

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER
Syllabus for Screening Test for the post of
Senior Demonstrator-Dentistry
Medical & Health Department

A. Medical Subjects :-

- Detailed Anatomy & Osteology of Head & Neck
- Arterial Supply & Lymphatic drainage of the head & neck
- Study of cranial nerves – in detail extracranial course 5th, 7th
- Histology of Oral tissues
- Basic chemistry & fate of haemoglobin, blood groups, WBC types, number, variations, function, formation, circulation.
- Pituitary gland - Hormones, actions & abnormal function.
- Inflammation - Acute & chronic inflammation, repair of wound.
- Hemorrhage, Shock, Syncope
- Circulatory disturbances & Hypertension.
- Introduction to Bacteriology with special reference to medical & Dental Bacteriology.
- Immunity & immunizing agents.
- Biochemistry applied to Dental Science.
- Cardiovascular Drugs - Vasopressor agents & treatment of shock.
- Dosage & mode of administration of drugs
- Role of Calcium and vitamins in growth and development of oral tissues
- Drugs acting on blood - anticoagulants, coagulants & hematinic
- Vitamins, proteins, minerals & trace elements
- Antiseptics, astringents.
- Medical emergencies in Dental practice.
- Congenital & rheumatic heart disease.
- Anaemia, coagulation defects, bleeding diseases
- Allergy, Drug reactions

B. Dental Subjects :-

- Immunity, knowledge of organisms commonly associated with diseases of oral cavity.
- Study of Human masticatory apparatus and its functions in healthy and deranged occlusal states & in conditions incidental to partial or complete loss of teeth and/or facial structure.

- Study of the principle, procedures and techniques of constructing and maintaining various types of dentures and allied prosthesis including the material used.
- Study of biological & mechanical considerations related to various types of dentures and allied prosthesis.
- Applied anatomy, physiology, biochemistry of the periodontium.
- Characteristics of periodontal diseases, etiology, pathogenesis and microbiology.
- Periodontal Therapeutics.
- Surgical aspects of Periodontics.
- Traumatic periodontal disturbances.
- Inter relationship of periodontal with other dental or clinical disciplines.
- Public health aspects of Periodontal diseases.
- Preventive Periodontics.
- Current advances in periodontics. Guided bone regeneration, procedure/technique, uses and various types of membranes.
- Basics of laser, types & uses in dentistry.
- Various types of bone grafts & their uses.
- History and rationale of conservative procedures.
- Pathologic and non-pathologic lesions of the hard tissues of the teeth, advanced knowledge of etiology, diagnosis, treatment and prevention.
- Modern development & advanced knowledge of restorative materials, procedures, cutting tools, drugs and chemicals used in conservative dentistry.
- Modern biological & mechanical concept.
- Dental caries-detailed study of research, methods used in studying Dental Caries and its prevention.
- Conservative dentistry in relation to other branches of dentistry including geriatric dentistry.
- History and rationale of endodontic procedures.
- Pulp and periapical pathology, advanced knowledge of etiology, diagnosis, treatment and management of pulp involved in teeth.
- Bacteriological investigations and intra coronal medication.
- Advanced knowledge of development of root canal instruments their sterilization and use. Advanced knowledge of restorative materials and operative procedures in endodontics.
- Etiology, treatment of fractured and traumatized teeth.
- Endodontic procedures for reimplantation of teeth and fundamentals of surgical procedures for reimplantation of teeth.
- Surgical Anatomy to approach various organ, like mandible maxilla & T.M.J.
- Metastasis, infections, osteo radionecrosis.
- Surgical procedures of
 - Diseases and defects of oro facial region.

- Prosthetic and orthodontics problems.
- Recent advances in oral and maxilla facial oral surgery in medically compromised patient.
- General Anaesthesia.
- Fracture of middle third & Mandible.
- Growth & development, Anthropology, Genetics, Embryology, Statistics, Nutrition, normal occlusion and variations.
- Malocclusion, Etiology of malocclusion, radiology and Cephalometry, preventive & interceptive orthodontics, corrective orthodontics, development of orthodontics.
- Appliances and techniques.
- histological changes related to orthodontics treatment, retention and anchorage.
- Clinical pathology & microbiology as applied to oral & facial lesions.
- Congenital & hereditary disorders involving lesions of oro facial region.
- Systemic diseases with oral manifestation.
- Hematological, dermatological & neurological condition with oral manifestation.
- Salivary glands disorders.
- Disease of reticulo endothelial system & auto immune diseases.
- TMJ Dysfunction.
- Allergy, Forensic odontology & other miscellaneous. Conditions.
- Neoplasm, cysts and premalignant lesions and their management.
- Hazards of radiation.
- Radiological techniques of head & neck region Including C.T. Scan, MRI & Dentascan.
- Radiological anatomy of head & neck & interpretation of X-ray films.
- Principles of Oral and Dental health in children.
- Diagnosis – Examination, diagnostic aids, diagnosis and treatment planning.
- Clinical Pedodontics-
 - Management of developmental anomalies, teething disorders, Dental caries, traumatized teeth, problems of primary & mixed dentition, premature loss of teeth, mouth habits and stomatologic conditions.
 - Management of handicapped child.
 - Oral surgical procedures of child patient.
- Preventive Pedodontics- epidemiology, general and specific preventive measures.
- Psychology-Psychological development from birth to adolescence.
- Management of child in Dental office.
- Study of principles of reactive & special techniques used for histopathology including principles of histochemistry as related to oral pathology.
- Advanced & histopathologic study of dental & oral tissues including embryologic consideration.

- Oral microbiology & their relationship to various branches of dentistry.
- Study of principles & techniques of oral cytology and oral biopsy procedures.
- Forensic dentistry.
- Recent advances in dentistry.
- School and dental public health programme.
- Preventive Dentistry.
- Concept of prevention level and application of various preventive measures at individual and mass level preventive programme in dentistry.
- Dental auxiliaries.
- Fluorosis & various preventive methods.
- Fluoridation, norms for potability, purification of water.
- Importance of nutrition on health, common disorders related to nutritional deficiencies.
- Disposal of wastes, pollution & radiation hazards, occupational hazards.
- Epidemiology.
- Ethics , Dental council of India, Indian Dental Association.
- Basics of oral implantology, various types, procedures and their implication in relation to systemic diseases.

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Note :- Pattern of Question Paper

1. Objective type paper
2. Maximum Marks :100
3. Number of Questions :100
4. Duration of Paper : Two Hours
5. All questions carry equal marks.
6. There will be Negative marking.

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