私立臺北醫學院 ___9o___ 學年度第 ___1___ 學期 期中考試 命 (試) 題紙
期末考試

系級科	目	授課教師	考 試 日 期	學 號	姓 名
牙四	咬合學	吳家驤等	90年1月4日第1~2節		

※①請注意本試題共 _____ 張。如發現頁數不足及空白頁或缺印，應當場請求補齊，否則缺少部份概以零分計。
　②每張試題卷務必填寫(學號)、(姓名)。

選擇題：

1. Rest position changes with head position :
   a. but contact vertical dimension is responsive to changes in rest position
   b. and should be used to relate the mandibular cast to the maxillary cast because it is a functional position
   c. a and b
   d. and should be considered even in a single restoration
   e. a,b,and d

2. Freedom in centric :
   a. has anterior-posterior and lateral dimensions
   b. occurs in almost everyone
   c. would improve the dental health of most adults
   d. is best when about 0.5 mm long
   e. all of the above

3. Centric occlusion
   a. can be used to relate the maxilla to the mandible without error
   b. can be use to mount casts that will have no occlusal interferences in centric occlusion, but will have in centric relation
   c. is not always anterior to centric relation
   d. is not found in animals
   e. all of the above

4. Centric occlusion :
   a. is maximum intercuspation of the teeth
   b. is the initial contact position of the open-and-close clench
   c. is best determined with stone casts
   d. is almost always correct if casts are mounted in centric relation
   e. all of the above

5. Centric occlusion:
   a. may be influenced by the force of clench or bite
   b. may not be registered on mounted casts correctly because of hard wax used for the interocclusal registration
   c. may not be obtained correctly on casts because of incorrect use of impression material
   d. may be influenced by the temporomandibular joints
   e. all of the above

6. Freedom in centric can be :
   a. found rarely, if ever, in the natural dentition
   b. developed in an occlusal adjustment
   c. formed in restorations
   d. developed in complete dentures
   e. all of the above

7. A tooth with increased mobility (jiggling tooth) :
   a. may be adapting to an occlusal interference
   b. could be a response to an initial interference elsewhere in the mouth
   c. a and b
   d. will show progressive injury and thus traumatic occlusion
   e. a, b, and d

8. A full crown restoration is seated with cement. The "filling" feels "high" and requires grinding. The reason for the interference could be:
   a. thickness of the film of cement
   b. case mounted in centric occlusion
   c. poor temporary restoration and some extrusion of the tooth
   d. impressions taken after clenching or mouth open for one-half hour for crown preparation
   e. all of the above

私立臺北醫學院＿＿＿90＿學年度第＿＿1＿＿學期 期中 期末 考試（命試）題紙

系 級	科 目	授 課 教 師	考 試 日 期	學 號	姓 名
牙四	咬合學	吳志雄	90 年 1 月 4 日第 1-2 節		

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9. Occlusal interferences may interfere with :
   a. swallowing and speaking
   b. chewing
   c. a and b
   d. centric occlusion function
   e. a, b, and d

10. Concerning mastication of food :
    a. Tooth contacts rarely occur in centric occlusion
    b. Tooth contacts occur frequently and regularly in centric relation
    c. An ideal occlusion is a requisite for masticatory efficiency
    d. It is done primarily in a border position
    e. None of the above

11. The points of reference for a simple non ear piece :
    a. arbitrary hinge axis and notch on incisal pin
    b. atbitrary hinge axis and infraorbital point
    c. a and b
    d. true hinge axis and upper notch on incisal pin
    e. a, b, and d

12. When using a small simple articulator, contact vertical dimension error in the molar area would be minimized if the centric occlusion check bite :
    a. has zero thickness
    b. is made of very soft wax
    c. is taken in centric relation
    d. is taken in centric occlusion
    e. none of the above

13. A thick centric occlusion check bite could result in a molar restoration having :
    a. premature contact in centric occlusion when placed in the mouth
    b. absence of centric stops
    c. lateral interferences
    d. protrusive interferences
    e. all of the above

14. A balancing side interference is found on articulated casts but not in the patient. This discrepancy is possibly because :
    a. the condylar inclination is incorrect
    b. the balancing interference tooth is mobile
    c. working side disclusion is not found when in fact it is present in the patient
    d. there is distortion of impression and hence distorted casts
    e. all of the above

