**Lower molars + Deciduous dentition questions**

1- All deciduous teeth undergo calcification before birth while, only the first permanent molars show calcification ............

2- The sharpest and largest cusp on the upper first deciduous molar is .......... cusp.

3- The geometric outline of occlusal surface of the permanent lower first molar is ............

4- The roots of the deciduous molars are more divergent than those of the permanent molars to accommodate ............

5- The developmental grooves of the occlusal surface of the permanent lower second molar are ........

6- In the permanent lower first molar, the ........ root is longer and broader than the .... root.

7- The size of the cusps of the permanent lower first molar arranged in a descending order is as follows:

8- The process of resorption of the roots of deciduous teeth and the loss of these teeth is known as:

9- The geometric outline of occlusal surface of the permanent lower second molar is ............

10- The size of the pulp chambers and the height of the pulp horns are ............ in deciduous teeth than in permanent teeth.

11- Supplemental grooves are present more on the occlusal surface of .......... molar.

12- All the ............ teeth show physiological resorption of their roots and shedding.

13- The developmental grooves present on the occlusal surface of the permanent lower first molar are: ........, ........, ........, ...........

14- The tooth that contact the lower third molar mesially is .......

15- There is a strong bulbous elevation of enamel on the buccal surfaces of deciduous first molars called...

16- The ratio of the root / crown length in the deciduous teeth is ......./....

17- In permanent lower first molar the smallest cusp is ........

18- The permanent lower second molar is formed of ...... lobes.

19- The geometric outline of the occlusal surface of lower first deciduous molar is ....

20- The highest and largest cusp on the mandibular first deciduous molar is .......

21- The deciduous tooth that has a cusp of Carabelli is ....

22- The lower permanent first molar has the following root canals ........, ........, ........

23- The molar that is most likely to have a cruciform occlusal groove pattern is ............

1- **The largest cusp in the occlusal surface of lower 1st permanent molar is:**
   a- Mesiobuccal cusp  b- Mesiolingual cusp  
   c- Distobuccal cusp  d- Distolingual cusp

2- **The size of the buccal cusps of lower 2nd deciduous occur as following:**
   a- Mesiobuccal-distobuccal-distal.  b- Distobuccal-mesiobuccal-distal.  
   c- The 3 cusps are nearly equal in size.  d- Distal-distobuccal-mesiobuccal.

3- **The successor of upper 1st deciduous molar is:**
   a- Upper 1st premolar  b- Upper 2nd premolar  
   c- Upper 1st permanent molar  d- Lower 1st premolar
4- The geometrical form of the occlusal surface of lower 1st deciduous molar is:
   a- Triangle    b- Rhomboid    c- Square    d- Rounded

5- The geometrical form of the occlusal surface of lower 1st permanent molar is:
   a- Rhomboid    b- Square    c- Diamond    d- Hexagonal

6- The distal contact area of the lower 1st permanent molar present:
   a- On the distal cusp contour just below the distal cusp tip.
   b- At the middle third.
   c- At cervical third.
   d- Does not have distal contact area.

7- The geometrical outline of the proximal surface of lower molars is:
   a- Trapezoid    b- Square    c- Rhomboid    d- Triangle

8- The occlusal surface of upper 1st deciduous molar may have one of 4 types, but one of the following cannot be a type of this tooth:
   a- 4 cusps (2 buccal and 2 lingual).
   B- 4 cusps with oblique ridge.
   c- 5 cusps (2 buccal and 3 lingual)
   d- 3 cusps (2 buccal and one lingual)

9- The successor of the lower 2nd deciduous molar is:
   a- Lower 2nd permanent molar    b- Upper 2nd premolar
   c- Lower 2nd premolar    d- Lower 1st premolar

10- Lower 3rd molar may be similar to the 1st permanent molar, but differ than the 1st permanent molar in:
   a- It has supplemental grooves and no distal contact area.
   b- It has 5 cusps (3 buccal and 2 lingual).
   c- It has 2 roots (one mesial and one distal).
   d- None of the above.

11- The mesiobuccal cervical ridge is most marked & considered a characteristic feature of :
   a- Deciduous & permanent upper 1st molars
   b- Deciduous & permanent lower 1st molars.
   c- Deciduous upper & lower 1st molars.
   d- Permanent upper & lower 1st molars
12- The roots of the permanent lower first molar are completed at:
   a- 9-10 years. b- 6-7 years. c- 11-12 years. d- 8-9 years.

