

1. ORTHODONTICS & DENTAL ORTHOPAEDICS – IV BDS

1. Introduction, Definition, Historical Background, Orthodontics And Need For Orthodontics Care
2. Growth And Development: In General
 - a. Definition
 - b. Growth spurts and Differential growth
 - c. Factors influencing growth and Development
 - d. Methods of measuring growth
 - e. Growth theories (Genetic, Sicher's, Scott's, Moss's, Petrovics, Multifactorial)
 - f. Genetic and epigenetic factors in growth
 - g. Cephalocaudal gradient in growth.
3. Morphologic Development Of Craniofacial Structures
 - a. Methods of bone growth
 - b. Prenatal growth of craniofacial structures
 - c. Postnatal growth and development of: cranial base, maxilla, mandible, dental arches and occlusion.
4. Functional Development of Dental Arches And Occlusion
 - a. Factors influencing functional development of dental arches and occlusion.
 - b. Forces of occlusion
 - c. Wolfe's law of transformation of bone
 - d. Trajectories of forces
5. Clinical Application Of Growth And Development
6. Malocclusion - In General
 - a. Concept of normal occlusion
 - b. Definition of malocclusion
 - c. Description of different types of dental, skeletal and functional malocclusion.
7. Classification of Malocclusion
Principle, description, advantages and disadvantages of classification of malocclusion by Angle's, Simon's, Lischer's and Ackerman and Proffitt's.
8. Normal And Abnormal Function Of Stomatognathic System

9. Etiology Of Malocclusion
 - a. Definition, importance, classification, local and general etiological factors.
 - b. Etiology of following different types of malocclusion:
 - 1) Midline diastema
 - 2) Spacing
 - 3) Crowding
 - 4) Cross Bite: Anterior/Posterior
 - 5) Class III Malocclusion
 - 6) Class II Malocclusion
 - 7) Deep Bite
 - 8) Open bite
10. Diagnosis And Diagnostic Aids
 - a. Definition, Importance and classification of diagnostic aids
 - b. Importance of case history and clinical examination in orthodontics
 - c. Study Models; Importance and uses - Preparation and preservation of study models .
 - d. Importance of intraoral X-rays in orthodontics
 - e. Panoramic radiographs: - Principles, Advantages, disadvantages and uses
 - f. Cephalometries: Its advantages, disadvantages
 1. Definition
 2. Description and use of cephalostat
 3. Description and uses of anatomical landmarks lines and angles cephalometric analysis
 4. Analysis- Steiner's, Down's, Tweed's, Ricket's-E- line
 - g. Electromyography and its uses in orthodontics
 - h. Wrist X-rays and its importance in orthodontics
11. General Principles In Orthodontic Treatment Planning Of Dental And Skeletal Malocclusions
12. Anchorage In Orthodontics - Definition, Classification, Types and Stability Of Anchorage
13. Biomechanical Principles In Orthodontic Tooth Movement
 - a. Different types of tooth movements
 - b. Tissue response to orthodontic force application

c.Age factor in orthodontic tooth movement

14 Preventive Orthodontics

a. Definition

b.Different procedures undertaken in preventive orthodontics and their limitations.

15. Interceptive Orthodontics

a. Definition

b. Different procedures undertaken in interceptive orthodontics

c. Serial extractions; Definition, indications, contra-indication, technique, advantages and disadvantages.

d. Role of muscle exercises as an interceptive procedure

16. Corrective Orthodontics

a. Definition, factors to be considered during treatment planning.

b. Model analysis; Pont's, Ashley Howe's, Bolton, Careys, Moyer's Mixed Dentition Analysis

c. Methods of gaining space in the arch:- Indications, relative merits and demerits of proximal stripping, arch expansion and extractions

d.Extractions in Orthodontics - indications and selection of teeth for extraction.

17.Orthodontic Appliances: General

d. Requisites for orthodontic appliances

e. Classification, indications of Removable and functional Appliances

f. Methods of force application

g. Materials used in construction of various orthodontic appliances - uses of stainless steel, technical considerations in curing of acrylic, Principles of welding and soldering, fluxes and antfluxes.

h. Preliminary knowledge of acid etching and direct bonding. Ethics

REMOVABLE ORTHODONTIC APPLIANCES

1) Components of removable appliances

2) Different types of clasps and their uses

3) Different types of labial bows and their uses

4)Different types of springs and

their uses

5) Expansion appliances in orthodontics;

i) Principles

ii) Indications for arch expansion

iii) Description of expansion appliances and different types of expansion devices their uses.

iv) Rapid maxillary expansion

FIXED ORTHODONTIC APPLIANCES

1. Definition, Indications, Contraindications

2. Component parts and their uses

3. Basic principles of different techniques: Edgewise, Begg's, straight wire.

EXTRAORAL APPLIANCES

1. Headgears

2. chin cup

3. reverse pull headgear

MYOFUNCTIONAL APPLIANCES

1. Definition and principles

2. Muscle exercises and their uses in orthodontics

3. Functional appliances:

(i) Activator, Oral screens, Frankel's function regulator, bionator twin blocks, lip bumper

(ii) Inclined planes - upper and lower

18. Orthodontic Management Of Cleft Lip And Palate

19. Principles Of Surgical Orthodontics

Brief knowledge of correction of:

a. Mandibular Prognathism and Retrognathism

b. Maxillary Prognathism and Retrognathism

c. Anterior open bite and deep bite

d. Cross bite

20. Principle, Differential Diagnosis & Methods Of Treatment Of:

1. Midline diastema

2. Cross bite

3. Open bite

4. Deep bite

5. Spacing

6. Crowding

7. Class II - Division 1, Division 2

8. Class III Malocclusion - True and Pseudo Class III

21. Retention And Relapse

2. PEADIATRIC & PREVENTIVE DENTISTRY – IV BDS

THEORY:

1. INTRODUCTION TO PEDODONTICS & PREVENTIVE DENTISTRY.

Definition, Scope, Objectives and Importance.

2. GROWTH & DEVELOPMENT:

Importance of study of growth and development in Pedodontics. Prenatal and Postnatal factors in growth & development. Theories of growth & development.

Development of maxilla and mandible and related age changes.

2. DEVELOPMENT OF OCCLUSION FROM BIRTH THROUGH ADOLESCENCE.

Study of variations and abnormalities.

4. DENTAL ANATOMY AND HISTOLOGY:

Development of teeth and associated structures.

Eruption and shedding of teeth.

Teething disorders and their management.

Chronology of eruption of teeth,

Differences between deciduous and permanent teeth.

Development of dentition from birth to adolescence.

Importance of first permanent molar.

5. DENTAL RADIOLOGY RELATED TO PEDODONTICS.

6. ORAL SURGICAL PROCEDURES IN CHILDREN.

Indications and contraindications of extractions of primary and permanent teeth in children.

