

RPD M C Q with answers

1. A maximum intercuspation occlusion that demonstrates no pathology is the clinical occlusion to which most removable partial dentures are constructed.

T or F

2. "Witness marks" are lines scribed on the base of casts which serve to tripod the cast and thereby record its path of insertion.

T or F

3. Removable partial dentures improve mastication by providing chewing surfaces and obliterating small edentulous spaces into which food might otherwise escape.

T or F

4. Scaife and Holt showed that in a population of Angle's Class I patients canine rise occurs either bilaterally or unilaterally in 27% of the patients.

T or F

5. Inept fitting of a framework to a master cast will cause scarring of the cast. The framework will probably not fit the mouth when you try it in.

T or F

6. Class III removable partial dentures must be physiologically relieved.

T or F

7. All frameworks must be equilibrated until harmony is restored to the occlusion in all mandibular movements.

T or F

8. For an altered cast impression the plastic trays should stand free of the vestibule by 2 - 3mm.

T or F

9. An altered cast impression provides a corrected cast whose vestibular extensions are anatomically correct and relates the framework accurately to the teeth.

T or F

10. After the investment cast has been dried it is sealed by dipping it in molten boxing wax.

T or F

11. The investment cast upon which a removable partial denture wax pattern is formed is called a _____ cast:

- a. reformed
- b. refractory
- c. reformatted
- d. blocked out

12. Which of the following clinical requirements is not required in order to produce an acceptable functionally generated record of mandibular movements:

- a. completed opposing restored or natural arch
- b. acceptable occlusal guidance
- c. stable record base
- d. fully adjustable articulator

13. The waxing of a framework can be done free hand with wax or by using a preformed pattern that is made of _____.

- a. bees wax
- b. TiColorforms
- c. plastic
- d. paper cones

14. The channel which allows molten metal to flow from the crucible to the mold cavity during the casting procedure is called a _____.

- a. cannula
- b. barrel
- c. peanut
- d. sprue

15. In Kennedy Class I, II, IV removable partial dentures, support comes from abutment teeth and the most prominent bone in the residual ridge which is located nearest the abutment and has the least displaceable overlying mucosa.

T or F

16. In the healthy dentition, the magnitude of functional loading during chewing is approximately proportional to the development of the muscles of mastication. However, for dentures the load limit is influenced by all of the following except:

- a. size of the bolus
- b. pain
- c. size of the occlusal table
- d. location

17. Diseases such as diabetes, nephritis, duodenal ulcers, tuberculosis, hormonal imbalances during menopause, and post thyroid surgery are all conditions which lead to degenerative changes in the oral mucosa.

T or F

18. Increased loading of a periodontally involved abutment may hasten the progress of the pathologic process.

T or F

19. Increasing the width of a clasp will produce increased rigidity in a 3 to 1 ratio.

T or F

20. Chromium, Nickel, Molybdenum, Manganese, Aluminum, and Beryllium are the component elements of Ticonium. One important biological consideration is that in patients with a history of nickel sensitivity, 80% will react to a nickel chromium based alloy.

T or F

21. Which of the following is out of sequence for developing a removable partial denture design:
- select abutments
 - extent of denture base
 - rests, guiding planes, major connector, minor connectors
 - retention, reciprocation
22. Which of the following is not a criterion for selecting an abutment for a removable partial denture?
- crown to root ratio
 - mobility
 - estimated cost
 - alveolar support
23. Which of the following major clinical appointments for construction of an RPD can be safely skipped?
- diagnosis and treatment planning
 - mouth preps and final impressions
 - post-preparation endodontic testing
 - delivery
24. The dentist need not write the laboratory work authorization himself so long as he signs it and lists his license number.
- T or F
25. There is no indirect retention in a Kennedy Class III removable partial denture.
- T or F
26. Both research and our textbooks state that “the most important factor in RPD treatment” is: (choose one)
- broad stress distribution
 - I-bar, mesial rest, guiding plane design
 - the final impression
 - motivation for plaque control
27. Methods for evaluating the vertical dimension of occlusion are the:
1. proprioception and tactile sense of the patient
 2. parallelism of the ridges
 3. closest speaking space
 4. vertical dimension of rest less 3mm
 5. temporary diagnostic stent overlaying the natural dentition
- Choose one
- 1, 2, 3, 4
 - 2, 3, 4
 - 1, 2, 3, 4, 5
 - 3, 4, 5
28. Which one of the following is not a basic factor in determining the most advantageous path of insertion?
- guiding planes
 - retention

- c. interferences
- d. esthetics
- e. dexterity of the patient

29. In order to protect gingival tissues from food abrasion, the major and minor connectors must be designed to cover them.

