





ii) Distribution of lesion: Three areas of localization of bone loss has been described.

- 1<sup>st</sup> molar or incisor
- 1<sup>st</sup> molar or incisor + Additional teeth not exceeding 14 teeth.
- Generalized involvement.

For localized juvenile periodontitis, Classical distribution in the first molar & the incisors. With least destruction in cuspid & premolar area.

- Most striking feature is lack of clinical inflammation with presence of deep periodontal pocket.
- Formation of plaque which really mineralize to become calculus.
- Most common initial symptom - like root surface sensitivity, dull radiating pain, periodontal abscess formation & lymph node enlargement may occur.
- presence of distolabial migration of maxillary & mandibular incisors as well as first molar.
- patient may complaint of sensitivity of denuded root surfaces to thermal as well as tactile stimuli.
- In various cases of localized aggressive periodontitis, disease appears to be self limiting. Attachment loss & bone destruction do not spread to other teeth. This



Phenomenon of self-limiting activity along with advanced age is known as burn-out phenomenon.

Radiographic Finding :-

- Vertical or angular bone loss around the 1<sup>st</sup> molar & incisors.
- presence of widening of periodontal ligament.

Histopathology

- Ulceration of pocket epithelium.
- Bacterial invasion of connective tissue that reached bone surface.

Treatment :-

Nonsurgical Treatment.

- Phase I therapy:

- Educate & motivate the patient.

- Oral hygiene instruction are given to the patient & counseling of the family members should be done.

- Full mouth disinfection.

- Dorsum of tongue should be brushed by the patient for 60 sec with 1% chlorhexidine gel.

- Peritonsillar region should be sprayed by chlorhexidine for two times a day.

Q] Define periodontal ligament. Describe in detail Fibres (Principal) of P.D.L With Diagram?

Ans] Introduction:- The normal periodontium is a unique & a complex dynamic structure; each of its components having distinct functions that are capable of adaptation during the life of the structure.

- Synonyms: Desmodont Gomphosis, Pericementum, Dental-periosteum, Alveolodental ligament, Periodontal membrane.

Definition:- Periodontal ligament is composed of soft complex vascular & highly cellular connective tissue that surrounded the tooth roots & connects to the inner wall of the alveolar bone.

- It is a narrow & highly cellular CT that forms the interface between alveolar bone & Cementum.

Extent & Shape :- At the root apex it merges with the dental pulp.

- It ranges in width from 0.15 to 0.38 mm.

Average width.

- Depending on age :-  
11-16 yrs - 0.21 mm  
32-52 yrs - 0.18 mm  
51-67 yrs - 0.15 mm



- According to functional state of the tissue.

Time of eruption - 0.1 - 0.5 mm

At function - 0.2 - 0.35 mm

Hypo function - 0.1 - 0.15 mm

Evolution :- The central point is the radical reconstruction of the mandible.

- In reptiles mandible consists of dentary

Mandibular articulation - Articularis & Quadratum

Growth changes :- Growth of mandibular body height.

- Tooth movement during eruption. Teeth move as unit independent of bones, by remodeling of periodontium.

Development :- The periodontal tissues are derived from dental follicle which in turn originates from dental papilla.

- The term dental follicle has been used by different authors to mean different things.

Orientation of PDL :- Mature PDL can be sub-divided into 3 regions.

- Bone related region - rich in cells.

- Cementum related region - dense & ordered collagen fibres.

- Middle zone - few cells & thinner collagen fibres.

## Q] Chlorhexidine mouth wash :-

Ans :- Introduction :- Chlorhexidine gluconate is a prescription germicidal mouthwash that decreases bacteria in your mouth.

Chlorhexidine mouthwash side effect :-

There are three side effect of using Chlorhexidine to consider before using it.

- Staining :- Chlorhexidine might cause staining to tooth surfaces, restorations, & the tongue. Often, a thorough cleaning can remove any stains.
- Alteration in taste :- Some people experience an alteration in taste during treatment. In rare instances, permanent taste alteration is experienced after the treatment has run its course.
- Tartar formation :- you may have an increase in tartar formation.

Warnings :- Allergic reactions :-

Dosages

Injection

Timing

periodontic.



## 2] Fenestration & Dehiscence :-

Ans:- Definition of Tooth Fenestration :-

~~Ans:-~~ Fenestrations are isolated areas in which root is denuded of bone & root surface is covered only by periosteum & overlying gingiva is called as Fenestration. Make a note that Marginal Bone is intact in Fenestration.

It is a localized defect in the alveolar bone which exposes the apical or medium third of the root surface but does not involve the alveolar margin.

Definition of Tooth Dehiscence :-

Dehiscence are isolated areas in which root is denuded of bone & root surface is covered by periosteum & overlying gingiva but the denuded area extends through the Marginal Bone.

In dehiscence there is no bone on one side of it (Coronally) & is measured with the use of graduated periodontal probe. The loss of bone is at least 4 mm apical to the margin of the interproximal bone.

- The cause for fenestration & dehiscence is not known & the etiology is usually mentioned as unknown.

2] Patterns of bone loss & introduction:-

- The height & density of alveolar bone are normally maintained by an equilibrium.

- Regulated by local & systemic influences, between bone formation & resorption.
- When resorption exceeds formation, both bone height & density is reduced.

Causes of bone destruction (in periodontal disease) :-

- i] Extension of Gingival Inflammation.
- ii] Trauma from Occlusion (TFO)
- iii] Systemic disorders.

\* Bone destruction Caused by Extension of gingival Inflammation.

- periodontitis is always preceded by gingivitis but not all gingivitis progress to periodontitis.
- Extension of inflammation from marginal gingiva to supporting tissue.



# Jansarovar Dental College, Kolar Road, Bhopal

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2. ROLL NUMBER	AKRITI BHADURIA															3. DATE				
4. COURSE	5. EXAMINATION					6. SUBJECT					7. Signature of Student									
Bds Final yr	Re-Test 3					ORTHODONTICS					Akriti									

NUMBER	MARKS																		TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
MARKS																				17/25

Notes :-

Management of class II malocclusion.  
Classify myofunctional appliance and write detail about Activator.

Short notes :-

Lead gears

Differences between RME and SME  
space maintainers.

Class II malocclusion

Features :-

Patient exhibits class II molar relation.  
Classical features of a class II, division 1 malocclusion is the presence of proclined maxillary



- anterior with resultant increased overjet.
3. The patient exhibits a convex profile.
  4. increased overbite and excessive curve of spee.
  5. The patient may have a short hypotonic upper lip. In addition the patient may place the lower lip against the palatal surface of upper incisors. This is called lip trap.
  6. Patients often lack an anterior lip seal due to the short upper lip.

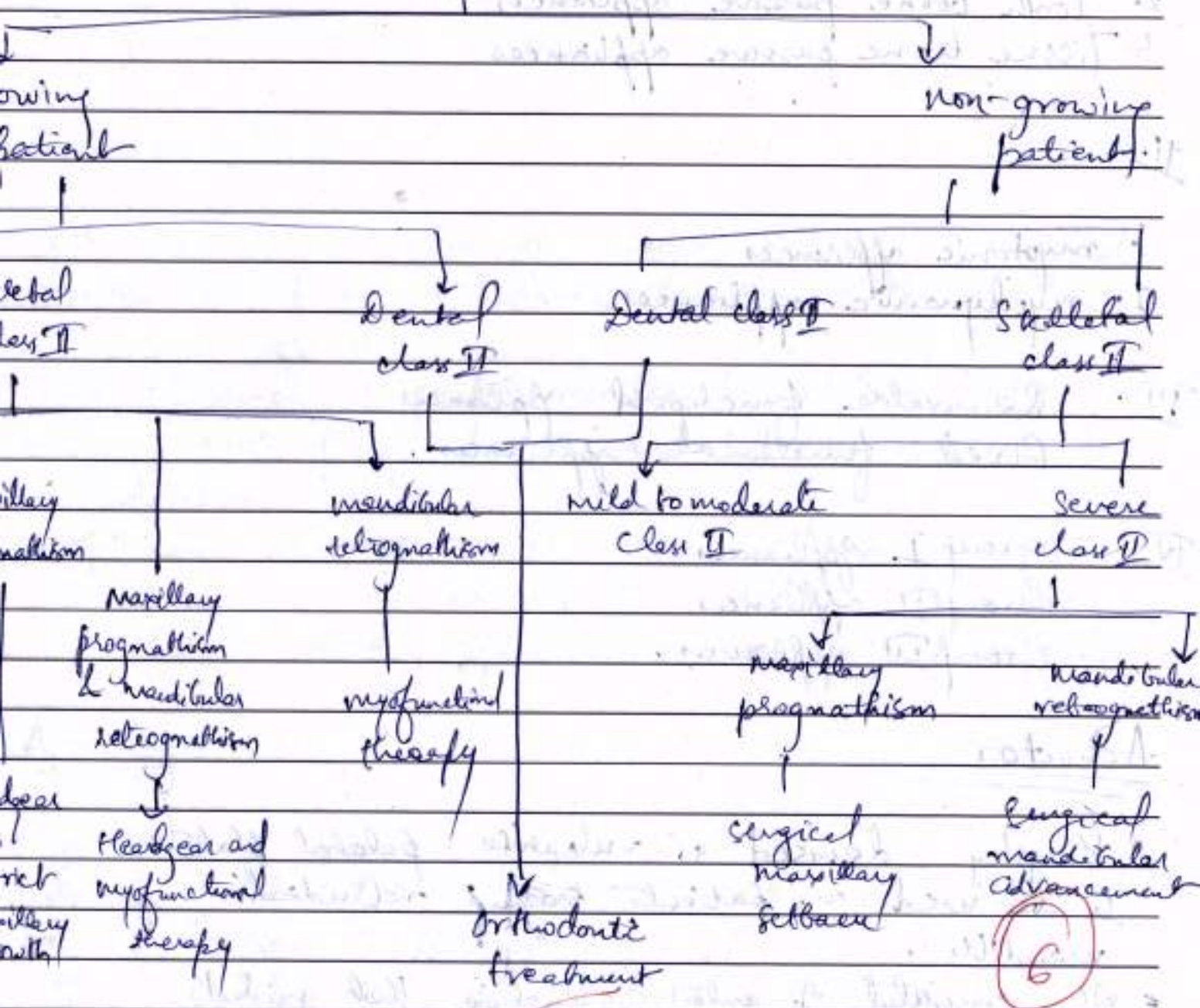
### Skeletal features :-

1. maxillary protrusion
2. mandibular retrusion
3. maxillary protrusion and mandibular retrusion

