

**DETAILED SYLLABUS FOR THE POST OF ASSISTANT PROFESSOR IN ORAL
AND MAXILLOFACIAL SURGERY IN (KERALA MEDICAL EDUCATION
SERVICE) - DIRECT RECRUITMENT**

(Cat.No. 294/2023)

Module I (10 MARK)

1. Armamentarium
2. Sterilization and Disinfection
3. Scrub technique
4. Antimicrobial therapy
 - a. Principles of Antibiotic therapy
 - b. Beta lactams antibiotics, Antiviral antibiotics, Antimycotic antibiotics
 - c. Guidelines of Antibiotic prophylaxis
5. Minor Oral Surgery
 - a. Exodontia
 - b. Dentoalveolar surgery
 - b.i. Principles of incision placement and Flap design
 - b.ii. Surgical management of Impacted teeth
 - b.iii. Complications of Extraction and Dentoalveolar surgery
 - c. Wound healing
 - d. Suture materials and Techniques

Module II (08 MARK)

1. Diagnosis in Oral and Maxillofacial Surgery
 - a. Radiographic examination
 - b. Clinical and Laboratory diagnosis
 - c. Biochemical profiles
 - d. Special Investigations – Biopsy, Sialography, Ultrasound, CT Scan, MRI
 - e. Recent advances in diagnostic aids with reference to OMFS including digital radiography, Scintigraphy and PET Scan

Module III - Anaesthesia (10 MARK)

1. Local anaesthesia
 - a. Neurophysiology and Mechanism of Action

2. Pharmacology of Local anaesthesia, Pharmacology of Vasoconstrictors
3. Techniques of Regional Anaesthesia
 - a. Techniques of regional anaesthesia in Dentistry
 - b. Complications – Local and Systemic
4. General anaesthesia
 - a. Preanaesthetic medication
 - b. Pharmacology of Commonly used Anaesthetic drugs
 - b.i. Intravenous,, inhalational agents and muscle relaxants
 - c. Preanaesthetic analgesia
 - d. Induction, maintenance and extubation procedures
 - e. Cardio pulmonary resuscitation

Module IV (10 MARK)

1. Orofacial and Neck infections and their management
 - a. Etiology, potential spaces,
 - b. Spread of Orofacial infections
 - c. Life threatening complications of Orofacial infections
 - d. Osteomyelitis, osteoradionecrosis, Osteochemonecrosis

Module V - Cyst, Benign tumours and lesions of the head and neck region (10 MARK)

1. Cyst
 - a. Classification, etiology, pathogenesis of cyst formation
 - b. Clinical features, diagnosis, investigation and management
 - b.i. Recent advances
2. Benign tumours
 - a. Odontogenic and non odontogenic tumours
 - b. odontogenic tumours of various origins
 - c. Clinical examination and surgical management of odontogenic tumours
 - d. Non odontogenic lesions of the jaws
3. Fibro osseous lesions
4. Diseases of Maxillary sinus
 - a. Acute and chronic maxillary sinusitis

- b. Cysts of maxillary sinus
- c. Oroantral communication and fistula
- d. Functional endoscopic sinus surgery

Module VI - Maxillofacial Trauma (12 MARKS)

1. General examination
2. Primary assessment and care
3. Airway management
4. Fracture of Mandible
 - a. Classification, clinical features, Diagnosis, different methods of treatment
 - b. Condylar fractures
 - c. Edentulous fractures
 - c.i. Recent advances in management
5. Fracture of Maxilla - LeFort I, II, III
 - a. Classification, signs and symptoms, diagnosis, treatment
 - a.i. Recent advances in the management of middle third fractures
 - b. Fractures of the Zygomatic complex
 - c. Naso orbito ethmoid fractures, Blow out fractures

Module VII - Preprosthetic surgery, Implantology, Temporomandibular joint diseases, Salivary gland diseases (10 MARKS)

1. Preprosthetic surgery
 - a. Alveolar ridge correction
 - b. Ridge extension/ Augmentation procedures
 - c. Vestibuloplasty
2. Implantology
 - a. Classification
 - b. Osseointegration
 - c. Zygoma, pterygoid implants
 - d. Complications of Implant therapy
 - e. Recent advances in Implantology
3. TMJ Diseases

- a. Surgical anatomy
 - b. Hypomobility
 - c. Hypermobility
 - d. Internal derangement
 - e. Surgery of the TMJ
 - f. Myofacial pain dysfunction syndrome
4. Salivary gland diseases
- a. Anatomy
 - b. Classification
 - c. Sialolithiasis
 - d. Tumours of the salivary gland
 - e. Surgical management and complications

**Module VIII - Premalignant and Malignant lesion of the Oral cavity
(10 MARKS)**

1. Premalignant lesions
- a. Leukoplakia
 - b. Erythroplakia
 - c. Submucosal fibrosis
2. Oral Cancer
- a. Etiology
 - b. Diagnosis and staging of oral cancer
 - c. Spread of Squamous cell carcinoma
 - d. Different modalities of treatment with special reference to surgical management
 - e. Neck dissection
 - f. Recent advances in management

Module IX (10 MARKS)

1. Orthognathic surgery
- a. Recognition and etiology of facial deformities
 - b. Assessment of the patient, diagnostic aids - cephalometrics
 - c. Presurgical orthodontic phase
 - d. Osteotomy procedure

- d.i. Maxilla
- d.ii. Mandible

2. Plastic and reconstructive surgery

- a. Cleft lip and palate
- b. Surgical correction post - traumatic deformities
- c. Major flaps used in reconstruction of skin and mucosa
- d. Repair of bone defects
- e. Microvascular surgery in orofacial reconstruction
- f. Distraction osteogenesis
 - f.i. Biology of Distraction osteogenesis
 - f.ii. Stages of Distraction
 - f.iii. Distraction devices

Module X (10 MARKS)

1. Facial esthetics surgical procedures and Recent advances

- a. Rhinoplasty
- b. Liposuction
- c. Face lift procedure
- d. Laser cosmetic procedure
- e. Neuro modulator
- f. Dermal filler
- g. Endoscopy in Maxillofacial Surgery
- h. Tissue engineering and stem cell therapy
- i. Computer assisted surgical planning, virtual osteotomy, 3d printing, 3d planning, stereolithography
- j. Navigation surgery
- k. Piezo surgery

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.