15. Relative to mandibular supporting cusps and opposing fossae, the cusp is ground :
    a. only when it makes a premature contact in centric and lateral excursions
    b. when it makes a premature contact in centric and not in lateral excursions
    c. when it is "high" in both centic relation and centric occlusion (rarely)
    d. when it is a premature contact in centric relation, centric occlusion and protrusive excursions
    e. none of the above

16. As a guide for an occlusal adjustment, a rule that shoule be followed is:
    a. maximal functional contact should be maintained around centric
    b. grinding of the lingual axial contours of maxillary teeth should be avoidec
    c. avoid grinding the buccal axial contours of mandibular teeth
    d. occlusal interferences in protrusive involving anterior teeth should be adjusted on the lingual surfaces of maxillary teeth
    e. all of the above

17. A premature contact in centric involving a mandibular premolar :
 a. should be ground only after the maxillary premolar has been ground
 b. may be ground before the maxillary premolar if grinding does not involve the cusp tip or ridge
 c. is always ground first when in cross-bite
 d. cannot be ground without creating a step between centric relation and centric occlusion
 e. none of the above

18. Excessive grinding is characterized by :
 a. unnecessary loss of centric stops
 b. loss of functional margin and cusp ridges
 c. a and b
 d. grinding for group function if unnecessary
 e. a, b, and d

19. Excessive grinding on patients can lead to :
 a. pulpitis
 b. dentin sensitivity
 c. occclusal instability
 d. temporomandibular-joint-muscle pain dysfunction
 e. all of the above

20. The first step in the occlusal adjustment on casts is to :
 a. mark balancing interferences and premature contacts
 b. mark centric stops and supporting cusps
 c. adjust working
 d. adjust balancing side interferences
 e. adjust protrusive interferences

21. The rule for adjustment of supporting buccal cusp and cusp ridges of mandibular molar teeth is :
 a. grind away from function
 b. do not grind on mandibular molar bucal cusp tips or cusp ridges
 c. grind toward the interference
 d. adjust to centric relation
 e. none of the above

22. Balancing side adjustment is completed when :
 a. dentin is exposed
 b. balancing side contacts are removed
 c. teeth are no longer mobile
 d. grinding of the balancing side results in smooth gliding movements
 e. none of the above

23. 正常咀嚼的韻律動作是由何者支配？

 (a) 模式發生器 pattern generator

 (b) 開口反射

 (c) 閉口反射

 (d) 大腦運動區

24. 測試咬合接觸點的薄片(shim stock)厚度是多少？
 (a) 80u   (b) 8u   (c) 1u   (d) 30u

25. 深層咬肌與淺層咬肌功能不同在：
 (a) 深層幫助下顎前突
 (b) 深層幫助下顎後退
 (c) 淺層幫助下顎後退
 (d) 兩者沒有不同

私立臺北醫學院 ___pU___ 學年度第 ___/___ 學期 期中 期末 考試 命(試) 題紙

系 級	科 目	授課教師	考 試 日 期	學 號	姓 名
D4	Occlusion	Wu. 比礼	PU年 / 月 6 日第 / 節		

※①請注意本試題共 ___ 張。如發現頁數不足及空白頁或缺印，應當場請求補齊，否則缺少部份概以零分計。
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26. The position CO(centric occlusion)is:
    a. determined by maximum intercuspation
    b. called habitual centric
    c. a and b
    d. anterior to centric relation(CR)
    e. a, b and d

27. Centric Relation(CR):
    a. is a ligamentous position
    b. is called terminal hinge position
    c. a and b
    d. denotes the posterior functional range of the mandible
    e. a, b and d

28. Initial contact of the teeth form rest position is made:
    a. by closure around the terminal hinge axis
    b. often involving a translatory movement of the mandible
    c. a and b
    d. with the mandible in CR
    e. a, b and d

29. The greater the intercondylar distance:
    a. the more mesial is the placement grooves on the mandibular teeth
    b. the more distal is the placement of ridges and grooves on the maxillary teeth
    c. a and b
    d. the greater the lingual concavity of the maxillary anterior teeth
    e. a, b and d

30. The horizontal condylar guidance setting of the articulator:
    a. indicates the angle of the eminentia in degree
    b. supplies Bennett movement
    c. a and b
    d. simulates candylar guidance of the patient
    e. a, b and d

31. The first and second steps in functional waxing are:
    a. development of supporting cusp tips and centric stops
    b. development of non-supporting cusp tips and centric stops
    c. development of supporting cusp tips and cusp ridges
    d. development of centric stops and supporting cusp tips
    e. none of the above

