



ALL INDIA COUNCIL FOR VOCATIONAL AND PARAMEDICAL SCIENCE

SYLLABUS
OF

DIPLOMA IN DENTAL TECHNOLOGY – DDT10

REGULAR PROGRAMME

DIPLOMA IN DENTAL TECHNOLOGY – DDT10

Eligibility : 10th

Programme Duration : 2 Years

PROGRAM OVERVIEW

A dental laboratory technician is trained craftsman who works with precision, great concentration and patience, with high standard of hand skills. As a member of dental health team, a dental laboratory technician provides a service to dentists by constructing for them a variety of appliances to repair, replace, or reposition teeth of patients whose natural teeth are broken, missing or need repositioning.

The program provides theoretical and technical training for the construction of these dental appliances.

Course in specialized techniques are presented to students in laboratory, demonstration and lecture classes. Practical laboratory work is emphasized in the courses to prepare the student for employment. Health Science Courses for dental personnel complete the program.

MAJOR SKILLS ACQUIRED

Design and construction of complete dentures, removable partial dentures, fixed partial dentures, orthodontic appliances.

Dental Technicians usually concentrate on one area of dental technology after graduation and specialize in denture construction, metal and porcelain bridge work, or tooth repositioning appliances. A licensed or registered Dental Laboratory Technician may own and operate a dental laboratory to provide services to a dentist, a number of dentists, or a group practice of dentists.

TYPICAL EMPLOYERS

Dental laboratories, dental practices.

COURSE OUTLINE

First Year Courses

DTC 021 Dental Anatomy and Terminology
DTC 031 Complete Dentures
DTC 041 Partial Dentures
DTC 051 Tooth Morphology
DTC 091 Dental Materials
DTC 071 Fixed Prosthodontics

Second Year Courses

DTC 131 Complete Dentures Construction

DTC 021 DENTAL ANATOMY AND TERMINOLOGY

A study of anatomy and terminology related to construction of dental appliances.

DTC 031 COMPLETE DENTURES

Students will be given an overview of complete denture construction. They will learn the anatomy and physiology of the mouth and associated structures. They will learn to pour impressions, fabricate impression trays, and construct occlusion rims. They will begin arranging artificial teeth for complete dentures, using various tooth forms and arch relationships.

Students will be given laboratory projects in complete denture construction. Use of heat polymerizing denture base acrylics, Basking, packing and recovering complete dentures.

Students will be able to repair broken dentures.

DTC 041 PARTIAL DENTURES

Principles and major component parts for removable partial dentures. Partially edentulous classification, principles of survey and design, cast design, contour soldering, tooth arrangement and wax-up, process and finishing.

Students will be introduced to the materials and equipment necessary to complete all of these stages involved in the construction of removable partial dentures.

Students will construct cast metal framework. Master cast duplication, refractory cast waxing, investing, burnout and casting, trimming, tooth arrangement, process and finish.

DTC 051 TOOTH MORPHOLOGY

An introduction to tooth morphology and the elements of occlusion. Materials, instruments and techniques will be used to model oversized wax teeth. Life size wax patterns of occluding teeth surfaces will be constructed.

DTC 061 DENTAL MATERIAL

To study physical and chemical properties of materials used in dental appliance construction. Testing and comparisons of dental materials.

DTC 071 FIXED PROSTHODONTICS

The last wax method of constructing fixed dental restorations. Occluding metal crowns will be constructed on models of articulated posterior dentitions. Metal crowns, pontics.

DTC 131 COMPLETE DENTURES CONSTRUCTION

Students will process complete dentures and perform post-processing occlusal refinement

Students will construct single dentures and immediate dentures with surgical template. They will continue to improve standards in the various phases of denture construction. The work also will be completed within an established time-frame.

DTC 141 PARTIAL DENTURE CONSTRUCTION

The study and construction of removable orthodontics. Contouring of wires to complete various techniques in anchorage, retention and tooth movement.

A further study into removable cast partial frameworks. Prescriptions, principles of design, spruing techniques. Processing in cold cure, pour and heat cure techniques will be used in the finishing of the repair partial denture frameworks.

DTC 171 FIXED PROSTHODONTICS

Stress directing attachments in Fixed partial dentures. Designing metal structures for ceramodontal restorations.

Dental porcelains and aesthetic restorations. Dental porcelains and ceramodontal techniques will be used to construct aesthetic individual crown, maxillofacial appliances are constructed, also various splints, obturators are constructed.

DTC 181 PRACTIUM

Students who complete assignments satisfactorily, will work in the hospital during the course to acquaint them with conditions, techniques and employment opportunities in specified laboratories and dental offices.

QUOTA OF THE PRACTICAL

1. Complete Denture	30
2. Partial Denture	40
3. Crown and Bridge	20
4. Relining and Rebasing	25
5. Splint, obturators BRA, Jaw exercise.	15
6. Orthodontics appliances, cast partial denture	25
7. Study Models	20
8. Maximum Attendance	60%