

**SCHEME OF STUDIES AND EXAMINATION  
DIPLOM IN DENTISTRY**

**I ST YEAR**

SL NO	SUBJECT	THEORY		PRACTICALS		TOTAL	
		Hours	Marks	Hours	Marks	Hours	Marks
	PART-A						
	1.Communication skill in English	245	75	65	25	320	100
	2. General Foundation Course( Computer applications)	150	50	130	50	280	100
	Vocational subjects PART-B						
	1. Applied Oral Anatomy	145	75	275	50	420	125
	2.Dental Mechanics	145	75	275	50	420	125
	3. dental materials	140	50	----	---	140	50
	PART-C						
	On Job training (project work)			245	50	245	50
	TOTAL	825	325	990	225	1825	550

**II nd YEAR**

SL no	SUBJECT	THEORY		PRACTICALS		TOTAL	
		Hours	Marks	Hours	Marks	Hours	Marks
	PART-A						
	1.Communication skill in English	245	75	65	25	245	100
	2. (Computer applications)	150	50	130	50	245	100
	Vocation subjects PART-B						
	1. Dental Mechanics and Orthodontic	165	100+25	495	75	655	200
	2.Dental Metaelurgy	325	100+25	---	---	325	100
	PART-C						
	On Job training (project work)	---	----	245	50	245	50
	TOTAL	885	375	935	200	1715	550

**I YEAR: PAPER-I SYLLABUSE DIPLOMA IN DENTISTRY**  
**APPLIED ORAL ANATOMY (THEORY)**

(Hours: 145 Marks: 50+25=75)

**Introduction: -**

Dental Formulae

Chronology

Parts of tooth

ELEMENTARY ANATOMY OF STRUCTURE OF DENTURE BEARING AREA

ANATOMICAL LANDMARKS

HUMAN DENTITION AND OCLUSION

FUNCTIONS OF TEETH

MORPHOLOGY OF CROWNS OF TEETH

Upper central incisor to 2<sup>nd</sup> molar

Lower central incisor to 2<sup>nd</sup> molar

MUSCLES OF MASTICATION

MUSCLES OF FACIAL EXPRESSION  
NERVE SUPPLY OF MAXILIARY AND MANDIBULAR TEETH  
BLOOD SUPPLY OF MAXILIARY AND MANDIBULAR TEETH  
TEMPOROMANDIBULAR JOINT  
JAWBONES  
Maxilla  
Mandible

**APPLIED ORAL ANATOMY (PRACTICALS)**  
**(Hours: 275, Marks: 50)**

Preparation plaster blocks  
Tooth carrying on plaster blocks  
Upper and lower central incisor to 2<sup>nd</sup> molar  
Teeth carving on wax blocks

**Ist YEAR: PAPER-II**  
**DENTAL MECHANICS (PRIMARY)-THEORY**

Hours – 145  
Marks: - 50+25=75

Introduction  
Dental formulas  
Chronology  
Anatomical landmarks  
IMPRESSION TRAYS TYPES  
PRIMARY IMPRESSION CRE AND CASTING THE IMPRESSION WITH VARIOUS  
MATERIALS FINAL IMPRESSIONS, BEEDING AND BOXING OF IMPRESSION  
CONSTRUCTION OF SPECIAL TRAYS WITH  
Shellac Base plate  
Self cure acrylic  
With spacers  
Without spacers  
CAST PREPERATION TRIMMING INCLUDING ORTHODONTIC COSTS  
PREPERATION OF OCCUSSAL RIMS  
ARTICULATORS-Parts classification, adjustments mounting of cast  
SELECTION OF TEETH  
PRINCIPALS OF TEETH SEETING  
TEETHSETTING AND WAXING-FINISHING  
PARTICULATION, OCCLUSAL PLANE, CURVE OF SPEE, COMPENSATING CURVE, BALANCING  
BIET, PROTBUSIVE BALANCE, OVER JET, OVER BIET, KEY OF OCCLUSION  
FLASKING, DEWAXING, PACKING, CURING, DEFLASKING, FINISHING AND POLISHING OF  
DENTURES  
Denture Relining, Rebasing  
Denture Repairs  
Kennedy's classification of partial dentures  
Principles of partial denture design  
Surveyor-Surveying path of insertion and path of removal  
Designing of Clasps, parts of clasp, Principles of Wire bending,  
Occusal rests, lingual bars and various component parts of partial denture  
General Principles of denture retention

**I YEAR: PAPER-III**  
**DENTAL MATERIALS (PRIMARY) (THEORY)**

1. The Science of Dental materials : Introduction
2. Gypsum and Gypsum Products
3. Impression materials RIGID
4. Elastic impression materials
5. Irreversible Hydro Colloid : ALGINATE
6. Electrometric impression materials
7. Denture Base Materials
8. Dental cements

9. Direct filling Gold
10. Dental casting alloys
11. Dental waxes
12. Dental casting investment materials
13. Modal cast and die materials
14. Dental ceramics
15. Abrasive and polishing agents

**Ist YEAR**

**DENTAL MECHANICS (PRACTICALS) PAPER-II**

(No. of Hours: 275, Marks: 50)