32. Factors influencing maxillary anterior lingual concavity are
    a. Bennett movement
    b. intercondylar distance
    c. a and d
    d. compensating curve
    e. a, b and d

33. What factors can be appreciably changed by occlusal adjustment
    a. curve of spee   b. plane of occlusion   c. a and b
    d. cusp angle   e. a, b and d

系級科	目	授課教師	考 試 日 期	學 號	姓 名
D 4	Occlusion	Wu, et al	84 年 1 月 4 日第 1 節		

34. Vertical dimension is in one way or another a measure of:
    a. postural muscle activity
    b. face height (lower 1/3)
    c. a and b
    d. tooth height
    e. a, b and d

35. Contact vertical dimension is determined by
    a. anterior teeth
    b. posterior teeth
    c. interocclusal space
    d. rest vertical
    e. all of the above

36. The interocclusal space, measured at the incisor is:
    a. dependent on head posture
    b. about 3-8 mm, average
    c. a and b
    d. related to vertical overlap of the teeth

37. Rest position:
    a. is sometimes referred to as a postural position
    b. is a stable position that can be used as a good reference for mounting casts on an articulator
    c. a and b
    d. does not change with head position
    e. a, b and d

38. The difference between contact vertical dimension and rest vertical dimension is :
    a. the interocclusal space
    b. free-way space
    c. a and b
    d. dependent upon vertical overlap
    e. a, b and d

39. A "cuspid protected occlusion" is one where:
    a. contact in working is only on cuspids
    b. working contact starts with the cuspid and moves posteriorly for group function
    c. no lateral movement is possible thereby limiting occlusal forces to those in the vertical axis
    d. most of the guidance in working comes from the cuspids
    e. none of the above

40. Ridge and groove direction are affected by which of the followings?
    a. direction of the rotating condyle
    b. intercondylar distance
    c. a and b
    d. Bennett movement
    e. a, b and d

私立臺北醫學院 ___P___ 學年度第 _____1_____ 學期 期中 考試 命 題紙
期末 (試)

系 級	科　　　目	授 課 教 師	考　　試　　日　　期	學　　　　　　號	姓　　　　名
D4	occlusion	Wu. et al	P 年 1 月 6 日第 1 節		

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41. Which of the following statements related to the unloaded reflex is correct
    a. The "unloading reflex" elicits a strong jaw opening caused by a noxious stimulus
    b. The muscle spindles in the jaw-closing muscles are completely responsible for the occurrence of unloaded reflex
    c. During chewing brittle foods, the unloaded reflex is usually seen in the first few cycles of chewing
    d. none of the statements is correct

42. During Jaw-closing phase of mastication
    a. The digastric motonurons are hyperpolarized
    b. The Jaw-opening reflex triggered by lower-threshold afferents is inhibited
    c. The masseter motoneurous are hyperpolarized
    d. The muscle spindles in digastric muscles will be stretched which will inhibit the mosseter motoneurons

43. Which of the following statements is correct
    a. Chewing can be induced by stimulating the intra-oral pressure receptors in decercbrated animals
    b. the classic masticatory cortex area is located laterally to the orofacial primary somatosensory cortex
    c. The chewing center in the midbrain can be activated from the cortex or the oral cavity
    d. All of the statements are correct

44. 肌梭(muscle spindle)的初級感覺末稍(primary sensory ending)連接那一種神經纖維
    a. Ia　　　　b. Ib　　　c. Ic　　　d. II

45. 感受咬力大小的牙周組織, 其感受器(Receptor)屬於:
    a. Exteroceptor
    b. Teleceptor
    c. Proprioceptor
    d. Interceptor

私立臺北醫學院 ____ 學年度第 __/__ 學期 期中 期末 考試 命 (試) 題紙

系 級 科	目	授課教師	考 試 日 期	學	號	姓	名
D4	Occlusion	Wu et al	80 年 1 月 6 日第 1 節				

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46. 患者#36(左下第一大臼齒)的 distobuccal cusp 與# 26 的 central fossa 形成 premature contact in centric occlusion. 患者覺得左後側方有高點(僅#26 與 #36 有接觸), 無中心滑動, 側方滑行時,該 cusp 亦未造成任何接觸或干擾. 此時應如何調整其咬合
    a. 深磨#26 的 fossa
    b. 磨低# 36 的 cusp
    c. #26 與#36 的 cusp 各磨一點
    d. 不必調整. 要患者忍耐