Knowledge of Local and General

Anesthesia. Minor surgical procedures in children.

7. DENTAL CARIES:

Historical background.

Definition, aetiology & pathogenesis.

Caries pattern in primary, young permanent and' permanent teeth in children.

Rampant caries, early childhood caries and extensive caries:

* Definition, aetiology, Pathogenesis, Clinical features, Complications &

Management

Role of diet and nutrition in

Dental Caries. Dietary

modifications & Diet counseling.

Caries activity, tests, caries prediction, caries susceptibility & their clinical application.

8. GINGIVAL & PERIODONTAL DISEASES IN CHILDREN.

Normal gingiva & periodontium in children.

Definition, aetiology & Pathogenesis.

Prevention & Management of gingival & Periodontal diseases.

9. CHILD PSYCHOLOGY:

Definition.

Theories of child psychology.

Psychological development of children with age.

Principles of psychological growth & development while managing child patient.

Dental fear and its management.

Factors affecting child's reaction to dental treatment.

10. BEHAVIOUR MANAGEMENT:

Definitions.

Types of behaviour encountered in the dental clinic.

Non-pharmacological & pharmacological methods of Behaviour Management.

11. PEDIATRIC OPERATIVE DENTISTRY:

Principles of Pediatric Operative Dentistry.

Modifications required for cavity preparation in primary and young permanent teeth.

Various Isolation Techniques.

Restorations of decayed primary, young permanent and permanent teeth in children using various restorative materials like Glass Ionomer, Composites & Silver Amalgam. Stainless steel, Polycarbonate & Resin Crowns.

12. PEDIATRIC ENDODONTICS

Principles & Diagnosis.

Classification of Pulpal Pathology in primary, young permanent & permanent teeth .

. Management of Pulpally involved primary, young permanent & permanent teeth.

* Pulp capping - direct & indirect.

* Pulpotomy

* Pulpectomy

* Apexogenesis*

* Apexification

Obturation Techniques & material used for primary, young permanent & Permanent teeth in children.

13. TRAUMATIC INJURIES IN CHILDREN:

Classifications & Importance.

Sequelae & reaction of teeth to trauma.

Management of Traumatized teeth.

14. PREVENTIVE & INTERCEPTIVE ORTHODONTICS:

Definitions.

Problems encountered during primary and mixed dentition phases & their management.

Serial extractions.

Space management.

15. ORAL HABITS IN CHILDREN:

Definition, Aetiology & Classification.

Clinical features of digit sucking, tongue thrusting, mouth breathing & various other secondary habits.

Management of oral habits in children.

16. DENTAL CARE OF CHILDREN WITH SPECIAL NEEDS:

Definition, Aetiology, Classification, Behavioural and Clinical features & Management of children with:

- , Physically handicapping conditions.
- Mentally compromising conditions.
- Medically compromising conditions.
- Genetic disorders.

17. CONGENITAL ABNORMALITIES IN CHILDREN:

Definition, Classification, Clinical features & Management.

18.DENTAL EMERGENCIES IN CHILDREN & THEIR MANAGEMENT.

19.DENTAL MATERIALS USED IN PEDIATRIC DENTISTRY.

20.PREVENTNE DENTISTRY:

Definition.

Principles & Scope.

Types of prevention.

Different preventive measures used in Pediatric Dentistry including pit and fissure sealants and caries vaccine.

21.DENTAL HEALTH EDUCATION & SCHOOL DENTAL HEALTH PROGRAMMES.

22.FLUORIDES:

Historical background.

Systemic & Topical
fluorides. Mechanism
of action. Toxicity &

Management.

Defluoridation
techniques.

23. CASE HISTORY RECORDING:

Outline of principles of examination, diagnosis & treatment
planning.

24.SETTING UP OF PEDODONTIC CLINIC.

25.ETHICS.

3. PERIODONTOLOGY – IV BDS

1. Introduction: Definition of Periodontology, Periodontics, Periodontia, Brief historical background, Scope of Periodontics
2. Development of perio-dontal tissues, micro-structural anatomy and biology of periodontal tissues in detail Gingiva. Junctional epithelium in detail, EpithelialMesenchymal interaction, Periodontal, ligament Cementum, Alveolar bone.
3. Defensive mechanisms in the oral *cavity*: Role of-Epithelium,Gingival fluid, Saliva and other defensive mechanisms in the oral environment.
4. Age changes in Age changes in teeth and periodontal structures periodontal structures and their association with· periodontal diseases and their significance in Geriatric dentistry
5. Classification of periodontal diseases –
 - Need for classification scientific basis of 1 classification
 - Classification of gingival and periodontal diseases as described in World Workshop1989

Gingivitis:

Plaque associated, ANUG, steroid hormone influenced, Medication influenced, Desquamative gingivitis, other forms of gingivitis as 111 nutritional deficiency, bacterial and viral infections etc.

Periodontitis:

Adult periodontitis, Rapidly progressive periodontitis A&B, Juvenile periodontitis(localized, generalized, and post-juvenile), Prepubertal periodontitis, Refractory pe'riodontitis Localized and generalized

6. Gingival Disease – Localized and generalized gingivitis, Papillary, 6 marginaJ and diffuse gingivitis Etiology, pathogenesis, clinical signs, symptoms and. management of

- i) Plaque associated gingivitis
- ii) Systemically aggravated gingivitis(sex hormones, drugs and systemic diseases)
- iii). ANUG
- iv) Desquamative gingivitis-Gingivitis associated with lichen planus, pemphigoid, pemphigus, and other iresiculobullous lesions

- v) Allergic gingivitis
- vi) Infective gingivitis-Herpetic, bacterial and candidial
- vii) Pericoronitis
- viii) Gingival enlargement (classification and differential diagnosis)

7. Epidemiology of periodontal disease –

- Definition of index, incidence, 2 prevalence, epidemiology, end, emic, epidemic, and pandemic
- Classification of indices (Irreversible and reversible)
- Deficiencies of earlier indices used in Periodontics
- Detailed understanding of Silness & Loe Plaque Index, Loe & Silness Gingival Index, CPITN & CPI.
- Prevalence of periodontal diseases in India and other countries.
 - Public health significance (All these topics are covered at length under community dentistry. Hence, the topics may be discussed briefly. However, questions may be asked from the topics for examination)

8. Extension of inflammation from gingival –

Mechanism of spread of inflammation from gingival 1 area to deeper periodontal structures.

