MAEER PUNE's
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ESTD 2006
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# 2.5.4 Re-test and Answer sheets

# MIDSR DENTAL COLLEGE, LATUR

## DEPARTMENT OF Physiology

## MID TERM EXAMINATION

Roll No. 15

Question Booklet Version

Answer Sheet No.

(write this no. on your question booklet)

Name of Examination: Biochemistry examination

| Subject | Paper |
|---|---|
| | |

Roll No. (In Words)

Question booklet version (In words)

forty five

This is to certify that the entries of Roll No. Question Booklet Version Question Booklet Sr.N. and subject have been verified.

Candidate's Signature

Invigilator's Signature

Date : 17/2/2022

**USE BLUE BALL POINT PEN ONLY**

**INSTRUCTIONS**

1. Cross X The Blocks Using Blue Ball Point Only
2. Cross Only One Block For Each Question As Shown Below

| Wrong | Wrong | Wrong | Wrong |
|---|---|---|---|
| A ✓ | A ■ | A X | A X |
| B | B | B | B |
| C | C | C X | C |
| D | D | D | D |

3. Cross only Block Provided Do not Make Any sure Marks On The Answer Sheet.
4. Rough Work Must Not Be Don On This Answer Sheet Use Free Space in The Question Booklet Provided

| No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| A | | X | X | | | | X | | | X |
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| D | | | | | X | | | | X | |

| No | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
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| A | | X | X | | X | X | | | | |
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MARKS SECURED

$+\frac{10}{20} + \frac{18}{20} = \frac{38}{60}$

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# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF Prosthodontics

INTERNATAL ASSESSMENT EXAMINATION

## SECTION -B

Signature of Invigilator

Roll No. 45 Date 27/2/21 Time.....

Note : Start writing from here.

SAQ's

3) ——— ?

Anterior teeth selection for CD →

following are the three principals used for the selection of Anterior teeth.

1) Size of teeth
2) form of teeth
3) color of teeth

Enumeration of Method of Teeth selection →

1) Methods of using ~~pre~~ extraction record →

Diagnostic casts
- pre extraction radiograph
- pre extraction photograph

- Teeth of close resemblence should be selected.

- Methods of anthropological measurement of patient

- Anthropometric cephalic Index →
Based on size of face

- H. pound's formula.
- Based on width of nose

Methods Using Anatomical landmark →

- Size of maxillary arch.
- Location of buccal fraenum attachment
- Location of corner of mouth
- Location of ala of nose

Methods using theoretical contact Wintler's concept →

- Size of face
- Interarch spacing
- Distance between distal end of mesially cuspids

9) ——?

## Articulators →

### Definition →

Articulator is a mechanical device which represent temperomandibular joint and jaw member to which maxillary and mandibular cast may be atrached to stimulate jaw moremen

### classification of Articulator →

① Based on theories of ocylusion

② Based on types of interocclusal records used

③ Based on a ability to stimulate jaw moremen

④ Based on adjustability of Articulator.

① Based on theories →

ⓐ Bownwill theory of articulator
ⓑ conical theory of articulator

ⓒ spherical theory of Articulator

② Based on type of interocclusal records used →
Record used for their adjustment

i) Intra occlusal record adjustment

ii) Graphic record adjustment

(3) Based on a ability to stimulate jaw movement →

Class I -

only vertical motion is possible
simple holding device

Class II -

permit horizontal and vertical movement of TMJ with a facebow.
A - Arcrage value
B - arbetary theory of motion

Class III -

These articulator permit horizontal & vertical movement of TMJ with facebow.

Class IV -

Permit horizontal and vertical movement they do not accept facebow transfer.

Class V -

This accept three dynamic registration

(4) Based on adjustability of Articulator →

1) Non adjustable

2) semi adjustable

3) fully adjustable

6) ——— ?

## Post insertion instruction for CD →

following are the post insertion instruction for CD patient →

① Nature of complete denture →

It must be explained to patient that there is no perfect solution to loss of any part of body and denture are mechanical substance for living tissue

② Individually of patient →

patient must be told that their physical, mental and oral condition are different in different individual.

First oral feeling →

- Initially denture feel strange and buccally in mouth
That new denture slightly larger than old patient. patient should be assured that this feeling of lip fullness will disappear with familization.

## Appearance with new denture →

patient must be assured that his appearance will became more natural with time as the soft tissue adapt themselves to denture

## Excess Saliva -

Told to patient, Saliva secretion increases due to new denture it get reduced as time passes

## Speech with new denture →

Three things contribute in speech difficulty-

- Excess salivation
- large tongue
- Basal material covering of palate

## Mastication with new denture →

- It requires at least 6-8 weeks for developing the skill.

## Type of food →

patient should ask to avoid sticky and fibrous substance and should start with relatively soft and crispy food cut into small pieces

## How to wear -

Incising from anterior tooth is avoided place food between posterior teeth on both side of the mouth stimulation easily

## Tongue position -

patient should make to be position the tongue such that it rests on lingual surface of mandibular anterior teeth

## oral Hygiene with denture →

- Tissue health maintainance
- Denture maintainance
- plaque stain & calculus

10) ——?

Selective pressure impression technique →

Definition -

Impression can be defined as " negative likness or copy in reverse of a surface of an object to imprint teeth and its adjecant structure in oral cavity "

- GPT 8th edition

Types of Impression technique →

- Mucostatic impression technique
- Mucocompressive impression technique
- selective pressure impression technique

- The selective pressure impression technique make it ~~possible~~ to extend beyond denture bearing area as possible without interferance with limiting structure at function at rest

- The selective pressure technique make it possible to combine forces acting on denture to stress bearing area

- This is achiere through the design of special tray in which non stress bearing area are allow to come in contact relieved and stress bearing area are allow to come in contact with tray

8) ——?

## Ideal requirement for provisional restoration

Mainly 3 types A ideal requirement -

1) Biological
2) optimal restoration
3) mechanical

① Biological →

ⓐ pulp protection -

- Protect the pulp from infection or mech-anical injury.

To prevent micro organism accumulation over surface of pulp

ⓑ Mainlain periodontal health -

It restoration should provide proper contour of the arch, prevent formation of plaque retentive area

ⓒ Mainlain tooth position
ⓓ protect against fracture

optimal restoration →

esthetic
- easily contourable
- color compatibility
- pantumency
- color stability

③ Mechanical →

Resist functional load

Resist removable load

Maintain inter abutment alignment

9) ——?

2)

facebow -

Definition -

It is a dental instrument used in prosthodontics it purpose transfer functional and esthetic component from patient's mouth to denture or ornamentarium.

Parts of facebow -

Y-shape frame

condylar rods

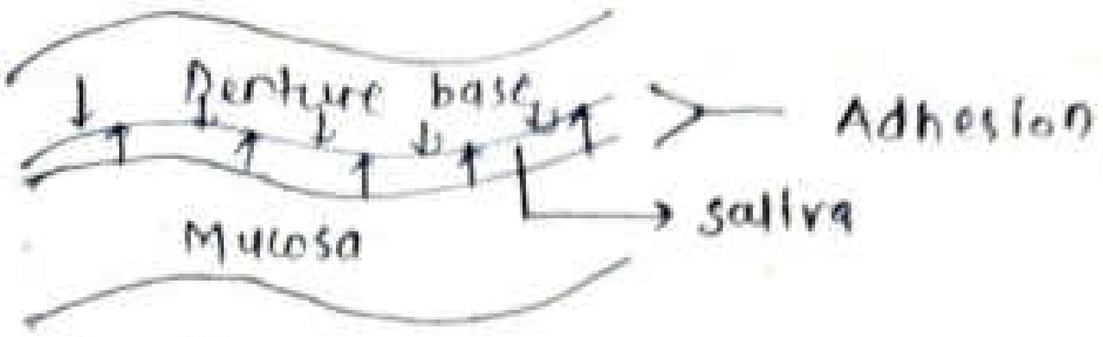
Bite fork

locking device

orbital pointer with clamp

2) ——?

## Role of saliva in adhesion of CD →




Adhesion - Adhesion is defined as attraction of dissimilar molecule.

- It takes place between saliva & denture base and saliva & mucosa
- It is achieved by forces between the mucosa & salivary glycoprotein surface epithelium or acrylic resin.
- It depends on -
  - close adaptation of denture
  - size of denture bearing area
  - Type of saliva.
- In xerostomia, adhesion leads to ulceration & abrasion in mucosa.

D R — 1

## Relining of complete denture →

### Definition –

The procedure used to resurface the tissue side of removable dental prosthesis with new base material, thus producing an accurate adaptation of denture foundingharea.

### Indications –

1) Adaptation of denture basee to the ridges are poor due to resorption of residual alveolar ridges.

2) patient with complaint of loosee or instability of denture following a long standing history of comfort

3) 3 / 6 months after construction of immediate denture.

4) for chronically ill patient when the construction of immediate denture

5) when a patient can't afford the prize

### Contra indication →

1. when the ridge resorption is more.
2. when the underlying bone is resorped
3. when CD is wrong
4. poor retention of denture
5. denture dislodges during mastic
6. TMJ

treatment of problem.

7. Denture with poor aesthetic
8. unsatisfactory jaw relation
9. Disruptive with major speech problem
10. Presence of severe undercut

procedure -

1) preparatory phase
   i) tissue preparation
   ii) Denture preparation

2) procedure
   a) impression making
      i) static method
      ii) close mouth technique
      iii) functional technique
      iv) chairside technique

3) lab procedure
   1) flask method
   2) Articulator method
   3) Jig method

5) ——?

vertical jaw relation →

Definition –

length of face as determined by amount of separation of jaw under specified condition.

Method of VD at rest –

1) phonetic – pt is repeatedly instructed to say words that contain later 'm' when this is pronounced (pt is instructed to stop all jaw movement when this happen. Measurement is made between point of refferance

– vertical jaw relation

7) ——?

sequele of CD →

There are mainly two types of sequele →

1) Direct sequele →

1) mucosal reaction
- Denture stomatitis
- Denture imitation by hyperplasia
- fibroepithelial polyp
- flabby ridge
- flabby ridge as a constituent of Combinatt-on Syndrome
- traumatic ulcer
- oral ulcer

i) Burning mouth syndrome
ii) Residual ridge resorption
iii) gagging / retching
iv) altered taste
v) altered speech
vi) Angular cheilitis
vii) galvanism

2) Indirect sequde -

1) Atrophy of masticatory muscle
2) Nutritional deficiency

AT OF .....

RNATAL ASSESS

SECTION

Signature of Invigilator

45 ..... Date 2/1/21

Note : Start writing from here

LAQ's

1) ——— ?

Jaw Relation

Definition

Relation of mandible to maxilla in oral cavity

Types —

① Orientation jaw relation
② vertical jaw Relation
③ centric jaw Relation / Horizontal jaw relation

following is the horizontal jaw relation —

Centric Jaw Relation / Horizontal jaw relation

- It is a relationship of mandible to maxilla in horizontal plane.
- The basic horizontal relationship is a centric relation.
- Horizontal jaw relation is a basically a centric relation.

Definition -

Centric relation →

Centric relation can be defined as -
The maxilla mandibular relationship in which the condyles articulate with the thinnest avascular portion of their respective disk with the complex in anterior superior position against the slopes of articular eminance. The position is independant of tooth contact. This position is clinically discernible when mandible is directed superiorly and anteriorly. It is restricted to purely rotatory movement about the transverse horizontal axis.

- GPT 8th edition

- Methods of recording centric Relation for complete denture -

Various methods for recording centric relation -

1) Physiological Method

- Tactile or interocclusal check record method
- pressureless method
- pressure method.

2) Functional Method -

- Needle house method
- patterson method
- Mayers method.

3) Graphic Method -

- Intraoral trading
- extraoral trading

① Terminal hinge axis Method

② other Methods -

- Healing of surface of one of the rim.
- Shape of celluoid placed between the rim.
- Soft wax placed over the occlusal surfaces of mandib bular posterior teeth.
- Soft cones of wax placed on lower denture base.

Ⓐ Physiological Method -

following are the physiological methods →

① Tactile / interocclusal Method →

It is a tentative centric jaw relation recorded by asking the patient to retrude the mandible. The casts are articul-ated based on mandible

- The casts are articulated based on tentative jaw relation Teeth arrangement is done and interocclusal registration is made. The tentative jaw relation is varified with the interocclusal record & errors are corrected.

② pressureless Method

The occlusal rims are customized as usual and the patient is trained to close at centric relation position. once the patient attains centric relation position. The denture base with occlusal rims are indexed / sealed in this position

③ pressure Method -

- After establishment the vertical diamension, upper occlusal rim is inserted into the patient's mouth. The entire lower occlusal rim is fabricated to be excess height.

The entire border occlusal rim is softened to be wax bath and inserted carefully in patients mouth

patient is guided to close his mouth in centric relation dentist should gently guide the mandible patient asked to close or soft wax place the patient closes his mouth till predetermined vertical dimension. Both the occlusal rim are trimmed, waxed and articulated.

① Functional Method →
The methods utilize functional movements of jaw to record centric relation -

② Needle house method →
Commonly used functional technique.
In this fabrication of occlusal rims made from impression compound
four metal pins or styli are embedded into premolar and molar area of maxillary occlusal rim
occlusal rims inserted into patients mouth - this asked to close on occlusal rims and make protrusive - retrusive, right, left lateral movement of mandible
When it moves his mandible metal styli or maxillary occlusal rim will create a marking on mandible occlusal rim. when all movements are made a diamond shaped making pattern rather than a line is formed on mandibular occlusal rim

The posterior most point of this diamond pattern indicates centric jaw relⁿ

③ Ferguson's Method —
Here occlusal rims are made of modeling wax
Trough is made along with length of mandibular occlusal rim
A mixture of carborundum & dental plaster is loaded into trench

- The occusal rims are inserted and asked the pt to perform mandibular movement
Movement will produce compensating curves on plaster carborundum mix.
All the movements are made the height of plaster, carborundum mix
Pt asked to continue these movements till predetermined vertical dimension obtained.
Finally, Pt is asked to retrude the jaw (occlusal rims are fixed in this position with metal strip.

(c) Graphic Method →
These methods are called so because use graphic tracing to record centric jaw relation

① Intraoral –
The central bearing point with plate is fitted in upper arm in such a way that tracing point is placed centrally across a line joing premolar. Tracing point is fitted to lower rim. The central bearing point work as needle in intraoral device.

Now perform lateral protusive jaw movement keeping tracing point with contact plate. The sharp bearing points make a tracing on opposite central bearing plate while performing these movements

② Extraoral Method –
Tracing is made outside the mouth & are also called Gothic arch / arrow point tracing.

Procedure –
The centric records and movement of mandible in horizontal plane.

It is a needle point tracing made on tracing table which is coated with wax. The needle or styli attached to one jaw and tracing table is attached to other jaw during recording procedure. The occlusal rims are ~~placed~~ seprated by

central bearing point / pin.

- To make bowing we start from the most retruded position of mandible The condyle move forward and inward performing lateral mandibular movement of one side with rotation occuring around opposite condyle
- The apex of bowing table is the most retruded or centric relation position. the needle is held at this point & both the occlusal rim in mouth of patient are joined together by a quick setting plaster now record is transfer to articulator

(D) Terminal Hinge axis Method →

In this method, kinematic face bow is used. As mandible rotates around hinge axis & occludes with wax rim, it comes automatically in centric relation

Other Methods -

* Deep bearing / pooling method →

Deep bearing is done in the posterior portion of mandibular rim and anterior portion should be left cold.

* celluloid strips -

As rim is adjusted, a strip of celluloid is placed between rims and is pulled. If celluloid strips pulls out easily, this indicates uneven contact and occlusal rim is adjusted.

?

Balanced Jaw →

Definition -

Balanced occlusion can be defined as " the bilateral, simultaneous anterior and posterior occlusal contacts of teeth in centric and eccentric positions"

- GPT 8th edition

Factors affecting balanced occlusion/jaws →

1. Inclination of condylar path / condylar guidance
2. incisal guidance
3. orientation of plane of occlusion
4. curve of angulation
5. compensating curves

1. Inclination of condylar path / condylar guidance →

- condylar guidance is defined as - the mechanical form located in the upper posterior region of an articulator which controls movement of the mobile member
- GPT (8th edition)

- It is also called as first factor of occlusion
- This is the only factor which can be recorded from patient
- It is registered using protrusive registration, i.e. the patient is asked to protrude with occlusal rims
- Interocclusal record material is injected between the occlusal rim in this position . occlusal rims with interocclusal record are transfered to articulator since the occlusal rims are protrusive relation, upper member of articulator is moved is back to accomodate them
- Interocclusal record is carefully removed & the upper member is allowed to slide forward to its original position

The condylar guidance should be adjusted or rotated upper member slides freely into position It is refer- ffered to articulator as condylar guidance

- Increase in condylar guidance increases the jaw separa during protrusion
- This factor can't be modified. All the other four factors of occlusion should be modified to compen - sate the effect of this factor

② Incisal guidance →

It is defined as " the influence of contacting surfaces of the mandibular and maxillary anterior teeth on mandibular movement".

:- GPT 8th edition

- It is also called as second factor of occlusion'
- It is determined by dentist and customized for Patient during anterior Try-in.
- Incisal guidance act as controlling path for the move- ment of cast in articulator.
- It should be set depening upon the desired overjet and overbite planned for Pt. If overjet is increased the inclination of the incisal guidance is decreased.

- If the overbite is increased, the incisal inclination incr- eases.
- Incisal guidance has more influence on posterior teeth. than condylar guidance because the action of incisal inclination is closer to teeth than action of condylar guidance.

- During protrusive movement, incisal edge of man- dibular anterior teeth move in downward & forward path corresponding to the palatal surfaces of the upper incisors This is known as 'protrusive incisal path' or incisal guidance.

## Plane of oulusion

An imaginary surface which is related anatomically to the cranium and which theoritically touches the incisal edges of incisors and the tips of the occluding surfaces of posterior teeth. It is not a plane in true sense of the word but represents mean of curvature of surface

- GPT

- It is established anatomically anteriorly by height of lower canine, which nearly coincides with commisure of mouth and posteriorly by height of retromolar pad.

- It is usually parallel to ala tragus line or camper's line
- Tilting plane of oclusion beyond 10° is not advicable

## Compensating curves -

The anteroposterior and lateral curvatures in the alignment of occlusding surfaces and incisal edges of artificial teeth which are used to develop balanced oclusion.