### Management of class II malocclusion



# Class II malocclusion



Functional appliances or myo-functional appliances are referred to as appliances that depend upon the oro-facial musculature for their action.

## Classification of myofunctional appliance



- I
1. Tooth borne active appliances
  2. Tooth borne passive appliances
  3. Tissue borne passive appliances

II.

1. myotonic appliances
2. myodynamic appliances

- III.
- Removable functional appliances
  - fixed functional appliances.

- IV
- Group I appliances
  - Group II appliances
  - Group III appliances.

### Activator

- Kingsley devised a vulcanite palatal plate to be used in patients having retruded mandible.
- It consisted of anterior incline that guided mandible to a forward position as patient closed on it.

### indications

1. class II, div 1 malocclusion
2. class II, div 2 malocclusion
3. class IV malocclusion
4. class I open bite malocclusion



class II deep bite malocclusion.  
for post treatment retention.

### Contraindications :-

- not used in correction of class I problems of crowded teeth caused by disharmony between teeth size and jaw size.
- The appliance is contraindicated in children with excess lower facial height and extreme vertical mandibular growth.
- Appliance is ~~used~~ not used in children whose lower incisors are severely procumbent.
- It has limited application in non-growing individual.

### Advantages :-

- Uses existing growth of jaws.
- During treatment the patient experiences minimal oral hygiene problems.
- The intervals between appointments are long.
- Appointments are usually short due to need for minimal adjustments.

### Disadvantages :-

- Requires very good patient co-operation.
- The activator cannot produce a precise detailing and finishing of the occlusion.



## Short notes

### 1) headgear

Headgears are the most commonly used extraoral orthopaedic appliances.

- They are used during growth period to interfere or correct certain skeletal malocclusions as well as to distalize the maxillary dentition or maxilla itself.

The headgear-face bow assembly has three main components :-

1. Face bow
2. The force element
3. head cap or cervical strap.

### 2) Uses of headgear :-

1. Anchorage augmentation
2. Distalization of molars
3. molar rotation
4. space maintenance



RME

Skeletal

Rapid

more traumatic

greater forces

more frequent

short

mostly fixed appliance  
before fusion of midpalatal suture  
more chance of relapse

SME

mostly dental

slow

more physiologic

milder force

less frequent

long

either fixed or removable

Any type

lesser chance of relapse



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ROLL NUMBER		Gauri Bhatnagar										3. DATE							
												200721							

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	Re-Test = 2	Orthodontic	

### MARKS

Q. NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL
MARKS																			13/12/25

classification of habits, detail about thumb sucking  
classification of anchorage & anchorage planning

- Optimum orthodontic force
- Ackerman's profit classification.

long answers.

Habit is defined as tendency towards an act that has become a repeated performance, relatively fixed, consistent and easy to perform by an individual

classification.

William James.



1. Useful habits = habits that are considered essential for normal function.

2. Harmful habits = habits that have deleterious effect on teeth.

II. Klein.

- Empty habit = Not associated with deep rooted prob.
- Meaningful habit = that have psychological problem.

III. AT pressure habit = thumb sucking, lip sucking

Non-pressure habit = mouth breathing.

Biting habit = Nail biting, pencil biting.

### Thumb Sucking Habit

placement of thumb in varying depth into mouth.

• Etiology

→ Socioeconomic status.

→ working mother.

→ order of birth.

→ Neglectance.

• Clinical feature.

→ maxillary anterior protrusion.

→ lingual tipping of mandibular incisor

→ anterior open bite

→ palatal vault become high.

→ upper lip hypotonic.

## • Management.

→ • Removable appliance =  
Upper Hawley appliance along with tongue spike

→ • Fixed Appliances =  
Blue gear appliance.  
oral screen.

→ Psychological approach =  
parent should be counselled to child with adequate love and affection to spend quality time with child

42  
dunlop hypothesis.

→ chemical approach =

- Pepper dissolved in volatile medium
- Quinine

## 2. anchorage =

anchorage is Nature & degree of resistance to displacement offered by anatomic unit for purpose of effecting tooth movement.

# classification.

• According to force

- (a) simple.
- (b) stationary
- (c) Reciprocal.

• According to jaws.

- (a) intra-maxillary
- (b) inter-maxillary



• According to site.

i) Intra-oral

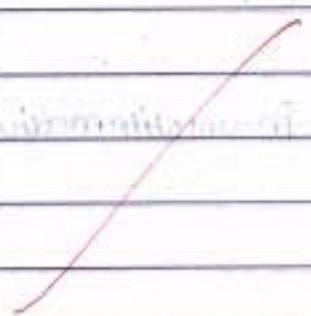
ii) Extra-oral

- cervical

- occipital

- cranial.

iii) Muscles.





## Short Notes.

### 10 Optimum Orthodontic Force.

→ Oppenheim and Schwartz had discovered optimum orthodontic force.

→ optimum force is one which moves teeth most rapidly in desired direction with least possible damage to tissue and with minimum patient comfort.

→ Ideal orthodontic force

→ Range = 20-26 gm/cm<sup>2</sup>.

Type of Movement	Force
Tipping	35-60g
bodily movement	70-120g
Rotation	35-60g
Exclusion	35-60g
Intusion	10-20g

→ clinically optimal force produces rapid tooth movement with minimum patient discomfort.



## 2. Ackermann-Profile

### • Group 1 (alignment)

1st step involves assessment of alignment of symmetry of dental arch.  
classified as crowded / spaced.

### • Group 2 (profile)

it involves profile.  
profile as convex / straight / concave.

### • Group 3 (type)

transverse skeletal & dental relationship is evaluated  
Buccal / palatal crossbite

### • Group 4 (class)

involves assessments of sagittal relationship  
as class I / class II / class III

### • Group 5 (bite depth)

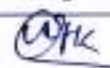
malocclusion in vertical plane  
anterior or posterior open bite  
anterior deep bite or collapsed bite.

- adv → complexities of malocclusion are easily explored  
→ readily acceptable.  
→ helps in formulating diagnosis.



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4. COURSE	5. EXAMINATION				6. SUBJECT				7. Signature of Student													
BDS IV <sup>4<sup>th</sup></sup>	3 <sup>rd</sup> Retest				Periodontics																	

## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				28/30

Paper III

Define trauma from occlusion. Write in detail its classification, stages & about primary TFO with radiographic features & etiology.

Q:-

**Definitions :-** When occlusal forces exceed the adaptive capacity of the tissue, tissue injury results. The resultant injury is termed as trauma from occlusion.

**Stages of Tissue Response:**

- Stage I - Injury

- change in occlusal forces causes injury
- varying degrees of pressure & tension create varying degrees of changes.

## Stage II - repair

i) Reparative activity includes formation of:

- New CT tissue cells & fibres, bone & Cementum
- Thinned bone is reinforced with new bone buttressing bone formation.

## Stage III - Adaptive remodeling of the periodontium.

- If the repair process can't keep pace with the destruction, the periodontium is remodeled in an effort to create a structured relationship in which forces are no longer injurious to the tissues.
- This results in a thickened periodontal ligament, which is funnel-shaped at the crest & angular defects in the bone with no pocket formation, increased mobility & increased vascularisation.

Features :- i) It does not initiate pocket formation.

ii) It does not alter the level of connective tissue attachment.



2) What is Periodontal Regeneration. Write in detail about Bone Graft?

Ans-

Terminology (acc. to glossary of Periodontal terms):

- A graft is any tissue or organ used for implantation or transplantation.
- An autograft is a tissue transferred from one position to a new position in the same individual.
- Homograft a graft between genetically similar individuals of the same species.
- Isograft graft between genetically identical individuals, identical twins.

Assessment of periodontal Regeneration

- Evidences of reconstruction of the marginal periodontium can be obtained by.
  - Clinical
  - Radiographic
  - Surgical re-entry or
  - Histologic procedures.
- All of these methods have advantages & shortcomings.