9. Pocket - Definition, signs and symptoms, classification, 2 pathogenesis, histopathology, root surface changes and contents of the pocket

10. Etiology -

- Dental Plaque (Biofilm) 5
- Definition, New concept of biofilm
- Types, composition, bacterial colonization, growth, maturation & disclosing agents
- Role of dental plaque in periodontal diseases Plaque microorganisms in detail and bacteria associated with periodontal diseases
- Plaque retentive factors
- Materia alba
- Food debris
- Calculus
- Definition
- Types, composition, attachment, theories of formation
- Role of calculus in disease

Food Impaction

- Definition
- Types, Etiology Hirschfelds' classification
- Signs ,symptoms &sequelae of treatment

Trauma from occlusion

- Definition, Types Histopathological changes
- Role in periodontal disease
- Measures of management in brief

Habits

- Their periodontal significance
- Bruxism ¶functional habits, tongue thrusting ,lip biting, occupational habits

IATROGENIC FACTORS

Conservative Dentistry

- Restorations
- Contact point, marginal ridge, surface roughness, overhanging restorations, interface between restoration and teeth

Prosthodontics

- Interrelationship
- Bridges and other prosthesis, pontics(types) ,surface contour, relationships of margins to the periodontium, Gingival protection theory, muscle action theory& theory of access to oral hygiene.

Orthodontics

- Interrelationship, removable appliances &fixed appliances
- Retention of plaque, bacterial changes

Systemic diseases

- Diabetes, sex hormones, nutrition(Vit.C &proteins)
- AIDS & periodontium
- Hemorrhagic diseases, Leukemia, clotting factor disorders,PMN disorders

11. Risk factor - Definition. Risk factors for periodontal diseases

12. Host response -

- Mechanism of initiation and progression of periodontal diseases
- Basic concepts about cells, Mast cells, neutrophils, macrophages, immunoglobulins, complement system, immune mechanisms &

cytokines in brief

- Stages in gingivitis-Initial, early, established & advanced
- Periodontal disease activity, continuous paradigm, random burst & asynchronous multiple burst hypothesis

13. Periodontitis –

- Etiology, histopathology, clinical signs & 6 symptoms, diagnosis and treatment of adult periodontitis
 - Periodontal abscess; definition, classification, pathogenesis, differential diagnosis and treatment
 - Furcation involvement, Glickmans' classification, prognosis and management
 - Rapidly progressive periodontitis
 - Juvenile periodontitis: Localized and generalized Post-juvenile periodontitis
- Periodontitis associated with systemic diseases

14. Diagnosis –

- Routine procedures, methods of probing, types of 2 probes, (According to case history)
- Halitosis: Etiology and treatment. Mention advanced diagnostic aids and their role in brief.

15. Prognosis –

- Definition, types, purpose and factors to be taken into consideration

16. Treatment Plan – Factors to be considered

17. Periodontal therapy –

A. General principles of periodontal therapy. Phase I, II, III, IV therapy.

Definition of periodontal regeneration, repair, new attachment and reattachment.

B. Plaque control

(i) Mechanical tooth brushes, interdental cleaning aids, dentifrices

(ii) Chemical; classification and mechanism of action of each & pocket irrigation

18. Pocket eradication procedures –

- Scaling and root planing:
- Indications .
- Aims & objectives

- Healing following root planning
- Hand instruments, sonic, ultrasonic & piezoelectric scalers
- Curettage & present concepts Definition
- Indications
- Aims & objectives
- Procedures & healing response
- Flap surgery
- Definition
- Types of flaps, Design of flaps, papilla preservation
- Indications & contraindications
- Armamentarium
- Surgical procedure & healing response.

19. Osseous Surgery – Osseous defects in periodontal disease

- Definition
- Classification
- Surgery: resective, additive osseous surgery (osseous grafts with classification of grafts)
- Healing responses
- Other regenerative procedures; root conditioning Guided tissue regeneration

20. Mucogingival Surgery & Periodontal plastic surgeries –

- Definition
- Mucogingival problems: etiology, classification of gingival recession (P.O. Miller Jr. and Sullivan and Atkins)
- Indications & objectives
- Gingival extension procedures: lateral pedicle graft, frenectomy, frenotomy
- Crown lengthening procedures

21. Splints -

- Periodontal splints
- Purpose & classification
- Principles of splinting

22. Hypersensitivity – Causes, Theories & management

23. Implants –

- Definition, types, scope & biomaterials used.

-Periodontal considerations: such as implant-bone interface, implant-gingiva interface, implant failure, peri-implantitis & management

24. Maintenance Phase (SPT) -

- Aims, objectives, and principles
- Importance
- Procedures
- Maintenance of implants

25. Pharmaco – therapy-

- Periodontal dressings
- Antibiotics & anti-inflammatory drugs
- Local drug delivery systems

26. Periodontal management of medically –

Topics concerning periodontal management of 1 medically compromised patients

27. Inter – disciplinary care -

- Pulpo-periodontal involvement
- Routes of spread of infection
- Simons' classification Management

28. Systemic effects of periodontal diseases in brief -

Cardiovascular diseases, Low birth weight babies etc.

29. Infection control protocol –

- sterilization and various aseptic procedure

30. Ethics

4. ORAL & MAXILLOFACIAL SURGERY – IV BDS

DETAILED SYLLABUS

1. Introduction, definition, scope, aims and objectives.
 2. Diagnosis in oral surgery
 - (A) History taking
 - (B) Clinical examination
 - (C) Investigations.
 3. Principles of infection control and cross-infection control with particular reference to HIV / AIDS and Hepatitis.
 4. Principles of Oral Surgery -
 - a) Asepsis: Definition, measures to prevent introduction of infection during surgery.
 1. Preparation of the patient
 2. Measures to be taken by operator
 3. Sterilisation of instruments - various methods of sterilisation etc.
 4. Surgery set up
 - b) Painless Surgery:
 1. Pre-anaesthetic considerations. Pre-medication: purpose, drugs used
 2. Anaesthetic considerations -
 - a) Local b) Local with IV sedations
 3. Use of general anaesthetic
 - c) Access:

Intra-oral: Mucoperiosteal flaps, principles, commonly used intra oral incisions.

Bone Removal: Methods of bone removal.

Use of Burs: Advantages & precautions

Bone cutting instruments: Principles of using chisel & osteotome.
- Extra Oral Skin incision- principles, various extra – oral incision to expose facial skeleton.
- d) Control of haemorrhage during surgery
 - Normal Haemostasis
 - Local measures available to control bleeding
 - Hypotensive anaesthesia etc.

e) Drainage & Debridement

Purpose of drainage in surgical wounds

Types of drains used

Debridement : purpose, soft tissue & bone debridement.

f) Closure of wounds

Suturing Principles, suture material, Classification, body responses to various materials etc.

g) Post operative care

Post operative instruction

Physiology of cold and heat

Control of infection – antibiotics

Control of swelling – anti – inflammatory drugs

Long term post operative follow up – significance.

5. Exodontia General considerations

Ideal Extraction.

Indications for extraction of teeth

Extraction in medically compromised patients.

Methods of extraction-

(a) Forceps or intra – avulsion of teeth

Extraction in medically compromised patients.