- GPT

- It is an important factor for establishing balanced occlusion and is determined by inclination of posterior teeth & their vertical relationship to occlusal plane.
- The posterior teeth should be arranged such that their occlused surfaces form a curve which should be in harmony with move-ments of mandible guided posteriorly by condylar path.

- There are 2 types of curves →
  1) Anteroposterior compensating curves
  2) lateral compensating curves

Curve of Spee, Wilson curve, Monson curve are associated with natural dentition.

① Anteroposterior compensating curves

These are compensatory curves running in anteroposterior direction. They compensate for the curve of Spee in natural dentition.

(b) Compensating curve for curve of spee -

curve of spee is defined as "Anatomic curvature of the occlusal alingment of teeth begining at tip of lower canine and following the buccal cusp of natural premolars and molars, and continuing to the anterior border ramus described by Graf von spee - GPT

- Imaginary curve joing buccal cusp of mandibular posterior teeth starting from canine passing through head of condyle
- It is seen in natural dentition & should be reproduced in CD
- The significance of this curve that when the patient moves his mandible forward, the posterior teeth set on this curve will continue to remain in contact If the teeth are not aranged according to this curve There will be disocclusion protrusion of the mandible

(c) Lateral Compensating curves

These curves run transversly from one side of arch to other.

Compensating curve for Monson's curve →

The curve of occlusion in which each cusp and incisal edge to touches or conforms to a segment of sphere of 8 inch in diameter with its centre in the region of Glabella - GPT

- The cure run across palatal & buccal cusp of maxillary Molars
- During lateral movement, mandibular lingual cusp on working side should slide along inner inclines of maxillary buccal cusp The relationship form a balance, on its teeth set following the monson's curve, there will be lateral balance of occlusion

compensating curve for wilson's curve -

A curve of occlusion which is convex upward
- GPT

This curve run opposite the direction of monson's curve
it is followed when first premolar arranged, so that there do
not produce any interference.

(3) Reverse curve -

A curve of occlusion in which transverse cross section
conforms to a line which is convex upward
- GPT

- Improves stability of denture.
- explained in relation to mandibular posterior teeth.

Pleasure curve -

A curve of occlusion which in transverse cross section
confirms to a line which is convex upward except for
last molars.
- GPT.

(4) cuspal Angulation

The angle made by average slope of cusp with
cusp plane measured mesiodistally or buccolingually.
- GPT

- The mesiodistal cusp which lock the occlusion & reposit
-ioning of teeth do not occur due to setting of denture
base.
- So, prevent locking of occlusion.

# MIDSR DENTAL COLLEGE, LATUR

## DEPARTMENT OF Prosthodontics

## MID TERM EXAMINATION

Roll No. 07

Question Booklet Version: A

Question Booklet Sr.No.: 0

Answer Sheet No.
(write this no.on your question booklet)

Name of Examination: Betterment examinat

| Subject | Paper |
|---|---|
| | |

Roll No. (In Words): NINE

Question booklet version (In words):

This is to sertify that the entries of Roll No. Question Booklet Version Question Booklet Sr.N. and subject have been verified.

Candidate's Signature | Invigilator's Signature

Date : 14 / 2/2022

**USE BLUE BALL POINT PEN ONLY**

| Q.No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| A | | | | X | | | | | | |
| B | | | | | | | | X | X | |
| C | X | X | X | | X | X | X | | | X |
| D | | | | | | | | | | |

| Q.No. | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|
| A | X | | | | | X | | | | |
| B | | X | | | X | | X | X | X | X |
| C | | | | X | | | | | | |
| D | | | X | | | | | | | |

**INSTRUCTIONS**

1. Cross X The Blocks Using Blue Ball Point Only
2. Cross Only One Block For Each Question As Shown Below.

| Wrong | Wrong | Wrong | Wrong |
|---|---|---|---|
| A ☑ | A ■ | A ☒ | A ☒ |
| B ☐ | B ☐ | B ☐ | B ☐ |
| C ☐ | C ☐ | C ☒ | C ☐ |
| D ☐ | D ☐ | D ☐ | D ☐ |

3. Cross only Block Provided Do not Make Any sure Marks On The Answer Sheet.
4. Rough Work Must Not Be Don On This Answer Sheet Use Free Space in The Question Booklet Provided

| 14 |
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| 20 |

MARKS SECURED

T 15/20 + 12/20 = 41/60.

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MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF Prosthodontics

INTERNATAL ASSESSMENT EXAMINATION

SECTION - B

Roll No. 67 Date 19/8/22 Time

Signature of Invigilator

Note : Start writing from here.

Section B

1A8.

2 → Temporization.

- It is also known as temporary crown, temporization or provisional restoration.
- Provisional restoration is defined as " a fixed or removable prosthesis, designed to enhance esthetics stabilization and function for a limited period of time which is then replaced by a definitive dental or maxillofacial prosthesis. Such prosthesis is used to assist in determination of the therapeutic effectiveness of a specific treatment plan".

- The ideal requirement of provisional restoration, it is classified as :-

1. Biologic requirement.
2. Mechanical requirement.
3. Aesthetic requirement.

A. Biologic requirement :

a) Pulp protection :

- It should protect the prepared tooth from the oral environment, which helps in preventing the sensitivity to the pulp.

b) Periodontal Health :

- It must have a proper fit, marginal fit, proper contour and smooth surface to prevent plaque accumulation which will help in maintaining good oral health.

c) Positional Stability :-

- It should provide a comfortable, stable and functional relationship of occlusion by maintaining interarch and intra-arch stability and preventing tooth migration, or supraeruption.

d) Prevention of fracture :-

- It should protect the prepared tooth surface from fracture which is more commonly seen in partial coverage restoration.

B) Mechanical requirements :-

a) Functional :-

i) It should possess good compressive and flexural strength.
ii) The strength materials used for fabrication of provisional restoration is always of lower than that of definitive restoration material.
iii) Thus the cross-sectional size needs to be larger in provisional restoration.

b) Loss of retention :-

i) It should have a close adaptation to the prepared surface to prevent displacement.

c) Removal for Reuse :

- Temporary restorations may need to remove and recemented often.
- If they are well fabricated with adequate thickness and cemented with weak cement, as it will help in removing easily without any fracture.

c) Aesthetic Requirements :

- It should match the size, shape, colour and texture of the restored tooth, specially in the anterior region.
- Colour stability is important if it is used for the prolonged period.

Classification :

Provisional restorations are classified as follows :

A] According to the Method of fabrication :

1) Pre-formed
2) Custom made

B] According to the material used :

1) Resins :
   a) Preformed :
      - Polycarbonate
   b) Custom-made
      - Acrylics

1) Metals :

a) Performed :

- Aluminium
- Tin - silver

b) Custom - made

- Cast metal alloy

c) According to the duration of use :

1) Short Term Temporary Restoration
2) Long Term Temporary Restoration

d) According to the techniques of fabrication

1) Direct technique :

The restorations are fabricated directly in the mouth

b) Indirect technique :

The restorations are fabricated extra-orally on a cast.

c) Direct - Indirect technique :

Restorations are fabricated using combination of intra-oral and extra-oral procedures.

Various Methods of Temporization :

a) Direct Technique :

The restorations are fabricated intra-orally.

1) Performed with polycarbonate crowns.
2) Custom - made with index.

- Indication :

- Advantages :
  - Less chair side time
  - Less cost as there is no need to make cast

- Disadvantages :
  - Only used for single unit restorations
  - Patients co operation is required.
  - Offensive odour
  - Exothermic heat may cause pulp irritation

b) Indirect technique :
  - Restorations are fabricated extra-orally on a cast
  - Performed with nickel-chromium crowns.
  - Custom-made with template.
  - Indicated for fabrication of provisional restoration in fixed partial dentures

Advantage :
  - The patients co-operation is not required as they will be not exposed directly to the impression material.
  - No offensive odour & no tolerance of exothermic heat.

Disadvantage :-
  1) More chair-side time
  2) More cost required.

c) Direct - Indirect Technique :-
Restorations are fabricated using a com
of intra-oral & extra-oral procedure

1. → Principles of Tooth preparation in fixed part
dentures.

The principles of tooth preparation include
1) Biologic principle.
2) Mechanical principle.
3) Esthetic principle.

a) Biologic principle includes :-

1) Conservation of tooth substance :
a) Pulp
b) Tooth.
c) Soft tissues.

2) Prevention of damage.
a) Adjacent teeth.
b) Soft tissue.
c) Pulp.

2) Conservation of tooth structure.
3) Margin integrity.
a) Placement.
b) Catenary.
c) Adaptation.

B) Mechanical.
a) Retention form.
b) Resistance form.
- Magnitude of dislodging forces
- Geometry of preparation.
- Type of luting agent.

c) Structural durability.

d) Aesthetic :-

1. Partial veneer restorations.
2. Metal - ceramic restorations.
3. All ceramic restorations.

...General Human Physiology & Biochemistry

Practical Examination

Roll No. 13 Date Time Signature of Invigilator

| | Hematology | Biochemistry | Clinical Examination | Record Book | | Total Marks |
|---|---|---|---|---|---|---|
| | | | | Physiology | Biochemistry | |
| Maximum Marks | | | | | | |
| Secured Marks | | | | | | |

Note: Start writing from here

Section C

SAQ.

2 → Retromolar Pad Area.

1) It is a triangular area of soft tissue present on the distal end of ridge
2) It is composed of mucosa which contain thin non keratinized tissue and submucosa which contains loose areolar tissue. some glandular tissue and fibers such as buccinator, superior constrictor, pterygomandibular raphae and tensor veli palatini as muscles
3) It limits the pressure and extension of the denture.

Significance :-

1) The position of the retro-molar pads remain constant even after the extraction of all natural teeth.
2) Hence it acts as a fixed point, from it acts which helps in determining and setting the occlusal plane in the upper and lower arches
3) The retromolar pads provide bilaterally edentulous support for the denture.
4) The denture should cover the retromolar pads, whi it helps in reducing the resorption of residual alveolar ridge.

3 → Posterior Palatal Seal

Definition :- It is defined as the junction between the adherent tissues of hard palate and the movable tissue of soft palate, which can be palpated when the mouth on which the pressure within the physiologic limit can be applied by the complete removable denture prosthesis to aid in retention of denture.

1) The posterior palatal seal is the area between the anterior and posterior vibrating line.

2) Vibrating line :-
An imaginary line across the posterior part of the palate marking the division between the movable and immovable tissues of the soft palate.

3) This can be identified when the movable tissues are functioning.
It is divided into :-
a) Anterior vibrating line
b) Posterior vibrating line.

4) The seal also consits of two sp seperate but confluent areas, namely - Palatal seal and Pterygomaxillary sed.

Functions :-
This can be divided into its importance when incorporated in the impression tray and complete denture.

a) Impression tray :-

1) Establishes a positive contact at posteriorly and prevents the impression wash material to slide down the pharynx.
2) Guides the positioning of impression tray.
3) Creates slight displacement of soft tissues.
4) Helps verify retention and seal of potential denture border.

b) Complete dinture

1. Primary function is the retention of maxillary dinture.
2. Reduces gag reflex by reducing patient awareness of this area.
3. Prevents food accumulation beneath the posterior part of the denture.
4. Reduces patients discomfort.
5. Compensates for volumetric shrinkage that occurs during polymerization of methyl meth-acrylate resin.

---

4. Soft tissue management :-

- Gingival displacement or retraction is required prior to the tooth fabrication.
- It can be done by following ways :-
  1) Mechanical.
  2) Mechanical - chemical.
  3) Chemical.
  4) Surgery.

a) Mechanical :-

- This is the physical retraction of gingiva.
- It can be achieved by :-
  1) Copper band.
  2) Rubber dam.
  3) Cotton thread.
  4) Magic foam

a) Copper band :

- It retracts impression material to displace gingiva.
- It is no longer used routinely ... it can be indicated with multiple abutments.
- It can cause injury to the gingiva and retraction is minimal.

- Advantage :-
  - Easy to use with less trauma.
- Disadvantage :-
  - Less retraction than cord.

b) Mechanical - Chemical :-

- A displacement cord is used for mechanically seperating the tissue from the prepared margin and is impregnated with a chemical for astringment action or haemostasis as impressions are made.
- Cord displaces the gingival tissue laterally and vertically.

Chemicals used :

1) Ferric sulphate 20 % - 25 %
2) Aluminium chloride 15 % - 19 %

Displacement techniques :-

1) Single cord
2) Double cord.

c) Chemical :-
- This is the recent development where the retraction of tissue is carried out by aluminium chloride paste.

. Advantage :- Achieve good haemostasis

. Disadvantage :- Retraction is much less compared to cord.

---

d) Surgical :-
a) Rotary curettage (gingivitage)

- Indication :- 1) No bleeding on probing.
2) Sulcus depth less than 3 mm.
- Rotary instruments are used.

b) Electro-surgery :-
- The tissue is destructed to achieve surgical result.
- Indication - Gingivectomy.

---

5. → Selection of ideal abutment for fixed partial denture :-

1) The following factors are evaluated for the selection of ideal abutment in fixed partial denture :-

a) Crown :-

a) Crown length :-
- The adequate occluso-cervical crown length is required for the retention.

b) Crown form :
- Few teeth may have short clinical crowns which interfere in the parallelism preparation, for which may require full crown restorations ( coverage.

c) Mutilation of crown :
- The size, number and location of caries or restoration may alter the retainer used on abutment tooth.

2) Root length and form :

- Adequate root anchorage is necessary for the support of abutment.
- The root anchorage is directly proportional to strength and stability of FPD.
- Roots with parallelism and divergents roots provide more strength.
- The bucco-lingual width most be greater.
- Multi-rooted teeth gives more support.

3) Root proximity.
4) Crown-Root ratio :-
- It is the measure of teeth from the occlusion to the alveolar crest and to the tip of root.
- Normal ratio is 2 : 3 while 1 : 1 is also acceptible if the
  - Opposing occlusion is removable partial prosthesis.

5) Periodontal health :

Any periodontal defects may be should be removed.

6) Ante's law :

7) Caries.

- Any caries on teeth should be removed prior to the fabrication.

8) Endodontic Treated Tooth :-

- They may provide a good anchorage to the prosthesis.

9) Tilt.

---

6. Gingival finish lines :-

→ Finish lines :- Terminal portions of the prepared tooth.

- Margin geometry - it refers to the shape of the prepared finish lines.
- Finish line configurations are as follows :-

i) Crumpfer & Chamfer :-

- It is an obtuse-angled finish line
- It is distinct, exhibit least stress.

ii) Heavy crumpfer chamfer :-

- Indicated for all ceramic crowns.
- Similar to reg. chamfer but prepared with a diamond of greater diameter.

iii) Shoulder :

- It is a right-angled finish line.
- Requires more preparation, hence not conservati

iv) Shoulder with bevel :

- It is a shoulder with a bevel on the extenal edge.
- Protects the edge of finish line preventing chipping.

v) Radial shoulder

- It is a shoulder finish line rounded internal line angle.
- Indicated for all ceramic crowns.

vi) Sloped shoulder :

- Similar to the shoulder but with an obtuse angle.

vii) Knife edge :

- It is a thin finish line.
- Highly conservative.
- It can lead to over-contoured restoration.

1.→ Indications for FPD :-

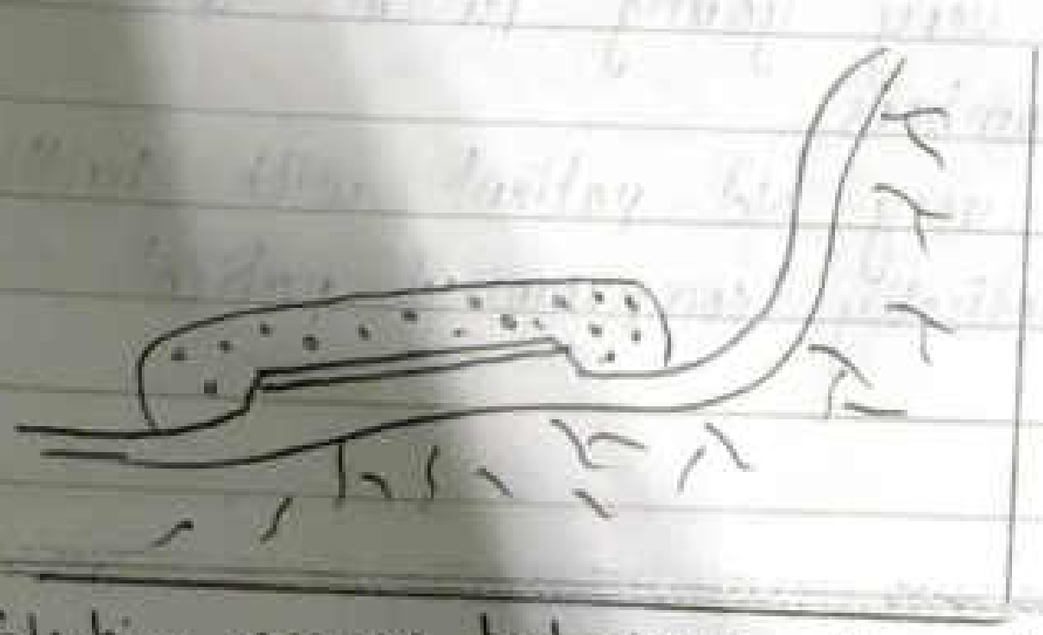
1) In short edentulous space.
2) Abutment tooth and supporting tissues are healthy.
3) To harmonize dental occlusion.
4) To stabilize and splint the dentition after advanced periodontal therapy.
5) When the patient desires to fixed prosthesis
6) The patient has skills to maintain good oral and prosthesis hygiene.

Contraindications for FPD :-

1) In long edentulous spaces.
2) Edentulous space with no distal abutment.
3) Bilateral edentulous space with more than two teeth missing on either side require cross arch stabilization.
4) Presence of periodontally weakened abutments.
5) Teeth with short clinical crowns.
6) Severe loss of tissue in the edentulous ridge because of surgery or trauma.
7) In patient with poor oral hygiene.
8) In very young patient with wide pulp chambers.
9) In very old patient with brittle teeth.
10) Medically compromised patients.

