

**SCHEME OF EXAMINATION FOR RECRUITMENT TO THE POST OF DENTAL ASSISTANT
SURGEONS IN MEDICAL AND HEALTH SERVICE**

SCHEME

Part-A (Written Examination (Objective type))				
Paper-1	General Studies & Mental Ability (Degree standard)	150 Marks	150 Questions	150 Minutes
Paper-2	Dental Surgery – I (BDS standard)	150 Marks	150 Questions	150 Minutes
Paper-3	Dental Surgery – II (BDS standard)	150 Marks	150 Questions	150 Minutes
Part-B Oral Test (Interview)		50 Marks		

SYLLABUS

Paper-1: GENERAL STUDIES MENTAL ABILITY

1. General Science – Contemporary developments in Science and Technology and their implications including matters of every day observation and experience, as may be expected of a well-educated person who has not made a special study of any scientific discipline.
2. Current events of national and international importance.
3. History of India – emphasis will be on broad general understanding of the subject in its social, economic, cultural and political aspects with a focus on AP Indian National Movement.
4. World Geography and Geography of India with a focus on AP.
5. Indian polity and Economy – including the country's political system- rural development – Planning and economic reforms in India.
6. Mental ability – reasoning and inferences.

Paper-2: DENTAL SURGERY-I

Paper-1:

APPLIED GENERAL HUMAN ANATOMY - HEAD AND NECK, ORAL ANATOMY AND ORAL HISTOLOGY

1. Osteology: General knowledge of the human skeleton - Detailed knowledge of the bones of the head and neck - articulation - muscle attachment - ossification.
2. Soft Parts: Muscles of head and neck - Muscles of expression - Mastication - Deglutition.
3. Joints: Temporo mandibular Joint.
4. Circulator system: Circulatory system - Lymphatic drainage of the head and neck.
5. Embryology: Development of Face, tongue, lips, jaws, palate, salivary glands, Temporo mandibular joint and tooth.

DENTAL ANATOMY: Macroscopic Anatomy of permanent and deciduous dentition. Age changes in teeth and surrounding structures - Occlusion.

ORAL HISTOLOGY: Macroscopic and Microscopic appearance of Enamel, Dentin, Cementum, Pulp, Periodontal Ligament and Alveolar Bone.

APPLIED GENERAL HUMAN PHYSIOLOGY AND ORAL PHYSIOLOGY:

1. Blood: Structure - composition - function and blood coagulation.
2. Respiration: Mechanism of respiration - chemical changes in blood and air - interchanges of gases.
3. Alimentary system: Physiology of mastication - salivary, Gastric and Intestinal degestion - Role of Liver, Pancreas and Galbladder.
4. Nutrition: Chemistry of food, their digestion, absorption and assimilation
5. Endocrines: Thyroid, Para thyrod, Adrenals, Pituitary and Gonads.

ORAL PHYSIOLOGY:

1. Saliva: Secretion, composition and functions.
2. Calcium Metabolism: Calcium metabolism - relating to oral structures.
3. Teeth: Development of teeth, Eruption, resorption and shedding.
4. Vitamins: Vitamins and minerals - influence on oral structures.

ORAL PATHOLOGY:

1. Inflammation - Mechanism - Varieties and results.
2. Healing of Jaw fractures and complications.
3. Healing of the Socket following extraction.
4. Repair following Root fracture.
5. Healing and repair of Periodontium after Root Canal Therapy.
6. Developmental abnormalities of Teeth.
7. Acquired changes of the Teeth.
8. Dental Caries.
9. Regressive changes in tooth structure.
10. Inflammation of the pulp.
11. Acute and Chronic conditions of the Periodontium
12. Common Tumors and Cysts of the Oral Cavity.
13. Neuralgias - Trigeminal - Glossopharyngeal neuralgias.

ORAL MICROBIOLOGY:

1. Sterilization and Disinfection
2. Infection and Immunity.
3. Pathogenic Microorganisms of oral cavity - Culture Media and methods.
4. Relationship of oral Sepsis and Focal infection to general and systemic diseases.

APPLIED BIO-CHEMISTRY RELATING TO DENTAL SURGERY:

1. Principles and Clinical applications, Structure and Properties of: Amino acids, Peptides, Proteins, Enzymes and Co-enzymes.
2. Metabolism of: Minerals, Carbohydrates, Fats, Proteins.

APPLIED GENERAL AND DENTAL PHARMACOLOGY:

GENERAL PHARMACOLOGY:

1. Chemotherapy - Sulfonamides and Antibiotics.
2. Drugs acting on Blood - Coagulants and Anti-coagulants - Haemostatics.
3. Drugs Acting upon Central Nervous System - General Anaesthetics - Hypnotics, analgesics, Psychotropic drugs, epileptic and anti-epileptics, muscle relaxants, analeptics, Local Anaesthetics.
4. Sialogogues and Anti-sialogogues.