13- The size of the pulp chamber & the height of the pulp horns are:
   a- Greater in the permanent than in the deciduous.
   b- Equal in both deciduous and permanent teeth.
   c- Greater in the deciduous than in the permanent.
   d- Variable.

14- The shape of the occlusal surface of lower D is:
   a- Rhomboidal. b- Rectangular. c- Hexagonal. d- Square.

15- The roots of the deciduous molars are more divergent than those of the permanent ones to:
   a- Provides maximum support & strength to the teeth.
   b- Facilitate their resorption.
   c- Allow more blood supply to their investing tissues.
   d- Allow enough room for the permanent successors.

16- The ratio of the root crown length in the deciduous teeth is:
   a- Equal to that of the permanent teeth.
   b- Greater than that of permanent teeth.
   c- Lesser than that of the permanent teeth.
   d- Variable.

17- The smallest cusp on a permanent mandibular first molar is the

18- The crown of a deciduous maxillary first molar most closely resembles:
   a. the permanent maxillary first molar b. the premolar that replaces it.
   c. the mandibular first premolar d. the permanent maxillary second molar.

19- One of the 'differences between the deciduous and permanent teeth' written below is wrong.
   Circle that one.
   a. Deciduous enamel ends at a knife edge cervically
   b. The roots of deciduous molars are longer, thinner, and more divergent.
   c. The crowns are bulbous
   d. The enamel is less mineralized and whiter.
20- There is a strong bulbous bulge of enamel on the axial surfaces of deciduous molars. Where is it located
a. Buccally at the mesial b. Buccally at the distal
c. Lingually at the mesial d. Distally at the mesial

21- The lower 6 has the following root canals:
a- One mesial & one distal. b- Two buccal & one lingual.
c- Two distal & one mesial. d- Two mesial & one distal.

22- What deciduous tooth is likely to have a cusp of Carabelli:
a- Upper first molar b- Upper second molar
c- Lower first molar d- Lower second molar

23- Which root canal in the lower first permanent molar is the biggest?

24- The occlusal surface of the lower 7 is:
a- Hexagonal. b- Rhomboidal. c- Rectangular. d- Trapezoidal.

25- The developmental grooves present on the occlusal surface of the permanent lower first molar are:
a- Central, mesiobuccal, distobuccal and lingual grooves.
b- Central, buccal, mesiolingual and distolingual grooves.
c- Central, distal oblique, mesiobuccal and lingual.
d- Central, transverse, lingual and buccal grooves.

26- The size of the cusps of the permanent lower first molar arranged in a descending order is as follows:
a- Mesiobuccal, distobuccal, mesiolingual & distolingual and the distal cusp.
b- Mesiolingual, mesiobuccal, distobuccal, distolingual and the distal.
c- Mesiobuccal, mesiolingual and distolingual, distobuccal and distal.
d- Mesiolingual, distolinguval, mesiobuccal, distobuccal and distal.

27- The shape of the occlusal surface of the deciduous lower first molar is:
a- Rhomboidal. b- Rectangular. c- Hexagonal. d- Square.