Principles, types of movement force etc.

(b) Trans – alveolar, surgical or open method, Indications, surgical procedure.

Dental elevators: uses, classification, principles in the use of elevators commonly

Used elevators.

Complications of exodontias

Common to both maxilla and mandible.

Post –operative complications-

Prevention and management of complications.

6. Impacted teeth:

Incidence, definition aetiology

(a) Impacted mandibular third molar.

Classification reasons for removal,

Assessment procedures for removal.

Surgical procedures for removal

Complications during and after removal.

Prevention and management.

(b) Maxillary third molar,

Indication for removal, classification,

Surgical procedure for removal,

(c) Impacted maxillary canine

Reasons for canine impaction

Localization, indications for removal,

Methods of management , labial and palatal approach,

Surgical exposure, transplantation, removal. etc.

7. Pre- prosthetic Surgery:

Definition, classification of procedures

(a) Corrective procedures: Alveoloplasty,

Reduction of maxillary tuberosities,

Frenectomies and removal of tori.

(b) Ridge extension or sulcus extension procedures

Indications and various surgical procedure

(c) Ridge augmentation and reconstruction

Indication, use of bone grafts Hydroxyapatite

Implants – concept of osseous integration

Knowledge of various types of implants and

Surgical procedure to place implants

8. Diseases of the maxillary sinus

Surgical anatomy of the sinus.

Sinusitis both acute and chronic

Surgical approach of sinus – Caldwell Lue procedure

Oro- antral fistula – aetiology, Clinical features and various surgical methods for closure.

9. Disorders of T. M. Joint

Applied surgical anatomy of the joint

Dislocation – Types, aetiology, clinical features and management.

Ankylosis – Definition , aetiology clinical features and management.

Myofascial pain dysfunction syndrome, aetiology, clinical features, management –

Non surgical and surgical.

Internal derangement of the joint

Arthritis of T.M. Joint.

10. Infection of the Oral cavity

Introduction , factors responsible for infection course of odontogenic

Infection , spread of odontogenic infection through various facial spaces.

Dento – alveolar abscess- aetiology, clinical features and management.

Osteomyelitis of the jaws- definition aetiology, predisposing factors,

Classification, clinical features and management.

Ludwigs angina- definition, aetiology, clinical features, management and complications.

11. Benign cystic lesions of the jaws

Definition, classification, pathogenesis.

Diagnosis – Clinical features, radiological, aspiration biopsy use of contrast media and histopathology.

Management – Type of surgical procedures,, Rationale of the techniques, indications, procedures, complications etc.

12. Tumours of the Oral cavity

General considerations

Non odontogenic benign tumours occurring in oral cavity- fibroma, papilloma lipoma, ossifying fibroma, myxoma etc.

Ameloblastoma- Clinical features, radiological appearance and methods of management.

Carcinoma of the oral cavity-

TNM classification

Outline of management of squamous

Cell carcinoma surgery, radiation and chemotherapy

Role of dental surgeons in the prevention and early detection of oral cancer.

13. Fractures of the jaws –

General considerations, type of fractures, aetiology clinical features and general mandibular fractures – Applied anatomy, classification.

Diagnosis – Clinical and radiological

Management – Reduction closed and open

Fixation and immobilisation methods

Outline of rigid and semi-rigid internal fixation.

Fractures of the condyle- aetiology classification, clinical features, principles of management.

Fractures of the middle third of the face.

Definition of the mid face, applied surgical anatomy, classification, clinical

Features and outline of management.

Alveolar fractures – methods of management.

Fractures of the Zygomatic complex

Classification, clinical features, indications for treatment,
various methods of reduction and fixation.

Complications of fractures - delayed union, non-union and malunion.

14. Salivary gland diseases -

Diagnosis of salivary gland
diseases' Sialography, contrast
media, procedure. Infections of
the salivary glands

Sialolithiasis - Sub mandibular duct and gland and
parotid duct. Clinical features, management.

Salivary fistulae

Common tumours of salivary glands like Pleomorphic
adenoma including minor salivary glands.

15. Jaw deformities -

Basic forms - Prognathism, Retrognathism
and open bite. Reasons for correction.

Outline of surgical methods carried out on mandible and maxilla.

16. Neurological disorders -

Trigeminal neuralgia - definition, aetiology, clinical features
and methods of management including surgical.

Facial paralysis - Aetiology, clinical
features. Nerve injuries -

Classification, neurolysis etc.

17. Cleft Lip and Palate -

Aetiology of the clefts, incidence, classification, role of dental surgeon
in the management of cleft patients. Outline of the closure procedures.

18. Medical Emergencies in dental practice -

Primary care of medical emergencies in dental practice particularly -

(a) Cardio vascular (b) Respiratory (c) Endocrine •

(d) Anaphylactic reaction (e) Epilepsy (f) Epilepsy

19. Emergency drugs & Intra muscular LV. Injections-

Applied anatomy, Ideal location for giving these injections, techniques etc.

20. Oral Implantology

21. Ethics

LOCAL ANAESTHESIA:

Introduction, concept of L.A., classification of local anaesthetic agents, ideal requirements, mode of action, types of local anaesthesia, complications.

Use of Vaso constrictors in local anaesthetic solution

Advantages, contra-indications, various vaso constrictors used.

Anaesthesia of the mandible

Pterygomandibular space - boundaries, contents etc.

Inferior Dental Nerve Block - various techniques

Complications

Mental foramen nerve block

Anaesthesia of Maxilla

Intra - orbital nerve block.

Posterior superior alveolar nerve block

Maxillary nerve block - techniques.

GENERAL ANAESTHESIA-

Concept of general anaesthesia.

Indications of general anaesthesia in dentistry.

Pre-anaesthetic evaluation of the patient.

Pre-anaesthetic medication - advantages, drugs used.

Commonly used anaesthetic agents ..

Complication' during and after G.A.

I. V. sedation with Diazepam and Medazolam.

Indications, mode of action, technique etc.

Cardiopulmonary resuscitation

Use of oxygen and emergency drugs.

Tracheostomy.

ORAL MEDICINE & RADIOLOGY – IV BDS

Part-I ORAL MEDICINE AND DIAGNOSTIC AIDS

SECTION (A) - DIAGNOSTIC METHODS.