T or F

30. In the long-term study on the serviceability of RPDs, the patients' and clinicians' opinion of acceptability were identical.

T or F

31. During diagnosis a good "rule of thumb" is to extract teeth with more than 50% bone loss as shown on radiographs.

T or F

32. A good source of bone for periodontal grafting is in an extraction site that is about 6 months old.

T or F

33. Carlson, Hedegarde, and Koivumaa wrote that failure to eradicate periodontal disease before RPD treatment results in accelerated breakdown of the collapsing dentition.

T or F

34. Because of the variable capacity of a residual ridge to support a denture one can expect that initial support from the ridge will come from that area lying the furthest from the abutment, is most prominent and covered by the least displaceable soft tissue.

T or F

35. In a healthy dentition, the magnitude of chewing force is approximately proportional to the

- a. area of the occlusal table
- b. area of the periodontal membrane
- c. masseter muscle
- d. development of muscles of mastication

36. With tissue borne dentures, chewing force from the muscles is primarily limited by

- a. fibrosis
- b. pain
- c. the occlusal table
- d. the mass of the muscles

37. Hormonal imbalances, nutritional deficiencies, diabetes, duodenal ulcers, nephritis, upper gut resection, and blood chemistry imbalance after thyroid / parathyroid surgery can all lead to constant contour changes in the alveolar process of the mandible.

T or F

38. Selection of abutments for RPDs depends upon information about many factors. Which one of the following is the least important criterion for abutment selection?

- a. arch location
 - b. crown to root ratio
 - c. root form and number of roots
 - d. inclination
 - e. mobility, alveolar support, estimation of added stress
39. The concept of distributing functional stresses among all of the remaining oral anatomy is called
- a. functional basin
 - b. broad stress distribution
 - c. Steffel's theory of design
 - d. Kratochvil's concept of design
40. Flexible major connectors produce
- a. necrosis of the mucosa
 - b. localized stress on isolated support areas
 - c. noxious vapors
 - d. allergic reactions
41. Stressbreakers are indicated for use when the clinical exam reveals that the
- a. residual ridge is atrophic and the teeth are strong
 - b. denture will be toothborne
 - c. residual ridge is strong and the teeth are weak
 - d. residual ridge is weak and so are the teeth
42. During construction, the framework whose metal covers exostoses or inclined slopes of alveolar bone located between the edentulous segment and its nearest rest must be
- a. deplated
 - b. stripped
 - c. polished
 - d. relieved
43. In an extension RPD (class I, II, IV) metal of the framework must not be placed above the survey line anywhere on a tooth between the denture base and the
- a. farthest rest
 - b. opposing teeth
 - c. nearest rest
 - d. stabilizing clasp
44. If the path of dislodgement is controlled, an I-bar is most often located in .01" undercut on the
- a. cemento-enamel junction
 - b. greatest mesio-distal curvature of the buccal or lingual surface
 - c. mesio-buccal line angle
 - d. disto-buccal line angle
45. If the I-bars are placed in some position other than the area listed in the previous question, their functional motion that is induced by occlusal loading must be plotted in relation to the