- Graft :- A viable tissue that after removal from a donor site is implanted with in a recipient tissue is then restored repaired & regenerated.

- Allograft :-

- i) Bone graft's harvested from one person for transplantation in another.
- ii) Used in periodontal therapy since last 3 decades.
- iii) most frequently used alternative to autogenous bone for bone grafting procedures in the US.

- Autografts :-

- i) First bone replacement grafts reported for periodontal applications.
- ii) Gold Standard for bone grafting procedures.
- iii) Rich source of bone & marrow cells.
- iv) Osteogenic potential.

OBJECTIVES OF BONE GRAFTING :-

- i) probing depth reduction.



- ii) Clinical treatment gain.
- iii) bone fill of the Osseous defect.

### ADVantages :-

- i) No donor site within the patient.
- ii) Reduces antigenicity
- iii) Facilitates long term storage
- iv) Material is available in large quantities.

### Disadvantages :-

- i) More expensive armamentarium
- ii) Extensive defects may require more material than can be ~~practically~~ processed with this approach.
- iii) Additional surgical result to the patient.
- iv) additional expense.  
i.e ; orthopedic surgeon or hematologist
- v) potential for root resorption with fresh material.

Contact Inhibition :- The process by which the graft material prevents apical proliferation of epithelium.

S/N.

## 1) Specification of Tooth Brush :-

Ans:-

Brushing surface :-

- 1 to 1.25 inches in length  
(25.4 to 31.6 mm long).
- $5/16$  to  $3/8$  inches in width  
(7.9 to 9.5 mm wide).
- 2 to 4 rows of bristles
- 5 to 12 tufts per row.

Tooth brush selection :-

- Ability of the patient.
- Manual dexterity of the patient.
- Age of the patient.
- Size & shape.
- professional personnel.

Types of Toothbrush :-

- Electric Toothbrush.
- Interdental Brush
- Sulca brush
- End-tuft Brush.
- Chewable Toothbrush.
- Ecological Toothbrush.



## 2) Aging & periodontium :-

Ans :-

periodontal ligament.

- Decrease in the no of collagen fibres; reduction or loss in tissue elasticity.
- Increased amounts of elastic fiber.
- Decreased organic matrix (mucopolysaccharides) production.
- Decreased Epithelial cell rests.

### Conclusion :-

- Aging dental patients have particular oral & general health conditions that dentists should be familiar with detecting, consulting, & treating.
- Medical disease & conditions that occur more than often with age may require modification to periodontal preventive tooth as well as the planning & treatment phases of periodontal care.

### 3) Supportive periodontal therapy

ns :-

#### Definition:-

- procedures performed at selected intervals to assist the periodontal patient in maintaining oral health.
- Therapeutic measures to support the patient's own efforts to control & so to avoid re-infection.

#### Rationale for SPT:

- limitation of mechanical subgingival debridement.
- Recolonization of pocket.
- long JE (weak attachment).
- To prevent interference.
- Subgingival scaling alters the ~~the~~ microflora of periodontal pockets.



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4. COURSE	5. EXAMINATION					6. SUBJECT					7. Signature of Student									
BDS- 4 <sup>th</sup> year	2 <sup>nd</sup> Re-test					Pedodontics					Dhanya									

## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				12½/20

## LONG ANSWERS :

### Pulpotomy :-

Pulpotomy is defined as the complete removal of the coronal portion of the dental pulp followed by placement of suitable dressing or medicament that will promote healing and preserve the vitality of tooth.

### Techniques :-

#### 1) Vital pulpotomy technique

- Devitalization
  - a) Single sitting
    - Formocresol
    - Electrosurgery
    - Laser
  - b) Two stage



- a) Gysi ~~test~~ paste
- b) Eastick's formaldehyde
- c) Paraform dentalizing paste.

## \* Formocresol Pulpotomy Technique

- Tooth should be anaesthetized and is isolated with rubber dam.
- All the remaining dental caries should be removed.
- Entire roof the pulp chamber is removed by tooth.
- A sharp spoon excavator must be used to extirpate coronal pulp; pulp stump should be cleanly excised.
- Moist cotton pellets should be placed in pulp chamber and allowed to remain over the pulp stump until clot forms.
- If haemorrhage is controlled and pulp stump appears normal, it is safe to proceed with ~~pulpotomy~~.
- Pulp chamber is dried with sterile cotton pellet. Now a pellet of cotton is moistened with 1:5 concentration of Buckley's formocresol and is blotted on a sterile gauze to remove excess is placed in contact with pulp stump and is allowed to remain for 5 minutes.



- Pellets are then removed and pulp chamber is dried with new cotton pellets.
- Thick paste consisting of zinc oxide eugenol is prepared and is placed over pulp stump.
- Zinc polycarboxylate cement is placed over the paste and tooth is restored with stainless steel crown.

(3)

Ans:2

## ORAL HABITS

According to Boucher, Habit is a tendency towards an act that has become a repeated performance, relatively fixed consistent, easy to perform and almost automatic.

Various oral habits are :-

1. Thumb / Digit sucking
2. Tongue thrusting
3. Mouth breathing
4. Bruxism
5. Nail biting
6. Lip biting
7. Masochistic habits



## \* Thumb Sucking

It is the ~~action~~ placement of thumb or digit into varying depths inside mouth.

### Clinical features:-

1. Maxillary anterior proclination and mandibular retroclination.
2. Anterior open bite → This type of malocclusion arises due to
  - a) interference with normal eruption of incisors due to interposed thumb.
  - b) Excessive eruption of posterior teeth due to separation of jaws, which alters vertical equilibrium on posterior teeth.
3. Constriction of maxillary arch - This is because of failure of maxillary arch to develop in width due to an alteration in balance between cheek and tongue pressure.
4. Posterior cross bite - This occurs as a consequence of constriction of maxillary arch. Unbalanced muscle forces on maxilla exerted by cheek muscle.



## Treatment:-

1. Psychosocial therapy -  
Thumb sucking between the age of 4-8 years need reassurance, positive reinforcement and friendly reminders.
2. Reminder therapy or mechanical therapy -
  - a) Extra oral approach - Mechanical restorations applied to hand and digit like splints, adhesive tapes. Thumb guard is most effective extra oral appliance for control of habit.
  - b) Intra oral approach - Optimal time for appliance placement is between ages of 3-1.5 years preferably during summer or spring.
    1. Fixed intra oral antithumb sucking appliance - It is most effective mechanical method to thumb sucking which is attached to upper teeth by means of band fitted to primary second molars and permanent first molars.
    2. Blue grass appliance - It is given to the children whose permanent or mixed dentition is affected.
    3. Oral screen - It produces its effect by by redirecting the pressure of muscular and soft tissue curtain of cheeks.



## SHORT NOTES :-

### Neonatal teeth :-

#### 1. Neonatal teeth -

Neonatal teeth are those that erupt within one month after birth.

- Mandibular incisor region is most prevalent location.

#### Clinical features :-

1. They resemble normally primary teeth, but in many instances they are poorly developed conical, yellowish with hypoplastic enamel and dentin with failure of root development.

- 2. A sharp incisal edge of neonatal teeth may lacerate the tongue and cause difficulty while breastfeeding of tooth germ, which predisposes the tooth to erupt early.

#### Treatment :-

1. It maintains the teeth in position
2. Extraction only when the teeth are mobile, supernumerary, interferes with feeding and danger of swallowing.
3. Extraction should not be done below the age of 10 days; if required vitamin K



supplement is given.

## Ans. 2 · SNYDER TEST

This test measures the ability of microorganism in saliva to form acids from carbohydrate media.

- The stimulated saliva is collected before breakfast by chewing paraffin.
- Then 0.2 cc of saliva is pipetted into media which is incubated at  $37^{\circ}\text{C}$  for 72 hours.

The media contains-

1. Bacto-peptase
2. Dextrase
3. Sodium chloride
4. Agar
5. Bromocresol green



Bromocresol green being an indicator, changes color from blue green to yellow in range of pH of 5.4 to 3.8. The color change is correlated with caries activity.



### 13 Stages of anaesthesia and Conscious sedation

#### Phase I - Moderated sedation and analgesia

- It can be achieved with concentrations of 5-25%  $N_2O$ .
- As the patient inhales, reassure that the symptoms may not be felt. When the symptoms are felt, instructions have to be adapted.
- The patient feels tingling in fingers, toes, cheeks, tongue.

#### Phase II - Dissociation sedation and analgesia.

- It can be achieved by 25-45%  $N_2O$
- Psychological symptoms - dissociation or detachment may be felt.
- Patient is suffused by a warm wave and may experience a slight humming or buzzing in the ear.

#### Phase III - Total analgesia -

- It can be achieved by 45-65%  $N_2O$ .
- Analgesia is complete and amnesia develops.
- It is a zone between analgesia and light anaesthesia.

#### Phase IV -

- Achieved by 65-85%  $N_2O$
- Provide light anaesthesia and contact is lost.



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BDS 3rd year	III Retest				Pedodontics				Rimmi													

## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				14/20

May 2

Long Note :->

Q1) Define child Psychology & Describe classical conditioning theory?

Ans) Defined as science (or) study of child's mind and how it function. It is science that deals with mental power (or) an organism conscious & subconscious elements in child.