Preparation of dentulous and edentulous casts

Preparation special trays

Shellac base plate

Self cure acrylic

With spacer

Without spacer

**PEPARATION OF COMPLETEDENURE**

Base plate adoption

Preparation of occlusal rims

Mountion of the casts

Teeth setting

Max carving finishing

Flaking

Dewaxing

Packing

Curing

Deflasking

Timing sand papering, polishing

**PREPERATION OF PARTIAL DENTURE**

Preparation dentulus costs for Kennedy's Classification

Base plate adaptation

Occlusal rims preparation

Teeth setting

Wax carving finishing

Flasking

Dewaxing

Packing

Trimming, sand Papering, Polishing

Denture Relining, Rebasing

Denture Repair

**ON THE JOB TRAINING (Ist YEAR)**

**SIES**

1. Dental labs (Private)
2. corporate hospitals

**SYLLABUS**

**I FARRICATION OF COMPLETEDENTURE**

- a. Case Preparation
- b. Base plate Adaptation
- c. Occlusal Rims Preparation
- d. Mounting
- e. Teeth Setting
- f. Waxing & Carving
- g. Flasking
- h. Dewaxing
- i. Curing

- j. De Flasking
- k. Trimming sand Papering Polishing

## **II FABRICATION OF REMOVABLE PARTIAL DENTURES**

- 1. Self cure acrylic
- 2. Heat cure acrylic

### **EVALUATION**

The marks may be allotted to

- 1. Observation of work by supervisor
- 2. Viva or Interview
- 3. Report

### **II nd YEAR :PAPER-I**

## **DENTAL MECHANICS & ORTHODONTIA (FINAL) THEORY**

(Hours: 165, Marks: 125)

### **INTRODUCTION:**

Crown and Bridge  
Importance, Advantages

### **CASTING**

Centrifuge casting machine  
Pressure casting machine  
Induction casting machine  
Casting furnaces and procedures involved

### **PRINCIPLES OF CASTING**

CASTING TECHNIQUES OF BRIDGES, FULL CROWNS, OCCLUSAL RESTS PARTIAL DENTURE (SKELETON)

WAXPATTERN FABRICATION

INVESTING PROCEDURES-Spurring the wax pattern and investing

COSTING PROCEDURES-Burnout procedures

METAL TRIMMING, FINISHING AND POLISHING

INLAYS-Classification

TYPES OF ABUTMENTS

VARIOUS PNTIC DESIGNS

COBALT CHAROMIUM DENTURE BASES

WROUGHT ALLOY DENTURE BASES

CAST GOLD RESTORATION

CERAMIC TYPES OF CERAMIC MATERIALS

CERAMIC HI-CEREMIC, METAL FUSING CERAMIC

MAXILLA FACIAL PROSHONISIS-Obturator, Splints mouth guards

CAST DUPLICAION VARIOUS METHODS

IMMIDATE DENTURES CONSTRUCTION

## **DENTAL MACHANICS & ORTHODONTIA (FINAL) THEORY**

### **I. INTRODUCTION**

Definition  
Nature of Malocclusion  
The Need for orthodontic treatment

### **II. JALOCCLUSION**

Malposition of Individual teeth  
Classification of malocclusion

### **III. AETIOLOGY**

### **IV.APPLIANCE THERAPY IN GENERAL**

Histological aspects of tooth movements  
Mechanical appliances  
Functional appliance  
The component parts of mechanical appliance  
Designing on appliance  
Material used in the construction of appliance  
Designing on appliance  
Material used in the construction of appliances  
Soldering

Welding

**V. REMOVABLE AND FUNCTIONAL APPLIANCES**

Removable appliances in which screws are incorporated

Removable appliances with auxiliary springs

The construction of removable appliances with screws & springs

**FIXED APPLIANCES**

Molla Bands

Incisor Bands

Attachments

Labial lingual appliances

Spring or flexible bows

Local fixed appliances

**VII. RETENTION AFTER TREATMENT**

**IIInd YEAR : PAPER-I**

**DENTAL MECHANICS (FINAL):PRACTICALS**

(Hours: 615, Marks: 50)

Preparation of wax pattern

Spruing of wax pattern

Investing wax pattern

Burnout wax pattern

Casting

Metal trimmings, Finishing and polishing

Preparation of cast's partial denture

Preparation of maxilla facial prosthesis

Ceramic-ceramic – Hyceremaic, Metal fused ceramic

**ORTHODONTICS (PRACTICALS)**

Study Model Preparation

Long and Short labial bow

Lingual bow

Canine retractor

Adams Clasp

Bite Planes

Habit breaking appliance

Space maintainers

Z-Spring

T-Spring

Finger spring

Oral screen

Activator

Welding and soldering

**Paper: II**

**DENTAL METALLURGY (THEORY)**

(Hours: 325, Marks: 100)

**COURSE CONTENT:-**

Metallurgical Terms

General Properties of Metals

Study of:-

1. Metals used in dentistry particularly, Gold, Silver, Copper, Zinc, Tin, Lead and Aluminum
2. Alloys used in dentistry casting Gold, Wrought, Gold, Silver alloys, Stainless steel, Cu.....

Heat treatment - annealing tempering

Solders, fluxes, antfluxes

Tarnish and corrosion

Electric deposition

Dies-counter dies-electroforming

Stainless steel

Soldering and welding

Chrome cobalt casting

Metal polishing materials