1- The lower third molar has numerous supplemental grooves ( )
2- All of the lower molars have three roots.  
3- The distal cusp is the smallest cusp in the occlusal surface of the lower 1st permanent molar.  
4- The lower third molar has no distal contact area.  
5- The three buccal cusps of the lower 1st deciduous molar are unequal in size.  
6- The lower deciduous incisors have lingual inclination.  
7- The crowns of the lower molars are wider mesiodistally than buccolingually.  
8- The developmental groove of the occlusal surface of the lower 2nd permanent molar is cruciform shape.  
9- The elevations and depressions of the deciduous teeth are less developed than the permanent teeth.  
10- All lower permanent teeth have lingual inclination.  
11- Lower first permanent molar has 5 cusps.  
12- The mesial root of lower 1st permanent molar usually has two root canals.  
13- The incisal edge of lower deciduous incisors is centered over the center of the root.  
14- In upper deciduous canine the distal cusp slope is longer than the mesial cusp slope.  
15- The buccal surface of upper and lower D has no buccal developmental groove inspite of they have 2 buccal cusps.  
16- In upper and lower D, the cervical ridge is well developed and deviated slightly to the mesial portion and called mesiobuccal cervical ridge.  
17- All deciduous teeth undergo calcification before birth while, only the first permanent molars show calcification at birth.  
18- The mesial cusp slope of the deciduous maxillary canine is longer than the distal cusp slope.  
19- The deciduous molars are replaced when exfoliated by the permanent molars.  
20- The three roots of the maxillary deciduous molars are thin and widely diverged (giving space for the developing premolar).  
21- The occlusal surface of the upper 2nd deciduous molar is somewhat hexagonal.  
22- The permanent lower second molar is formed of five lobes.  
23- The permanent lower second molar shows less supplemental grooves than the lower third molar.  
24- The rate of attrition in permanent teeth is higher than that of deciduous teeth.  
25- There are three fossae with three developmental pits in their bottom in the occlusal surface of the permanent lower first molar.  
26- The proximal geometric outline of the lower permanent molars is trapezoid in shape.  
27- The roots of the deciduous teeth have long root trunks.  
28- The mesial root of the lower permanent first molar is straight.  
29- The calcification of the permanent lower first molar begins at birth.  
30- The cingulum and cervical ridges in deciduous teeth are less developed than that of permanent teeth.  
31- The lingual surface of the permanent lower first molar exhibits mesiolingual and distolingual developmental grooves.  
32- The crown of deciduous teeth are constricted at the neck.
**Geometrical outline + mandible at different ages questions**

2- The geometrical outline of the proximal surface of the anterior teeth is ........................

3- The geometrical outline of the proximal surface of the lower premolars is .............

4- The two halves of the mandible joint at the symphysis menti area from below upward by bone at the................year.

5- The mandibular angle at adult age becomes ..........................

6- The mandibular canal and mental foramen present near the .......... border due to the loss of teeth.

7- The trapezoid form of the proximal surfaces of upper posterior teeth provides ......, ......

8- In the adult period the mandibular angle measures...........

9- At birth, the two halves of the mandible are united just by fibrous tissue at the symphysis menti which get completely ossified at ........

10- The trapezoid shape of the facial and lingual surfaces of the teeth provides ......, ......

11- There are ........ teeth in the deciduous dentition; ........ maxillary and ........ mandibular.

12- The geometric outline of the proximal aspects of lower molars is....

13- In the adult period the mandibular angle measures.....

14- The rhomboidal shape of the proximal surfaces of the lower posterior teeth provides the following ........, ........

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1- **The crowns of which of the following teeth are approximately triangular when viewed from the proximal?**

a. canines b. Premolars c. first molars d. none of the above

2- **In the adult period the mandibular angle measures:**

a- 130-140°. b- 150-160°. c- 110-120°. d-140-150°.

3- **In old age the condyle of the mandible becomes inclined backwards & at a lower level to the coronoid process due to:**

a- Marked bone resorption at the lower border of the mandible.

b- Marked bone resorption at the upper border of the mandible.

c- Bone formation at the symphysis menti.

d- Posterior muscle traction to the condyle.

4- **Marked reduction in the height of the body of the mandible in old age places the mental foramen & the mandibular canal:**

a- Near the lower border of the mandible.

b- Close to the upper border.

c- Midway between upper & lower border.

d- In the middle 3rd of the body of the mandible.
5- In the adult period the mandibular angle measure:
a- 130- 140°. b- 150-160°.

6- During the neonatal period the mandibular canal runs:
a- Near the upper border of the body of the mandible.
b- Near the lower border of the body of the mandible.
c- Midway between the upper & lower border of the body of the mandible.
d- In the middle 3rd of the body of the mandible.

7- During the fetal period, the two halves of the mandible are just united by fibrous tissue at the symphysis menti which get completely ossified:
a- At birth. b- 6 months after birth.
c- By the end of the 1st year d- By the end of the 2nd year.

8- The trapezoid shape of the facial and lingual surfaces of the teeth provides:
a- Narrow occlusal surfaces to be easily forced through the food.
b- Self cleansing ability of the teeth.
c- Positive contact between the neighboring teeth.
d- Wide escapement spaces.