- (1) Definition and importance of Diagnosis and various types of diagnosis
- (2) Method of clinical examinations.
 - (a) General Physical examination by inspection.
 - (b) Oro-facial region by inspection, palpation and other means
 - (c) To train the students about the importance, role, use of saliva and techniques of diagnosis of saliva as part of oral disease
 - (d) Examination of lesions like swellings, ulcers, erosions, sinus, fistula, growths, pigmented lesions, white and red patches
 - (e) Examination of lymph nodes
 - (f) Forensic examination - Procedures for post-mortem dental examination; maintaining dental records and their use in dental practice and post-mortem identification; jurisprudence and ethics.
- (3) Investigations
 - (a) Biopsy and exfoliative cytology
 - (b) Hematological, Microbiological and other tests and investigations necessary for diagnosis and prognosis

SECTION (B) - DIAGNOSIS, DIFFERENTIAL DIAGNOSIS

While learning the following chapters, emphasis shall be given only on diagnostic aspects including differential diagnosis

- (1) Teeth: Developmental abnormalities, causes of destruction of teeth and their sequelae and discoloration of teeth
- (2) Diseases of bone and Osteodystrophies: Development disorders: Anomalies, Exostosis and tori, infantile cortical hyperostosis, osteogenesis imperfecta, Marfan's syndrome, Osteopetrosis, Inflammation- Injury, infection and spread of infection, fascial space infections, osteoradionecrosis.
Metabolic disorders – Histiocytosis
Endocrine- Acromegaly and hyperparathyroidism
Miscellaneous – Paget's disease, Mononuclear and polyostotic fibrous dysplasia, Cherubism,

(3) Temporomandibular joint : Developmental abnormalities of the condyle , Rheumatoid arthritis, Osteoarthritis, Sub – luxation and luxation.

(4) Common cysts and Tumors.

CYSTS ; cysts of soft tissue: Mucocele and Ranula

Cysts of bone : Odontogenic and nonodontogenic.

TUMORS :

Soft Tissue :

Epithelial : Papilloma, Carcinoma, Melanoma

Connective tissue Fibroma,Lipoma, Fibrosarcoma

Vascular : Haemangioma, Lymphangioma

Nerve Tissue : Neurofibroma, Traumatic Neuroma, Neurofibromatosis

Salivary Glands : Pleomorphic adenoma, Adenocarcinoma, Warthin’s Tumor,
Adenoid cystic carcinoma.

Hard Tissue :

Non Odontogenic : Osteoma, Osteosarcoma, Osteoclastoma. Chondroma.

Chondrosarcoma, Central giant cell tumor and central and central haemangioma.

Odontogenic: ameloma, Ameloblastoma, Calcifying Epithelial Odontogenic tumor,
Adenomatoid Odontogenic tumor, Periapical cemental dysplasia and odontomas.

(5) Periodontal diseases : Gingival hyperplasia, gingivitis, periodontitis, pyogenic granuloma

(6) Granulomatous diseases : Tuberculosis, Sarcoidosis, Midline lethal granuloma, Crohn’s Disease and Histiocytosis X

(7) Miscellaneous Disorders Burkitt lymphoma, sturge- weber syndrome, CREST syndrome, Rendu- Osler – weber disease

SECTION (C) ORAL MEDICINE AND THERAPEUTICS.

The following chapters shall be studied in detail including the etiology, pathogenesis, clinical features, investigations, differential diagnosis, management and prevention.

(1) Infections of oral and paraoral structures

Bacterial Streptococcal, tuberculosis, syphilis, Vincent’s, leprosy, actinomycosis,
diphtheria and tetanus

Fungal Candida albicans

Virus: Herpes simplex, herpes zoster, Ramsay Hunt syndrome, measles,
herpangina, mumps, infectious mononucleosis AIDS and hepatitis – B

(2) Important common mucosal lesions:

White lesions : Chemical burns, leukodema, leukoplakia, Fordyce spots, stomatitis nicotina palatinus, with sponge nevus, candidiasis, lichenplanus, discoid lupus erythematosus

Vericulo- bullous lesions Herpes simples, herpes zoster, herpangina, bullous lichen planus, pemphigus, cicatricial pemphigoid erythema multiforme.

Ulcers : Acute and chronic ulcers

Pigmented lesions : Exogenous and endogenous

Red lesions : Erythroplakia, stomatitis venenata and medicamentosa, erosive lesions and denture sore mouth.

(3)Cervico- facial lymphadenopathy

(4)Facial pain:

(i) Organic pain : Pain arising from the diseases of orofacial tissues like teeth, pulp gingival periodontal tissue, mucosa, tongue, muscles, blood vessels, lymph tissue, bone, paranasal sinus, salivary glands etc.

(ii) Pain arising due to C.N.S. diseases :

(a) Pain due to intracranial and extracranial involvement of cranial nerves (Multiple sclerosis cerebrovascular diseases, trojter's syndrome. Etc.)

(b) Neuralgic pain due to unknown causes : Trigeminal neuralgia. glossopharyngeal neuralgia, sphenopalatine ganglion neuralgia, periodic migrainous neuralgia and atypical facial pain.

(iii) Referred pain : Pain arising from distant tissues like heart, spine etc.

(5)Altered sensation : Cacogeusia, halitosis

(6) Tongue in local and systemic disorders: (Aglossia, ankyloglossia, bifid tongue, fissured tongue, scrotal tongue, macroglossia, microglossia, geographic tongue, median rhomboid glossitis, depapillation of tongue, hairy tongue, atrophic tongue, reactive lymphoid hyperplasia, glossodynia, glossopyrosis, ulcers, white and red patches etc.)

(7) Oral manifestations of:

(i) Metabolic disorders:

(a) Porphyria

(b) Haemochromatosis

(c) Histocytosis X diseases

(ii) Endocrine disorders:

- (a) Pituitary: Gigantism, acromegaly, hypopituitarism
- (b) Adrenal cortex: Addison's disease (Hypofunction)
Cushing's syndrome (Hyperfunction)
- (c) Parathyroid glands: Hyperparathyroidism.
- (d) Thyroid gland: (Hypothyroidism) Cretinism, myxedema (e) Pancreas: Diabetes
- (iii) Nutritional deficiency: Vitamins: riboflavin, nicotinic acid, folic acid Vitamin B12, Vitamin C (Scurvy)

(iv) Blood disorders~

(a) Red blood cell diseases

Deficiency anemias: (Iron deficiency, plummer - vinson syndrome, pernicious anemia)

Haemolytic anemias: (Thalassemia, sickle cell anemia, erythroblastosis fetalis) Aplastic anemia . .