8)__, Selective pressure technique :

- Impression is defined as negative likeness or copying in reverse of the surface of an object or imprint of the tooth for the use in dentistry.
- It is a technique which uses the principle of minimal pressure and pressure technique.
- In this technique to force is exerted on the stress bearing areas while the force is not applied applied on the less tolerating areas (relief areas)
- This can be achieved by the design of custom tray where the relief areas are relieved and the stress-bearing areas contact the tray.
- The relieved areas are in loose contact with the custom tray.
- Disadvantages :
  - Some areas are already traced even without the force application.
  - While applying force in some specific area it may not record the arch in patient properly.



Slective pressure technique. Stress bearing areas are recorded by coming in contact with the tray.

Radiographs in fixed prosthodontic treatment :

A full mouth radiographic examination is required while making fixed partial denture

So based on the types of radiographs used their importance is :

a) Periapical radiograph :

1) It helps in studying the extent of bone support
2) Help in viewing the detailed morphology of the abutment teeth.
3) To view pulpal morphology as well as endodontic treatment.

b) Bitewing radiograph :-

- Helps in evaluation of dental caries over proximal surface and 2° caries on the restoration.

c) Panoramic films :

1) Helps in evaluation of resorption of bone, pattern of bone resorption.
2) For determining the presence of impacted tooth.
3) Determining the thickness of soft tissues over the pontic area.

- Radiograph are important tools in assessment to determine the success of prosthesis.

1. Significance of biologic width :

- The natural barrier that develops around the teeth and dental implants to protect the alveolar bone from disease is known as biologic width.

- It is vital for the preservation of periodontal health and removal of irritation that could damage periodontium.

2. Advantages of partial veneer crowns over full veneer crowns are as follows.

1) Conservation of tooth structure
2) Margins accessible by patient to maintain hygiene.
3) Better periodontal response.
4) Cementation is easy.
5) Easy removable and recementation.
6)

MAEER PUNE's
**MIDSR DENTAL COLLEGE, LATUR.**
Dept. of General Human Physiology & Biochemistry
Batchwise III BDS Examination
Roll No. ____ Date ____ Time ____ Signature of Invigilator

| | Hematology | Biochemistry | Clinical Examination | Record Book | | Total Marks |
|---|---|---|---|---|---|---|
| | | | | Physiology | Biochemistry | |
| Maximum Marks | SAR = ___ | 3/10 + LAR = | 15/30 = Total | 21/30 | | |
| Secured Marks | | | | | | |

Note : Start writing from here.

1. SERIAL EXTRACTION

- Serial extraction can be defined as the systematic timed removal of certain deciduous and permanent teeth in mixed dentition cases with dentoalveolar disproportion in order anticipate crowding of incisor teeth, allow unerupted teeth to guide themselves into improved position, lessen the period of active appliance therapy.
- The term serial extraction was given by Dewel in 1949

* Indications :-

1) premature loss of deciduous tooth
2) Arch length deficiency
3) Absence of physiological spacing
4) Unequal eruption of lateral incisor
5) Unilateral deciduous canine loss
6) Mesial drift of buccal segment
7) Abnormal eruption direction
8) Gingival recession on labial displaced canine incisor
9) Ectopic eruption and dilacerations
10) Deleterious oral habits

* Contraindications :-

3) Extensive caries of first permanent molars
4) Severe class II or III malocclusion
5) Unilateral congenital absence of teeth
6) Cleft lip and cleft palate

★ Tweed's technique of three serial extraction (1966)

At 8 years
↓
All deciduous molars are extracted
↓
Maintain deciduous canine to extract permanent canine erupting
↓
After 2-10 months
↓
Extract all erupting first premolar
↓
canine and incisors are aligned

★ Dewel method of serial extraction
At 8-9 years of age
↓
Deciduous canines are extracted
↓
After 1 year deciduous 1st molars extracted
↓
Eruption of 1st premolar accelerated
↓
Extraction of erupting 1st premolar
↓
canines erupt to alignment

★ Nance method of serial extraction
Extraction of deciduous 1st molar
↓
extraction of 1st premolar

Note : Start writing from here.

* Advantages :-

1) Treatment is more physiological as it induces guidance of teeth into normal position.
2) Removal of deciduous canine allows spontaneous alignment of erupted incisors.
3) extraction of 1st premolar before erupting allows spontaneous alignment of permanent canine.
4) It lessens the period of future appliance therapy.
5) physiological trauma associated with malocclusion can be avoided by this treatment protocol.

* Disadvantages :-

1) this procedure can not be applied to class II and class III malocclusion cases.
2) psychological trauma as it is unpleasant for child to have your teeth extracted.
3) If extractions are carried out to early it results to space loss or delayed eruption.
4) patient requires appliance therapy after extraction.
5) There is no single universal approach to treat each patient.
6) patient co-operation needed.

- Pit (Ash 1998) is defined as small pigmented depression located at junction of dentinoenamel areas or terminal of these areas
- Fissure (coburg 1986) is defined as deep clefts between adjoining cusps
- Pit and fissure sealant (Simonsen 1976) is a material that is interposed between the occlusal pits and fissure of caries susceptible teeth, thus providing a micromechanically bonded protective layer which prevents access of caries producing substances from oral environment source of materials

- There are four types of fissures according to Hoyer (1961)
  a) V type (34%)
  b) U type (16%)
  c) I type (19%)
  d) IK type (25%)
  e) λ type (inverted Y) (6%)

(4)

* Types of pit & fissure sealant
  1) According chemical structure of monomers
     - methylmethacrylate
     - Eg. TEGDMA
     - Bisphenol dimethacrylate
     - Bis-GMA

  2) According to generations
     - 1st generation - polymerized with UV light had excessive absorption and incomplete polymerisable of sealant at its depth
     - 2nd generation - self cure or chemical cure
     - 3rd generation - light cured with visible light
     - 4th generation - fluoride releasing sealant

  3) Based on filler content
     - unfilled - intrude better than
     - filled - resist

* Indications :-
1) deep and retentive pit & fissures
2) questionable enamel surface in pit and fissures
3) stained pit & fissure with minimum decalcification
4) caries free pit & fissure

* Contraindications :-
1) susp cleansing pit and fissure
2) tooth not fully erupted
3) isolation not possible
4) proximal caries

* Steps in application of sealant
1) Isolation of teeth
2) Tooth preparation
3) Acid etching of tooth surface
4) Rinse and dry tooth surface
5) Application of bonding agent
6) Application of sealant
7) Curing of sealant
8) Explore the sealed tooth surface
9) Recall and reevaluate

LAB

# Pulp therapies in primary teeth

- pulp exposure of dental pulp exists when the continuity of dentin surrounding the pulp is lesion by injurial or bacterial means
- The objective of pulp therapy are -
  1) preservation of teeth in healthy state functioning as an integral component of dentition
  2) prevention of tooth loss
  3) maintenance

A) pulpotomy

- the objective of pulpotomy technique is to remove the affected coronal pulp tissue so that the unaffected radicular pulp tissue can continue to function normally until tooth is ready to exfoliate

* Indications :-
  1) teeth should be devoid of spontaneous pain
  2) Teeth should be devoid of mobility
  3) demonstrate no external or internal resorption
  4) No furcation radiolucency

* contraindications :-
  1) night pain which is spontaneous in nature
  2) uncontrolled hemorrhage (more than 5min) at site of canal
  3) furcation radiolucency present

* Types of pulpotomy :
  1) partial pulpotomy (cvek's pulpotomy)
  2) complete pulpotomy

* Steps in pulpotomy procedure :
  Anesthesia of tooth
  ↓
  Isolation of tooth
  ↓
  Remove all caries prior to entering in pulp chamber

Expose the pulp chamber

↓

Remove coronal pulp with round bur or spoon excavator

↓

Apply cotton pellet or paper to achieve hemostasis

↓

Apply pulpotomy medicament over the exposed pulp

↓

Restore the tooth with appropriate restorative material

* pulpotomy medicament

classification :—

1) devitalizing - mummifying - formocresol
2) preserving - regenerative - ferric sulphate
3) regenerative - inductive - MTA

* Formocresol pulpotomy

Buckley's (1904) introduced formocresol

Content of formocresol

1 ml - formaldehyde

35 ml - cresol

water

- application protocol :- Sweet (1966) one visit endodontic
- Lewis and Main (1970) gave 1:5 dilution of formocresol
- steps for application :—

1) once bleeding controlled or stopped
2) a cotton pellet is dipped in dilution of buckley's formocresol
3) this cotton pellet is applied in pulp chamber for 4 min
4) cotton pellet removed, bleeding observed to check that each stump is healthy
5) the pulp chamber is filled with appropriate restorative material

5] pulpectomy

Kuttler (1955) defined as complete removal of necrotic pulp from the root canals of primary teeth and filling them with an inert, resorbable material so as to maintain teeth in dental arch

# Objectives -

1) Retain teeth free of infection
2) Promote physiological root exception
3) Hold the space for erupting permanent teeth

# Indications :-

1) In absence of permanent successor
2) Primary teeth with necrotic pulp
3) Primary teeth showing minimum teeth resorption
4) Pulpless primary teeth when extraction is young
5) Adequate bone and periodontal support

# Contraindications :-

1) Excessive tooth mobility
2) External resorption
3) Insufficient root length of primary teeth
4) Cyst in association with primary teeth
5) Uncooperative patient

## a) Multiple visit pulpectomy

- Pinkham and Casamassimo (1989)

→ 1st appointment

Anesthetize and isolate tooth

↓

Access cavity prepared

↓

All accessible coronal and radicular pulp removed with barbaches

↓

Intracanal calcium paste placed - Temp restoration done

→ 2nd appointment (5-7 days apart)

Remove temp restoration

↓

File the canals progressively increasing the diameter

↓

Between the sittings irrigate

↓

Dry out the canals

Dry the canal and place a sterile cotton pellet in pulp chamber place temp restoration

→ 3rd appointment (6-7 days apart)
Remove temp restoration

↓

Irrigate and dry the canals

↓

(a) coat the wall of canal with thin mix of calcium cement and then fill the canal with thick mix of cement

↓

Add the cement fill the orifice of canal seal the pulp chamber with permanent restoration

↓

Recall after one week and if patient is asymptomatic give rx crown

B) Single visit pulpectomy
This is carried out as an acute extension of pulpotomy procedure and tooth does not show any periapical changes

1. Sucrose - the arch criminal

Keyes (1960) - Dental caries is an infectious microbial disease of calcified tissue of teeth characterized by demineralization of inorganic portion and destruction of organic substance of tooth which often leads to cavitation

* classification of caries
  - Incipient caries
  - Recurrent caries

  - Acute caries
  - Chronic caries

  - Rampant caries
  - Backward caries

  - pit and fissure caries
  - smooth surface caries
  - Root surface caries

4. Sucrose chelation theory (Eggers Lura 1962) proposed that sucrose itself and not the acid derived from it can cause dissolution of enamel by forming an ionized calcium (Ca)
(5) This theory explains that calcium and its intermediates require inorganic phosphate which is subsequently removed by enamel phosphorylating enzymes

- Caries forming factor
  1) chemical composition of tooth surface
  2) oral microbial enzymes
  3) fermentable carbohydrates in diet

* Starch (carbohydrate) is widely distributed in the form of vegetable and cereal grains

- In mouth, salivary amylase enzyme hydrolyse this starch into disaccharide sucrose.
- Enzyme acts at pH of 6.9 and this pH falls below till 5.4 pH.
- Sucrose has been indicated as main cariogenic of dental caries because of its wide dietary usuage in large amount.
- It also has ability to support and help in growth of cariogenic bacteria.
- Sucrose is by far commonest dietary sugar its unique ability to support synthesis of extracellular glucans by s. mutans.

- Studies supporting this statement are as follows -

1) Hopewood house study (1962)
2) Vipeholm study (1954)
3) Turku study (1975)

* Food sugar substitute

1) Saccharin - It is 200-500 times sweeter than sucrose it is non-cariogenic and non-caloric.

2) Xylitol - It is non-fermentable, pleasant non-cariogenic polyol derived from pentose sugar xylose it was introduced to 1960s as sweetner substitute.

3) Sucralose - It is non-nutritive, non-caloric derivative of sucrose.

Betterment EXAM Thorax: Prosthesis

# MIDSR DENTAL COLLEGE, LATUR

## DEPARTMENT OF Ortho

### MID TERM EXAMINATION

Roll No.

Question Booklet Number

Question Booklet Sr.No.

Answer Sheet No.

Name of the Examination

Subject: Ortho

Paper:

Roll No. (in Words): Sixty two

Question booklet version (in words):

This is to certify that the entries of Roll No. Question Booklet Version Question Booklet Sr.No. and subject have been verified.

Candidate's Signature

Invigilator's Signature

Date: / /2020

USE BLUE BALL POINT PEN ONLY

**INSTRUCTIONS**

1. Cross X The Blocks Using Blue Ball Point Only
2. Cross Only One Block For Each Question As Shown Below.

| Wrong | Wrong | Wrong | Wrong |
|---|---|---|---|
| A ☑ | A ■ | A ☒ | A ☒ |
| B ☐ | B ☐ | B ☐ | B ☐ |
| C ☐ | C ☐ | C ☒ | C ☐ |
| D ☐ | D ☐ | D ☐ | D ☐ |

3. Cross Only Block Provided. Do not Make Any more Marks On The Answer Sheet.

4. Rough Work Must Not Be Done On This Answer Sheet Use Free Space in The Question Booklet Provided

(13/17) + (13/30) + (13/30) = 58

MARKS SECURED

Thagras Prathisha

Roll No. 62

Section B

19/30

—>7

Indication of serial extraction:

1) In class I when harmony of skeletal & muscle system

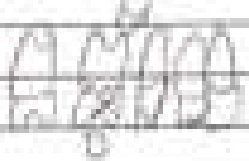
2) Arch length discrepancy compared to teeth material
- Absence of physiologic spaces
- crowded lower incisor
- Unilateral or bilateral loss of canine
- impacted malpositioned lateral incisor
- Ankylosis of teeth
- Flaring of lower anterior

3) when growth is not enough to overcome discrepancy of arch length & teeth material

4) In straight profile & pleasing appearance

Dewel's method of Serial extraction.

extraction of deciduous canine



deciduous molar extraction

eruption of permanent dentition

Dowell method

Death method of medication

Indication :-

Tuberous candida associated with malar
Vitamin mandibular deficiency
Cleft palate - in this mandibly collapse
with severe headpain
nasal thrush
Septal deformity
nasal irritation
DM
Rhinitis

Activation checklist :-

Activation checklist by Timm

10. Activation schedule by Kinetochore & Kinesin & Dynein

- be based on growing & non growing phase.
- for growing ph. 2 activation per 4 or 5 days
  1 activation after day 1
- for non growing ph. 2 activation per 2 days
  1 activated for 5 or 6 days
  alternate one day activation

10 — 12

Polyfunctional appliance

Removable —
FIR activator

Semi fixed
Dahlia Bass appliance

Fixed
Herbst ... jasper jumper

13. by origin —

Teeth helps present
— Ant. occlusion pres.

Teeth helps widen
— orthodontic pres.

Tissue helps
— F.E.M

by grader
group A
teeth have
melanin applied

2. group B
laser test
Ashwater

3. group C
Toothpaste
- F.F.F.

- Based on transition of pencil

graphite Continual flame

group A
Ashwater

group B
F.F.F

Hyperbolic
Hypoglycemia

5. Vestibular system of opposite

Area in pencil the mandibular
children the tendon
- To shrink the neutral zone when
other buccinator muscle is pace
- Vestibule stop the position acting
on teeth

6) Surgical correction via methane
emotion exchange

7) Differential emphin guidance
- nature of muscle produce teeth

8) Bilateral maxillary basal effect

9) F.F.F protrude mandible

10) Fractured gait by buccal shield on
lip pad
- apical block bone formation

4)

Advantages -

- easy to use
- easy to fabricate
- easy to maintain
- easy to construct
- economical

Disadvantage -

- cavity breaks
- patient compliance required
- Time consuming more for
- It's major connector is

Mode of action of clasp

- Clasp engages into constricted
  i.e undercut

5) Buccal / lingual circlet undercut

- Retains always circumferential clasp
  i.e clasp
- The arm engages into the
  mental undercuts
- It is viewed from mesial

- Only in fully erupted teeth

7) Ring - distal undercut.

- e.g. Adams clasp, Circlet clasp
- To provide good retention.

(7)

Advantages :-

- easy to use
- easy to fabricate
- easy to maintain
- easy to construct
- economical

Disadvantages :-

- cracks breath
- patient cooperation required
- Time required more for
- No major correction in

Mode of action of clasp

- Clasp engage into constituent
  i.e undercut

1. Bucco / Lingual cervical undercut

- Retentive arm of Circumferential clasp
  (C clasp)
- The arm engages into the
  cervical undercuts
- It is placed from mesial

- Clasp is fully supported both

2. Mesial - distal undercut

- Arms Retentive clasp (Aroon clasp)
- It provide good retention

C clasp

1. cervical
2. mesial
3. Distal

Steps in Banding

- Cleaning
- machine warming
- application of adhesive
- apply sealant
- Banding attachment

Advantages

- reliable
- Low risk injury
- cheap
- durable

Causes of sudden stillness

- infinite buckling edge
- in knee
- Abnormal femoral retroversion

Treatment

- Tenotomy
- Splint behind knee
- Physiotherapy

- Types of spring
- Elastic
- Elastic chain
- M shaped spring
- C - module

- Reasons the etiology factor

Reduction by Hawley's appliance

- Necessary periodontal effect of space closure

- Position / torque

- Complete

3)

Major surgery

- Orthodontic surgery
- Cosmetic surgery
- Maxillary advancement
- Gnathoplasty

Minor surgery

- Therapeutic extraction
- Evulsion of supernumerary teeth
- [illegible] medicinal teeth
- [illegible] cosmetic reasons
- [illegible] implantation
- Periodontal
- Prosthetic

- Periodontal ligament supracrestal fibrotomy

- Transseptal fibers are present in proximal area of bone of horizontal fibers apical to junctional epithelium
- These fibers extend into the cementum of adj teeth
- They maintain the gingival integrity

It is performed to overcome the relapse of gingival fibers

Gingival fibers resist the tooth movement in case of rotation

- In position the occlusal tendency of original first done with distalized in original sulcus depth

- To in close in case of retention canine

Classification

1) Anchorage upon bite
2) Reciprocal upon bite

Retention upon bite

- Skeletal
- dental

Skeletal C.I.