• Classical conditioning theory :-

- Given by Ivan Pavlov in 1927

• Components of classical conditioning :->

i) Unconditional stimulus :  
It is natural & automatically  
triggers a response.

ii) Unconditional response :  
unlearned, occurs naturally.

iii) Conditioned stimulus :  
with previously neutral stimulus  
with an unconditional stimulus  
triggers response.

iv) Conditioned response : learned  
response to previously neutral  
stimulus.

• Principles :

↳ Acquisition :  
learning new response  
from environment by  
conditioning.



3) Generalisation :

Process of conditioning is evoked by a band of stimulus centered on specific conditioned stimulus.

3) Extinction :

Association b/w conditioned and unconditioned response is not reinforced.

4) Discrimination :

It is the opposite to the generalisation.

3) Spontaneous Recovery :

• Types of Conditioning :

- ④
- 1) Forward
  - 2) Backward.

~~Advantages~~ :

- Simple to understand.
- easy applicable.

Q2) Describe in detail about  
Pedodontic clinic setup?

Ans) Requirements :

- Dental office should be warm & have homely environment.
- Healthy communication with the child.
- Pleasant environment to keep child anxiety free.

• They should be :

- Walkway
- Ramp
- Door
- Corridor
- Flooring

• Waiting Room :

- reading material can be made available
- Soothing music
- uncomplicated architecture



- operating room :

- should be colorful & lively with posters
- colorful toys.

- Dental Health Education room :

- child, parents can be given proper instruction in preventive procedures

Eg : Brushing technique

- Dental Care for handicapped child :

- Appointment should be short.

- child must be treated lovingly

- ~~wheelchair & wheel chair lift should be made available.~~

## • Care procedures :

- child should be greeted by his name.
- child should be given sufficient time to relax.
- Dentist should praise the child's good behavior.

## • Guidelines for treatment :

- Emergency treatment
- Restorative therapy
- plaque control
- recall appointment
- infection control
- sterilisation
- autoclave

(4)



## Short Notes

Q) write symptoms of physical & sexual Abuse?

Ans) Symptoms of physical Abuse:

features:

- bruise
- burn
- bite
- Cut
- broken limbs.

Cause:

- verbal threats
- unexplained injury
- fracture
- Excuses or blaming

Symptoms of sexual Abuse:  
features:

- chronic itching
- pain
- feeling insecure
- Depression
- Suicidal attempt
- tearing
- bruising
- inflammation of genitalia

2

- difficulty in sitting.

Q2) Enumerate pharmacological & non-pharmacological means of behavior management?

Ans) Non-pharmacological methods of behavior management

- 1) Communication
- 2) Behavior shaping



# Mansarovar Dental College, Kolar Road, Bhopal

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ENROLMENT NO. DP 0 0 8 0 0 0 0 0 0 1 9 0 5 0

ROLL NUMBER  
0 8 1 9 0 5 0

DATE  
29 06 21

4. COURSE BDS 2nd year	5. EXAMINATION 1st Test	6. SUBJECT Pathology	7. Signature of Student N Kumar
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## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				15/20

Section - A  
Pathology

Long Answer :->

Inflammation is defined as local response of tissue to injury due to any agent.

-> It consists of 4 signs :->  
Redness  
swelling  
heat  
Pain

Vascular events of inflammation are  
a.) Hemodynamic changes  
b.) changes in vascular permeability.

- 1) Hemodynamic changes have  $\rightarrow$
- 1.) vasoconstriction  $\rightarrow$  Immediate vascular response is of transient vasoconstriction of arterioles.
  - 2.) vasodilation  $\rightarrow$  Next follows vasodilation of arterioles.
  - 3.) Local hydrostatic pressure  $\rightarrow$  vasodilation increases blood pressure resulting in transudation of fluid into extracellular space.
  - 4.) Slowing or stasis  $\rightarrow$  causes concentration of red blood cells.
  - 5.) Leucocyte margination  $\rightarrow$  Leucocyte move through gap between endothelial cells.

b) Increased vascular permeability  $\rightarrow$   
 $\rightarrow$  It is due to  $\rightarrow$   
contraction of endothelial cells.  
mild endothelial injury.  
Direct injury to endothelial cells.  
Leucocyte mediated injury.



- Cellular events have :->
- 1) Exudation of leucocytes
  - 2) Phagocytosis

3/2

2b) Necrosis is a focal death along with degradation of tissues by enzymes by dead cell.

Types are :->

1.) Coagulative necrosis :-> focal injury due to cessation of blood flow  
-> organs affected are heart, kidney and spleen.

2.) Liquefaction necrosis :-> when necrosed cells are converted into structure less fluids.

2/1h

- > due to enzymes
- > In brain.

3.) Caseous Necrosis :-> when necrosed tissue is converted into soft cheese like mass.  
-> Granuloma appear  
-> combination of above two.

4.) Fat Necrosis :-> Necrosis of fat cells.  
-> In acute pancreatitis and necrosis of breast.

Ans. c) Primary Healing consists of  $\Rightarrow$

- a.) Initial hemorrhage  $\Rightarrow$  Immediately after injury. Wound is filled with blood and then clots and seal wound.
- b.) Acute inflammatory Response  $\Rightarrow$  Appearance of PMNs from margin of incision. PMNs replaced by macrophages.
- c.) Epithelial changes  $\Rightarrow$  Basal cells of epidermis start proliferating and migrating.  $\rightarrow$  A new epidermis is formed.
- d.) Organisation  $\Rightarrow$  By fifth day new collagen fibrils start forming.  $\rightarrow$  In four weeks scar tissues with scanty cellular and vascular elements.
- e.) Suture tracks  $\Rightarrow$  Each wound have different suture track.

Complication  $\Rightarrow$  wound or healing is affected by factors  $\Rightarrow$

- a.) Foreign Bodies
- b.) Infection
- c.) Poor Blood supply
- d.) Age
- e.) Nutrition

3



2)

## Short Answer Questions :-

1)

Iron deficiency Anaemia :- causes due to deficiency of iron in body.

### Lab Diagnosis :-

- 1.) General Blood Parameters :- Hemoglobin is decreased.  
→ RBC count decreased.  
→ MCV, MCH, MCHC ↓.
- 2.) Peripheral Blood Parameter :- Anisocytosis and Poikilocytosis occur.
- 3.) Reticulocytes count is decreased.
- 4.) Bone Marrow :- Presence of erythroid hypoplasia  
→ prominent cell is polychromatic normoblast.
- 5.) Iron Studies :- Decrease in serum iron.  
Serum ferritin is very low.  
Red cell is low.

### Clinical Features :-

- 1.) Anaemia
- 2.) Pica
- 3.) Nail becomes brittle
- 4.) Infections

2) Acute myeloid leukemia  $\rightarrow$  Disease by infiltration of malignant myeloid cells in blood.

Lab diagnosis  $\rightarrow$

a.) Blood picture  $\rightarrow$  normochromic and progressive Anaemia  
Thrombocytopenia.  
WBC count is more than 100,000/ML.

b.) Bone marrow  $\rightarrow$  marrow is hypercellular with predominance of myeloblasts.  
③  $\rightarrow$  Erythropoiesis cells are reduced.  
 $\rightarrow$  Aneuploidy.

c.) Cytochemistry  $\rightarrow$  Presence of Auer rods.

d.) Biochemical investigations  $\rightarrow$  Serum naranidase i.e serum level of lyszyme is increased.

3) Benign And malignant Neoplasia.

	Benign	②	Malignant
Boundaries $\rightarrow$	well circumscribed		Poor circumscribed
Size $\rightarrow$	Small		Large
Basal Polarity $\rightarrow$	Retained		lost
N-C ratio $\rightarrow$	Normal		Increased.



Hyperchaematisms →	Absent	Present
Growth rate →	slow	Rapid
Local invasion →	Absent	Present
metastasis →	Absent	Present

4.)

Site →	Moist Gangrene Bowel is affected	Dry Gangrene Limbs are affected ..
--------	-------------------------------------	---------------------------------------

- |                           |                                |                                 |
|---------------------------|--------------------------------|---------------------------------|
| 1.) Mechanism →           | By venous occlusion            | Asterial occlusion .            |
| 2.) Macroscopy →          | moist, soft, swollen, rotten   | organ dry, shrunken and black . |
| 3.) Line of demarcation → | <del>Present</del><br>Absent . | Present .                       |

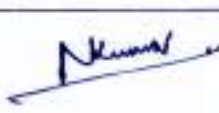


5.) Cardiac Edema →



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4. COURSE	5. EXAMINATION	6. SUBJECT		7. Signature of Student																
BDS 2nd Year	1 <sup>st</sup>	Microbiology																		

## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				14

Q1

Q1 The clinical course of HIV infection can present as follows:

• Acute HIV Infection

• It is characterized by acute onset of fever, malaise, sore, throat, myalgia, arthralgia, skin rash and lymphadenopathy.

• Peripheral blood usually shows lymphocytosis.

• Virus, viral nucleic acid or viral p24 antigen may be detected during acute infection.



- Asymptomatic infection

- In the course all infected persons are usually well.
- Patients show positive HIV antibody test, and are infectious.

