

**Syllabus for the post of**

**Associate Professor, Plastic and Reconstructive Surgery, Class-I**

**(Advt. No. 38/2023-24)**

**Marks – 200**

**Questions – 200**

**Medium - English**

**1. Principles, Techniques, and Basic Sciences**

Techniques and principles in Plastic Surgery, Wound Healing: Normal and Abnormal, Wound care, The Blood Supply of the Skin, Muscle flaps and their Blood supply, Transplant Biology and Applications to Plastic Surgery, Implant Materials and biomaterials, Principles of Microsurgery, Microsurgical Repair of Peripheral Nerves and Nerve Grafts, Tissue Expansion

**2. Plastic surgery and innovation in medicine**

History of reconstructive and aesthetic surgery, Psychological aspects of plastic surgery, The role of ethics in plastic surgery, Business principles for plastic surgeons, Medico-legal issues in plastic surgery, Photography in plastic surgery, Patient safety in plastic surgery, Local anesthetics in plastic surgery, Evidence-based medicine and health services research in plastic surgery, Genetics and prenatal diagnosis, Principles of cancer management, Stem cells and regenerative medicine

**3. Aesthetic**

Managing the cosmetic patient, Aesthetic Surgery of the Face, Nonsurgical skin care and rejuvenation, Botulinum toxin (BoNT-A), Soft-tissue fillers, Facial skin resurfacing, Anatomy of the aging face, Forehead rejuvenation, Blepharoplasty, Secondary blepharoplasty, Asian facial cosmetic surgery, Cutaneous Resurfacing: Chemical Peeling; Dermabrasion and laser resurfacing, Filler Materials, Botulinum Toxin, Structural Fat grafting, Blepharoplasty, Rhinoplasty, Liposuction, Abdominoplasty and Lower Truncal Circumferential Body Contouring, Facial Skeletal Augmentation with Implants, Osseous Genioplasty, Hair Transplantation

#### **4. Facelift**

Facelift: Principles, Facelift: Introduction to deep tissue techniques, Facelift: Platysma-SMAS plication, Facelift: Facial rejuvenation with loop sutures, the MACS lift and its derivatives, Facelift: Lateral SMASectomy, Facelift: The extended SMAS technique in facial rejuvenation, Facelift: SMAS with skin attached –.Facelift: Subperiosteal facelift , Secondary deformities and the secondary facelift

#### **5. Neck rejuvenation, Structural fat grafting, Skeletal augmentation**

Anthropometry, cephalometry, and orthognathic surgery, Hair restoration: A comprehensive review of techniques and safety, Abdominoplasty procedures Lipoabdominoplasty, Lower bodyliftsButtock augmentation, Upper limb contouring Post-bariatric reconstruction, Aesthetic genital surgery

#### **6. Breast**

**1) Anatomy for plastic surgery of the breast**

**2) Cosmetic Surgery of the Breast**

Breast augmentation, Secondary breast augmentation, Current concepts in revisionary breast surgery, Endoscopic approaches to the breast, Iatrogenic disorders following breast surgery, Mastopexy, Breast Reduction, Augmentation Mammoplasty and its Complications, Mastopexy and Mastopexy Augmentation, Breast Reduction: Inverted-T Technique, Vertical Reduction Mammoplasty, Gynecomastia, Breast Reconstruction: Prosthetic Techniques, Latissimus Dorsi Flap Breast Reconstruction, Breast Reconstruction: Tram Flap Techniques, Breast Reconstruction- Free Flap Techniques, Nipple Reconstruction, Reconstructive Surgery of the Breast, Breast cancer: Diagnosis therapy and oncoplastic techniques, The oncoplastic approach to partial breast reconstruction, Patient-centered health communication, Imaging in reconstructive breast surgery, Expander-implants breast reconstruction, Latissimus dorsi flap breast reconstruction, The bilateral pedicled TRAM flap, Free TRAM breast reconstruction, The deep inferior epigastric artery perforator (DIEAP) flap, Alternative flaps for breast reconstruction, Omentum reconstruction of the breast, Local flaps in partial breast reconstruction, Reconstruction of the nipple-areola complex, Congenital anomalies of the breast, Poland syndrome, Contouring of the arms; breast; upper trunk; and male chest in the massive weight loss patient, Fat grafting to the breast

## **7. Principles of Craniofacial distraction**

- **Skin and Soft Tissue**

Dermatology for Plastic Surgeons, Mohs Micrographic Surgery, Congenital Melanocytic Nevi, Malignant Melanoma, Thermal, Chemical and Electric Injuries Principles of Burn Reconstruction, Radiation and Radiation Injuries  
Lasers in Plastic Surgery