- Short anterior facial height
- Short upper lip
- Narrow orbits
- Steep mandibular plane angle
- ↓ upper anterior facial height
- ↓ posterior facial height

True

- Class II malocclusion
- Class II skeletal
- Convex profile
- No change in profile while closing of mands
- Mandibular
- mandible cannot be retruded
- Flatness of curvature contact

Bimaxillary

- Class II dental
- Class I or Class III
- straight or profile
- change in while closing mandible
- bimaxillary
- mandibular retrusion
- flatness of curvature



Treatment of skeletal malocclusion

Class II malocclusion

- F.R.R. II
- Orthopedic appliances
- head gear

Class III

- F.R.R. III
- orthopedic appliances
- Chincup headgear
- Rubbers

Section C

Aetiology

Cleft lip results from failed merging of maxillary & medial nasal elevation on one side or on both side due to inadequate migration of mesenchymal cell. Cleft palate results from failure of lateral palatine process to meet & fuse with each other.

Aetiology

Genetic factor
maternal disturbance during development
Physiological, emotional or traumatic theory during development
Defective vascular supply to area involved

Mechanical disturbance about the time of suture may prevent union of bone
Maternal consumption of alcohol & smoking
Various environmental factor like infection, Rubella, exposure to radiation

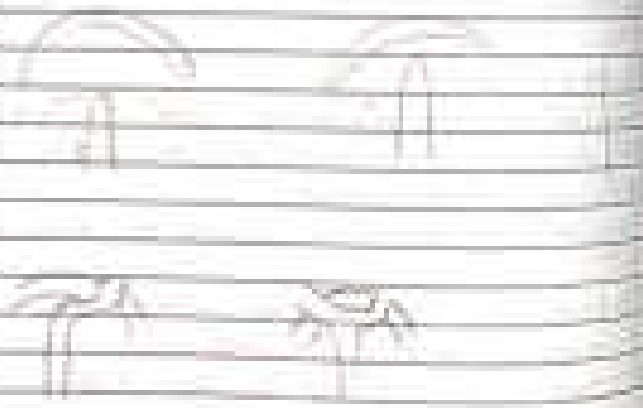
Tools of Kirschner classification

Group 1 - Prealveolar cleft
only lip
- Unilateral
- Bilateral
- Median

Group 2 - Postalveolar cleft

Group 3 - With alveolus cleft
it involves palate, ridge, lip

- Unilateral
- Bilateral
- median



Management of CLCP

There are 4 stages

Stage 1
- from birth to 12 months

Stage 2
- 13 months to 5 yrs

Stage 3
- 6 yrs to 11 yrs

Stage 4
- 11 yrs to 12 - 13 yrs

In surgical phase
Difficulty has gone rule of
15 month
15 to eight
15 to
more than 15

NBM given for cleft lip (upto
2 - 4hr Enteral nutrition
parenteral nutrition
Primary lip repair 3 - 4wk
12 - 24hr Palate repair
Speech assessment 3 - 4yr
2 - 3yr Lip revision
Dental intervention 2 - 3yr
mandibular arch
permanent lower incisors
- canine space closing
18 to 21 Alveolar bone
Definitive rhinoplasty 12 - 14yrs
16 yrs Nasal revision
- orthognathic surgery 18 - 21yrs
- Advanced conservative procedures

Def^n
Force or pressure applied which initiates tissue response from periodontal ligament, alveolar bone through medium of appliance.

Principles of myofunctional appliance -
Force application -
Compressive stress & strain are an absolute requirement & result in alteration in form & adaptation in function
Most of myofunctional appliance works on this principle

Force elimination -
It means the elimination of adverse mechanical environmental influence on dentition thereby allowing optimal development & the function is established with periodontal changes

- All current functional appliances have basic function components
  - Expansion - bite plane
  - Labiolingual muscle balance - shield
  - Mandibular repositioning - condylar

# Indication of activator

- Class I open bite
- Class I deep bite
- Class II div I - div II
- class III
- In children with horizontal pattern

# Contraindication

- Children with vertical growth pattern
- In children with severe skeletal problems
- Non - cooperative individuals
- In cases of severe periodontal

# Mode of action

When activator is used the mandible is moved forward of maximum protrusive path of functional area.

Dynamic - muscle

Viscoelastic

- Construction bite
- pt is asked to sit straight
- Then pt mandible is guided
- Then pt is asked to close the jaw
- Remove the pt bite wax
- Then junction shaped bite
- With placed incisal portion
- Wax removed & trimmed

- Articulation:
- The anterior portion is
- Then posterior side.

- Fabrication:
- 0.2 to 0.3 mm wax used for

Trimming of occlusion:
acrylic bur as grinding stone.

Trimming in vertical aspect

Polishing -
- Reduction of occlusion:
- acrylic bur of incisal edge
- Incisal wax incline grinding
- Reduction of protrusion:
- Acrylic bur incisal tip

Evaluation:

- Evaluation of anterior
- acrylic bur incisal tip &
- Incisal wax of interocclusal

- Evaluation of protrusion
- acrylic bur below groove

MAEER PUNE's

# MIDSR DENTAL COLLEGE,LATUR.

DEPARTMENT OF Orthodontics

III INTERNATAL ASSESSMENT EXAMINATION

**SECTION -B**

Signature of invigilator

53 Date ____ Time ____

Note : Start writing from here

Model analysis

Teeth present -

Teeth arrangement -

Maxilla

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | |
| 11 | 7 | 6 | 9 | 2 | 5 | 3 | 4 | 8 | 6 | 7 | 11 | |
| 12 | 5 | 7 | 3 | 7 | 4 | 4 | 5 | 5 | 4 | 9 | 12 | |
| 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | |

Mandible

Total tooth material

| | Maxilla | Mandible |
|---|---|---|
| Actual | 10.3 | 80 |
| Normal | 91.7 | 87 |
| Diff | 10.3 | 4 |

Bolton's analysis

| | | |
|---|---|---|
| Actual | 84 | 78 |
| Normal | 91.3 | 77.3 |
| Diff | 2.3 | 0 |

Crowding/spacing

| | | | |
|---|---|---|---|
| Actual | Crowding 2 | Diff | Crowding |
| Normal | 0 | 0 | |
| Diff | 2 | 0 | |

Types of pulse
Normal
Abnormal

Specific Gravity

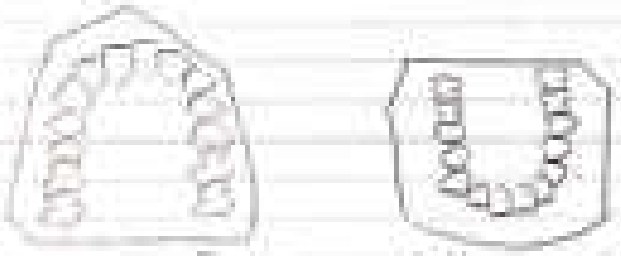
Pulse rate

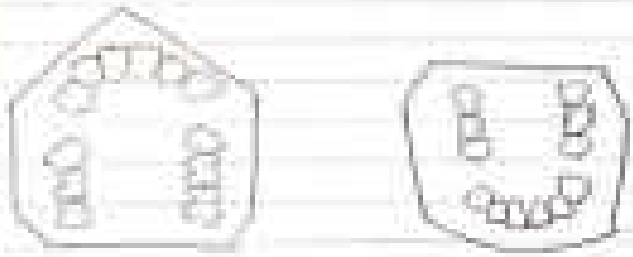
Pulse
Normal
Abnormal

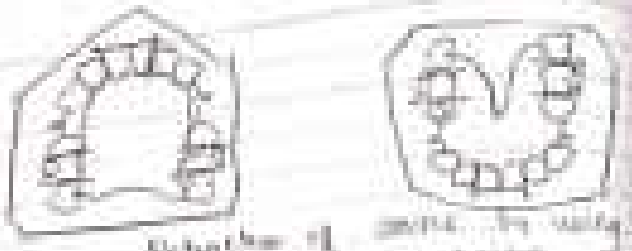
Pulse rate

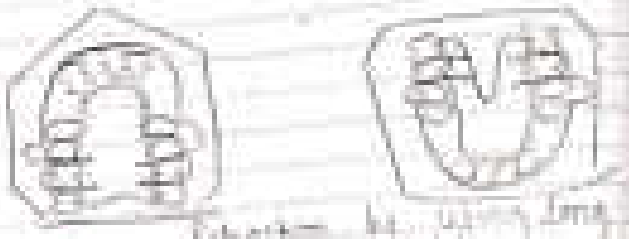
Site required

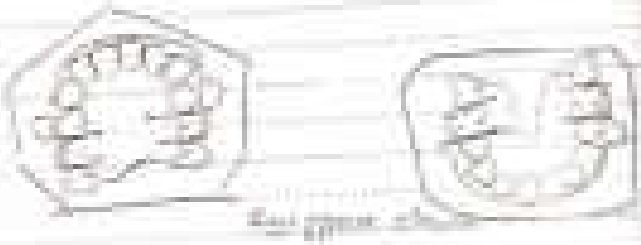
Space available
Unhardened spong
explosive
Distillation
Determination of protein
Separating mixture
extraction
mixtures

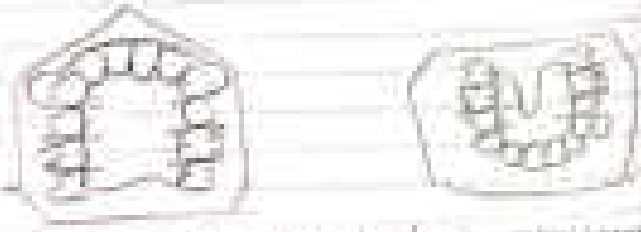












Spot 1
- Class I ... molar relation

- Canine guard
- Prolonged crowns
- mesiobuccal cusp of maxillary molar occlusion buccal groove of mandibular

Spot 2
- Oral cavity

- Habit breaking appliance
- used in habit like
- Thumb sucking ... mouth breathing ...
- modification ... with habit

Spot 3
- quad helix

- Used in ... expansion
- Other ... maxillary expansion

Spot 4
- Cetlass appliance

- Use ... impaction
- ... vertically placed ... canine ...
- ... anterior ... is

Opt I

- Actinides
- Class II — class I
- Class II — class II
- Class III

Opt J

- Benzene ring
- Para, ortho, meta positions
- Uses of ... in ... industry

Opt F

- Both ... are ... mass
- In class II
- In ... solution ... solution ... reaction

Opt H

- Should also ... reactions
- Also ... only for ... and class ... ratios
- For ... reaction ... of ... product
- ... mass ...

Opt D

- Reversible plots
- U - V plots
- F - V plots
- Decimal plots
- Parabolic plots
- Potential ... plots
- Balmer ... plots

Opt B

- Causal ... appliance

- Carbonate
- Acid ...
- Nitric Acid
- Reagi. ... acids
- E - Class
- I ... metabolic

Unit 5

- Activator
- Class I
- Class II
- Class III

Unit 6

- Tongue crib
- Nail biting appliance
- Used in
Tongue thrusting

Type 2

- Fixed type face mask
- In class III
- In maxillary retrusion
protrusion

Type 3

- Dental plate space maintainers
- Also used for the 1st molar
molar
- For guiding eruption of 1st
molar
- Space maintainers

Type 2

- Functional planes
- A - M planes
- F - H planes
- Occlusal plane
- Mandibular plane
- Palatal plane
- Bolton's plane

Unit 12

- Fixed appliances
- Components
- Bands
- Molar tube
- Begg's bracket
- E - Chain
- L - modules

# MIDSR DENTAL COLLEGE, LATUR

## DEPARTMENT OF oral pathology

## MID TERM EXAMINATION

Subject: oral pathology

Paper:

03

Q.No. 1 2 3 4 5 6 7 8 9 10

A
B
C
D

11 12 13 14 15 16 17 18 19 20

A
B
C
D

**USE BLUE BALL POINT PEN ONLY**

**INSTRUCTIONS**

1. Cross & Tile Blocks Using Blue Ball Point Only
2. Cross Only One Block For Each Question As Shown Below

| Wrong | Wrong | Wrong | Wrong |
|---|---|---|---|
| A ☑ | A ■ | A ☒ | A ☒ |
| B ☐ | B ☐ | B ☐ | B ☐ |
| C ☐ | C ☐ | C ☒ | C ☐ |
| D ☐ | D ☐ | D ☐ | D ☐ |

3. Cross only Block Provided Do not Make Any more Marks On The Answer Sheet
4. Rough Work Must Not Be Done On The Answer Sheet Use Free Space in The Question Booklet Provided

5
15

MARKS SECURED

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF oral pathology & microbiology

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - B

Roll No : 53 Date : 14/10/24 Time :

Signature of Invigilator

Note : Start writing from here.

Q4)

Developmental disturbances of tongue :

1) Aglossia & microglossia -

It is characterised by complete absence of tongue
It is really a microglossia with extreme severity.

2) macroglossia -

It is the uncommon condition characterised by enlargement of tongue

Types - True macroglossia
pseudo macroglossia

Causes

1. congenital & hereditary -
   - lymphangioma
   - haemangioma
   - M. crtinism
   - Downs syndrome

2. Acquired -
   - Edentulous patient
   - amelonblastoma
   - acromegaly
   - myxoedema
   - carcinoma & other tumors

Clinical features:

1. It is more common among the children.
2. There is presence of open bite and mandibular prognathism is seen.
3. Mandibular development in young people produces spacing of the teeth and distortion of maxillary arch.
4. In infants it is manifested by noisy breathing, drooling & difficulty in eating.
5. Macroglossia results in slurring of speech.
6. Pressure of tongue on mandibular teeth produces wavy crenated border of tongue.

Treatment:- The goal is to reduce tongue size thereby improving the function.

2) Ankyloglossia:-

Ankyloglossia is also known as tongue tie.

- It can be defined as an congenital developmental condition characterized by the fixation of tongue to the floor of mouth causing restricted tongue movement.
- Complete ankyloglossia is extremely rare condition however the partial ankyloglossia which is also known as tongue tie is relatively common developmental anomaly of tongue.
- Tongue tie occurs often due to short & thick frenulum or due to the which attaches the under the tip of tongue.

Clinical features:
- more common among males as compair to female
- It can cause feeding problems in infant
- It causes speech defects
- It leads to persistant gap between the mandibular incisors

Treatment:- frenulectomy is treatment of choice.

4) Cleft tongue:
- complete cleft tongue or bifid tongue is a rare condition which arises due to lack of fusion merging of lateral lingual swelling of the organ.

- partial cleft tongue is more commonly seen
- partial cleft occurs because of incomplete merging & failure of proper differention by underlying mesenchymal tissue.

5) Fissured tongue:
- It is also known as scrotal tongue or lingua plicata

Clinical features:-
- more common among males
- No clinical symptoms are seen but collection of food debris & microorganism in fissures or grooves sometimes causes discomfort

- fissures / grooves often radiate frequently on dorsal surface in irregular direction

- large and deep grooves may be interconnected they separate portions of tongue into multiple lobes

Histopathology:

- There will be loss of filiform papilla from surface mucosa
- Neutrophilic microabscess formation within epithelium
- Mixed inflammatory cell infiltration in connective tissue stroma

5) Hairy tongue -

It is the unique condition which occurs due to hypertrophy of filiform papilla of tongue along with loss of normal desquamation process.

- Persistence with the growth of papilla eventually leads to the formation of pigmented thick matted layer on tongue surface which heavily stained with bacteria & fungi.

Etiology -

- poor oral hygiene
- pyogenic fungal infection
- prolonged use of antibiotics
- heavy smoking
- chronic illness
- lack of tooth brushing

Clinical features -

- hairy tongue commonly affect mid dorsum of tongue
- hypertrophy of filiform papilla produces thick matted layer on dorsal surface.

- Normally the filiform papilla are approximately 1 mm in length however filiform papilla of hairy tongue are more than 15 mm in length.

- Patient frequently complains of itching of soft palate oropharynx during swallowing. In more severe cases patient may have severe sensation.

- Only the complication associated with hairy tongue is occasional candidal overgrowth which results in glossopyrosis (burning tongue).

Treatment -
- Removal of etiological factor
- Proper cleaning of tongue.

3) Median rhomboid glossitis -

It is asymptomatic, elongated, erythematous patch of atrophic mucosa on mid dorsal surface of tongue.

Clinical features
- Male common commonly affected.
- Condition is mostly seen in young age.
- Lesion is present at posterior midline of dorsum of tongue just anterior to v shaped sulcus separating oral from circumvallate papilla.

- Early developed lesion appears diamond shaped which is devoid of papilla.

- Colour of lesion varies from dark pink to bright red.
- Lesion is usually asymptomatic but occasionally causes slight soreness & burning.

Histopathology -

- Irregular & stratum parts are absent
- Presence of chronic inflammatory cell infiltration in subepithelial & deeper tissue
- It shows fibrous nodular mass covered by atrophic thinned squamous epithelium
- In presence of candidal overgrowth, necrotic elongation of rete ridges & production of pseudo hyphae.

Treatment

- no any treatment is required.
- Antifungal therapy is given to reduce the inflammation due to fungal infection

2) Ectopic thyroid nodule -

Accessory accumulation of functional thyroid gland tissue in the body at region is known as ectopic thyroid nodule.

Clinical features -

- Seen in the females more commonly
- In tongue thyroid tissue appear as an nodular exophytic mass measuring about 1-3 cm in diameter, located in foramen caecum.
- It can present as an fixed cystic swelling.

- Symptoms may vary which include change in the voice, breathing problem, dysphagia, feeling of tightness in throat.

Histopathology

- Thyroid nodule may exhibit colloid degeneration / goiter
- Normal mature thyroid tissue although
  Enlargement of total thyroid gland tissue may also be seen.

Treatment:- Surgical excision should be done.

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF.....

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - B

Roll No : ..... Date : ..... Time : .....

Signature of Invigilator

Note : Start writing from here.

Q1) a) CEOT

CEOT is also known as pindborg tumor

Clinical features -

- It is seen in middle age with mean age of occurrence is 40 years
- mandible is more commonly affected than maxilla
- The lesion is slowly expanding painless swelling of the jaw with distortion of facial profile
- It sometimes bone is bony clinically it is well defined radiolucent

Histological features -

- CEOT is contains polyhedral epithelial cells
- The characteristic histological feature is calcifying epithelial odontogenic ghost is presence of homogeneous eosinophilic substance known as amyloid
- It may be in cyst or solid growth

- one more characteristic feature of cervix presence of calcification often in the form of laminated ring.