- a. guiding planes
 - b. location of the terminal rest
 - c. guiding lines
 - d. tips of the retainers
46. The main axis of rotation downward for a Class I RPD will pass through the
- a. rigid connectors
 - b. terminal rests on either side of the dental arch
 - c. guidelines
 - d. tips of the retainers
47. Even though multiple rests have been used in a Class I RPD, when the path of dislodgement is not controlled all rests disengage except for those located the
- a. farthest from the denture bases
 - b. nearest the denture bases
 - c. none disengage
 - d. all disengage
48. Ordinarily, retentive clasps are not located on the opposite side of the rotational axis from the denture base. If a retainer is used, it must have increase _____ or engage an undercut that is minimal.
- a. taper
 - b. flexibility
 - c. nickel content
 - d. roundness in cross section
49. The denture design whose advantages are (1) less contour distortion of abutments, (2) less contact of metal to teeth, (3) cleaner design, (4) more efficient mechanical retention and (5) improved esthetics is the:
- a. precision attachment design
 - b. stressbreaker design
 - c. Aker's design
 - d. I-bar, distal rest, guiding plate design
 - e. RPI design
50. If I bars are not placed on the height of contour of the abutment (in a frontal plane), their functional motion must be plotted in relation to the
- a. guiding plane location
 - b. terminal rest location
 - c. denture base location
 - d. artificial tooth location
 - e. Ante's law
51. Dislodging movement of a RPD is resisted by
- a. stabilizing clasps
 - b. mechanical retainers
 - c. reciprocating clasps
 - d. denture base retainers
 - e. denture base mesh

52. The dentist who first proposed the mesial rest, guiding plate, I-bar design in order to control functional forces was

- a. DeVan
- b. Poffenbarger
- c. Orban
- d. Kratochvil
- e. Krol

53. According to Coolidge and Orban the average width of the periodontal membrane is

- a. .25 in.
- b. .24 in. + .1 in.
- c. .25 mm + .1 mm
- d. .25 mm
- e. none of the above

54. A master cast is placed in the cast holder and aligned at the zero degree tilt. A 0.02 “ undercut is found on the mesiolingual of the mandibular right second molar. Tilting the cast to the anterior will

- a. increase the undercut
- b. decrease the undercut
- c. not effect the undercut
- d. none of the above. The cast should not be tilted since all RPD's are designed at the zero degree tilt.

55. From radiographic evidence, a dentist can best predict the reaction of alveolar bone to the additional stress load of a removable partial denture by the

- a. trabecular pattern of the alveolar bone
- b. amount of alveolar bone support remaining
- c. amount of alveolar bone loss already sustained
- d. reaction of bone to previously induced stresses

56. The first step in relining a distal-extension removable partial denture is to

- a. correct the occlusion
- b. verify the fit of the framework
- c. border mold the denture base
- d. eliminate undercuts in the denture base
- e. re-establish the plane of occlusion by using modeling compound in the tissue surface of the denture base.

57. Ulcerated soft tissues that resist therapy and are associated with a mandibular RPD are of particular concern if located

- a. in the buccal vestibule
- b. on the crest of the ridge
- c. in the retromylohyoid area
- d. in the anterior portion of the floor of the mouth

58. Keratitis of the eyes, scaly dermatitis of the nasolabial area, cheilitis and glossitis are clinical features of

- a. Vitamin C deficiencies
- b. excessive intake of Vitamin A

- c. hormone imbalance
- d. diabetes mellitus
- e. Vitamin B deficiencies

59. Symmetrical widening of the periodontal ligament space around one or more teeth is an important early manifestation of

- a. a “too-well-fitting” RPD
- b. poor force control by the major connector
- c. chondrosarcoma
- d. occlusal traumatism
- e. osteosarcoma

60. All of the following statements concerning beryllium are correct, except

- a. in small percentages, in nickel-based alloys, lowers the melting temperature of the alloy
- b. is not found in all base metal alloys
- c. is biologically hazardous
- d. is used as a scavenger in casting alloys
- e. the addition of beryllium to an alloy may allow the use of calcium sulfate investments

61. In dental casting alloy the metal ingredient which is considered to be the scavenger is

- a. silver
- b. gold
- c. tin
- d. zinc
- e. copper

62. Which of the following are true concerning Combination Syndrome?

- 1. Usually occurs in patients with a maxillary complete denture opposing a mandibular removable partial denture and with mandibular anterior natural teeth remaining
- 2. Thought to occur because patients function on their natural remaining teeth because they sense a feeling of mastication
- 3. Induces symptoms of severe resorption or epulis fissuratum of maxillary anterior ridge; palatal papillary hyperplasia; large protruding tuberosities; severe resorption of the posterior mandibular ridge; supraeruption of mandibular anterior teeth
- 4. Cannot be prevented unless maxillary implants are placed
- 5. Can minimize destructive forces by ensuring there are no protrusive interferences

- a. all of the above
- b. 1, 2, 3, 5
- c. 1, 2, 3
- d. 1, 3, 4, 5
- e. 2, 3, 5

63. The term “Combination Syndrome” was first coined by

- a. DeVan
- b. Kelley
- c. Kratochvil

- d. Steffel
- e. Wolff

64. Who is credited with the statement "The internal architecture and external form of a bone are related to its function and change with altered function."