- Persistent generalized lymphadenopathy

- It is characterized by enlarged nodes at two or more extragastric sites for at least 3 months.
- Persistent generalized lymphadenopathy must be differentiated from other causes of lymphadenopathy such as lymphomas.
- Symptomatic HIV infection.

- When CD<sub>4</sub><sup>+</sup> T lymphocyte count falls below 700 per mm<sup>3</sup>, patient may develop symptoms like fever, diarrhea, weight loss, night sweats and opportunistic infections.

- AIDS is the end stage of HIV infections.

## 2) Lab Diagnosis

### Immunological tests

Total leucocyte count and lymphocyte count shows leukopenia and lymphocyte count decreases to  $2000\text{mm}^3$

- Count of  $\text{CD}_4^+$  T cells is less than  $200\text{mm}^3$
- $\uparrow$  in IgG and IgA antibodies.

### Specific Tests

#### Antigen Detection Test

- Done by ELISA
- This test becomes negative when antibodies appear

#### Nucleic acid detection

- Signal amplification test: In this branched DNA test is done
- Target amplification test: In this PCR is done for detection of nucleic acid and RT-PCR is done for quantification of viral load.



## Virus isolation

- In this method lymphocytes of patient are cocultured with uninfected lymphocytes in presence of interferon-2

## Antibody Detection

- Appearance of antibody in 2-6 months prior to sexual exposure.
- In patient's serum IgG and IgM antibodies are seen.

- For antibody detection there are two types of test i.e. screening and confirmatory

### • Screening Test

1) ELISA

(1) Rapid Test

a) Dot blot assay

b) Particle agglutination

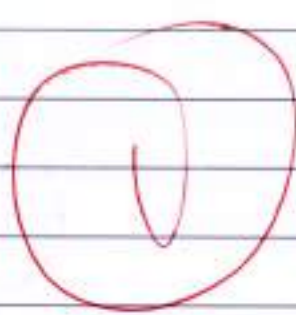
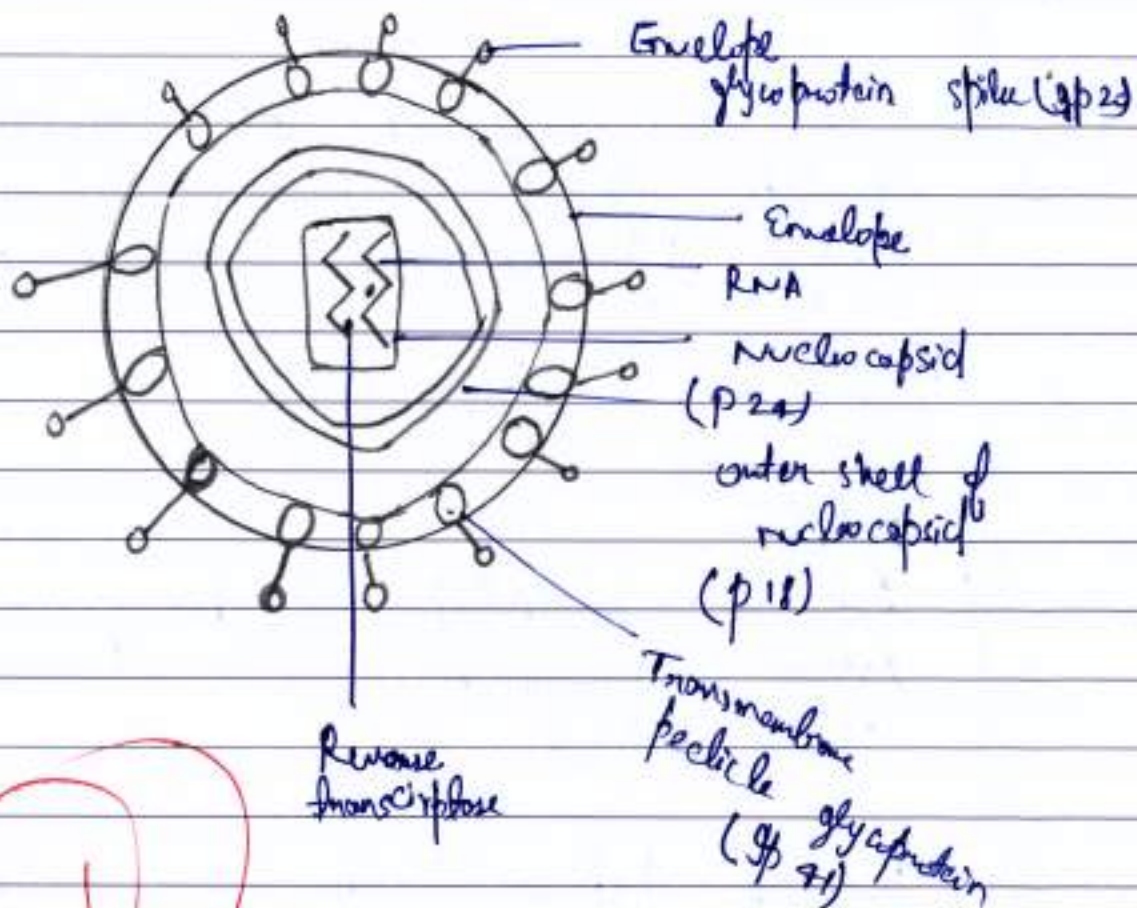
c) HIV spot and comb test

2) Supplemental Test

2

- a) western blot test
- b) Indirect immunofluorescence test
- c) Radioimmunoassay ~~test~~ assay.

(a)





D. Hypersensitivity refers to a condition in which immune response results in excessive reactions which leads to tissue damage, disease or even death in sensitized host.

### Classification

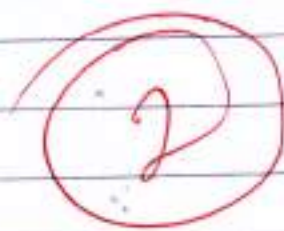
Based on time required to sensitized host to develop clinical reaction on re-exposure to antigen hypersensitivity is classified as

- a) Immediate hypersensitivity
- i) Anaphylaxis
  - ii) Allergy
  - iii) Antibody-mediated cell damage
  - iv) Arthus phenomenon
  - v) Serum sickness.

b) Delayed hypersensitivity

- i) Infection
- ii) Contact dermatitis type

iii) Hypersensitivity reactions are classified into four major types by Coombs and Gell (1963)



Type - I : Immediate

Type - II : Cytotoxic

Type - III : Immune complex

Type - IV : Delayed or cell mediated.



Q-4

- 1) a) ✓
- 2) b) ✓
- 3) ✓
- 4) b) ✓
- 5) a) ✓
- 6) c) ✓
- 7) ✓
- 8) b) ✓
- 9) a) ✓
- 10) b) ✓



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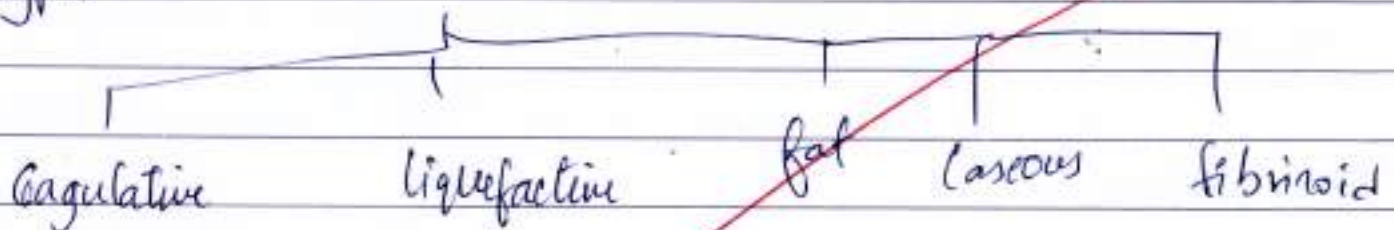
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BDS				1 <sup>st</sup> retest				PATHOLOGY														
MARKS																						
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL			
MARKS																						

R.I

b.) Necrosis

It is defined as focal death along with degeneration & degradation of tissue by hydrolytic enzymes liberated by dead cell.  
- Accompanied by inflammatory response

Types



### Q.3 Coagulative necrosis:

- 1.
2. - most common type
3. - irreversible focal injury
4. - sudden cessation of blood flow
5. - heart, kidney, spleen
6. ex: myocardial infarct.
- 7.

mech.

Decrease of pH



Denaturation



± enzymatic proteins



preservation of basic  
architecture

Gross appearance: pale, swollen, yellowish, soft.

Microscopic: islands, debris lost.

### Liquefactive:-

- Structure less fluid
- Ischaemia & infection
- Structure lost
- Liquefied



Mech:

Bacterial infection

↓  
Accumulation of inflamed cells

↓ enzymes

Autolysis

Gross: liquified, necrotic debris.

Microscopic: No structure

necrotic debris.

Caseous Necrosis:

soft cheese like mass

granuloma production

tuberculosis

mech: - delayed hypersensitivity

Gross: soft, granular, yellowish

Microscopic: dystrophic calcification  
granular structure.