Treatment:

Small intraepithelial neoplasia lesions are treated with ablation followed by excision of thin strip or layer of tissue adjacent to tumor.

Radicular cysts -

Radicular cysts are mostly known as radicular cysts.

radicular cyst also known as apical periodontal cysts or the periapical cysts.

Pathogenesis -

Radicular cyst is the inflammatory & epithelial odontogenic cysts.

- Radicular cyst develops due to degeneration and proliferation of epithelial cell rest of malassez.

- Stages of development of cyst -

1- Phase of Initiation -

Initial stage the bacterial infection in dental pulp & periapical tooth stimulates epithelial cell rest of malassez in root apex of tooth.

2- phase of proliferation -

Stimulation of cell rest of malassez leads to the proliferation which leads to the formation of large mass.

3- Phase of epithelialization -

Once the large mass is formed its peripheral cells get nutrition while the central cells are deprived of the nutrition.

due to which central cells undergo liquefaction necrosis & peripheral cells survive.

A topological space is formed which contains infinite space.

Ex: Space of real numbers -
All the real open sets is formed
& probably infinite

Techniques

- Real valued functions
- Continuity & uniformity
- Extraction of important results

3. odontogenic keratocyst -

odontogenic aetiology is common
cystic lesion of jaw - while developing from non dental
tissue

It is termed as aggressive because it produces
lot more of osteolysis than other cystic lesions

Clinical features -

- Peak incidence is in 2nd & 3rd decade of life
- males are more commonly affected than females
- mandible is more commonly affected than maxilla
- in mandible the major sign noted is canine thrid molar followed by 1st & 2nd molar & then ascending mandible
- It is usually asymptomatic - unless it is secondarily infected when patient complains of pain & swelling & drainage
- Radiographically the patient appearance of radiolucency of crown like & the tooth
- Expansion & thinning of bone cortex particularly lingually
- maxillary odontogenic keratocyst they tend to secondarily infected in greater frequency than the mandibular one
  Due to its vicinity to maxillary sinus

Histopathology:

- no such signs are present
- parakeratinized epithelium which is composed of regular or wavy
- prominent palisaded basal cell layer which is described as having wavy linear or ribbon like appearance
- underlying thick epithelium which is 5-10 cell layer thick
- connective tissue shows daughter cells or palisade layer
- lumen may be filled with keratin coloured fluid or thick white material

Treatment -

Most important feature of cyst is its recurrence rate.

- primary closure
- surgical excision

- Hypocalcified :
  It is due to disturbances in the process of early mineralisation of enamel.
  In this type the enamel is soft and can be removed with instrument

- Hypomaturation :
  It occurs due to disturbance in the process of maturation of enamel.
  Eg: the enamel is of normal thickness but does not have normal hardness & translucency.

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF Oral pathology & microbiology

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - C

Roll No : 23 Date : 16/11/21 Time : 2:00

Signature of Invigilator

Note : Start writing from here

Ans 1a)

Definition :-

Cyst - Channel (1974) :-

It is the pathological cavity having fluid, semifluid or gaseous content which is not created by accumulation of pus. It is frequently but not always lined by epithelium.

- Cysts are more common in facial region & also most common cause of chronic jaw swelling.

- Most of the cyst are cystic tumors cysts arising from connective tissue capsule.

Classification :-

1) Classification by Shear :-

a) Cyst of the jaws

I. Epithelial
II. Developmental
III. Odontogenic cyst :-

- Eruption cyst of newborn
- Gingival cyst of adult
- NOC
- Dentigerous cyst
- Eruption cyst

- lateral periodontal cyst
- Gingival odontogenic cyst
- Botryoid odontogenic cyst
- etc

2. non odontogenic -
- Nasopalatine duct cyst
- Nasolabial cyst
- midpalatine raphe cyst
- Nicoloumaxillary cyst

3. Inflammatory cyst -
- Radicular cyst
- Residual cyst
- Inflammatory collateral cyst
- Paradental cyst

II non epithelial -
- Aneurysmal bone cyst
- Traumatic bone cyst
- Solitary bone cyst

3 cyst associated with maxillary antrum -
- Mucocele
- Pseudocyst
- Retention cyst
- Post operative maxillary cyst

Dentigerous cyst :

Introduction :-

- Dentigerous cyst is also known as follicular cyst or perifollicular cyst

- Dentigerous cyst can be defined as an odontogenic cyst that surrounds the crown of an impacted tooth, caused by fluid accumulation between reduced enamel epithelium & enamel surface resulting into a cyst in cystic areas of stratified squamous epithelium

- It is the most common developmental odontogenic cyst.

Clinical features :-

- There are usually associated pathology with the crown of an impacted, embedded or malaligned tooth.

- most common site is mandibular & maxillary third molar, maxillary canine area.

- most of the lesions are present in 2nd & 3rd decade of life with male predilection.

- Once dentigerous cyst are solitary. Bilateral & multiple cyst are rarely found & associated with numbers of syndromes including cleidocranial dysplasia, nevoid basal cell carcinoma syndrome.

- Dentigerous cyst has potential to become an aggressive lesion.

- It is usually painless unless it is secondarily infected.

- Expansion of bone with consequent facial asymmetry - excessive displacement of tooth, severe tooth resorption of adjacent teeth & pain are possible sequele

Pathological features

1. Intraosseous theory -
   Dentigerous cyst is caused by fluid accumulation between reduced enamel epithelium & enamel surface, which causes it to
   a cyst in which crown is located within the bony

2. Extraosseous theory

Histological features -

- Lining epithelium is consist of 2-3 layers of flattened non-keratinizing cells.
- Rete peg formation is generally absent, except in the cases where they are secondarily inflamed
- Cystic lumen may filled with straw coloured fluid

Dentigerous cyst

Radiographic features

There radiological variants of dentigerous cyst may be observed:

- In central variety, the crown is surrounded symmetrically. In such instances the pressure is applied on the crown portion of tooth pushing them away from direction of tooth eruption.

- In this variety mandibular third molar is found at the lower border of mandible, in ascending ramus.

- maxillary canine is forced in the maxillary sinus as far as floor of orbit.

- Lateral variant: This type is most commonly seen when impacted mandibular third molar is partially erupted.

- Circumferential variant:
  Cystic expands in a manner in which whole tooth appeared to be encircled by the cyst.

- Dentigerous cyst are usually unicystic unilocular lesion but occasion it may appear multilocular.

Treatment:

- Smaller lesions are surgically removed.
- while larger cyst with infected bone are treated with marsupialization.

Odontogenic complications

- Ameloblastoma
- Squamous cell carcinoma
- Mucoepidermoid carcinoma

It is the malignant salivary gland tumor
- It is commonly found in odontogenic cyst associated with impacted mandibular third molar.

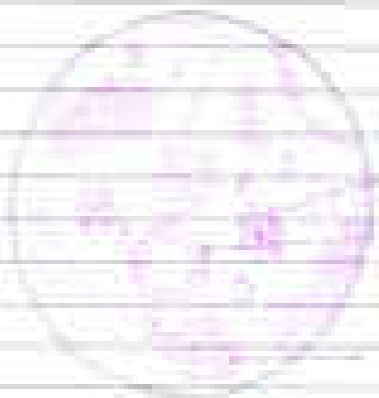
Adenomatoid odontogenic tumor -

It is also known as adenoameloblastoma or pseudocystic adenomatoid odontogenic tumor.

- It occurs as an hamartoma, rather than a tumor
- It is also known as two-third tumor because two third occurs in young women, two-third is maxilla & two third is associated with the unerupted teeth anterior maxillary canine

Clinical features -

- It is predominantly seen in people younger than 30 years of age with female predilection.
- Larger cyst subsequently leads to facial asymmetry
- Lesion is usually asymptomatic causing facial swelling when it enlarged
- The two-third tumor is associated with unerupted teeth often maxillary canines.



ans.

2.

benign migratory glossitis -

g.i.e a developmental disturbance of tongue

- benign migratory glossitis is one known as geographic tongue
- It is characterized by continuous changing pattern of white lesion which surrounds the area which is known as depapillated.
- The disease is more serious in pigmented races.

clinical features -

- It may be a single area but usual multiple mathematical patch
- It is present on the anterior two third of the dorsum of tongue.
- It is commonly seen at tip of tongue & lateral borders of tongue.

1- unicystic ameloblastoma

Classification of odontogenic tumors

a) Benign -

a- Tumor arising from odontogenic epithelium
- Ameloblastoma
- Squamous odontogenic tumor
- CEOT
- AOT

b- Arising from odontogenic mesenchyme
- Odontogenic fibroma
- odontogenic myxoma
- * Cementoblastoma
- Cemento-ossifying fibroma

c: arising from odontogenic epithelium & mesenchyme -
- Ameloblastic fibroma
- Odontoma: Complex
Compound

- Dentinogenic ghost cell tumor

b) malignant

a- Tumor arising from odontogenic epithelium
- Ameloblastic carcinoma
- clear cell odontogenic carcinoma
- ghost cell odontogenic carcinoma

b- Tumor arising from odontogenic ectomesenchyme
- Osteosarcoma fibrosarcoma

Ameloblastoma: infiltrating ameloblastoma -

It is the histological variant of ameloblastoma,
which arises from odontogenic epithelium

unicystic ameloblastoma

- mandible is more commonly affected than maxilla
- lining epithelium is consist of ameloblast like cell which has prominent palisaded outer cell layer.
- And the presence of stroma reticulum like cell.

3. Ghost Cells :-

Ghost cells are the enlarged, ballon shaped, enucleated, keratinized squamous epithelial cell.

These are eosinophilic cytoplasm of the ghost cell as it was denucleated which is present in lining epithelium.

Ghost cell is the characteristic feature of Ca. which is known as calcifying epithelial odontogenic cyst.

On Cut Histologically it is a cell layer thick epithelium & fibrous

Capsule consisted ballon cells with hyperchromatic nuclei.

Log 1 Date Investigations:-

Developmental disturbances associated with stage of teeth :-

Examination
- Inspection
- Palpation
  - Palpation tools
  - Palpation technique
    - Bimanual palpation
    - Digital palpation
    - Regional palpation

- Dens Invaginatus is also known as dens in dente

- Germination is developmental anomaly which refers to the partial development of two teeth from a single tooth germ resulting in incomplete division

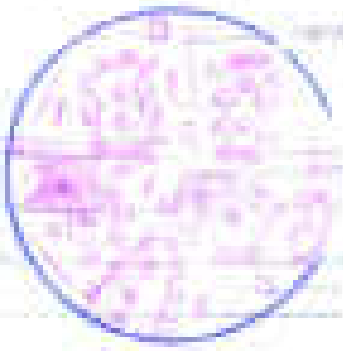
- Fusion is the union of two adjacent normal tooth germ at a point of dentin during development

Concrescence is a kind of fusion which occurs after root formation has be completed. Here the teeth united by cementum only.

2nd Internal practical Exam

37/50

Slide 01



Identification: given slide is of cardiac muscle fibres

Cardiac striated fibres

3½

Slide 02

Identification: given slide is of capillary blood vessel

Capillary blood vessel

3½

Slide 03

Identification: given slide is of oral lichen planus

Oral lichen planus

3½

identification: given slide is of squamous epithelial cells

2½

identification: given slide is of cholesterol clefts

Cholesterol Clefts

3½


identification: The given slide is of capillary hemangioma

Not

X 0

46.

Identification - The given bone specimen is of dislocated bone.

It is the condyle of lower head in the right side of human skull.

Complications - difficult to remove

Treatment - surgical removal.

It is present in eyes of middle or cervical portion of tooth or which means occurs

47.

Identification -

The given case is of congenital syphilis.

Clinical features -

- It is caused due to fungal infection
- occurs in children and young infants
- mostly are more commonly affected than female

Q2-

Identification - The given clinical specimen is of permanent

It is supernumerary teeth which is located lingually or buccal to the normal series of teeth in the permanent dentition.

Etiology - Hyperactivity of dental lamina during tooth development

down syndrome.

Syndrome - gardner syndrome, Cleidocranial dysplasia.

Complications - odontogenic cysts

Treatment - surgical removal

Q10

Identification - The given soft tissue specimen is of developmental cyst

Note -

Developmental cyst is also known as fissural cyst or fissural cyst

Clinical features -

- most commonly seen in children
- Males are more commonly affected than females
- It is usually asymptomatic unless secondarily infected
- most common sites are mandibular third molar, maxillary third molar & maxillary canine
- mostly occurs during 2nd & 3rd decade of life.

Radiographic features:-
- coronal variety
- lateral density
- circumferential density:
  follicle expands the manner in which the whole tooth is appeared to be encircled by the sac.

Treatment:-
- Cystic lining are surgically removed
- marsupialization

Betterment Exam

# MIDSR DENTAL COLLEGE, LATUR

DEPARTMENT OF

MID TERM EXAMINATION

USE BLUE BALL POINT PEN ONLY

MIT ... GE, LATUR

INTERNAL ASSESSMENT EXAMINATION

... DEPARTMENT

SECTION- B

Roll No. 69 Date 30/10/23 Time 10 to 1

Name of Engineer _____

(15)

(1) ———— ?

→ Define hypochloric anemia

• Causes —

→ Teeth with white spots formation

→ Apical convolutions developed during formation of root canal preparation

→ Extreme pressure during ...

→ Bleeding of ... gums up to the root canal

→ Not determining working length or going beyond it

• Symptoms —

→ Severe pain during ...

→ Immediate edema of the ... cheek

→ Profuse bleeding from root canal

→ Enlargement of the ... is evident

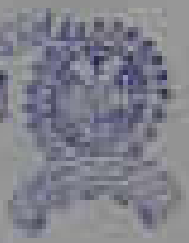
→ Clinical tests ... the teeth

→ Tenderness of ... if injected ... swelling ...

→ Visible ... opening

→ Formation of ... that is ...

→ Edrava way adopt to [illegible]



- Management = [illegible]

→ [illegible]

→ [illegible]

→ [illegible]

- [illegible]

(2) ———— 1.

→ Resistance Brazing:-

Brazing resistance from:-

Ochrance - Brazing resistance from is that shape and placement of brazing units to use energy both the both and resistance to withstand, ensure factors are ability of maintaining force clearance positively along long one of both.

- Factors affecting resistance from:-

→ Presence of current shapes

→ Type of resistance used

→ Amount of resistance with carbon

- Features of Resistance from:-

→ A low-shaped projection.

→ A flat point of original fitter, which help the both to resist external resistance forces without any displacement.

→ Adequate hardness of resistance material depending on its material composition. Other resist strength to prevent the fracture of both the resistance both shapes & resistance.

→ Right the selection of current with for allow strong brazing using parts with sufficient energy strength

→ Evaluation of maximum load resistance to avoid fracture under maximum force

## Fabrication laws :-

Definition :-

Fabrication laws is that laws which deal with the relationship of both employer and employee with the development or removal of unemployment was prohibitive under existing statutory laws.

→ Utility assistance & relation laws are defined by providing some factors, laws like:-

flywheel helps in providing rotation

→ Purpose of the workshop layout

→ Location of the workshop

→ Thickness of the rim

→ The diameter of the hub

(1) ——————?

→ Cotton down technique

→ First step in Cross down technique is the cross cavity preparation with pulp chamber, locate the canal orifices with sharp explorer under sharp binding in the pulp chamber.

→ Now fill the cross cavity with an irrigant and check positions of the canal orifices. Positions of the canal can be done by using hand instruments, Gates-Glidden drills or the nickel titanium rotary instruments.

→ Gates-Glidden drill can be used after staking the canal orifices with instrument in orifice first.

The cross down approach begins with large Gates-Glidden bur.

After using the subsequent smaller diameter Gates-Glidden are inserted into the canal with additional work to complete coronal flaring.

→ Frequent irrigation with sodium hypochlorite and re-lubrication with a chelator like Glyde is used to prevent canal blockage.

→ After circumferential coronal and root canal enlargement, explore the canal and complete the working length with apical instruments.

→ Patient gives the history of [illegible] sensitive to [illegible] and [illegible]

• Diagnosis —

→ It is associated with inflammation of root canal treatment in the asymptomatic teeth.

→ Patient gives a history of trauma which causes discoloration and [illegible] tooth.

→ Loss of vitality tests vitality tests is diagnostic of necrotic pulp

→ Radiograph shows presence of radiolucency at the root apex.

• Histopathology —

→ There is presence of coagulation degeneration with disintegrating polymorphs, [illegible] vacuoles and cellular debris.

→ Cystic cavity are surrounded by proliferation of granulation tissue, lymphocytes & plasma cells

• Treatment —

→ Undergo pulp extirpation & sealing of the cavity.

→ Place calcium hydroxide as intracanal medicament.

(6) ——— ?

→ Classification of Endocrine Hormones -

* FDA - For (Federation Drug Administration) :
Grouped with camel (different) are to their
working of use

Group I : Water use only
eg: H fibre, H fibre, Hormone, Antibiotic etc.

Group II : Later type engine drugs
same drugs as group I but can be
diluted by water

Group III : Both of working later type engine drugs
eg: Insulin - Diabetes, pressure problem etc.

Group IV : Fast acting penis drug
Gutta-percha
Silver point
Foam - paint

* Endocrine classification -
Function of hormones
→ Exciting - growth hormone & antidiuretic hormone.
→ Providing or controlling - thyroid hormone
→ Closing & opening - hormone & bile
→ Behaving - progesterone, oestrogen

MAEER'S
M.I.D.T.R. DENTAL COLLEGE, LATUR
INTERNAL ASSESSMENT EXAMINATION
Department

Roll No. 43 Date 23/01/23 Time 10:30

Subject

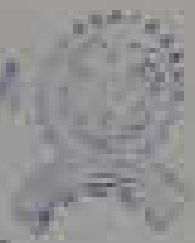
Ans:-

(1) Explain

Ans:- Examination with preference to the cleaning and sterilization of root canal system

Root cleaning comprises the removal of pulpal tissue, debris from root canal system which are carrying infectious microorganisms. Cleaning of root canal system refers to the mechanical and chemical preparation of root canal walls with the help of various instruments & materials in order to remove the pulp tissue, debris, microorganisms which will prevent the final obturation.