Polycythemia

(b) White Blood cell diseases

Neutropenia, cyclic neutropenia, agranulocytosis, infectious mononeucleosis and leukemias

(c) Haemorrhagic disorders:

Thrombocytopenia, purpura, hemophilia, christmas disease and von willebrand's disease

(8) Disease of salivary glands:

(i) Developmental disturbances: Aplasia, atresia and aberration

(ii) Functional disturbances: Xerostomia, ptyalism

(iii) Inflammatory conditions: Nonspecific sialadenitis, mumps, sarcoidosis heerfort's - syndrome (Uveoparotid fever), Necrotising sialometaplasia

(iv) Cysts and tumors: Mucocele, ranula, pleomorphic adenoma, mucoepidermoid carcinoma

(v) Miscellaneous: Sialolithiasis, sjogren's syndrome, mikuliez's disease and sialosis

(9) Dermatological diseases with oral manifestations:

- (a) Ectodermal dysplasia
- (b) Hyperkerotosis palmarplantaris with periodontopathy
- (c) Scleroderma
- (d) Lichen planus including ginspan's syndrome
- (e) Lupus erythematosus
- (f) Pemphigus
- (g) Erythema multiforme
- (h) Psoriasis

(10) Immunological diseases with oral manifestations

- (a) Leukemia
- (b) Lymphomas
- (c) Multiple myeloma
- (d) AIDS clinical manifestations opportunistic infections, neoplasms
- (e) Thrombocytopenia
- (f) Lupus erythematosus
- (g) Scleroderma
- (h) dermatomyositis
- (i) Submucous fibrosis
- (j) Rheumatoid arthritis
- (k) Recurrent oral ulcerations including behcet's syndrome and reiter's syndrome

(11) Allergy: Local allergic reactions, anaphylaxis, serum sickness (local and systemic allergic manifestations to food drugs and chemicals)

(12) Foci of oral infection and their ill effects on general health

(13) Management of dental problems in medically compromised persons:

- (i) Physiological changes: Puberty, pregnancy and menopause
- (ii) The patients suffering with cardiac, respiratory, liver, kidney and bleeding disorders, hypertension, diabetes and AIDS. Post-irradiated patients.

(14) Precancerous lesions and conditions

(15) Nerve and muscle diseases:

- (i) Nerves: (a) Neuropraxia (b) Neurotmesis (c) Neuritis (d) Facial nerve paralysis including Bell's palsy, Heerfordt's syndrome, Melkerson Rosenthal syndrome and ramsay hunt syndrome
- (e) Neuroma (f) Neurofibromatosis (g) Frey's syndrome
- (ii) Muscles: (a) Myositis ossificans (b) Myofascial pain dysfunction syndrome (c) Trismus

(16) Forensic odontology:

- (a) Medicolegal aspects of orofacial injuries (b) Identification of bite marks

- (c) Determination of age and sex
 - (d) Identification of cadavers by dental appliances, Restorations and tissue remanants
- (17) Therapeutics: General therapeutic measures - drugs commonly used in oral medicine viz., antibiotics, chemotherapeutic agents, anti-inflammatory and analgesic drugs, astringents, mouth washes, styptics, demelucents, local surface anaesthetic, sialogogues, antisialogogues and drugs used in the treatment of malignancy

Part - II BERA VIORAL SCIENCES AND ETHICS.

Part - III ORAL RADIOLOGY

- (1) Scope of the subject and history of origin
- (2) Physics of radiation: (a) Nature and types of radiations (b) Source of radiations (c) Production of X-rays (d) Properties of X-rays (e) Compton effect (f) Photoelectric effect (g) Radiation measuring units
- (3) Biological effects of radiation
- (4) Radiation safety and protection measures
- (5) Principles of image production
- (6) Radiographic techniques:
 - (i) Intra-Oral: (a) Periapical radiographs (Bisecting and parallel technics) (b) Bite wing radiographs (c) Occlusal radiographs
 - (ii) Extra-oral: (a) Lateral projections of skull and jaw bones and paranasal sinuses (e) Cephalograms (d) Orthopantomograph (e) Projections of temporomandibular joint and condyle of mandible (f) Projections for Zygomatic arches
 - (iii) Specialised techniques: (a) Sialography (b) Xeroradiography (c) Tomography

(7) Factors in production of good radiographs:

- (a) K.V.P. and mA of X-ray machine
- (b) Filters
- (c) Collimations
- (d) Intensifying screens
- (e) Grids
- (f) X-ray films
- (g) Exposure time
- (h) Techniques
- (i) Dark room
- (j) Developer and fixer solutions
- (k) Film processing

(8) Radiographic normal anatomical landmarks

(9) Faculty radiographs and artefacts in radiographs

(10) Interpretation of radiographs in various abnormalities of teeth, bones and other orofacial tissues

(11) Principles of radiotherapy of oro-facial malignancies and complications of radiotherapy

(12) Contrast radiography and basic knowledge of radio-active isotopes

(13) Radiography in Forensic Odontology - Radiographic age estimation and post-mortem radiographic methods

6. CONSERVATIVE DENTISTRY & ENDODONTICS – IV BDS

1 Nomenclature of Dentition

Tooth numbering systems A.D.A Zsigmondy palmer and F.D.I system

2 Principles of cavity preparation

Steps and nomenclature of cavity preparation classification of cavities nomenclature of floors Angles of cavities

3 Dental caries:

Aetiology, classification, clinical features, morphological features, microscopic features, clinical diagnosis and sequel of dental caries.

4 Treatment planning for operative dentistry:

Detailed clinical examination , radiographic examination, tooth vitality test, tests, diagnosis and treatment planning , preparation of the case sheet.

5 Gnathological concepts of restoration:

Physiology of occlusion, normal occlusion, ideal occlusion, mandibular movements and occlusal analysis, occlusal rehabilitation and restoration.

6 Armamentarium for cavity preparation:

General classification for operative instruments, hand cutting instruments, design formula and sharpening of instruments. Rotary cutting instruments, dental bur, mechanism of cutting, evaluation of hand piece and speed current concepts of rotary cutting procedures. Sterilisation and maintenance of instruments. Basic instrument tray set up.

7 Control of operating field:

Light source sterilization field of operation control of moisture, rubber dam in detail, cotton rolls and anti sialogues.

8 Amalgam restoration:

Indications, contraindications, physical and mechanical properties, clinical behavior, cavity preparation for class I, II, V and III step wise procedure for cavity preparation and restoration , failure of amalgam restoration.

9 Pulp protection:

Liners, bases and varnishes , zinc phosphate, zinc polycarboxylate, zinc oxide eugenol , glass ionomer cement

10 Anterior Restoration:

Selection of cases, selection of materials, step wise procedures for using restorations, silicate (theory only) glass ionomers, composites, including sand witch restorations and bevel of the same with a note on status of the dentine bonding agents.

11 Direct filling gold restorations:

Types of direct filling gold, indications and limitations of cohesive gold. Annealing of gold foil cavity preparation and condensation of gold foils

12 Preventive Measures In Restorative practice:

plaque control pit and fissure sealants dietary measures restorative procedure and periodontal health contact and contour of teeth and restorations matrices tooth separation and wedges.

13 Temporisation or interim Restoration

14. Pin Amalgam restoration indication contra indication Advantage disadvantages of each type of pin methods of placement use of auto matrix. Failure of pin amalgam restoration.