DENTAL PHARMACOLOGY:

Antiseptics - astringents - obtundents - mummyfying agents - bleaching agents - Styptics - Disclosing agents - Dentifrices and Mouth washes.

DENTAL BIOMATERIALS:

1. General and Physical properties of Gypsum products - Impression materials - Denture base resins - Restorative Resins and direct bonding cement materials.
2. Metals and Alloys: Structure, behaviour and physical properties - Dental Amalgam alloys - Gold foil - Dental casting gold alloy - Stainless Steel - Chrome Cobalt alloys - Titanium.
3. Dental Cements: Zinc cement - Copper cement - Zinc Oxide Eugenol cement - Silicate cement - Cavity Liners - Cavity Varnishes and Resin cements.

Paper-3: DENTAL SURGERY-II

ORAL MEDICINE:

1. Method of diagnosis including special investigations.
2. Acute infections of Oral and Para Oral structures.
3. Blood dyscrasias and their management.
4. Metabolic and Endocrine disturbances and their Oral manifestations.
5. Nutritional deficiencies - their significance in Dentistry.
6. Oral sepsis and its effects on General system.
7. Dysfunctions of Temporomandibular Joint.
8. Diseases of Salivary Glands.
9. Facial Pain.
10. Radiological Interpretation of abnormal dental and Jaw conditions.
11. Radiation treatment in oral and Facial conditions and their sequelae. Biological effects of Radiation.

ORAL AND MAXILLO-FACIAL SURGERY:

1. Techniques of infiltration and Nerve block Anaesthesia - Complications associated with local anaesthesia and management.
2. Short anaesthesia in Dental Office - Endotracheal anaesthesia - Intra venous anaesthesia and general anaesthetics in Dentistry.
3. Forceps Extractions - Surgical Extractions - Complications and their management.
4. Emergencies in Oral Surgery - their Management.
5. Inflammatory diseases of the Jaw Bones.
6. Benign Cystic lesions of the Jaws - their Management.
7. Trismus and Ankylosis - Its management.
8. Fractures of the Jaws - Treatment - Complications - its Management.
9. Odontogenic Tumors - its treatment.

PERIODONTICS:

1. Aetiology of Periodontal diseases.
2. Diagnosis and Prognosis of Periodontal diseases.
3. Treatment of all Gingival and Periodontal disturbances - Treatment planning - Phases rationale - Healing Mechanism.
4. Drugs in Periodontics.
5. Periodontal Splints.
6. Plaque Control.
7. Biological and Clinical aspects of Dental Implants.

CONSERVATIVE DENTISTRY:

1. Principles of Cavity preparation Design and - Control of Pain - Prevention of damage to hard and soft tissues during operative procedure.
2. Choice of filling materials.
3. Pulp and soft tissue protection.
4. Diagnostic Aids in Endodontics.
5. Treatment of Vital and Non-vital pulp.
6. Bleaching of Teeth.
7. Surgical treatment in Endodontics.

ORTHODONTICS:

1. Genetics applied to Orthodontics.
2. Malocclusions - Aetiology - Types and different classifications.
3. Preventive and Interceptive treatment of Malocclusion.
4. Appliances used in Orthodontic treatment.
5. Habit breaking appliances.
6. Tissue change in Orthodontic treatment.

PROSTHODONTICS:

1. Mouth examination and preparing patient for Complete Dentures.
2. Choice of Impression Materials.
3. Concept of Occlusion.
4. Articulators and Face Bow and other Gadgets.

5. Immediate Dentures.
6. Periodontal aspects of partial dentures.
7. Systemic methods of designing partial dentures.
8. Principles of preparation of Retainers for Fixed Partial Dentures.
9. Latest trends in Materials and Techniques in Fixed Prosthodontics.

PEDODONTICS:

1. Child Psychology and management of Child patient.
2. Clinical Pedodontics.
3. Teething and Developmental Anomalies.
4. Dental Caries in Children and prevention.
5. Restorative Dentistry.
6. Space maintainers.
7. Treatment of Traumatized teeth.
8. Stomatological condition in Children.
9. Mouth habits and management.

COMMUNITY DENTISTRY AND FORENSIC ODONTOLOGY:

1. Demographs - Population statistics in relation to Medical and Dental health - 2. Biostatistics - Statistical methods and tests - 3. Public health Dentist and Dentistry - 4. School Dental health Service - 5. Fluorides and Human body - 6. Oral Cancer - Prevention - individual and Community level -- 7. Legal procedures - Evidence, witness and expert witness - 8. Injuries - Recording and registering - 9. Dentist and Legal problems in the profession - consumer councils.

Sd/- Secretary