

## Annexure "H"

### **Syllabus for the post of Junior Dental Technician**

**Marks :-120**  
**Time :- 2.00 Hours**

➤ **General Human Biology & Disease** **(Marks 10)**

- Elementary Physics and Chemistry.
- Characteristics of living matter.
- The Structure of living matter.
- The Tissues
- Systems and various parts of human body.
- Development and types of Bones.
- Bones of Head & trunk.
- Bones of the Limb.
- Joints and Articulations
- Structure and Action of muscles
- The Chief Muscles of the Body
- The Blood
- The heart and Blood Vessels
- The Circulatory system
- The Respiratory System
- The Digestive System
- The Liver , Billary system and Pancreas
- Nutrition and Metabolism
- Endocrine Glands and Exocrine
- The Urinary System
- The Nervous system.
- The Ear.
- The Eye
- The Skin
- The Reproductive System etc.

➤ **Dental Anatomy & Physiology Pharmacology, Pathology including Microbiology** **(Marks 10)**

✓ **General & Dental Anatomy** **(Marks 10)**

- Elementary Knowledge of the jaws and teeth, Important between deciduous and permanent teeth. Chronology of eruption , elementary knowledge of occlusion of teeth. Relationship of teeth with investing tissues, muscles of mastication facial expressions and elementary knowledge of temporary mandibular joints.

➤ **General & Dental Physiology and Histology** **(Marks 10)**

- Elementary knowledge of the structure and function of various dental and oral tissues e.g. gingival, peridontal membrane, alveolar process , cementum, enamel,dentine, mucous-membrane , pulp.
- Salivary glands and functions of salivation, mastication.

➤ **General and Dental Pharmacology** **(Marks 05)**

- The Therapeutics drugs commonly used in dentistry and their effects. Practical diagnosis, dispensing of drugs.

✓ **Dental Radiology** **(Marks 05)**

- Technical aspect of Dental Radiograph i.e. the taking, processing and mounting of Dental Radiographs, Radiation Hazards and protection against radiation.

➤ **General Dentistry including Oral Surgery** **(Marks 30)**

General knowledge of various materials used in Dentistry such as impression material, Gypsum products, waxes, investing materials and various filling materials temporary and permanent.

✓ **Chairside Assistants**

- Reception of Patient.
- Lay-out of reception room and Dental Surgery and Hygienist Clinic.
- Chairside Assistance and Techniques
- Local anesthesia and equipment.
- Methods of Sterilization and care of Dental Instruments.
- Basic principles in surgery.
- The use of instruments in Dental practice.
- Examination of Oral Cavity and Charting of teeth etc.
- Instructions to patients and recalls.
- Maintenance of Dental Unit / Instrument.

➤ **Prosthodontics with Cosmetology** **(Marks 15)**

- Introduction and applied anatomy.
- History taking and Examination.
- Simple surgical preparation, impression taking.
- Selection of patient.
- Phonetics and anatomical articulation.
- Clasp retained partial denture-plan, treatment, design and management.
- Partially edentulous arches.
- Connectors- major and minor and functions.
- Retainers direct and indirect.
- Dentures functions, biomechanics, Survey, diagnosis, planning, partial and temporary relining, resilient lining, aids to retention and relief.
- Cosmetology and appearance.
- Dental Materials and its manipulation.

➤ **Orthodontics** **(Marks 10)**

- Etiology, Classification and malocclusion.
- Skeletal maturation, growth, dentition with special reference to endocrinology.
- Classification of dentofacial abnormalities, anthropometrics, cephalometrics.

- Examination of patient, differential diagnosis and treatment planning .
- Principle of mechanotherapy
  - Basics about tweed method, twin wire appliance, activators , plates appliances including tissue reaction and evaluation of treatment.

➤ **General Hygiene, Nutrition, Community welfare, Conservative & Preventive Dentistry :**

✓ **Dental Hygiene and Oral Prophlaxix – (Marks 15)**

- Definition of Hygiene.
- Objective of Dental Hygiene.
- Oral prohlyaxis-various methods.
- Stains on teeth-and their management.
- Dental Plague, Dental calculus.
- Brief description and the role of oral Prophylaxis in Gingivitis, Peritonitis etc.

✓ **Clinicals –**

- Instruments, technique of Oral Prophylaxix.
- Polishing of teeth.
- Topical application of fluorides.
- Care of Oral Cavity and appliances during treatment of Maxillo-facial cases.

➤ **Conservative & Preventive Surgery** **(Marks 10)**

- Dental Caries-Prevalence and Prevention.
- Peridontial Diseases, saliva in relation to Dental Health and diseases.
- Dental Health &Diseases.
- Dietary habits and dental Health , Maiocclusion , Oral Cancer.