9- The trapezoid form of the proximal surfaces of upper posterior teeth provides:
a- Wide interproximal spaces. b- Proper embrasures or spillways.
c- Narrow occlusal surfaces leading to decrease in the forces of mastication applied on the teeth.

d- Positive contact between the teeth.

10- The rhomboidal shape of the proximal surfaces of the lower posterior teeth provides the following except:
a- Making the axes of the crown and roots of the teeth of the arches parallel to each others.
b- Lingual inclination of the crown bringing the cusps into proper occlusion with the cusps of their maxillary opponents.
c- Prevents clashing between the cusps of the lower teeth with the cusps of their maxillary opponents.
d- Create proper compensating curvatures of the dental arches

11- The trapezoid shape of the facial and lingual surfaces of the teeth provides:
a- Narrow occlusal surfaces to be easily forced through the food.
b- Self cleansing ability of the teeth.
c- Positive contact between neighbouring teeth.
d- Wide escapment space.

1- The geometric crown outline of the upper and lower posterior teeth are trapezoid from the buccal surface and rhomboid from the proximal surface. (    )

2- At birth no teeth erupted in the mandible but the deciduous and permanent tooth germs present in their bony crypts. (    )

3- The mandibular angle of the adult mandible is 140°. (    )

4- At old age the mandibular canal and mental foramen present near the lower border of the mandible due to the loss of teeth. (    )

5- All deciduous teeth undergo calcification after birth. (    )
Factors affecting periodontium + teeth at different ages questions

1- The direct factors of the physiological tooth form that protect the periodontium are ……, ……, ……, ……, ……, ……

2- The contact area is centered labiolingually in …….. teeth while, in posterior teeth it is deviated ……………

3- The height of contour of the lingual surfaces of all posterior teeth is located in the ……. third except the lower second premolar where it is located at the ………. third.

4- Mixed dentition begins at ……. and ends with the loss of ………

5- Teeth which have no predecessors are ……, ……, ……

6- Eruption of the deciduous upper and lower second molars occur respectively at the age of………,………

7- The first permanent teeth to erupt is usually the ……

1- Deciduous dentition period is?
   a- Start from 6 months to 4 years.   b- Start from 6 years to 12-13 years.
   b- Start from 6 months to 6 years.   d- Start from 6 months to 9 years.

2- Mixed dentition is the period between
   a- Birth to 6 months.   b- Birth to 6 years.   c- 6 years to 12 years.

3- The height of contour of the facial and lingual surface of the anterior teeth occurs in the:
   a. mesial third.   b. incisal third.   c. middle third.   d. cervical third.

4- The process brought about by the resorption of the roots of deciduous teeth and the eventual loss of these teeth is known as:
   a. succedaneous eruption.   b. primary eruption.
   c. shedding   d. all of the above.

5- Appearance of the enamel organ of the permanent upper first molar occurs at:
   a- 4 weeks I.U.L.   b- 4 months I.U.L.
   c- 8 week I.U.L.   d- 5 months I.U.L.

6- Eruption of the deciduous upper and lower second molars occur respectively at the age of:
   a- 24 and 20 months.   b- 24 and 22 months.
   c- 20 and 18 months.   d- Two years and 22 months.

7- Shedding of deciduous upper canine takes place at:
   a- 8 years.   b- 9 years.   c- 10 years.   d- 11 years.
8- **Beginning of calcification of the permanent second molars occurs at:**
   a- At birth.   b- 1 year.   c- 2- 3 years.   d- 4-5 years.

9- **Eruption of the lower second premolar occurs at:**
   a- 9-10 years.   b- 11-12 years.   c- 12-13 years.   d- 8-9 years.

10- **Beginning of calcification of the permanent upper lateral incisor take place at:**
    a- 4 months IU.  b- 8 months IU.  c- 3-4 months.  d- 10-12 months.

11- **The first permanent teeth to erupt are usually the:**
   a. maxillary central incisors.  
   b. maxillary first molars.  
   c. mandibular first molars.  
   d. mandibular first premolars.

12- **The sequence of eruption of deciduous teeth is as follows:**
   a- A , B , C , D , E. 
   b- A , B , D , C , E. 
   c- A , B , E , C , D. 
   d- A , C , B , D , E.