47. 關於 primary trauma from occlusion
    a. caused by normal or overt occlusal force on the diseased or unhealthy periodontium
    b. caused by overt occlusal force on the healthy periodontium.
    c. it is not recommended to perform occlusal adjustment in this case.
    d. None of the above

48. 有少數人其 CR 與 CO 位置相同(沒有 slide in centric), 此稱為:
    a. Freedom in centric
    b. b. Long centric
    c. Point centric
    d. Power centric
    e. None of the above

49. 咬合調整的目標是為求得:
    a. Balanced occlusion
    b. Normal occlusion
    c. Ideal occlusion
    d. Mutually protected occlusion
    e. All of the above

50. 下列有關 BULL rule,何者為不正確:
    a. BULL rule 用於削除 working-side interferences
    b. BULL rule 用於削除 protrusive interferences
    c. BU 代表 :磨 Buccal inclines of upper buccal cusps
    d. LL 意指 :磨下顎舌側咬頭的 buccal inclines

51. 下列有關 Freedom in centric 之陳述, 何者為不正確:
    a. Freedom in centric 於 TMJ 約為 0.2mm
    b. Freedom in centric 於牙齒約為 0.2-0.5mm
    c. Freedom in centric 是人為的
    d. Freedom in centric 自然存在於約 25%的人口中

52. The first order neuron of the muscle spindle in masticatory muscle is in:

    A. Paradorsal ganglion
    B. Trigeminal ganglion
    C. Main sensory nucleus
    D. Mesencephalic nucleus

53. The central pattern generator of the masticatory system is located in:

    A. Cerebral cortex
    B. Brain stem
    C. Cerebellum
    D. Spinal cord

54. The neurons directly control the movement of mastication is in:

    A. Cerebral cortex
    B. Mesencephalic nucleus
    C. Trigeminal motor nucleus
    D. Pattern generator

55. The central pattern generator of the masticatory system is in:

    A. Cerebral cortex
    B. Mesencephalic nucleus
    C. Reticular formation
    D. Trigeminal motor nucleus

56. The slow adapting periodontal mechanoreceptors is usually found in:

    A. Coronal part of the root
    B. Middle part of the root
    C. Apical part of the root
    D. Part of the root close to fulcrum of tooth rotation

系 級	科	目	授課教師	考 試 日 期	學 號	姓 名
D4	occlusion		Wu et al	8· 年 1 月 6 日第 1 節		

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Please compare " Ideal Occlusion" and " Normal Occlusion." .

Please compare "Point Centric" and "Freedom in Centric".

What is the concept of the Bonwill's Geometric Ideal?
What is the implication in the design of articulator?

請提出對咬合學及咬合實驗的建議
咬合學:

咬合實驗:

年輕人 要認真　　Eyes Up.　　*Good　Luck　to　Every　One*
Enjoy　Your　Colorful　Holidays

系 級	科 目	授課教師	考 試 日 期	學 號	姓 名
D4	Occlusion	Wu et al	l0 年 1 月 6 日第 1 節		

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複選題

_____1 用力咬時 digastric 會 a.收縮 b.放鬆

_____2.張口時除 digastric 外 a.lateral pterygoid b.medial pterygoid 也會收縮？

_____3 masseter 除閉口外與下顎 a.前伸 b.後縮有關？

_____4 側方運動時那些肌肉收縮 a. lateral pterygoid b, masseter c.temporalis ？

_____5.側方運動時頸部那一條肌肉明顯收縮 a 同側 SCM b 對側 SCM c.Tapezius ？

_____6.用門牙咬硬物時 TMJ 的髁頭會 a.向上壓 b.向下拉 c.不動？

_____7.用第二大臼齒咬硬物時 TMJ 的髁頭會 a.向上壓 b.向下拉 c.不動？

_____8.下顎最放鬆時咬合面之間有多大空隙 a.2-4mm b.10-15mm c20-30mm ？

_____9.提高咬合高度咬壓會 a.增加 b.減少 c.不變？

_____10..提高咬合高度超過原有 clinical rest position 但不超過 EMG rest position
　　　肌肉會 a 被拉長 b.放鬆 c.緊張

問答題

1. 為甚麼 superior lateral pterygoid 與咬肌同步收縮？

2. 為甚麼第一大臼齒咬合面最大？