- a. DeVan
- b. Pleasure
- c. Wolff
- d. Adell
- e. Zarb

65. The tripping action of Stone refers to

- a. the water / powder proportion of the mix
- b. the removal of a suprabulge clasp
- c. the framework is more retentive on a cast than in the mouth
- d. the removal of an infrabulge clasp
- e. none of the above

66. Which of the following are true about gypsum bonded casting investments?

- 1. should be allowed to set a minimum of 45 minutes
 - 2. should be heated no longer than 30 minutes at 900 degrees F
 - 3. the mold temperature should not exceed 1200 degrees F
 - 4. used for alloys with melting temperatures exceeding 1800 degrees F
 - 5. ideal mold temperature for hygroscopic technique is 875 degrees F
- a. 1, 2, 3, 5
 - b. 1, 3, 5
 - c. 2, 3, 4
 - d. all of the above
 - e. none of the above are correct statements

67. Which of the following is not a function of an indirect retainer?

- a. a part of the RPD that assists the direct retainers in preventing displacement of distal extension denture bases by functioning through lever action on the opposite side of the fulcrum line
- b. it tends to reduce anteroposterior tilting leverages on the principle abutments
- c. contact of the minor connector with vertical tooth surfaces aids in stabilization against horizontal movement of the denture. Such tooth surfaces, when made parallel to the path of placement, may also act as auxiliary guiding planes.
- d. anterior teeth supporting indirect retainers are splinted against lingual movement
- e. aids in retention of the RPD by increasing the strength of the direct retainers by redistributing the forces to all areas of the mouth.

68. All of the following describe a reciprocal clasp arm, except

- a. it is placed above the height of contour
- b. it is a rigid clasp arm
- c. it must contact the tooth after the retentive clasp arm passes over the height of contour
- d. it must contact the tooth before the retentive arm passes over the height of

contour

e. ideal placement should be at the junction of the gingival and middle third of the abutment tooth crown ط

69. All of the following are correct statements concerning an occlusal rest, except

- a. the rest prep should extend one-half the buccolingual width of the tooth from cusp tip to cusp tip
- b. the rest prep should extend one-third to one-half the mesiodistal width of the tooth
- c. the rest seat is prepared such that the deepest portion is at the marginal ridge
- d. the rest measures between 1.0 to 1.5 mm thick where it crosses the marginal ridge
- e. the occlusal rest seat is prepared so that the enclosed angle formed by the floor of the rest seat and a line dropped down the proximal surface of the tooth must be less than 90 degrees

70. All of the following statements concerning major connectors are correct, except

- a. at least 8 mm of vertical space between the active floor of the mouth and gingival margins of the teeth is required for a mandibular lingual bar major connector
- b. in the maxillary arch, the border of the major connector should be at least 6 mm from the gingival crevice of the teeth
- c. in the mandibular arch, the border of the lingual bar major connector should not be closer than 2 - 3 mm to the gingival margins
- d. the border of the maxillary major connector should be scalloped to mimic the gingival crevices of the teeth
- e. the border of the mandibular major connector should run parallel to the gingival margin of the teeth

71. All of the following are principal objections to the use of a U-shaped maxillary removable partial denture major connector, except

- a. its lack of rigidity, compared to other designs, may induce torque or direct lateral force to abutment teeth
- b. the design fails to provide good support characteristics and may permit impingement of tissues underlying its palatal borders when subjected to occlusal loading
- c. bulk to enhance rigidity results in increased thickness in areas most frequented by the tongue
- d. movement is particularly noticeable and is traumatic to the residual ridge in distal extension removable partial dentures when posterior tooth support is nonexistent
- e. the lack of interfacial surface tension between the metal and tissues reduces the amount of retention of the prosthesis