Fat Necrosis:

fat cells

pancreatitis

fat necrosis of breast.

mech: pancreated lipases

↓

destruction of fat &  
release of fatty acids

↓

chubby white sea

Gross appearance

yellowish white

chubby white appearance

Microscopic: cloudy appearance

Fibrinoid necrosis

- deposition of fibrin

vasculitis, arteries

Microscopically eosinophilic

nuclear debris

local haemorrhage.

3



## D) Difference b/w malignant & benign tumours

### Benign

- Well circumscribed boundaries
- Small size
- 2° changes less often
- Basal polarity retained
- Anisonucleosis absent
- Hyperchromatism Absent
- Function maintained
- Growth rate slow
- Metastasis absent

### Malignant

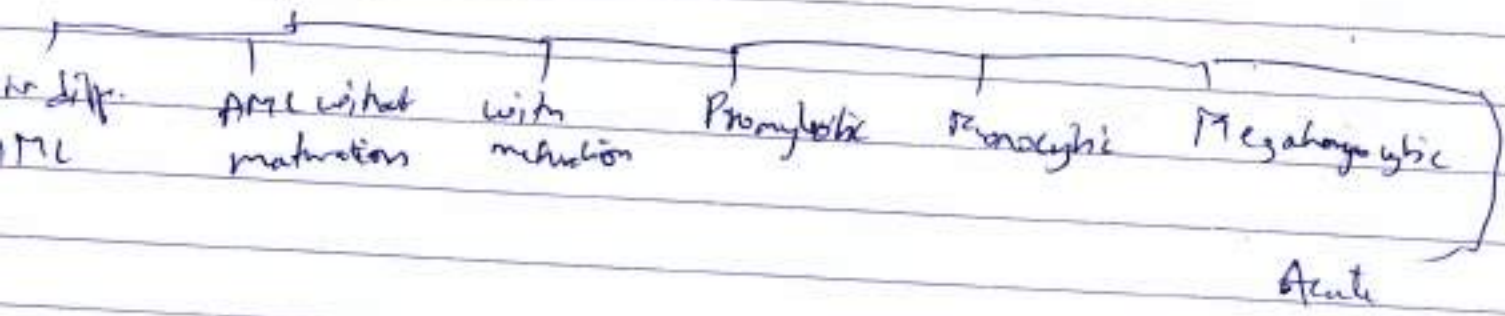
- Poorly circumscribed boundaries
- Large size
- 2° changes more often
- Lost
- present
- present
- lost
- Growth rate fast
- Metastasis present



## E) Acute myeloid leukaemia

- Heterogenous disease
- infiltration of malignant myeloid cells in blood, bone marrow, & tissues.

### Classification



## Clinical features

- Due to bone marrow failure
  - Bleeding, bruising
  - fever
- Organ infiltration
  - pain
  - seen by pathophys
  - hepatomegaly
  - lymph node path

## Lab findings



- Anemia
- thrombocytopenia
- WBC count increased
- hepatosplenomegaly
- leukocytosis
- Erythrocytosis
- Philadelphia chromosome

## Biochemical investigations

Urea nitrogen levels  $\uparrow$

Uric acid  $\uparrow$  increased



2.3

1. [C] lung. ———— ⊗
2. [D] leiomyoma ———— ⊕
3. [A] High ———— ⊕
4. [B] Border line ———— ⊕
5. [B] Gross red & non-polarised ———— ⊕
6. [A] Dead parasite ———— ⊗
7. [C] Hyaline changes ———— ⊗
8. [B] Spread to lymph nodes ———— ⊗
9. [A] Tumor suppression ———— ⊕
10. [T] AL. ———— ⊕

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ENROLMENT NO. DP 008D000019003

ROLL NUMBER  
0819003

DATE  
26/10/21

4. COURSE BDS	5. EXAMINATION 2nd year Retest	6. SUBJECT Pathology	7. Signature of Student Akash Rungta
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MARKS																				
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				13/20

## 2 Short Answer Questions

Difference between benign and Malignant Neoplasia.

### Benign Neoplasia

An abnormal growth that does not invade surrounding tissue or spread to other parts of the body.

Have a slow growth rate.

Most cells in benign tumour are normal.

### Malignant Neoplasia

An abnormal growth that can invade and destroy nearby tissue and that may spread (metastasize) to other parts of the body.

Have a fast growth rate.

Cells have abnormal DNA and chromosomes, which make the nucleus larger.



Easy to remove

Have less chance to occur

Do not spread to the other parts of the body

Do not invade the tissues around them

Cells are not cancerous

Can be treated with surgery



Secrete hormones including benign pheochromocytoma

Difficult to remove

Most likely to occur

Spread to the other parts of the body either through blood stream or lymphatic tissue.

Invade the tissues around them

Cells are cancerous

Treated with chemotherapy, radiation therapy or immunotherapy treatment.

Secrete substances which cause fatigue and weight loss.





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ROLL NUMBER	NEHA BANI														DATE				
4. COURSE	5. EXAMINATION					6. SUBJECT					7. Signature of Student								
BDS II <sup>nd</sup> year	Retest I					Dental material					Neha								

## MARKS

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				12/25

Paper 1

Kanishk

e-1 Long note

- Alginate - A dental impression is a negative record of the tissue of mouth
- The material used for taking impression is called impression material.
- # Alginate
- It is irreversible hydrocolloid.
- The word alginate comes from 'Algin' which is a peculiar mucous extract yielded certain brown seaweeds

Composition: →

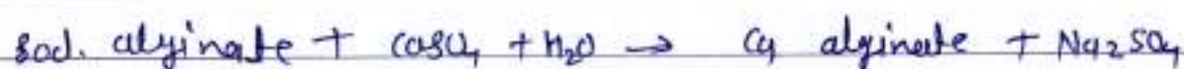
- triethanolamine alginate - 15%
- calcium sulphate dihydrate - 16%
- zinc oxide - 4%

Potassium titanium fluoride -	3%
diatomaceous earth	60%
Trisodium phosphate	2%
colouring & flavoring agent.	braces.

Setting reaction



3



# manipulation - A clean flexible plastic bowl.  
A clean wide-bladed, reasonably stiff metal spatula. curved

# use - It is used for impression making.  
For duplicating models.

Advantages → Easy to mix and manipulate.  
- low cost -

Disadvantages - Poor tear strength  
It cannot be corrected.

# Classification of impression material.

- (1) on the basis of mode of setting and elasticity.
- (2) on the basis of tissue displacement during



Impression procedure.

- c) on the basis of use in dentistry
- d. Based on the type of tray.

Q2) Short note.

Q3) hygroscopic setting expansion?

→ expansion of their peripheral boundaries that is known as "Normal setting expansion"

→ When additional water is brought into contact with the setting material, an increased expansion is observed.

→ This latter expansion has been termed 'hygroscopic expansion'.

Q4) Sintering -

→ sintering - a dental sintering furnaces are used to process dental zirconia after it has been milled into crown, bridge, framework or other restoration.

These furnaces are capable of reaching the extremely high temperatures required to sinter zirconia to its final hardness.

### B. Ceramics

→ Ceramics - Dental ceramic is the generalized term for the product which is made from non-metallic inorganic material which is processed by firing at high temperature, while porcelain is the restrictive term used for mixture of kaolin, quartz and feldspar which is when fired at high temperature produced glossy translucent finish.

MCQ

Methacrylate

Plastic

All of the above

0.1 - 0.5%

Mixing of amalgam alloy & mercury.



# Mansarovar Dental College, Kolar Road, Bhopal

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2. ROLL NUMBER	ANN ROSE RAJU															3. DATE				
4. COURSE	5. EXAMINATION					6. SUBJECT					7. Signature of Student									
BDS	Retest I Paper					Dental material														

MARKS																				
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				12 25

## ALGINATE IMPRESSION MATERIAL

- It is irreversible hydrocolloid.

### TYPES

Type 1 - Fast setting.

Type 2 - Normal setting.

### APPLICATIONS

\* It is used for impression making.

- when there are ulcers.

- In mouth with excessive flow of saliva.

- For partial denture with clasps.

\* For making preliminary impression for complete

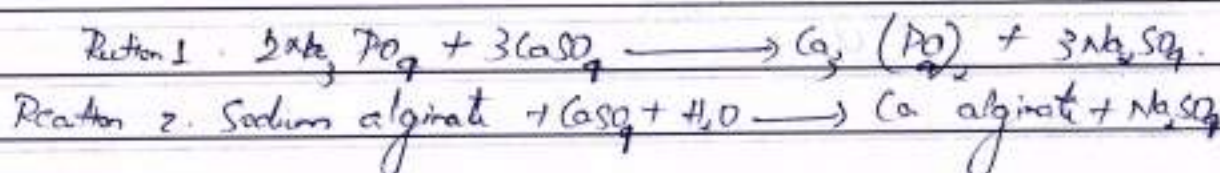
purpose

- \* for impressions to make study models & working casts.
- \* for duplicating models.

### 1. Composition

- Sodium / Potassium / Triethanolamine alginate
- Calcium Sulfate
- Zinc Oxide
- Potassium titanium fluoride
- Diatomaceous earth
- Sodium phosphate
- Coloring & flavoring agent

### SETTING REACTION



### MIXING TIME

for fast set = 45 seconds  
for normal set = 60 seconds

### SETTING TIME

Type 1 = 15 - 20 minutes  
Type 2 = 3 - 4.5 minutes



## ADVANTAGES

- It is easy to use & manipulate.
- Minimum requirement of equipment.
- Flexibility of the set impression.
- Accuracy if properly handled.
- Low cost.
- Comfortable to the patient.
- It is hygienic, as fresh material must be used for each impression.
- It gives a good surface detail even in presence of saliva.