- Various techniques for cleaning & shaping of root canal are -
  1. Conventional method
  2. Step back method or retreat method of root preparation
  3. Crown down method or step down method or preparation technique
  4. Balanced force method



① Step Back Method →

→ It is also known as "Elongate Count" progression or "Count and Compare".

→ This technique requires the optical properties count in its original position and performing a gradual taper accurately.

Steps :

→ Evaluate the canine teeth before initiating orthodontic treatment.

→ Initially prepare the entire anterior segment using the canine guides.

→ Re-Evaluate working length of the teeth using apex locator.

→ Now insert the 1st instrument into the canal with light working motion. It has a gentle clockwise and anticlockwise rotation to file until minimal optical pressure is given.

→ Remove the instrument & irrigate the canal.

→ Introduce the instrument for next apical constriction. It is done just to remove debris from the apical 1/3rd region without the intention to enlarge it.

→ Place the next larger size file to the working length in canine without irrigation irrigate the canal.

→ To not forget to assemble the cover with the rivets
cover washer nuts.
- This keeps up until doing which on without doing
with wiggle
→ Suppose the person will a use it for the washer like
working length.
Accomplishes increase the life by placing a small fit
to the working length.

Step II:

→ Place the file in the vise to a height convenient for
working height.
Insert the projection into the chain with work
working women, remove it like screwdriver
Bring height is adjustable.
→ Repair the chain provide with sharpening tapes
like as lower pressure, from pressing more file
→ Continue and down over and remove part of the
chain is pressure and shaped with tapes sharpen
like.
→ Finally, refining of the nut cover is done by wash
metal file with grade-cut shown in diagram & smooth
tapes from of the nut cover

(2) Cover Plate Tension ⇒

→ Cover plate in the tension is also easily purpose
with as pair chamber stretcher, where the small
pulleys with shape surface which wheel bearings
are fill chamber

→ Now fill the area cavity with impact & shot preparing of the canal orifices.
Preparing of the coronal third of the canal can be done by using hand instruments; Gates-Glidden drills.

→ Gates-Glidden drills can be used after securing the canal orifices with number 10 or 15 files.

→ Frequent irrigation with sodium hypochlorite and recapitulation with a smaller file

→ After establishing patency & working length, explore the canal & establish working length with small instruments.

→ Final apical preparation is prepared and finished along frequent of the canal system.

Q. ———— ?

→ Chemically used in lab solutions :-

(1) Chemically non-active solutions
- water
- saline
- Local anesthesia

(2) Chemically active reagents
- Acetic sodium hydrochloride
- Chelating agent
  - Ethylenediaminetetraacetic acid (EDTA)

(3) Oxidizing agents
- Hydrogen Peroxide
- Sodium chloride

(4) Reducing agents
- Thiosulfate
- Tris - dicyanoethylene carbonate

(5) Acids -
- HCl, hydrochloric acid

(6) Enzymes
- Chymotrypsin
- Pepsin
- Trypsin

(7) Detergents
- Sodium lauryl sulfate

## EDTA

EDTA was introduced by Nagenthiran

→ It is the most commonly used chelating agent

→ EDTA is non-toxic and is highly investigating in wide situations

→ For the good chelating & binding of ion EDTA should be used at neutral pH

- Mechanism of Action -

→ EDTA chelates along with the central ion in the medium & provides groups of attachment & chelate bonds

→ EDTA form stable bond with cations and displace water but when all chelating sites are used an equilibrium is set up which prevent further chelation

- Types of EDTA

→ E-EDTA :-
EDTA is combined with cations and binds better chelating of ion cations

→ EDTA-T :-
EDTA is combined with sulphur group which binds cations strongly to active tissues

→ EDTA-C :-
EDTA is combined with cations which provide guidelines protocols and tips for its usage

Functions –

→ It helps in hydration
→ It leads to emulsification
→ It helps delays in coagulation
→ It causes the removal of smear layer.

Uses –

→ It causes dissolution of debris
→ Helps in enlarging narrow canals
→ It causes recontamination of intracanal smear
→ It decreases the time used for debridement

* EDTAD ⇒

(Disodium of Tetraacetic Ethylene)
– an acid and a detergent

→ EDTAD irrigating solution is introduced in the last as final rinse for dissolving the root canal lumen.

→ It safely removes the smear layer and it effective against Enterococcus Faecalis

| Components | Functions |
|---|---|
| 1) Tetracycline | → – Broad spectrum bacteriostatic antibiotic<br>– Binds to the 30S ribosomal subunit<br>– Removes smear layer<br>– Prevents binding |
| 2) Citric acid | → – Solubilizer<br>– Removes smear layer |
| 3) Detergent | → – It decreases surface tension |

: Functions of MTAD –

→ It disinfects the dentin

→ It removes smear layer

: Advantages of MTAD –

→ It effectively removes the smear layer

→ It has bactericidal action of short

→ It is biocompatible

→ It has very less effect on propertis of root

→ It has some side effect on dentin & help as EDTA.

* Sodium Hypochlorite →

→ It is a clear straw coloured solution and has Ph of alkaline.

: Advantages –

→ It causes tissue dissolution

→ remove organic portion of smear the deep penetration of medicaments.

→ removes biofilm

→ It is economical

→ Easily available

: Disadvantages –

→ It can bleach the dentin, if spill.

→ It has bad odor & taste

→ vapors of NaOCl irritate eyes

→ It does not remove smear layer

* Properties of ideal irrigant solution —

→ Broad spectrum antimicrobial property
→ Act in debridement of root canal system
→ Ability to dissolve necrotic tissue debris
→ Low surface tension
→ Good lubrication
→ Low surface tension to fine into irregularities over
→ Ability to chelate the smear
→ Biocompatible solution

* Functions of Root canal irrigants —

→ Dissolve necrotic tissue
→ Perform physical & biological functions
— remove dentinal shavings by irrigation
→ Remove debris from lateral & accessory canals
→ Bactericidal as well as antibacterial properties
→ Lubricating action
→ Impart with ultimately clean surface
increase the efficacy
→ Drying of canal before by removal of excess liquid

Bachelor of Dental Surgery Examination MAHER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF Oral and Maxillofacial Surgery

INTERNATAL ASSESSMENT EXAMINATION

## SECTION -C

Roll No. 20 Date 16/Feb/22 Time 2.40 5

Subjects at Institute

03

Note: Start writing from here

Q.

Ans. Local Anesthesia has been defined as a loss of sensation in a circumscribed area of the body caused by a depression of excitation in nerve endings or an inhibition of the conduction process in peripheral nerves.

Ideal properties of Local Anesthesia are -

1) It should not be irritating to the tissue to which it is applied.
2) It should not cause any permanent alteration of nerve structure.
3) Its systemic toxicity should be low.
4) It must be effective regardless of whether it is injected into tissues or applied locally to mucous membrane.
5) The time of anesthesia onset should be as short as possible.
6) Duration of action must be long enough to permit completion of the procedure yet not so long as to require an extended recovery.
7) It should have potency sufficient to give complete anesthesia without the use of harmful concentrated solutions.
8) It should be relatively free from producing allergic reactions.
9) It should be stable in solution and readily undergo biotransformation in the body.

iii) It should either be sterile or capable of being sterilized by heat without deterioration

## MAXILLARY NERVE BLOCK :-

i) Infraorbital Superior Alveolar Nerve Block :- (0.8 - 1.2 ml)

a) Other common Name :- Tuberosity Block, Zygomatic Block

b) Nerves Anesthetized :- Posterior Superior Alveolar Nerve, and Branches

c) Area Anesthetized :-

i) Pulps of Maxillary 3rd, 2nd & 1st Molars (Entire Apex - 12 mm, Mesiobuccal root of Max. 1st molars not anesthetized - 28 %)

ii) Buccal periodontium and bone overlying these teeth.

d) Indications :- i) When treatment involves two or more maxillary molars

ii) When supraperiosteal injection is contraindicated (Infection or acute inflammation)

iii) When supraperiosteal injection proved ineffective

e) Contraindications :- When risk of Hemorrhage is too great in case of supraperiosteal or PDL injection is recommended.

f) Advantages :- i) Atraumatic : No pain experienced by pt.

ii) High success rate (95%)

iii) Minimum no. of necessary injection

iv) Minimize total volume of local anesthetic

g) Disadvantages :- i) Risk of Hematoma

ii) No bony landmarks

iii) 2-4 injection necessary for treatment of max. 1st molar (mesiobuccal root) in 24% pts.

h) Positive Aspiration :- Approx. 0.1 %

Target area : PDR nerve

Landmark : a Mucobuccal fold b Maxillary tuberosity
c Zygomatic process

Signs & symptoms: Subjective : pain
Objective : Bleeding during therapy

Complications : Hematoma.

Middle Superior Alveolar nerve Block
(1-2 ml)

Nerves Anesthetized: Middle superior alveolar & terminal branches

Areas Anesthetized: Pulps of the max. 1st and 2nd premolars, mucobuccal fold of the 1st molar
& Buccal periodontal tissues of bone over these teeth

Indications - when infiltration nerve block fails to provide pulpal anesthesia during the maxillary cuspids or premolars involving both max. premolar body

Contraindications: Infection or Inflammation,
- where PDR muscle is absent

Advantages -
Disadvantages - pain
Positive aspiration - migraine [<3%]

Target area - Maxillary bone above the apex of the maxillary second premolar

Landmark - Mucobuccal fold above the maxillary 2nd premolar

Signs & Symptoms : Subjective - Upper lip numb
Objective - No pain during dental therapy

Anterior Superior Alveolar Nerve Block :-
(Infraorbital Nerve Block) (1-2 ml)

Other Common names: Infraorbital Nerve Block

Nerves Anesthetized - 1. Ant. Sup. Alveolar
2. Middle Sup. Alveolar

a: Infraorbital nerve a-Inferior palpe
b-lateral nasal c-Sup labial

c) Area Anesthesized: Pulps of Maxillary centra
Incisor through the canine on inje
side

- In about 72% of pts, pulps of the max. premolars
& mesiobuccal root of the 1st molar
- lower eyelid, lateral aspect of the nose, upper l

d) Indications: Inflammation or Infection.
- When supraperiosteal injections have been
ineffective because of dense cortical bone.

e) Contraindications - Distorts treatment; Hemostasis

f) Advantages :- Simple technique, safe

g) Disadvantages :-

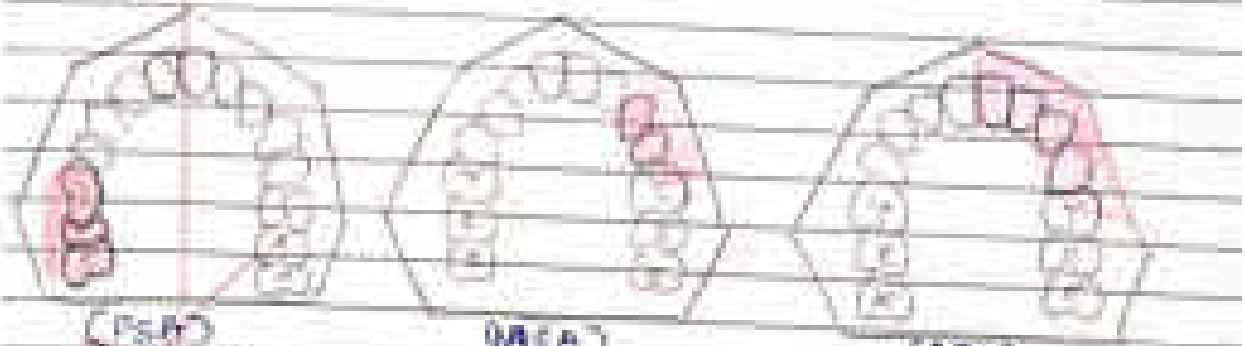
h) Needle Aspiration: 0.3 y.

i) Target area - Infraorbital foramen.

j) Landmarks - a) Mucobuccal fold b) Infraorbital notch
c) Infraorbital foramen

k) Complications - Hematoma (rare)

l)




4) Greater Palatine Nerve Block -
(0.45 ml)

a) Other Common Name - Ant. palatine Nerve Block

b) Nerve Anesthetized - Greater palatine

c) Area Anesthetized - Posterior portion of the hard palate and its overlying soft tissues, and first premolar & medially to the midline

d) Indications - When palatal soft tissue anesthesia is necessary for restorative therapy on more than four teeth - for pain control

e) Contraindications - Inflammation or infection
- Smaller areas of therapy

f) Advantages - Minimizes pt discomfort via needle penetration

g) Disadvantages - no Hemostasis, potentially traumatic

h) Positive Aspiration - less than 1%

i) Alternatives - local infiltration into soft tissue
- Max nerve block

j) Target area - Greater palatine nerve

k) Landmarks - Greater palatine foramen at junction of max alveolar process and palatine bone

l) Signs and symptoms - Lack - Numbness in the post-portion of the palate.
Objective - no pain during dental therapy

m) Complications - Trismus & Necrosis, Hematoma

n) Nasopalatine Nerve Block:
(0.45 ml)

o) Other Common Names - Incisive Nerve Block, Sphenopalatine nerve block

p) Nerves Anesthetized - Nasopalatine nerve bilaterally

q) Areas Anesthetized - Ant portion of the hard palate from the medial of the right premolar to the medial of the left first premolar

r) Indications - for pain control, When palatal soft tissue anesthesia is necessary for Restorative therapy

s) Contraindications - Inflammation or Infection
- Smaller area of therapy

t) Advantages - Minimizes needle penetrations and volume of solution
- Minimal pt discomfort from multiple needle penetrations.

g) Disadvantages :- No Hemostasis
h) Positive Aspiration - Air

i) Target area - Incisive foramen
j) Landmarks - Central Incisors & Incisive papilla
k) Signs & symptoms -
Subjective - Numbness in the oral portion of
Objective - No pain during dental Procedure
l) Complications - Hematoma, Necrosis of soft t

Q2)

Ans- Ludwig's Angina - Overwhelming / invasive, fir
Involving cellulitis / infections and acut
septic / toxic signs, involving simultaneously
the submandibular, sublingual and submental
spaces bilaterally.
- It is a potentially fatal rapidly expanding &
progressive infection.

# Management :-

→ Principles of Treatment :-
The treatment is based on the combination
of the following factors :
1. Early diagnosis
2. Maintenance of patient airway
3. Intensive & prolonged antibiotic therapy
4. Extraction of offending teeth
5. Surgical drainage or decompression of
fascial spaces

I- Airway Maintainance :-
- This condⁿ is considered to be fatal.
- Death can occur due to Asphyxia rather th
infection.
- Hence, Advisable to observe patient.
- Artificial Airway → Intubation of pt
→ Surgical Airway.

I) Intubation of the Patient:
- Blind intubation should be avoided.
- Nasal endotracheal intubation preferred.

b) Surgical Airway - May be required in case of severe upper respiratory obstruction.
- Laryngotomy & Cricothyroidotomy always preferred over tracheostomy.

II. Use of cuffed endotracheal tube.
- Avoid Sedatives & Narcotic agents.
- Pulse Oximeter - for Degree of respiratory Obstruction.

III. Anaesthesia - local Infiltration i.e. Xylocaine + Adrenaline into skin & superficial tissues of neck is sufficient to fulfil the need for surgery.
- I.V analgesics can be supplemented to relieve pain.
- Surgical Intervention - i) Removal of cause and ii) Surgical decompression: decompression of the spaces involved.

a) Surgical decompression:-
Advantages of early surgical decompression -
i) Reduces pressure of oedematous tissue.
ii) Allows prompt drainage.

Care should be taken to preserve or avoid trauma to:
i) Facial vessels near angle.
ii) Lingual nerve.
iii) Jugular vein.

IV Antibiotic Therapy:
i) Penicillin - penicillin G, 2-4 million units, I.V every 4-6 hrly, or 500 mg every 6 hrly orally.
ii) Ampicillin / Amoxicillin - 500mg every 6 to 8 hrly.
iii) Cloxacillin 500 mg orally every 6 hrly.
iv) In case of allergy to penicillin: Erythromycin 500mg orally 6-8 hrly.

vi. Gentamycin - 80 mg 2 M.D.
vii. Clindamycin - 300-600 mg 6 hrly.
viii. Metronidazole - 400 mg every 8 hrly.
ix. Cephalosporins.

## SAQ

**Ans 1)** Inferior Alveolar Nerve Block.

a) Other common names: Mandibular block

b) Nerves Anesthetized:
1) Inferior Alveolar
2) Incisive
a) Mental
b) Lingual

c) Areas Anesthetized:-
1) Mandibular teeth to the midline
2) Body of the Mandible
3) Buccal Mucoperiosteum
4) Ant 2/3 of the tongue & floor of the Mou
5) Lingual Gum, Incisive & periosteum

d) Indications:-
1) Involve multiple mandi. teeth in 1 quad
2) When buccal soft-tissue anesthesia
3) When lingual soft-tissue anesthesia is necessary.

e) Contraindications- 1) Infection or Inflammation
2) Physically / Mentally handicapped adult or child.

f) Advantages- One injection provides a wide area anesthesia.

g) Disadvantages-
1) Wide area of anesthesia.
2) Independent Anesthesia.
3) Intraoral landmarks not consistently
4) Positive aspiration (Blood) required
If lingual & lower lip anesthesia
5) Failure Anesthesia possible when
If not inferior alveolar nerve and
If not mandibular canals are end.

c) Positive Applications: 1st - 3rd.

i) Target area - Inferior Alveolar nerve as it goes downward toward the mandibular foramen but before it enters into the foramen.

ii) Landmarks - Pterygobuccal fold.
- a) Anterior border of Ramus.
- b) External border of Ramus.
- c) Internal border of Ramus.
- d) Retromolar triangle.
- e) Pterygomandibular raphe.
- f) Pterygomandibular space.
- g) Buccal sucking pad.
- h) Occlusal plane of mandibular teeth.
- i) Coronoid notch.

* subjective -

iii) Signs & Symptoms - Tingling or numbness of lower lip indicates anesthesia.
- Numbness of tongue.

* Objective - No pain & burning during dental therapy.

iv) Complications - Hematoma, Trismus, Transient facial paralysis.

Ans 2) Bilateral Sagittal Split Osteotomy.