15. Management of deep carious lesions indirect and direct pulp capping.

16. Non carious destruction tooth structures diagnosis and clinical management.

17. Hyper sensitive dentine and its management.

18. Cast restorations

Indication contra indication advantages and materials used for same class II and I cavity preparation

For inlays fabrication of wax pattern spruing inverting and casting procedures and casting defect

19. Die materics and preparation of dies.

20. Gingival tissues management for cast restoration and impression procedures.

21. Recent cavity modification amalgam restoration.

22. Differences between amalgam and inlay cavity preparation with note on all the type of Bwels used for cast restoration.

23. Control of pain during operative procedures.

24. Treatment planning for operative dentistry detailed clinical examination radiographic examination/

25. Vitality tests diagnosis and treatment planning and preparation of case sheet.

26. Applied Dental Materials.

1. Biological Considerations.

Evaluation, clinical application and adverse effects of the following materials. Dental cements, Zinc oxide eugenol cements zinc phosphate cements, polycarboxylates glass ionomer

- cements, silicate cement calcium hydroxides varnishes.
2. Dental amalgam, technical considerations mercury toxicity mercury hygiene.
 3. Composite, Dentine bonding agents, chemical and light curing composites
 4. Rubber base Imp. Materials
 5. Nobel metal alloys & non noble metal alloys
 6. Investment and die materials
 7. Inlay casting waxes
 8. Dental porcelain
 9. Aesthetic Dentistry
27. Endodontics: introduction definition scope and future of endodontics
 28. Clinical diagnostic methods
 29. Emergency endodontic procedures
 30. Pulpal diseases causes, types and treatment.
 31. Periapical diseases: acute periapical abscess, acute periodontal abscess, parodontal abscess, chronic alveolar abscess granuloma cysts condensing osteitis, external resorption.
 32. Vital pulp therapy: indirect and direct pulp capping pulpotomy different types and medicaments used.
 33. Apexogenesis and apexification or problems of open apex.
 34. Rationale of endodontic treatment case selection indication and contraindications for root canal treatments.
 35. Principles of root canal treatment mouth preparation root canal instruments, hand instruments, power driven instruments, standardisation color coding principle of using endodontic instruments. Sterilisation of root canal instruments and materials rubber dam application.
 36. Anatomy of the pulp cavity: root canals apical foramen. Anomalies of pulp cavities access cavity preparation of anterior and premolar teeth.
 37. Preparation of root canal space. Determination of working length, cleaning and shaping of root canals, irrigating solution chemical aids to instrumentation.

38. Disinfection of root canal space intracanal medicaments, poly antibiotic paste ross mans paste, mummifying agents. Out line of root canal treatment, bacteriological examinations, culture methods.
39. Problems during cleaning and shaping of root canal spaces. Perforation and its management. Broken instruments and its management, management of single and double curved root canals.
40. Methods of cleaning and shaping like step back crown down and conventional methods.
41. Obturation of the root canal system. Requirements of an ideal root canal filling material obturation methods using gutta perch a healing after endodontic treatment.
- Failures in endodontics.
42. Root canal sealers. Ideal properties classification. Manipulation of root canal sealers.
43. post endodontic restoration fabrication and components of post core preparation.
44. smear layer and its importance in endodontics and conservative treatment.
45. discoloured teeth and its management. Bleaching agents, vital and non vital bleaching methods.
46. traumatised teeth classification of fractured teeth. Management of fractured tooth and root. Luxated teeth and its management.
47. endodontic surgeries indication contraindications, pre operative preparation. Pre medication surgical instruments and techniques apicectomy, retrograde filling, post operative sequale terphination hemisection, radiscetomy techniques Df tooth reimplantation (both intentional and accidental endodontic implants.
48. root resorption.
49. emergency endodontic procedures.
50. lasers in conservative endodontics (introduction only) practice management

51. professional association dentist act 1948 and its amendment 1993.
52. duties towards the govt. Like payments of professional tax, income tax.
53. financial management of practice
54. Dental material and basic equipment management.
55. Ethics

Complete Dentures

- A. Applied Anatomy and Physiology.
 - 1. Introduction
 - 2. Biomechanics of the edentulous state.
 - 3. Residual ridge resorption.
- B. Communicating with the patient
 - Understanding the patients. Mental attitude.
 - Instructing the patient.
- C. Diagnosis and treatment planning for patients-
 - 1. With some teeth remaining.
 - 2. With no teeth remaining.
 - a) Systemic status.
 - b) Local factor.
 - c) The geriatric patient.
 - d) Diagnostic procedures.
- D. Articulators- discussion
- E. Improving the patient's denture foundation and ridge relation -an overview.
 - a) Pre-operative examination.
 - b) Initial hard tissue & soft tissue procedure.
 - c) Secondary hard & soft tissue procedure.
 - d) Implant procedure.
 - e) Congenital deformities.
 - f) Postoperative procedure.

- F. Principles of Retention, Support and Stability
- G. Impressions - detail.
 - a) Muscles of facial expression.
 - b) Biologic considerations for maxillary and mandibular impression including anatomy landmark and their interpretation.
 - c) Impression objectives.
 - d) Impression materials.
 - e) Impression techniques.
 - f) Maxillary and mandibular impression procedures.
 - i. Preliminary impressions.
 - ii. Final impressions.
 - g) Laboratory procedures involved with impression making (Beading & Boxing, and cast preparation).
- H. Record bases and occlusion rims- in detail.
 - a) Materials & techniques.
 - b) Useful guidelines and ideal parameters.
 - c) Recording and transferring bases and occlusal rims.
- I. Biological consideration in jaw relation & jaw movements - craniomandibular relations.
 - a) Mandibular movements.
 - b) Maxillo -mandibular relation including vertical and horizontal jaw relations.
 - c) Concept of occlusion- discuss in brief.
- J. Relating the patient to the articulator.
 - a) Face bow types & uses- discuss in brief.
 - b) Face bow transfer procedure - discuss in brief.
- K. Recording maxillo mandibular relation.
 - a) Vertical relations.
 - b) Centric relation records.
 - c) Eccentric relation records.
 - d) Lateral relation records.