13- **The sequence of eruption of deciduous teeth is as follows:**
   a- Central incisors, lateral incisors, canines, first molars and then second molars. 
   b- Central incisors, lateral incisors, second molars, canines and then first molars. 
   c- Central incisors, lateral incisors, first molars, canines and then second molars. 
   d- Central and lateral incisors, first molars, canines and then second molars.

14- **The sequence of eruption of permanent teeth is as follows:**
   a- First molars, lower incisors, upper central incisors, upper lateral incisors, lower canine, first premolars, second premolars, upper canine, second molars and then third molars. 
   b- Lower incisors, first molars, upper central incisors, upper lateral incisors, lower canine, upper canine, first premolars, second premolars second molars and then third molars. 
   c- Lower incisors, upper central incisors, first molars, upper lateral Incisors, lower canine, upper canine, second molars and then third molars. 
   d- First molars,upper incisors, lower incisors, lower canine, upper canine, first premolars, second premolars, second molars and then third molars.

15- **Calcification of the mandibular third molars generally begins at**
   a. 3 - 4 years.   b. 5 - 7 years   c. 8 - 10 years   d. 11 - 13 years.

16- **Which of the following represents the normal eruption age of the maxillary lateral incisors?**
   a. 4 - 5 years   b. 6 - 7 years   c. 8 - 9 years   d. 10 - 11 years
17- In a person who experiences normal eruption and exfoliation dates, how many years would the SECOND DECIDUOUS MOLAR and FIRST PERMANENT MOLAR be in contact with each other?
   a. 1 - 2 years         b. 3 - 5 years           c. Eight years       d. Twelve years

18- The root of a permanent tooth is completely formed in just about __________ after eruption of that tooth into the mouth.
   a. six months           b. one year            c. two years             d. three years

19- At 9 years of age how many primary teeth remain in the mouth:
   a. 0 teeth            b. 4                           c. 8                         d. 12

20- The following are the direct factors of the tooth form that protect the periodontium except:
   a- Proximal contact areas and interproximal spaces.
   b- Embrasures and curvature of the cervical line.
   c- Interproximal spaces and facial and lingual contours.
   d- Cusp form and root form.

21- The interproximal spaces are triangular in shape, the base, side walls and apex of the triangle respectively is formed of:
   a- Alveolar process, proximal surfaces of adjacent teeth and contact areas.
   b- Contact areas, proximal surfaces of adjacent teeth and alveolar process.
   c- Cervical lines of adjacent teeth, contact areas and alveolar process.
   d- Alveolar process, facial surfaces of adjacent teeth and contact areas.

22- The proximal contact areas are:
   a- Circumscribed in the anterior teeth and broad in the posterior teeth.
   b- Near the incisal ridges of the anterior teeth and become more cervical as you go posteriorly.
   c- Centered labiolingually in the anterior teeth.
   d- All of the above.

23- The proximal contact areas are:
   a- Narrow in the posterior teeth.
   b- Are centered buccolingually in the posterior teeth.
   c- Situated more to the lingual in anterior teeth.
   d- Situated more to the buccal in posterior teeth.

24- Underdeveloped facial & lingual contours of the teeth lead to:
25- The proximal contact areas provide the following except:
   a- Stability of the dental arches.
   b- Distribution of the masticatory forces on all the teeth of the opposing dental arch.
   c- Protection of the interdental gingival tissue.
   d- Prevention of food impaction between the teeth.

26- The proximal contact areas are:
   a- Narrow in the posterior teeth.
   b- Centered buccolingually in the posterior teeth.
   c- Situated more to the lingual in anterior teeth.
   d- Situated more to the buccal in posterior teeth.

27- Loss of contact due to extraction of one or more teeth will result in the following except:
   a- Disturbance in the proper arrangement of the teeth in the dental arches.
   b- Change in the angulations of the individual teeth.
   c- Teeth will suffer occlusal trauma leading to destruction of their investing tissues.
   d- Increase the masticatory efficiency of the dental arches.

28- The divergence of two proximal surfaces from the area of contact form spaces facially, occlusally or incisally, and lingu ally, known as:
   a. interproximal spaces.  b. gingival attachments.
   c. contact areas.  d. embrasures.

29- The embrasures are the spaces that widen out from the contact areas, they are named:
   a- Labial, lingual, mesial and distal embrasures.
   b- Incisal, occlusal labial, buccal and lingual embrasures.
   c- Incisal, occlusal, cervical, mesial and lingual embrasures.
   d- Occlusal, cervical, facial and distal embrasures.