It is versatile procedure, which can be employed for the correction of retrognathism & prognathism.

* Advantages - * Avoids an external scar.
* Avoids injury to the marginal mandibular nerve.

* Disadvantages * Bleeding is more.
* There are chances of injury to the mandibular neurovascular bundle.

* Surgical Technique -
* Incision is placed over the ant. aspect of ramus from the upper ant. border passing down over the oblique ridge in the M molar region.

- Mucoperiosteum is elevated on the labial of the maxilla till the lower border.
- Osteotomy is created above mandibular at the medial side.
- Posterior extent of this medial cut is a behind the mandibular foramen.
- Anterior extent of the cut is brought to external oblique ridge & this is taken through out border of the mandible.
- Same procedure is repeated on other side.
- Once the split is completed, the distal part of the mandible becomes free & can be moved anteriorly & posteriorly to reduce tension.

Ans 3) Chronic Maxillary Sinusitis - Chronic Maxillary sinusitis may be sometimes asymptomatic. Prominent symptoms during acute exacerbation present as pain and tenderness in the area of cheek & antrum and unilateral foul discharge through posterior nares.

(a) Causes - Constant dental infection.
- Chronic rhinitis.
- Chronic viral or bacterial sinusitis.
- Allergy.

(b) Radiographic findings :-
- Sinus cancer's radiopacity on the affected side due to the presence of fluid.
- Thickening of lining mucosa.

(c) Management -
- If caused by dental infection, then the affected tooth must be extracted & the socket surgically closed completely so there is no risk of recurrent fistula formation.
- In case the cause is a foreign body such as tooth or root in the antrum it is necessary to retrieve these foreign bodies prior to considering any other form of treatment.

3. The polyps found at operation should also be removed.

Q4] Complications of LA.
- Classified into → Local complications
  → Systemic complications

A. Needle complications
A) needle breakage - Rare nowadays.
- Causes - Sudden unexpected move by the patient.
ii) Unknowing of needle by bending it before the insertion into the patients mouth.
- Management - Carry calm attitude
- Removal of needle with mosquito forceps.

B) Persistent Nerve paralysis - persistent anesthesia beyond expectation or altered sensation
- Numbness, tingling after injection.
- Causes - Trauma to nerve, Haemorrhage around nerve sheath
- Management - Resolve within 6 weeks or can remain permanent
- Examine pt and examine for extent and degree of paresthesia.

C) Facial Nerve paralysis - Paralysis of 7th nerve with loss of motor function
- Cause - Injection of LA into capsule of parotid gland due to overpenetration or Inferior alveolar nerve block by Vazirani technique.
- Intraoperative nerve Block or Infiltration to masseter muscle
- Management - Eye patch, artificial tears.
- Reassure pt it is not permanent.

D) Trismus - Occurs due to spasm of Jaw muscles, which causes restricted mouth opening.
- Causes - Trauma to blood vessels
- Local anesthetic with alcohol or cold sterilization solution
- Excessive volume of anesthesia into localized tissue.
- Management - analgesics - Aspirin 325mg, Codeine (oral) - no-formal physiotherapy -

b. Systemic Complications :-

1. On Cardiovascular system: It decreases electrical excitability of the myocardium, conduction
- All these result in myocardial depression at a dose of 1.5-5 mg/kg of lidocaine intravenously

2. On Blood Vessels - It is the most vasodilatable of all tissues except for cocaine which produces vasoconstriction
- It primarily produces hypotension at a level approaching overdose due to depression of the myocardium.

3. On Central Nervous System - Lidocaine causes CNS depression at toxic levels
- At a.t.h regions - anticonvulsive action
- Seizures continues as long as the drug is present in the blood

4. On Respiratory system - Overdose leads to respiratory arrest as a consequence of respiratory center depression.

Ans 5] Alveoloplasty → this procedure helps in eliminating undercuts and irregularities and reducing the large anterior maxilla.

Obwegeser's intraoral alveoloplasty is based on the following biological principles →
- The prominence of the labial and buccal alveolar margin is reduced to facilitate reception of denture
- The muscle attachments are disturbed.
- The periosteum remains intact.
- The vertical plane is preserved as a viable periosteal bone graft with an intact blood supply.
- Because of the alveolar bone is spared, postoperative resorption is minimized.

→ The procedure involves 6 anterior teeth and sometimes the premolars are included.

→ The advantage of this technique is that since

Advantage - much of the compact bone vertical bone. It reduces resorption of the bone postoperatively.
→ This procedure is used at the time of extraction only.

Q46] Classification of Mandibular fractures -

a) Diagram and naming injured anatomic areas involved in fracture of mandible -

1. Midline
2. Canine region
3. Symphysis fracture
4. Body
5. Angle
6. Ramus
7. Condylar process
8. Coronoid process
9. Dentoalveolar process

b) Based on presence of serviceable teeth at the fracture line - Kazanjian and Converse - This may be helpful in determining treatment -

1. Class I - On both sides of fracture line
2. Class II - Only on one side of fracture line
3. Class III - In this class pt. is completely edentulous

c) Management →

A) Transosseous wiring

1. Direct wiring across the fracture line
2. Wiring can be done through intraoral or extraoral approach.
3. Fracture must be reduced independently with the teeth in occlusion before the free ends are tightened and twisted
4. The twisted ends are then sheared & tucked into the nearest drill hole
5. Variations can be two-hole, three-hole and 4 hole

c) Indications of intraoral incision with transection of wiring at the inferior border

1. Severe overriding of the two fragments
2. Triangular comminuted fractures of the inferior border are with angle fractures
3. Presence of edentulous mandible
4. Non union of the fractures
5. Continuance with large intraoral lacerations

Q.No.3] Classification of cyst -

A] By Shear

* Developmental Origin

① Odontogenic
- Gingival cyst of Infants
- DKC
- Eruption cyst
- Gingival cyst of Adults

② Non-Odontogenic
- Midpalatal raphe cyst of infants
- Nasopalatine duct cyst
- Nasolabial cyst

* Inflammatory origin:
- Radicular cyst
- Residual cyst
- Inflammatory collateral cyst.

* Non-Epithelial lined cyst
- Solitary bone cyst
- Aneurysmal bone cyst

B] Cyst Associated with Developing Antrum
- Mucocele
- Retention cyst
- Pseudocyst
- Post operative maxillary cyst

C] Cyst of Soft tissue of Mouth, Face and Neck
- Dermoid & Epidermoid cyst
- Cystic hygroma
- Nasolabial cyst
- Thyroid cyst
- Cyst of salivary gland
- Thyroglossal duct cyst

(iv) Treatment of OKC.

1. Small single cyst with regular spherical outline should be enucleated from intraoral approach.
2. large single cyst should be enucleated from extraoral approach.
3. Small multilocular cyst should be treated by marginal excision containing block of bone & cystic cavity.
4. Large Multilocular cyst - may require resection of involved bone followed by 1° & 2° Reconstruction with Stainless steel plate & screw as well as bone grafting procedures.

Ans 8) Trigeminal Neuralgia → It is defined as sudden usually unilateral, severe, brief, stabbing, lancinating and recurring pain in the distribution of one or more branches of fifth cranial nerve.

(i) Clinical features -
- Pain is confined to one part of one division of trigeminal nerve - Maxillary and Mandibular.
- Pain rarely crosses the midline.
- The pain is of short duration and last for a few seconds.
- The paroxysms occur in cycles each cycle appears closer and closer. with each attack pain appears to be more severe.
- In extreme cases the patient will have a motionless face - The frozen or mask-like face.

(b) Management - ┌ Medical
└ Surgical

i. Medicinal - Carbamazepine 100 mg three times a day
- Tab. Phenytoin : Dose - 100 mg 3 times a day
- Tab. Oxcarbazepine - 1200 mg/day
- Valproic acid 600 mg/day

ii. Surgical management -
a. Peripheral Injections
b. Peripheral Neurectomy (Nerve Avulsion)
c. Infraorbital neurectomy
d. Inferior Alveolar neurectomy
e. Lingual neurectomy

Ans4 Haemorrhagic Shock -

1. Haemorrhagic shock occurs due to loss of blood from the body as a result of injury
2. Haemorrhage decreases the mean systemic filling pressure and there is resultant decrease in venous return - results in fall of cardiac output
3. Approx. 10-15% of total blood volume loss will not affect the arterial pressure or cardiac output
4. It may cause Haemodynamic changes
5. If blood loss is not rapid, then metabolic changes associated with shock may be initiated.
6. Shock results due to Rapid loss of 30%-40% of the blood volume.

→ The procedure involves 6 and teeth were among the premolars are included

→ The advantage of this technique is that since

(iii) Treatment -

- Replacement of fluids and tissue proliferation perfusion are maintain of treatment
- legs are raised and body supine
- Patient should be kept warm.
- When haemorrhage is massive, specific matched transfused blood is the preferred method to correct
- Typing and cross-matching of blood takes time sometimes

(Q.10) Diabetes Mellitus is quite prevalent and these patients are prone to hypoglycemic and hyperglycemic events

- Hypoglycemic patients are more common it can be sudden and more dangerous whereas hyperglycemic events takes days or weeks to develop

- Lack of glucose to Brain results in confusion, restlessness, headache & bizarre behaviours

- loss of consciousness due to hyperglycemia is extremely unlikely to occurs

- Skin of Hyperglycemic patients looks flushed and dry whereas in hypoglycemic patients is low because of Hypovolemia, whereas it may be increased in Hypoglycemic pt

- Cause of hypoglycemia - Missed Meal

- If Hypoglycemia is evident, it can be readily corrected by giving glucose or source of sug

- In an unconscious patient 25-50 ml of 50% dextrose should be administered IV.

- Emergency management of hyperglycemic pt in dental clinic is supportive in nature and patient should be shifted to nearby emergency

# MIDSR DENTAL COLLEGE, LATUR

## DEPARTMENT OF

## MID TERM EXAMINATION

Subject: DADH

Paper: MCQ

Fifty five

Question booklet version (in words)

This is to certify that the entries of Roll No. Question Booklet Version Question Booklet Sr.No. and subject have been verified.

Invigilator's Signature

Date:

USE BLUE BALL POINT PEN ONLY

### INSTRUCTIONS

1. Cross X The Blocks Using Blue Ball Point Only.
2. Cross Only One Block For Each Question As Shown Below.

| Wrong | Wrong | Wrong | Wrong |
|---|---|---|---|
| A ☑ | A ■ | A ☒ | A ☒ |
| B ☐ | B ☐ | B ☐ | B ☐ |
| C ☐ | C ☐ | C ☒ | C ☐ |
| D ☐ | D ☐ | D ☐ | D ☐ |

3. Cross only Block Provided Do not Make Any Extra Marks On The Answer Sheet.

4. Rough Work Must Not Be Done On This Answer Sheet Use Free Space In The Question Booklet Provided.

MARKS SECURED

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF [illegible]

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - B

1st internal

Roll No : 55 Date : 25/2/21 Time : [illegible]

Signature of Invigilator

Note : Start writing from here.

Slip's -

1)

- Enamel is the hardest calcified tissue of the body
- It covers the outermost portion of the crown of the tooth
- Ameloblasts produces as plays a role in formation of enamel

2) Physical properties of enamel

- Enamel is the hardest substance of the body
- Enamel is brittle in nature
- Specific gravity of enamel is 2.8
- Enamel is resistant to external forces and can also resist temp (high)
- Enamel is opaque in colour
- It's hardness helps in the protection of tooth because of which we can eat hard food material also
- Its physical nature is of utmost importance in our life

* Chemical properties of enamel:
- Enamel consists of organic matter as well as inorganic matter
- It consists of 96% organic matter and 4% inorganic matter and water
- Hypocalcified structures of enamel are those structures which contain more organic content than the enamel as a whole
- These structures include: Incremental lines of Retzius
  Enamel spindle
  Enamel tufts
  Enamel lamellae
  Hunter Schreger bands
- Enamel consists of type I collagen and proteoglycans
- Other proteins and substances are also present in enamel which reflects its chemical properties

* Types of cemento-enamel junction:
- Cemento enamel junction is the junction between the cementum and enamel
- Cementum and enamel junction is nothing but the cemento enamel junction
- Cementoenamel junction is the junction at which the cementum is thinnest
- Cementoenamel junction can be divided into 3 types according to how cementum overlaps the enamel

The 3 types of junction are
1) CEJ Cementoenamel junction - gap type

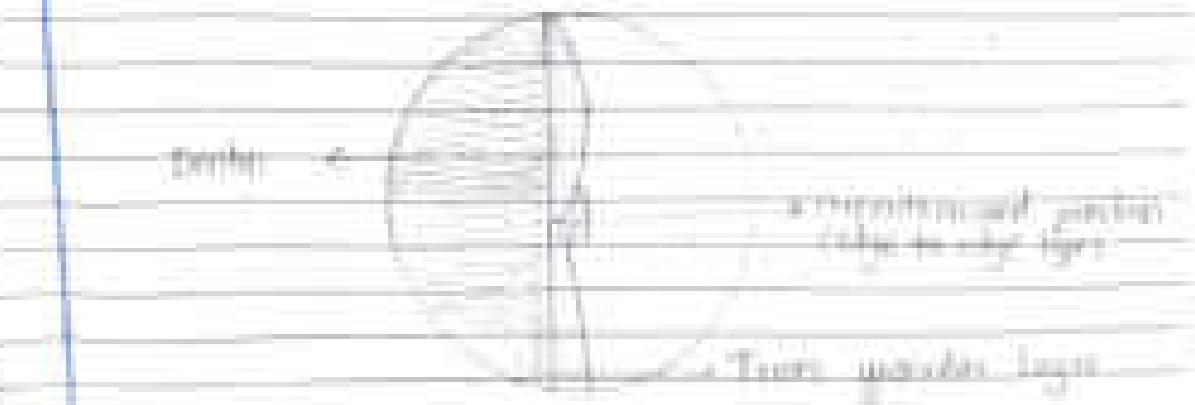
- Cementoenamel junction gap type is the very least junction

- It is present in 10% of the teeth

2) Cementoenamel junction - edge type

- In the cementoenamel edge to edge junction, the cementum and enamel are present just edge to edge not overlap no any gap is present

- These type of junction are present in 30% of the teeth



3) Cementoenamel junction (overlap type)

- In this cementoenamel overlap type of junction cementum overlaps the enamel
- This type is the most common type of cementoenamel junction
- This type is present in almost 60% of the teeth


4) Principle fibres of PDL

- Periodontal ligament is a avascular type of tissue
- It consists of type I and type III collagen
- The collagenous fibres as group of collagenous bundles form the main principle fibres of PDL
- The nerve supply to periodontal ligament is by both myelinated and unmyelinated fibres

The principle fibres of PDL include -

1) The Alveolar crest group of fibres
2) Apical group of fibres
3) Oblique group of fibres
4) Interradicular group of fibres
5) Horizontal group of fibres

- The most abundant principal fibres are the oblique group of fibres

- The cells are also present in periodontal ligament such as
  - synthetic cells
  - osteoblast cells
  - progenitor cells
  - Epithelial cell rest of Malassez
  - Defence cells
  - macrophages
  - mast cells

- Here, as the name suggest horizontal fibres are running horizontally

- Oblique group of fibres play a very important role in periodontal ligament

- They provide anchorage and also prevent the rotation in periodontal ligament

- The alveolar crest group of fibres is also bundled together

- These are the collagenous fibres in the form of bundles

4) Zones of pulp :-

- Pulp is richly vascularised and innervated connective tissue of mesodermal origin with communication to the periodontal ligament
- It is composed of soft connective tissue
- The total volume of pulp in adult permanent tooth is 0.35 cc
- Total no of pulp organs present in tooth is 5.
- When viewed under microscope, pulp is seen at two regions
  (a) Pulp at periphery
  (b) Pulp at centre

- Pulp at periphery exhibits 3 type of zone
  1. Odontoblastic zone
  2. Cell free zone (Weil Zone)
  3. Cell rich zone

(1) Odontoblastic zone (odontoid zone)
- As the name suggest, these contain odontoblast cells which differentiated in the formation of dentin.
- These cells are tall columnar in shape in this zone.

(2) Cell free zone (weil zone)
- As the name suggests, this is devoid of any type of cells.
- This zone is also known as weil zone.
- This zone is present in between the odontoblastic zone and cell rich zone.

(3) Cell rich zone
- Cell rich zone is present adjacent to the cell free zone.
- This zone is rich in cells like pulpal stem cells, defence cells, odontoblast cells, mast cells etc.

# Bone

- Bone is the skeletal tissue in the body and contain cells.
- The cells present in bone are fibroblast, osteoclast, osteoblast etc.
- Fibroblast secrete collagen fibres in the bone.
- Remodelling of fibres takes place by osteoblasts only.
- Trabeculae also project out from the surface in bone.
- Cells helps the bone in proper functioning.

- Fibres and are nothing but the bundles of collagen fibres.
- Two types of bone are present.
  1) Spongy bone
  2) Compact bone

MAEER PUNE's

# MIDSR DENTAL COLLEGE,LATUR.

DEPARTMENT OF Oral Pathology & Oral Medicine

INTERNATAL ASSESSMENT EXAMINATION

1st internal

SECTION -B

Roll No. 55 Date 24/2/21 Time

Signature of Invigilator

55

Note : Start writing from here

LAQ

life cycle of ameloblast

- Enamel is the hardest calcified tissue of the body
- It coves the outermost portion of the crown of the tooth.
- Ameloblasts produces or plays a role in formation of enamel.
- During development of a tooth, the inner enamel epithelial cells (IEE) of enamel organ interact with adjacent mesenchymal cells to differentiate into ameloblast & secrete enamel matrix and help in its mineralisation
- Ameloblast differentiation is advanced in the region of incisal edge and cusp tip
- According to their function, the life cycle of ameloblast can be divided into 4 stage
  1) Morphogenic stage
  2) Organizing stage
  3) Formative stage
  4) Maturative stage.