- L. Tooth selection and arrangement.
 - a) Anterior teeth.
 - b) Posterior teeth.
 - e) Esthetic and functional harmony.
- M. Relating inclination of teeth to concept of occlusion- in brief.
 - a) Neutrocentric concept.
 - b) Balanced occlusal concept.
- N. Trial dentures.
- O. Laboratory procedures.
 - a) Wax contouring.
 - b) Investing of dentures.
 - c) Preparing of mold.
 - d) Preparing & packing acrylic resin.
 - e) Processing of dentures.
 - f) *Recovery* of dentures.
 - g) Lab remount procedures.
 - h) Recovering the complete denture from the cast.
 - i) Finishing and polishing the complete denture.
 - j) Plaster cast for clinical denture remount procedure.
- P. Denture insertion.
 - a) Insertion procedures.
 - b) Clinical errors.
 - c) Correcting occlusal disharmony.
 - d) Selective grinding procedures.
- R. Treating problems with associated denture use - discuss in brief (tabulation/flow- chart form).
- S. Treating abused tissues - discuss in brief.
- T. Relining and rebasing of dentures- discuss in brief.
- U. Immediate complete dentures Construction procedure- discuss in brief.
- V. The single complete denture- discuss in brief.
- W. Overdentures denture- discuss in brief.
- X. Dental implants in complete denture - discuss In brief:

Note: It is suggested that the above mentioned topics be dealt with wherever appropriate in the following order so as to cover -

1. Definition
2. Diagnosis (of the particular situation/patient selection and treatment planning)
3. Types / Classification
4. Materials
5. Methodology - Lab / Clinical
6. Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase
9. Oral Implantology
10. Ethics

REMOVABLE FLEXIBLE DENTURE

1. Introduction

- Terminologies and scope
2. Classification.
 3. Examination, Diagnosis & Treatment planning & evaluation of diagnostic data.
 4. Components of a removable partial denture.
 - ~ Major connectors;
 - ~ minor connectors,
 - ~ Rest and rest seats.
 5. Components of a Removable Partial Denture.
 - ~ Direct retainers;
 - ~ Indirect retainers,
 - ~ Tooth replacement.
 6. Principles of Removable Partial Denture Design.
 7. Survey and design - in brief.
 - Surveyors.
 - Surveying.
 - Designing.

8. Mouth preparation and master cast.
9. Impression materials and procedures for removable partial dentures.
10. Preliminary jaw relation and esthetic try-in for some anterior replacement teeth.
11. Laboratory procedures for. framework construction-in brief.
12. Fitting the framework - in brief.
13. Try-in of the partial denture - in brief.
14. Completion of the partial denture - in brief.
15. Inserting the Removable Partial Denture - in brief.
16. Postinsertion observations.
17. Temporary Acrylic Partial Dentures.
18. Immediate Removable Partial Denture.
19. Removable Partial Dentures opposing Complete denture.

Note: It is suggested that the above mentioned topics be dealt with wherever appropriate in

the following order so as to cover -

1. Definition
2. Diagnosis (of the particular situation /patient selection /treatment planning)
3. Types / Classification
4. Materials
5. Methodology - Lab /Clinical
6. Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase

Fixed Partial Dentures

Topics To Be Covered In Detail

1. Introduction, p
2. Fundamentals of occlusion - in brief.
3. Articulators - in brief.
4. Treatment planning for single tooth restoration
5. Treatment planning for the replacement of missing teeth including selection and choice of abutment teeth.
6. Fixed partial denture configurations.
7. Principles of- tooth preparations.
8. Preparations for full veneer crown in detail.
9. Preparations for partial 'veneer crowns - in brief.
10. Provisional Restoration
11. Fluid Control and Soft Tissue Management
12. Impressions
13. Working Casts and dies
14. Wax- Patterns
15. Pontics and Edentulous Ridges
16. Esthetic Consideration .
17. Finishing and cementation

Topics To. Be Covered In Brief -

1. Solder Joints and Other connector
2. All - Ceramic restoration
3. Metal – ceramic Restorations
4. Preparations of intracoronar restorations.
5. Preparations for extensively damaged teeth.
6. Preparations for periodontology weakened teeth
7. The functionally " Generated, path Technique
8. Investing and Casting
9. Resin - Based Fixed Partial Denture

Note : It is suggested that the above mentioned topics be dealt with wherever appropriate in the following order so as to cover -

1. Definition
2. Diagnosis(of the particular situation / patient selection /treatment planning)
3. Types / Classification
4. Materials
5. Methodology ~ Lab /Clinical
6. Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase

19 AESTHETIC DENTISTRY

Aesthetic Dentistry is gaining MORE popularity since last decade. It is better that undergraduate students should understand the philosophy and scientific knowledge of the esthetic dentistry. . . ,

1. Introduction and scope esthetic dentistry
2. Anatomy, & physiology of smile
3. Role of the colour in esthetic dentistry
4. Simple procedures (roundening of central incisors to enhance esthetic appearance)
5. Bleaching of teeth
6. Veneers with various materials
7. Preventive and interceptive esthetics
8. Ceramics
9. Simple gingival contouring to enhance the appearance
10. Simple clinical procedures for BDS students

8. PUBLIC HEALTH DENTISTRY (COMMUNITY) – IV BDS

Syllabus:

1. Introduction to Dentistry: Definition of Dentistry, History of dentistry, Scope, aims and objectives of Dentistry.
2. Public Health:
 - (i) Health & Disease: - Concepts, Philosophy, Definition and Characteristics
 - (ii) Public Health: - Definition & Concepts, History of public health
 - (iii) General Epidemiology: - Definition, objectives, methods
 - (iv) Environmental Health: - Concepts, principles, protection, sources, purification environmental sanitation of water disposal of waste sanitation, then role in mass disorder
 - (v) Health Education: Definition, concepts, principles, methods, and health education aids
 - (vi) Public Health Administration: - Priority, establishment, manpower, private practice management, hospital management.
 - (vii) Ethics and Jurisprudence: Professional liabilities, negligence, malpractice, consents, evidence, contracts, and methods of identification in forensic dentistry.
 - (viii) Nutrition in oral diseases
 - (ix) Behavioral science: Definition of sociology, anthropology and psychology and their in dental practice and community.
 - (x) Health care delivery system: Center and state, oral health policy, primary health care, national programmes, health organizations.

Dental Public Health:

1. Definition and difference between community and clinical health.
2. Epidemiology of dental diseases-dental caries, periodontal diseases, malocclusion, dental fluorosis and oral cancer.
3. Survey procedures: Planning, implementation and evaluation, WHO oral health survey methods 1997, indices for dental diseases.
4. Delivery of dental care: Dental auxiliaries, operational and non-operational, incremental and comprehensive health care, school dental health.
5. payments of dental care: Methods of payments and dental insurance, government plans
6. Preventive Dentistry- definition, Levels, role of individual , community and profession, fluorides in dentistry, plaque control programmes.

Research Methodology and Dental Statistics

1. Health Information: - Basic knowledge of Computers, MS Office, Window 2000, Statistical Programmes
2. Research Methodology: -Definition, types of research, designing a written protocol
3. Bio-Statistics: - Introduction, collection of data, presentation of data, Measures of Central tendency, measures of dispersion, Tests of significance, Sampling and sampling techniques-types, errors, bias, blind trails and calibration.

Practice Management

1. Place and locality
2. Premises & layout
3. Selection of equipments
4. Maintenance of records/accounts/audit.

Dentist Act 1948 with amendment.

Dental Council of India and State

Dental Councils Composition and responsibilities.

Indian Dental Association

Head Office, State, local and branches.