## DISADVANTAGES

- Cannot be electroplated so metal dies are not possible.
- It cannot be conserved.
- Distortion may occur.
- Poor dimensional stability.
- Poor tear strength.
- Silica particles in dust cause possible health hazards.

## CLASSIFICATION OF IMPRESSION MATERIAL

⇒ According to setting & elasticity:

Thermoset, thermoplastic, rigid & elastic.

⇒ According to tissue displacement:

1. Mucostatic.

2. Mucocompressive.

- ⇒ According to the uses in dentistry:
- Impression materials used for complete denture prostheses
  - Impression materials used for dentulous mouth

### SN 1. HYGROSCOPIC SETTING EXPANSION

- When gypsum products are allowed to set in contact with water, the amount of expansion exhibited is much greater than the normal setting expansion.
- The increased amount of expansion is because water helps the accelerated growth of crystals. This expansion is known as hygroscopic setting expansion.

### Factors affecting hygroscopic setting Expansion:

⇒ Composition:

from partial size of the silica, greater is HSE.

⇒ W-P ratio:

higher W-P ratio - less is the HSE.

⇒ Temperature: Higher the temperature - greater the expansion.

⇒ Effect of Time of Impression: ∴ before the initial set results in greater expansion.



## 2. SINTERING

- The process of forming a solid mass of material through heat & pressure without melting to the point of liquidation.
- This process involves the atoms in materials diffusing across the particle boundaries & fusing together into one piece.

## 3. CERAMICS

- Dental Ceramics is defined as compounds of 1/non-metal with non-metallic element, usually oxygen.
- They are formed of chemical & biochemical stable substances that are strong, hard, brittle, & heat non-conductors of thermal & electrical energy.

### CLASSIFICATION

⇒ According to firing temperature.

- High firing.
- Low firing.
- medium firing.
- Ultra low-firing.

⇒ According to type.

⇒ According to its function with Pyrolytic.

- Core Ceramics
- Opacifier Ceramics
- Veneering Ceramics
- Stain
- Glaze

⇒ According to microstructure

⇒ According to fabrication process

⇒ According

Uses

(2)

- Inlays & onlays
- Aesthetic lamination
- Single crown
- Short span bridge
  - Artificial distal teeth
- Ceramic orthodontic brackets

MCQ


1. a ✓
2. a ✓
3. d ✓
4. b ✓
5. b ✓

(5)



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ENROLMENT NO.																				
ROLL NUMBER	Muskan Kushwaha																	DATE		
																		280521		
4. COURSE	5. EXAMINATION	6. SUBJECT															7. Signature of Student			
BDS (final year)	I <sup>st</sup> Retest buttehal Exam	Oral & Maxillo-facial Surgery																		
MARKS																				
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				19/25

19/25  
Present

es 1]

LONG ANSWERS

ns 1 → EXODONTIA

Exodontia / tooth extraction is defined as the painless removal of a whole tooth or tooth root with minimal trauma to the investing tissues, so that the wound heals uneventfully & no post operative prosthetic problem is created.

Geoffrey L. Howe

## ① Indication

- 1] Severe Caries where the teeth are not restorable
- 2] Economical
- 3] pulpal necrosis
- 4] Severe periodontal disease
- 5] orthodontic reasons
- 6] malposed teeth - which hinder with the design and fabrication of the prosthesis / cause trauma from occlusion.
- 7] fractured teeth which can not be conserved
- 8] preprosthetic extractions
- 9] teeth in fracture line.
- 10] Irradiation area
- 11] malignant condition, cyst, tumor.

## ② Contraindication

Absolute

- Uncontrolled diabetes
- Leukemia
- Renal failure
- Cirrhosis of liver
- Cardiac failure

Relative

- Hypertension
- pt on steroid therapy
- pregnancy
- Blood dyscrasias
- Toxic goitre



## Complications

### → Immediate

- failure to secure local anaesthetic
- failure to remove tooth
- fracture of tooth & alveolus
- orocutaneous communication
- Dislocation of [TMJ]
- pharynx & lung / stomach
- Aspiration of tooth / part of the tooth into pharynx.

### → Delayed

- Excessive pain, swelling & trismus
- Hemorrhage
- localized alveolar osteitis
- Acute osteomyelitis
- Orocutaneous fistula
- Nerve damage

### → late

- chronic osteomyelitis
- Osteoradionecrosis
- Nerve damage
- Chronic pain

6

Aug 21 → CLASSIFICATION OF IMPACTED  
THIRD MOLAR

① WINTER'S CLASSIFICATION

① According to the position of its long axis

(a) Mesioangular - long axis of 3<sup>rd</sup> molar bisects long axis of 2<sup>nd</sup> molar at or above occlusal plane.

(b) Distangular - long axis of 3<sup>rd</sup> molar away from long axis of 2<sup>nd</sup> molar at the level of occlusal plane.

(c) Vertical - long axis of 3<sup>rd</sup> molar is parallel to long axis of 2<sup>nd</sup> molar.

(d) Horizontal - long axis of 3<sup>rd</sup> molar bisect long axis of 2<sup>nd</sup> molar at right angle.

(e) Buccoverision - tooth buccally impacted

(f) Lingoverision - tooth lingually impacted

(g) Inverted - 3<sup>rd</sup> molar inverted downward.

② Management of Mesioangular impacted mandibular third molar

① Clinical ~~total~~ assessment of 3<sup>rd</sup> molar.



2) Anaesthesia - ~~LA~~ local anaesthesia - nerve block -  
inferior alveolar nerve block, lingual & long buccal nerve  
block.

Radiographic assessment

Woods incision - anterior release incision made including  
interdental papilla distal to 2<sup>nd</sup> molar

Incision extends downward at 45° to long axis of 2<sup>nd</sup> molar  
extending 5mm beyond mucogingival junction. Circular  
incision is done in with 3<sup>rd</sup> molar to remove  
sulcular epithelium along 2 teeth.

Distal release incision - from distobuccal line angle of 3<sup>rd</sup> molar  
buccolingually to avoid encountering the lingual nerve.

Buccal mucoperiosteal flap is raised including the interdental  
papilla. → Exposing impacted 3<sup>rd</sup> molar

~~Austin retractor placed over the external oblique  
ridge retracting the buccal flap.~~

~~Raising of lingual flap with~~

3) Guttering of the mesial buccal & distal base of 3<sup>rd</sup> molar  
(more - will be collar tech)

Initiation of odontotomy along long axis of tooth  
midway at the bifurcation, crown root  
sectioning of the tooth.

Straight elevator engaged into the created groove of rotated clockwise to complete the odontectomy.



Remove the distal segment



Remove the mesial segment



Wound debridement of primary closure



Suturing done





Ques 2]

# SHORT ANSWERS

Ans 1]

## CLASSIFICATION OF ANESTHESIA

⊙ Based on chemistry

1] ESTER

→ Co Benzoic acid

- Cocaine
- Benzocaine
- Butacaine
- hexylcaine
- piperocaine

→ Paraaminobenzoic acid

- procaine
- tetracaine
- propylcaine

2] AMIDES

- Bupivacaine
- Etidocaine
- Lidocaine
- Mepivacaine
- prilocaine

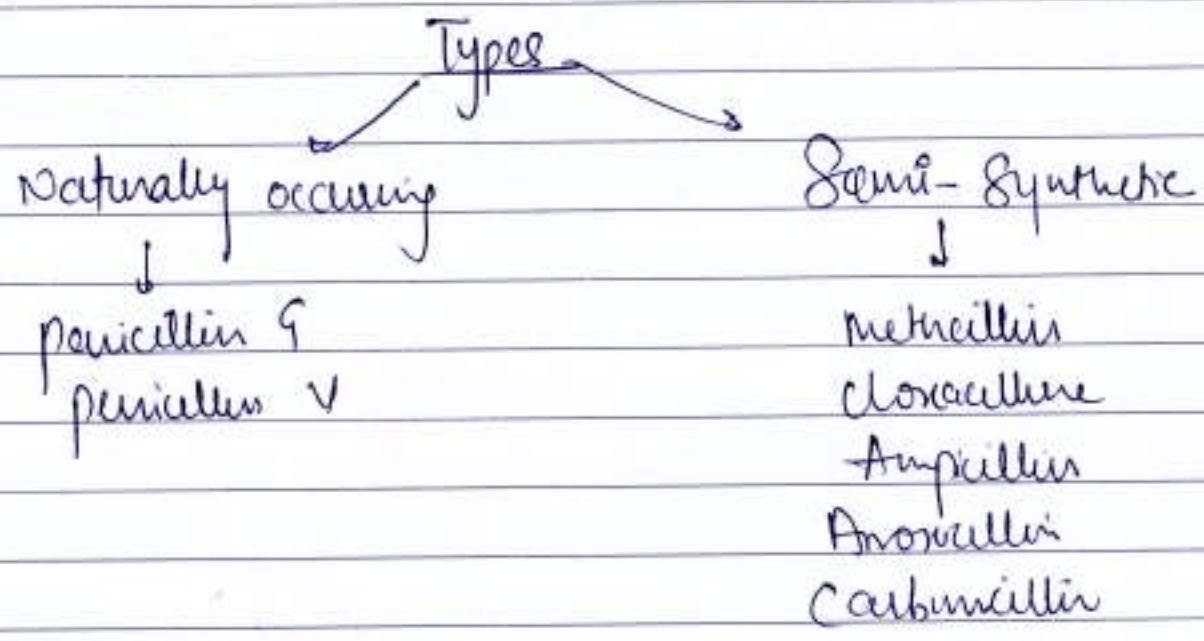
3

3] Quinoline

↳ Centbucaidine

# PENICILLIN

- Discovered by Alexander Fleming
- first antibiotic developed & used clinically
- Source - penicillium chrysogenum
- first choice of antibiotic for initial treatment of most acute odontogenic infections