72. All of the following statements are considerations when relining a bilateral distal extension RPD opposing a maxillary complete denture, except

- a. loss of posterior occlusal contact between the complete denture and removable partial denture may necessitate reestablishment of the original

occlusal relationship

- b. it is not unusual for a patient to complain of looseness of the maxillary complete denture and request relining of that denture when actually it is the removable partial denture that needs relining
- c. evidence of rotation of the distal extension removable partial denture about the fulcrum line must be the deciding factor as to whether relining needs to be done
- d. a closed-mouth impression procedure is indicated when relining the bilateral distal extension RPD
- e. an open-mouth impression procedure is indicated when relining the bilateral distal extension RPD

73. According to the Kennedy Classification of partially edentulous arches, a single, but bilateral edentulous area crossing the midline, and located anterior to the remaining teeth would be a

- a. Class I
- b. Class II
- c. Class III
- d. Class IV
- e. Class V

74. All of the following are sites of arbitrary blockout of the mandibular RPD master except

- a. all gingival crevices
- b. gross tissue undercuts situated below areas involved in design of denture framework
- c. labial and buccal tooth and tissue undercuts not involved in denture design
- d. tissue undercuts to be crossed by origin of bar clasps
- e. all of the above are sites of arbitrary blockout

75. All of the following features describe the proximal plate/guiding plate area needed for proper functioning of the RPI clasp assembly, except

- a. a guiding plane is prepared on the distal surface of the abutment tooth in the occlusal one-third
- b. the guiding plane is approximately 2-3 mm in height occlusogingivally
- c. an undercut should exist below the guiding plane to permit movement of the proximal plate
- d. the proximal plate contacts approximately 1 mm of the occlusal portion of the guiding plane
- e. the proximal plate contacts approximately 1 mm of the gingival portion of the guiding plane

76. Two or more parallel axial surfaces of abutment teeth shaped to direct the prosthesis during placement and removal are called

- a. reciprocal clasp arms
- b. indirect retainers
- c. guiding planes
- d. undercuts
- e. retentive clasp guidance

77. Which of the following are elements of the clasp assembly?

1. Major connector
2. Retentive clasp arm
3. Minor connector
4. Stabilizing clasp arm
5. Rest

- a. 1, 2
- b. 1, 3, 5
- c. 2, 4, 5
- d. 2, 3, 4, 5
- e. 1, 2, 3, 4, 5

78. The part of a removable partial denture that assists the direct retainers in preventing displacement of distal extension bases by functioning as part of the resistance arm of a lever anterior to the fulcrum line is termed a (an)

- a. reciprocal clasp arm
- b. indirect retainer
- c. inadvertent retainer
- d. guiding plane
- e. rest

79. The textbook authors and your lecturers recommend that, after mouth preparations, an impression be made in irreversible hydrocolloid and a cast poured in quick-setting stone. The purpose of this is to

- a. determine the proper size of stock tray for reversible hydrocolloid
- b. maximum resident benefit
- c. make a cast available to the laboratory for final waxing and casting
- d. evaluate the contours of the occlusal rests for adequate reduction
- e. verify that proper contours have been provided on the potential abutment teeth

80. The location of the clasp arms will be determined by the height of contour of the abutment teeth.

T or F

81. For a distal extension removable partial denture, the jaw relations should be recorded _____ the secondary impression is made and _____ the framework in place.

- a. before; with
- b. before; without
- c. after; with
- d. after; without
- e. as; with