30- The buccal embrasures of posterior teeth is:
   a- Equal to the lingual embrasure.  b- Larger than the lingual embrasure.
   c- Smaller than the lingual embrasure.  d- variable in size.

31- The lingual embrasure of anterior teeth is:
a- Equal to the labial embrasure.        b- Smaller than the labial embrasure.
c- Larger than the labial embrasure.   d- variable in size

32- *The embrasures protect the periodontium through:*
a- Reduction of the forces applied on the teeth.
b- Preventing food from being forced against the gingiva.
c- Ensure the self cleansing ability of the teeth.
d- All the above.

33- *The maximum convexity of the facial surfaces of all teeth is located at:*
a- Occlusal third.   b- Middle third.  c- Cervical third.      d- Mesial third.

34- *The maximum convexity of the lingual surfaces of the teeth is located at:*
a- The cervical third in anterior teeth and middle third in all posterior teeth.
b- The middle third in anterior and posterior teeth.
c- The cervical third in anterior teeth and middle third in posterior teeth except the lower second premolar at the occlusal third.
d- The cervical third in anterior teeth and occlusal third of posterior teeth except the lower second premolar at the middle third.

35- *Overdeveloped facial and lingual contours of the teeth results in the following except:*
a- Proper gingival massage.                  b- Over protection of the gingiva.
c- Escapement of food away from the gingiva.           d- a & c.

36- *Underdeveloped facial and lingual contours of the teeth lead to:*
a- Gingival recession.                  b- Injury to the attachment epithelium.
c- Excessive frictional irritation of the gingiva.         d- All the above.

37- *The curvature of the cervical line is important for the health of the periodontium because:*
a- It is greater in the anterior than in the posterior teeth.
b- It is greater mesially than distally.
c- It tends to be straight in the distal surface of some of the molars.
d- It is the site of attachment of the gingiva to the tooth by the attachment epithelium.

1- Pure deciduous dentition period starts at about 6 months and ends at about 6 years.   ( )
2- Deciduous teeth begin to erupt at 6 months and the last tooth to erupt at about 6 years.   ( )
3- The teeth that replace the deciduous teeth are called predecessors. ( )
**Occlusion questions**

1- Curve of Spee is within the .......... plane.
2- Curve of Wilson is within the .......... plane.
3- Sphere of Monson is a combination of curve of .......... and curve of .................

1- The permanent dental arch is considered physiologically completely developed by the end of:
   a- The fifth phase. b- The sixth phase. c- The fourth phase

2- In the 2nd phase of development of the permanent dental arch the following teeth erupt:
   a- Permanent incisors. b- First molars. c- Permanent anteriors. d- First molars & permanent incisors.

3- In an ideal occlusion, the lower canine contacts what teeth in the upper arch:
   a. The upper canine and the upper lateral incisor b. The upper canine and the upper first premolar c. Just the upper canine d. The upper central incisor and the upper lateral incisor

4- Curve of Wilson is more deep in the:
   a- Molar segment. b- Premolar segment. c- Canine segment. d- Incisors segment.

5- The permanent 1st molar is the key of occlusion because of all the following reasons except:
   a- It is the last permanent tooth to develop and erupt. b- It is the largest permanent tooth. c- Its eruption is guided to its correct position just distal to the deciduous molars d- Its eruption can never be disturbed since it has no predecessor.

6- During centric occlusion the labioincisal ridge of the lower central incisor strikes the lingual surface of the upper central incisor at the:
   a- Middle third. b- Cervical third. c- Incisal third. d- Junction between the incisal and middle thirds.

7- The horizontal overlap (over jet) is very important for:
a- Stability of the dental arches.  
   b- Proper oral hygiene.  
   c- Protection of the lips and cheeks against biting during mastication.  
   d- Providing room for the proper function of the masseter muscle.

8- Each tooth in one dental arch contacts two teeth in the opposing dental arch in centric occlusion except lower 1 and upper 8. This relation is important because:
   a- It prevents elongation or overeruption.  
   b- It prevents displacement of teeth through lack of antagonism.  
   c- It causes equalization and distribution of forces over larger number of teeth.  
   d- All of the above.