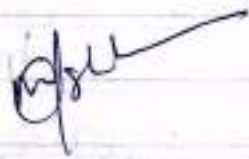
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Albinet



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2. ROLL NUMBER		Musfiam Keshwala												3. DATE						
														23 07 21						
4. COURSE				5. EXAMINATION				6. SUBJECT				7. Signature of Student								
BDS (final Year)				II <sup>nd</sup> Retest Interim exam				oral - maxilla facial surgery												
MARKS																				
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	
MARKS																				29/25

29/25  
Interim

Ques 1] LONG ANSWERS

Ques 1] HAEMORRHAGE

prolonged / uncontrolled bleeding is often referred to as haemorrhage

① Various types of Haemorrhage

~~According to situation~~

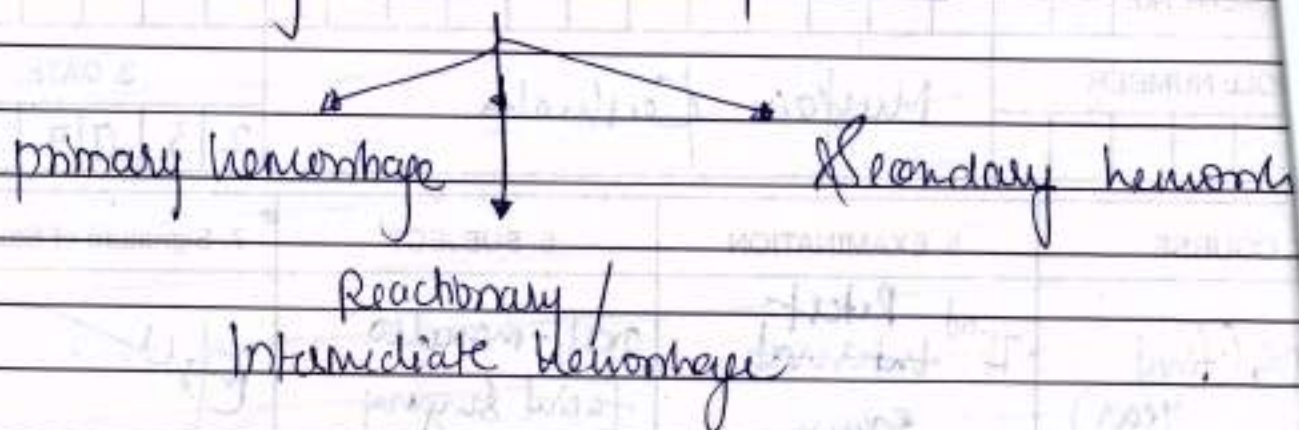
Arterial  
haemorrhage

Capillary haemorrhage

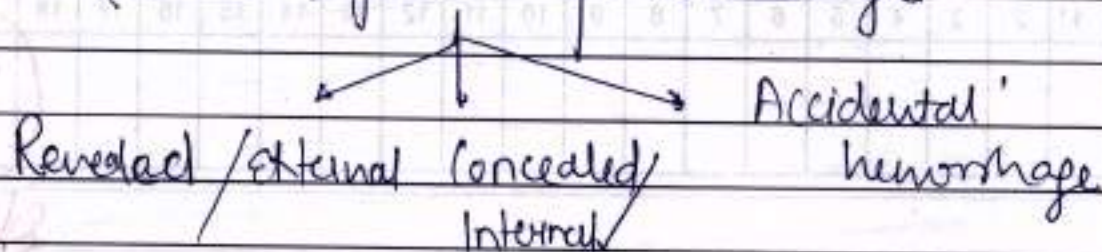
Venous  
haemorrhage



① According to the time of wound:



② Clinical classification of hemorrhage



③ WORLD HEALTH ORGANIZATION (WHO)

- Grade 0 - no bleeding
- Grade 1 - petechial bleeding
- Grade 2 - mild blood loss (clinically significant)
- Grade 3 - Gross blood loss, requires transfusion
- Grade 4 - debilitating blood loss, Retinal / Cerebral associated with fatality



# TREATMENT

- 1] Pad & Bandage → applying direct pressure to wound
- 2] Digital pressure
- 3] Application of tourniquet → for 30 mins.
- 4] Surgical ligation
- 5] Coagulation
- 6] pack.
- 7] Styptics - ~~Astringents~~

7

Ans 2]

# TRIGEMINAL NEURALGIA / TIC DOULOUREUX

## Introduction

Trigeminal neuralgia is defined as  
"An intermittent paroxysmal, ~~tutem~~ sharp,  
shooting, stabbing, lancinating pain in the  
distribution of trigeminal nerve".

## MANAGEMENT

(A) Medical Treatment

Surgical Treatment

Conservative

1<sup>st</sup> Line Treatment

- Anticoagulants

(a) Carbamazepine - 100-200 mg (TID)

(b) Dilantin Sodium /  
phenytoin Sodium (Control)

50-100 mg (BD/T&D)

or in combination with

(Carbamazepine)



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BDS (final yr)	2 <sup>nd</sup> Internal	Oral Surgery	Myskan

NUMBER	MARKS																		TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
MARKS																				

(c) phenobarbitone diazepam  
(adjuvant therapy)

(d) Gabapentin 100 - 200 mg (BD/TD)

(e) clonazepam 1.5 mg / day

(g) Tab Ox Carbamazepine - 1200mg / day

(h) Nerve tonic (B<sub>1</sub>, B<sub>6</sub>, B<sub>12</sub>)

(B) ~~SURGICAL TREATMENT~~

## 1) Peripheral procedure.

→ Destructive neurectomy



peripheral neurectomy, IAM & ION neurectomy

→ Non-destructive procedure

Surgical procedure don't damage nerve  
- Nerve decompression procedures.

## 2) Central procedure

non-destructive



Sensory root decompression  
↓ resection of CP angle tumor

pulsation of inferior cerebellar artery



Cause demyelination of nerve & provocation



lead pain



Interpositioning of inert material b/w  
artery & sensory root.



Destructive

- Injection of alcohol or glycerol injection  
in parotid gland.

- Percutaneous high frequency radio gangliolysis  
(Thermocoagulation)

- Rhizotomy
- Tracheotomy

7

Q2]

## SHORT ANSWERS

2] → TRISMUS

Condition in which muscle spasm or contracture  
prevents opening of the mouth.

Causes : orofacial Injection Trauma,  
Tetanus, myositis ossificans,  
~~Neurological disorders~~

## ① Classifications

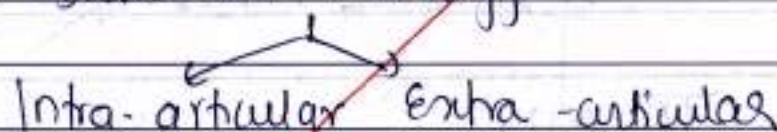
① Based on Range of mouth opening

- mild ( $30-40$  mm)
- moderate ( $15-30$  mm)
- Severe ( $\leq 15$  mm)

② Based on duration

- Acute
- Subacute
- chronic

③ Based on Aetiology



## TREATMENT

(Depends on etiological factor)

- for mild pain & dysfunction

Heat therapy - for 20 min

Analgesics (Aspirin, diazepam)

Soft diet

Muscle relaxants

physiotherapy involving dynamic jaw exercise



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final yr.					II <sup>nd</sup> Internal					oral Surgery					Muykan				

MARKS																			
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL
MARKS																			

→ Externally activated appliance  
Dynamic bite opener  
Screw type mouth gag  
Threaded tapered screw

3

Ques 3

WAR LINES

also called as Wintu's line

By George Wintus

W - White line

Corresponds to occlusal plane of 1<sup>st</sup> & 2<sup>nd</sup> molars and is extended posteriorly over the 3<sup>rd</sup> molar region

Indicates - differences in occlusal level of second and third molar & depth of tooth within the mandible

A - Amber line

- Represents the bone level joining crest of interdental septum b/w molars.

Indicates - height of margin of alveolar bone enclosing the tooth.

Amount of vertical bone removal required for extraction

R - Red line - Imaginary line perpendicular to amber line to an imaginary point of application of elevator.

this area is CEJ over mesial surface of impacted tooth

$\leq 5\text{mm}$  - less difficult

$> 5\text{mm}$  - advised under GA

$> 9\text{mm}$  very difficult.

3  
Obvious