82. Who developed the most widely accepted classification system for partially edentulous arches?

- a. Skinner
- b. Applegate
- c. Kennedy
- d. Barlyn
- e. Toth

83. If your laboratory technician is conscientious, dependable, and knowledgeable in all the details of good partial denture design and construction, you should make the prescription for the partial denture by
- submitting a rough sketch of the design and relying on the technician's ability and training to produce an acceptable denture
 - drawing all the details of the design on the master cast and submitting it with the expectations that it will be followed explicitly
 - labelling a colored pencil drawing on a chart, outlining it on the master, and providing the technician with written instructions
 - consulting with the technician throughout the designing phase to allow the technician to share in the responsibility for the design
 - simply send the final impression to the lab with a note to "Just Do It"
84. The primary requirement of a major connector is that it be
- flat
 - polished
 - flexible
 - a design from the book
 - rigid
85. Rigid metal which contacts rigid tooth structure located between the terminal rest and the denture base must never rise above the survey line.
- T or F
86. If the lingual alveolar bone in the premolar region of the mandible has anything but a steep vertical slope, any rigid metal covering the area during downward function must be
- relieved during construction
 - thickened during the wax-up
 - relieved at delivery
 - relieved after delivery
 - slightly in contact
87. The direction that dislodging forces unseat a RPD depends upon
- the location of rests
 - denture base retainers
 - guideplates, retainers, and minor connectors
 - chance
 - holding power of denture base adhesives
88. As dislodgement occurs, clasps act to keep a RPD seated. This action is enhanced by the anteriorly located occlusal rest which is known as an occlusal rest serving the function of an
- indirect retainer
 - fulcrum relocator
 - lever arm lengthener
 - impingement protector
 - direct retainer
89. As the curvature of a clasp increases so does its stiffness.

T or F

90. As the length of a clasp increases so does its stiffness.

T or F

91. Stiffness of a clasp is related to the number of bends in it.

T or F

92. How many rests are there on an embrasure clasp?

- a. enough to do the job
- b. two
- c. one
- d. three
- e. none

93. The part of an RPD framework that transmits stress to the abutment tooth and also serves as a vertical stop for the framework is called a

- a. clasp
- b. minor connector
- c. rest
- d. crown
- e. reciprocating arm

94. The part of an RPD framework that resists lateral functional stress and provides support for mobile teeth is called a

- a. retentive clasp
- b. major connector
- c. rest
- d. bracing component
- e. indirect retainer

95. The rests of a RPD must be free to move in function (except gingivally) in Kennedy Class

- a. I, II, IV
- b. I, II, III, IV
- c. I, III, IV
- d. II, III, IV
- e. none. Rests should never move in function

96. In order to attain symmetry of form in major connectors of the palate, they should cross the midline at

- a. midnight, when traffic is least likely
- b. an acute angle
- c. an ugly angle
- d. an obtuse angle
- e. right angles

97. Like halitosis, single palatal bars are objectionable. Single palatal bars are objectionable because they lack

- a. alcoholic beverages and sushi
- b. rigidity
- c. flexibility
- d. undercuts
- e. simplicity

98. Plates, minor connectors, guiding plates, and proximal contacts of natural teeth all contribute to

- a. reciprocation
- b. esthetics
- c. good oral hygiene
- d. the United Fund
- e. rigidity

99. Bracing elements are all located on or above the survey line

T or F

100. Guiding plates are curved occluso - gingivally

T or F

RPD Exam Answer Key

- 1. T
- 2. F
- 3. T
- 4. F
- 5. T
- 6. F
- 7. T
- 8. T
- 9. F
- 10. F
- 11. b
- 12. d
- 13. c
- 14. d
- 15. F
- 16. a
- 17. F
- 18. T
- 19. F
- 20. T
- 21. b or c
- 22. c
- 23. c
- 24. F
- 25. T
- 26. d
- 27. c
- 28. e
- 29. F
- 29. F
- 30. F
- 31. F
- 32. F
- 33. T
- 34. T

35. d
36. b
37. T
38. a
39. b
40. b
41. c
42. d
43. c
44. b
45. b
46. b
47. a
48. b
49. e
50. b
51. b
52. d
53. c
54. a
55. d
56. b
57. c
58. e
59. c
60. d
61. d
62. c
63. b
64. c
65. d
66. b
67. b
68. c
69. c
70. d
71. e
72. d
73. d
74. d
75. e
76. c
77. d
78. b
79. e
80. T
81. c
82. c
83. b

- 84. e
- 85. T
- 86. a
- 87. c
- 88. a
- 89. T
- 90. F
- 91. T
- 92. b
- 93. c
- 94. d
- 95. a
- 96. e
- 97. b
- 98. a
- 99. T
- 100. F



cden.tu.edu.iq