5) Apposition stage / Protective

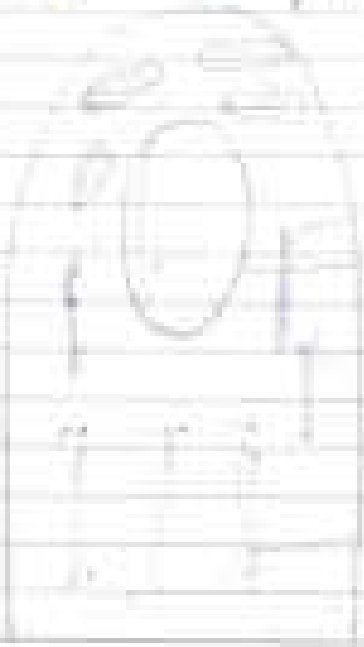
6) Differentiation stage

① Morphogenetic stage

- During bell stage of tooth development, the ameloblasts interact with adjacent mesenchymal cells determining the shape of the developing tooth and shape of the crown.
- At first stage the inner enamel epithelial cells are short and columnar with a large nucleus that almost fills the cell body.
- The golgi apparatus is present at the proximal (distal end near Tomes' process).
- Mitochondria and other cytoplasmic components are scattered throughout cytoplasm.
- During ameloblast differentiation, terminal bars (specks) between the adjacent cells.
- Rich in mitochondria supply energy to the basal region of cells.
- Terminal bars expand the close contact between the cells.

- The inner enamel epithelial cell are separated from connective tissue of dental papilla by a thin basal lamina.
- The adjacent pulpal layer is a cell free zone.

## ④ Organizing stage



- This stage is characterised by change in appearance of inner enamel epithelial cells.
- They become short and the migration of cell organelles take place.
- Migration of cell organelles take place from proximal end to basal end.
- Cells appear shorter & regrade from proximal end to basal end.
- This is known as reversal of functional polarity.

- Hence, ameloblast becomes a highly polarized cell in functional need to secrete enamel matrix from the distal end

- The cells of inner enamel epithelium comes in contact with connective tissue of dental papilla.

- Hence the first layer of dentin formation begins.

- At first the inner enamel epithelial cells are in contact with dental papilla & get nutrients from the blood vessels of dental papilla.

- But, as the dentin layer is formed the inner enamel epithelium left all itself from the original source of nourishment and from then on get nutrients from vessels of outer enamel epithelium. (capillaries)

- This removal of nutritional source is appreciated by capillaries by dental sac.

- Hence, the disappearance of stratum intermedium & capillaries is considered decisive.

- Hence, this dentin layer is formed so that the formation of enamel matrix can take place.

- Hence, it called the dentin stage known as formative stage.

MIDSR DENTAL COLLEGE, LATUR
DEPARTMENT OF DENTAL ANATOMY & HISTOLOGY
INTERNATAL ASSESMENT EXAMINATION

SECTION- B

Roll No: 55 Date: 24/9/21 Signature of invigilator

Note: Start writing from here

(5) Formative stage

- Ameloblast enter the formative stage once the dentin layer is laid down.
- Hence, the dentin layer is necessary for the formation of enamel matrix.
- At this stage, ameloblast show it enzymatic synthetic and secretory activity.
- The nucleus first goes to golgi apparatus, then pass to tomes process and to golgi apparatus.

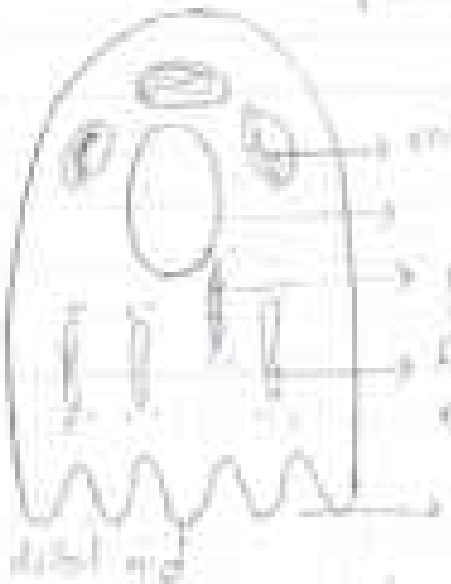
- In golgi apparatus it gets condensed & finally secretes as granules

- These granules produce matrix but in enamel matrix

- The first apparent change is the development of a blunt process on the surface of ameloblast known as Tomes process

- Here, the inner enamel epithelial cells cannot be differentiated from stratum intermedium.

## (3) Maturative stage -




- Ameloblast maturation (full mineralization) takes place when the dentin matrix is deposited.

- Mineralization occurs full mineralization.
- Here the cuboidal shape of inner enamel epithelium is changed.
- The shape is occupied spindle shape at the distal end.

(5) Protective stage

- Protection is also necessary when the matrix is formed.
- Hence, to protect the layer, another layer is formed by epithelial layer.
- The another layer is called as Reduced enamel epithelium (REE)
- It protects the matrix layer forming on it.

(6) Desmolytic stage

- Hence, the enamel matrix formation takes place

Morphogenic stage
It's tall short columnar
cells appear → Nuclei at
basal end → basal end

↓

Organizing stage
Reversal of polarity
Reversal of nucleus base

↓

Functional stage
Formation of Tome layer

↓

Maturation stage
Enamel matrix Maximum deposit

↓

Protective stage

↓

Desmolytic stage

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF [illegible]

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - C

(12/20)

1st internal

Roll No : 55 Date : 25/8/21 Time : .....

Signature of invigilator

Note : Start writing from here

1863

Q. Age eruption of maxillary canine 11-12 yr

- Age eruption of mandibular canine 10-11 yr
- Labial ridge is prominent in maxillary canine
- Lingual ridge is also present in maxillary canine
- Lingual pit is present in maxillary canine
- Cingulum is prominent in maxillary canine
- Maxillary permanent canine shows oval cross section in cervical section
- Mandibular canine shows oval cross section in cervical section
- Root is slightly tilted in distal part in maxillary canine
- Lingual pit is deeper
- Mandibular canine has two lingual

Mesial extend

- Mesial cusp slope is smaller than distal cusp slope in maxillary canine
- The inclination of the cusp make an acute angle with the cusp
- Contact areas are centrally located in the maxillary canine while they are incisally located in mandibular canine.

Q.

- In human, the deciduous & permanent teeth combined together consist of 52 teeth, i.e 20 primary teeth and 32 permanent
- So it becomes necessary to identify a particular tooth
- For a proper identification of a particular tooth, the dentition, arch, quadrant and tooth name has to be written in a specific order such as permanent maxillary right central incisor
- The full anatomical name such as permanent maxillary right central incisor is incorrect as dental practice is in favour of alternative understanding
- Hence, various shorthand systems have been devised for tooth numbering
- One such tooth numbering system is Zsigmondy / Palmer system

Zsigmondy / Palmer system

- This system was developed by Adolf Zsigmondy in the year 1861.
- At that time, he used a Zsigmondy cross in which he divided the teeth into 4 quadrants.
- Later, this system was developed by Palmer & he named it as Palmer / Zsigmondy system.
- This system is also called quadrant system because here the dentition is divided into horizontal and vertical lines.
- The horizontal line represents the maxillary mandibular dividing line.
- The vertical line represents the midsagittal plane.
  - ⌋ → maxillary right
  - ⌊ → maxillary left
  - ⌉ → mandibular right
  - ⌈ → mandibular left
- The teeth are named by placing it in 4 different quadrants.
- The numbers is different for primary and permanent teeth.

(2) Primary teeth.

- In this system, the teeth are denoted by capital letters of alphabet - from A to J.

- The letter A is assigned to the tooth adjacent to median line and it is called incisor.

- The E is assigned to the tooth present at the end of quadrant i.e. the 2nd molar.

- So, for example if we want to denote the teeth as permanent maxillary right central incisor, it should be written as

A

J I H G F E D C B A | A B C D E F G H I J

T S R Q P | K L M N O

(3) Permanent teeth

- In this system, the teeth are numbered from 1-32 & starting from the 3rd molar of mandibular right side to 3rd molar of mandibular right side.

- Hence, 1 is assigned to the tooth adjacent to mid line i.e. 8 is assigned to tooth present in the last in quadrant i.e. 3rd molar.

- So, for example if we want to denote the teeth as permanent maxillary

- The central incisor is found in either jaw

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

3) Cusp

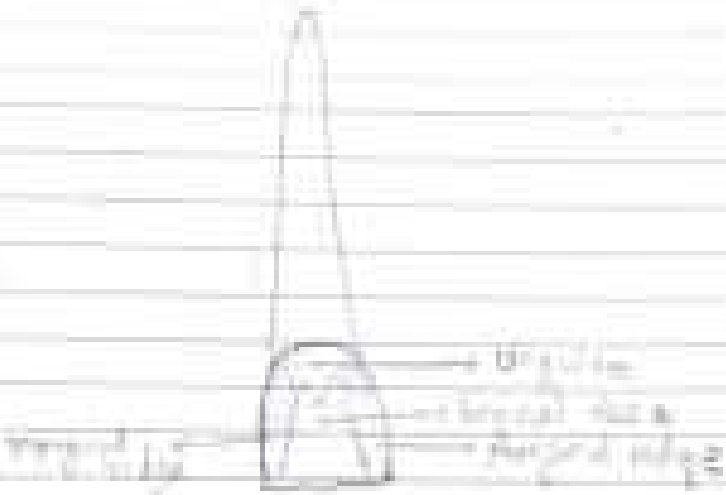
- A cusp is an elevation or mound or conical portion of tooth making a functional part of occlusal surface
- Cusp are present on posterior teeth ie premolars, molars & canine
- Permanent 1st molar have additional accessory cusp i.e. palatal surface known as Cusp of Carabelli

→ 4 cusps

Ridge

- A ridge is any linear elevation on the surface of crown
- It's name is given according to its location
- Different types of ridges are

1. Buccal ridge
2. Marginal ridge
3. Triangular ridge
4. Transverse ridge
5. Oblique ridge



Groove

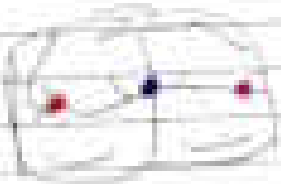
- A developmental groove is a shallow groove or line which marks the junction of primary parts
- A supplemental groove has distinct is also a shallow linear depression, but it is supplemental to developmental groove and do not marks the junction of primary parts
- Buccal and lingual grooves are present on buccal and lingual aspect of posterior teeth

Developmental grooves

Supplemental grooves

## Pit

- Pit are small pin point depressions present at the depth of development grooves formed during development and extending inwards into the pulp from the groove.
- Pit is the deepest portion of fissure.
- Pit are present on facial of posterior teeth.



central pit

distal pit

mesial pit

(7)

A) Each unit of permanent incisor

- Although mandibular incisors have a single fused cutting edge whereas mandibular lateral have separate cutting edge

- Maxillary incisors are the widest among frontal & mandibular incisors are the narrowest

- The crown of the maxillary incisor is wide mesiodistally

- The crown of the mandibular incisor is wide labiolingually

- Maxillary incisors are wider and longer than mandibular maxillary lateral incisor

- Mandibular lateral incisors are wider & longer than mandibular central incisors

- Facial surface is more convex in maxillary incisor

- A labial ridge is prominent

- Cingulum is prominent and related in maxillary central incisor

- Central grooves are located centrally on maxillary central incisors

- Central grooves are located mesially in mandibular lateral incisor

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MIDSR DENTAL COLLEGE, LATUR.
DEPARTMENT OF Dental Anatomy & Histology
INTERNATAL ASSESSMENT EXAMINATION

SECTION - C

1st internal

Roll No : 55 Date : 5/3/24 Time :

Signature of Invigilator

Note : Start writing from here

Lingual fossa is deeper in maxillary central incisor than in mandibular central incisor.

Anatomic crown :
- Tooth has two components - i.e. a crown and a root
- A crown is that portion of tooth which is above gum line & projects into oral cavity.
- A root is that portion of tooth which is present in bony socket (alveolus) & is not exposed in oral cavity.

Anatomic crown
- Refers to the crown which is covered by enamel and is not visible in oral cavity.
- Covered by enamel regardless it is fully completed or not.
- The size of anatomical crown remains same during the life time of a person except in cases of attrition or any other physical wearing of teeth.

⇒ Anatomical root

- Refers to that portion of root which is below CEJ (Cemento enamel junction) & is covered by cementum.

- The size of anatomical root remains same throughout lifetime of person except in cases of resorption of root

⇒ Clinical crown

- Refers to the crown which is visible to oral cavity and it is when one sees while looking into the mouth

- In erupted teeth, clinical crown is shorter than anatomical crown

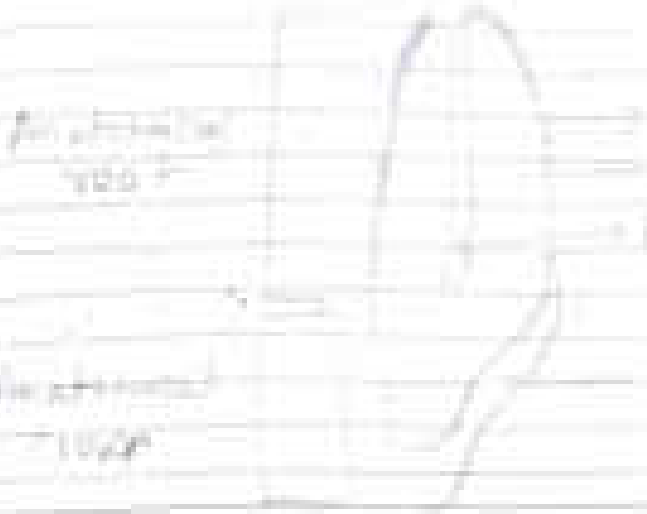
- In cases of gum recession, clinical crown is longer than anatomical crown because some portion of tooth root is also exposed in oral cavity.

⇒ Clinical root

- Refers to the root which is covered by gingiva & it is not exposed in oral cavity

- In newly erupted tooth, the clinical root is not shorter than anatomical root

- In elderly person, clinical root is shorter than anatomical root because of gingival recession



## Dog

- Canine have the longest tooth in oral cavity
- Canine are also known as Canine teeth or fang
- Canine also give canonical value in one life
- No. of canine present in each arch is 2.
- Single root is present in canine
- Life period canine is an important teeth in canine.
- Age of eruption 11-12 yrs

- 1st type
- Incisors canine are smaller than permanent canine
- Premolars canine are yellow stained permanent canine are opaque

- Canine type
- Canine are single rooted whereas premolar & molar are multirooted
- Canine have 2 lingual bottom sides of 1 form is present in incisor & open fossa is present in premolar & molar
- Singulum is present

- Molar type
- Canines have the longest root length
- mesial cusp slope is smaller than distal cusp slope
- The inclination of cusp make no acute angle with the cusp slope
- Distal ridge is present in occluding canine
- Lingual ridge is also present in occluding canine
- 2 lingual fossa are present in occluding canine
- Cingulum is present and central in occluding canine

MAEER PUNE's

# MIDSR DENTAL COLLEGE, LATUR.

DEPARTMENT OF Oral anatomy & dental histology

INTERNATAL ASSESSMENT EXAMINATION

## SECTION - C

1st internal

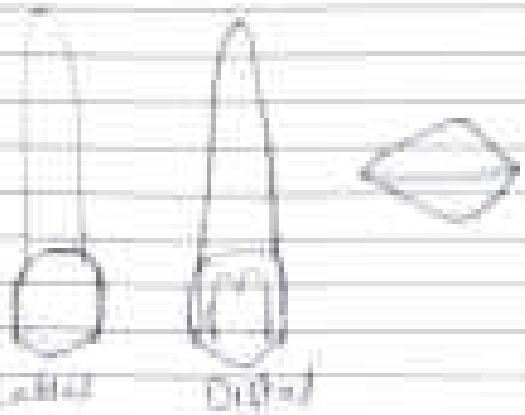
Roll No : 55 Date : 2/3/21 Time :

Signature of invigilator

Note : Start writing from here.

- Maxillary canine mesial slope length is more than distal slope in cervical section.
- Lingual fossa is deeper
- The mesiolingual elevation is less than labiolingual elevation.
- mesiodistal slope is not much rounded
- Labio lingual slope is much rounded
- Distal & mesial marginal ridges convex curve

- Axis



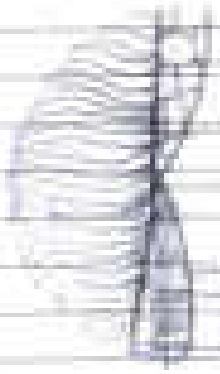
Batch - A

Roll no - 55
Date - 18/10/21
1st internal practical DMDI

Spot - 1

Malleus bone

Spot - 2



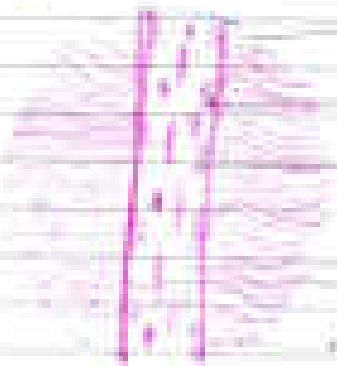
Edge to edge type
(I)
(Incisal surface)

Roll no. -55

Spot 3

Enamel tuft

Spot - 4



Pulp fibrosis

Roll no - 55

A 6) The tooth in mandibular central incisor (right & left)
Eruption - 6-7 yrs

Incisor

① Set limit
- Mandibular permanent incisor are usually longer than deciduous incisor
- Permanent incisors are yellowish white & deciduous incisor are bluish white

② Type limit
- Incisors are single rooted with one root, flattened mesiodistal.
- Eruption ages are different variation is different for each tooth

③ Arch limit
- Mandibular is longer than maxillary incisor arch longer than mandibular incisor

④ Close dist
- Gap is one while molars previously have more than one gap
- Eruption of primary dentition is completed in this order

⑤ Side determination
- The mesial depression is more on mesial side than on distal side
- The crown is more twisted

Roll no - 53

Q.5 Tooth is permanent maxillary right canine
Eruption - 11 - 12 yrs

(1) Set trait
(2) Permanent canines are larger than deciduous canine
(3) Permanent canines are yellowish white & deciduous canines are opaque
(4) Universal notation is different for both.
(5) Type trait
- Only type trait is only one canine in each arch
(6) Class trait
- Canines are single rooted tooth premolars molars are multirooted
- Angulation is present
(7) Arch trait
- Mandibular canine's trait is larger than maxillary canine
- Marginal ridges are prominent.
- Deep lingual fossa is present
(8) Side determined
- Cervical curvature is more found mesial side
- Incisal marginal lines are heavier & irregular.