9- Each tooth in one dental arch has two antagonists of the opposing dental arch except:
   a- Upper central incisor and lower third molar.  
   b- Lower central incisor and lower third molar.  
   c- Upper central incisor and upper third molar.  
   d- Lower central incisor and upper third molar.

10- Occlusally the facial and lingual outlines of the dental arches conform to a curve called:
   a- Curve of Wilson.  
   b- Curve of Spee.  
   c- Parabolic curve.  
   d- Curve of Monson.

11- Bonwill described the mandibular dental arch to be adapted to a 4 inches equilateral triangle, its angles are located as follows:
   a- The angles of the base are located at the anterior border of the condyles while the apex at the mesial contact areas of the lower central incisors.  
   b- The angles of the base at the centers of the condyles while the apex at the mesial contact areas of the lower central incisors.  
   c- The angles of the base at the center of the condyles and the apex at the cingulum of the lower central incisors.  
   d- The angles of the base at the coronoid while the apex at the mesial contact areas of the lower central incisors.

12- The fourth phase of development of the permanent dental arches eruption of the following teeth take place:
   a- Upper premolars.  
   b- Lower premolars.  
   c- Canines and second molars.  
   d- Second and third molars.

13- Curve of Spee is the curved line which extends from the incisalEdges of anterior teeth passing by the tips of the buccal cusps of posterior teeth to end at:
   a- The center of the condyle.
b- The anterior surface of the coronoid process.
c- The anterior surface of the condyle.
d- The center of the coronoid process.

14- **In centric occlusion the contact relation between cusp and fossa occurs when:**
   a- The buccal cusps of upper molars rest in fossae of the occlusal surfaces of lower molars.
   b- Lingual cusps of lower molars rest in fossae of the occlusal surfaces of upper molars.
   c- Lingual cusps of upper molars rest in fossae of the occlusal surfaces of lower molars.
   d- Buccal cusps of the lower molars contact the marginal ridges of upper molars.

15- **The bilaterally asymetrical mandibular movements are:**
   a- Depression and elevation.
   b- Protrusion and retrusion.
   c- Right lateral and left lateral movements.
   d- Depression and protrusion.

16- **The permanent first molar is the key of occlusion because of the following except:**
   a- It is the last of the permanent teeth to develop and erupt.
   b- It is the largest of the permanent teeth.
   c- Its eruption is guided to the correct position just distal to the deciduous second molar.
   d- Its eruption can never be disturbed since it has no deciduous predecessor.

17- **The horizontal over lap "over jet" is very important for:**
   a- Stability of the dental arches.
   b- Proper oral hygiene.
   c- Protection of the lips and cheeks against biting during mastication.
   d- Providing enough room for the proper function of the masseter muscles.

18- **In centric occlusion the mesiolingual cusp of the upper first molar lies in:**
   a- Central fossa of the lower first molar.
   b- Mesial triangular fossa of the lower first molar.
   c- Distal triangular fossa of the lower first molar.
   d- None of the above.

19- **In centric occlusion the mesiobuccal cusp of the lower first molar contacts:**
   a- The distal marginal ridge of the upper second premolar.
   b- The mesial marginal ridge of the upper first molar.
   c- The central fossa of the upper first molar.
   d- a & b.

20- **The bilaterally asymmetrical mandibular movements are:**
a- Depression and elevation.  
   b- Protrusion and retrusion.  
   c- Right lateral and left lateral movements.  
   d- All the above.

21. During lateral mandibular movement, the contact relation of the upper and lower teeth of the balancing side is as follows:
   a- The buccal cusps of the lower posterior teeth contact the lingual cusps of the upper posterior teeth.  
   b- The buccal cusps of the upper posterior teeth contact the lingual cusps of the lower posterior teeth.  
   c- The buccal cusps of the lower posterior teeth contact the buccal cusps of the upper posterior teeth.  
   d- The lingual cusps of lower posterior teeth contact the lingual cusps of upper posterior teeth.

1. During normal centric occlusion each tooth of one arch contacts with parts of two opposing teeth except the lower central incisors and the upper third molars.  
2. The mandibular dental arch adapts itself to an equilateral triangle of 8 inches length.

Good Luck all,  
Ur brother : Ahmed Ezz 😊