differential diagnosis of PD. 191. Formulate a treatment plan for PD. 192. Enlist the drugs used for PD with their side effects 193. Enlist complications of PD.
44.	Tetanus	1 hr	194. Define tetanus 195. Describe its pathophysiology 196. Enlist the types of tetanus 197. Recognize the clinical features of tetanus 198. Describe the principles of management of Tetanus 199. Summarize the prevention of tetanus
Preclinical Prosthodontics			
45.	Occlusal Relationships for RPD	3 hrs	200. Define occlusal relationship for RPD. 201. Describe the different methods of establishing occlusal relationships for removable partial dentures, including: • Direct apposition of casts

			• Interocclusal records with posterior teeth present • Occlusion rims on record bases • Jaw relation records made entirely on occlusion rims • Recording of occlusal pathways 202. Discuss the desirable occlusal contact relationships for various Kennedy classifications of removable partial dentures. 203. Discuss the use of face bow and articulators in partially dentate patient **204.** Discuss teeth selection for RPD patients.
Learning Resources			
	Oral pathology	Textbook of Soams and Southam's Oral Pathology Contemporary Oral and Maxillofacial Pathology Oral and Maxillofacial Pathologies by Neville	
	Oral medicine	Tyldesley's Oral Medicine Textbook Burket's Oral Medicine Diagnosis and Treatment Textbook	
	Periodontology	Newman and Caranza's Clinical Periodontology and Implantology, 14th edition Lindh's Clinical Periodontology and Implantology Dentistry, 7th Edition	
	General medicine	Davidson's Principles and Practice of Medicine	
	General surgery	Bailey & Love's Short Practice of Surgery	
	Preclinical Prosthodontics	McCracken's Removable Partial Prosthodontics Stewart's Clinical Removable Partial Prosthodontics	