- **Congenital Anomalies And Pediatric Plastic Surgery**

Embryology of the Head and Neck, Vascular Anomalies, Cleft Lip and Palate, Non syndromic Craniosynostosis and Deformational Plagiocephaly, Craniosynostosis syndrome Craniofacial Microsomia, Orthognathic Surgery, Craniofacial Clefts and Hypertelorbitism, Miscellaneous Craniofacial Conditions, Otoplasty and Ear, Reconstruction

- **Head and Neck**

Soft tissue and Skeletal injuries of the Face, Head and Neck Cancer and Salivary Gland Tumors, Skull Base Surgery, Craniofacial and Maxillofacial Prosthetics, Reconstruction of the Scalp, Calvarium and Forehead, Reconstruction of the Lips Reconstruction of the Cheeks, Nasal Reconstruction, Reconstruction of the Eyelids, Correction of Ptosis and Canthoplasty, Facial Paralysis Reconstruction, Mandible Reconstruction, Reconstruction of Defects of the Maxilla and Skull Base, Reconstruction of the Oral Cavity, Pharynx and Esophagus, Tumors of Head & Neck

- **Cleft Lip and Palate and Craniofacial Anomalies**

Embryology of head and neck (excluding central nervous system), Regional anatomy of head and neck, Embryogenesis of cleft lip and palate, Cleft lip and palate, alveolar clefts, Velopharyngeal incompetence, Orthodontics, speech therapy in cleft lip and palate, Principles of craniofacial surgery, Rare craniofacial clefts, Tessier's clefts. Craniosynostosis, hypertelorism, craniofacial microsomia

- **Trunk and Lower Extremity**

Thoracic Reconstruction, Abdominal Wall Reconstruction, Lower- Extremity Reconstruction, Foot and Ankle Reconstruction, Reconstruction of the Perineum Lymphedema, Pressure Sores, Reconstruction of the Penis, Diabetic Foot Care

- **Hand**

Plastic Surgeons and the Development of Hand Surgery, Principles of Upper Limb Surgery, Radiologic Imaging of the Hand and Wrist, Soft- tissue Reconstruction of the Hand, Fractures and Ligamentous Injuries of the Wrist, Fractures, Dislocations, and Ligamentous Injuries of the Hand, Tendon Healing and Flexor Tendon Injury, Repair of the Extensor Tendon System, Infections of the Upper Limb, Tenosynoviti, Compression Neuropathies in the Upper Limb and Electrophysiologic Studies, Thumb Reconstruction, Tendon Transfers, Congenital Hand Anomalies Dupuytren's Disease Replantation in the Upper Extremity, Upper Limb Arthritis, Upper Limb Amputation and Prosthesis, Management of Spastic Hands, Basic principles of Wrist Surgery

- **Burns**

Thermal burns, Electrical burns, Chemical burns, Radiation burn, Pathophysiology of burn shock, Nutrition in burns, Facial burns, Tangential excision and sequential excision, Reconstruction of burn hand and upper extremity, Post burn contractures –treatment of sequelae, Burn wound infection, sepsis, Principles of planning in event of burn disaster, Organization of Burns Unit, Principles of Skin Banking

## **8. General Principles**

History of Plastic Surgery and its broad scope at the present time, Anatomy and functions of skin, Split skin grafts and full thickness skin grafts, their take and Subsequent behavior, Local skin flaps, Pedicled skin flaps and tubs, Unstable scar and scar contracture, Care of wounds, dressing, techniques and splints, Wound healing, Grafts – fat; fascia; tendon; nerve; cartilage; bone, Infective skin gangrene, Hospital infections, Suture instruments, Surgical instruments, Implant materials used in Plastic Surgery, Principles of genetics and general approach to the

management of congenital Malformations, Flaps-Fasciocutaneous muscle, musculocutaneous, congenital malformations, Local anaesthesia, nerve blocks, regional anaesthesia, Principles of anaesthesia for infants; adults; hypothermia; hypotensive anaesthesia, Tissue expansion, Keloid, hypertrophic scars, Endoscopy in Plastic Surgery.

**9. RESEARCH METHODOLOGY.**

**10. MEDICO LEGAL ASPECTS RELEVANT TO THE DISCIPLINE.**

**11. INDIAN MEDICAL COUNCIL (PROFESSIONAL CONDUCT, ETIQUETTE AND ETHICS) REGULATIONS, 2002.**

**12. HEALTH POLICY ISSUES AS MAY BE APPLICABLE TO THE DISCIPLINE.**

**13. CURRENT TRENDS AND RECENT ADVANCEMENTS IN PLASTIC AND RECONSTRUCTIVE SURGERY.**