1. Applied Basic Sciences:

The candidate should have a thorough knowledge both on theory and principles in general and particularly the basic medical subjects as relevant to the practice of maxillofacial surgery.

A. Anatomy:

Development of face, paranasal sinuses.

Surgical anatomy of scalp, temple and face, anatomy and its applied aspects of

Triangles & deep structures of neck, cranial and facial bones & surrounding soft tissues

Cranial nerves

B. Physiology:

Blood - its composition hemostasis, blood dyscrasias, hemorrhage and its control,

Digestive system composition and functions of saliva, mastication, deglutition, digestion,

C. Biochemistry: General principles governing the biological principles of the body

D. General Pathology:

Inflammation, repair and regeneration,

Shock types of shock, diagnosis, resuscitation, pharmacological support,

Neoplasm - classification of tumors,

Carcinogens and Carcinogenesis, grading and staging of tumors.

E. General Microbiology:

Immunity,

Hepatitis B and its prophylaxis,

Knowledge of organisms commonly associated with diseases of oral cavity,

F. Oral Pathology And Microbiology:

Developmental disturbances of oral and paraoral structures,

Bacterial, viral, mycotic infection of oral cavity.

Cysts, odontogenic infection, benign & malignant neoplasms, salivary gland diseases,

Maxillary sinus diseases,

G. Pharmacology And Therapeutics:

General and local anesthetics,

Antibiotics

Analgesics

2. **Oral and Maxillofacial Surgery:**
   - Informed consent/medico-legal issues.
   - Concept of essential drugs and rational use of drugs.
   - Principles of evidence based surgery
   - Principles of surgery
   - Medical emergencies
   - Pre operative workup - Concept of fitness for surgery; basic medical work up;
   - Post operative care- concept of recovery room care, airway management
   - Wound management- Wound healing, factors influencing healing, basic surgical techniques
   - Surgical Infections - Asepsis and antisepsis, rational use of antibiotics,
   - Airway obstruction/management
   - Anesthesia - stages of anesthesia, intravenous and regional anesthetics.
   - Facial pain; facial palsy and nerve injuries.
   - Pain control- acute and chronic pain,
   - Clinical oral surgery - all aspects of dento alveolar surgery
   - Pre-prosthetic surgery.
   - Temporomandibular joint disorders - assessment and management.
   - Reconstructive Oral and Maxillofacial Surgery - hard tissue and soft tissue reconstruction.
   - Cyst and tumors of head and neck region and their management
   - Neurological disorders -
   - Maxillofacial trauma - basic principles, primary care, diagnosis and management
   - Orthognathic surgery
   - Laser surgery - The application of laser technology in the treatment of oral lesions
   - Distraction osteogenesis in maxillofacial region.
   - Cryosurgeries - Principles, the application of cryosurgery
   - Cleft lip and palate surgery-diagnosis and treatment planning,
   - Aesthetic facial surgery   .
   - Craniofacial surgery & craniofacial anomalies.
   - Head and neck oncology - principles of head and neck oncology .
   - Micro vascular surgery.
   - Implantology - principles, surgical procedures for insertion of implants.

3. **Allied Specialties:**
   - General medicine: General assessment of the patient
   - General surgery: Principles of general surgery,
   - Neuro - surgery: Evaluation & management of a patient with head injury,
   - Orthopedic: basic principles of orthopedic surgery,
   - Anesthesia: Evaluation of patients for GA technique , knowledge of IV sedation

REFERENCE BOOKS:

1. Oral and Maxillofacial Surgery:Fonseca et al: vol 1:2nd edition
2. Osseointegration in Craniofacial Reconstruction: Branemark et al:Quintessence,1998
3. Current therapy in Oral and Maxillofacial Surgery: Bagheri et al: Elsevier 2012
4. Contemporary Oral and Maxillofacial Surgery:Peterson:4th edition
5. Oral and Maxillofacial Surgery Vol.II: Laskin D.M.
6. Principle of Oral Surgery: Moore J.R