INSTRUCTIONS

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

1. The Answer Sheet is separately supplied to you. Fill in all the columns on the Answer Sheet correctly, failing which your Answer Sheet will be invalidated.

2. You must check up the Question Booklet and ensure that it contains all the questions and see that no page is missing or repeated. If you find any defect in the Question Booklet or Answer Sheet, you must get it replaced immediately.

3. Encode clearly the Question Booklet series, A, B, C, D, as the case may be in the appropriate place in the Answer Sheet.

4. This Booklet contains 100 items (questions). Each item comprises four responses (answers). You will select ONLY ONE response which you consider best and mark on the Answer Sheet.

5. All items carry equal marks. Attempt ALL items. Your total marks will depend only on the number of correct responses marked by you in the Answer Sheet.

6. Rough work must not be done on the Answer Sheet. Use the blank spaces at the end of the Question Booklet for rough work.

7. Once you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over the Answer Sheet to the Invigilator. In no case you should leave the examination hall without returning the Answer Sheet.
1. Which of the following is used as the best root end filling?
   (a) MTA
   (b) Amalgam
   (c) ZOE
   (d) Calcium hydroxide

2. Dental wax pattern should be invested as soon as possible, because of danger of
   (a) distortion due to relaxation of internal stresses
   (b) drying of the wax pattern
   (c) continued expansion of wax
   (d) reduction in flow of wax

3. Pain and sensitivity in a tooth with only a few days after 4 months is due to
   (a) supraocclusion
   (b) gingivitis
   (c) infraocclusion
   (d) None of the above

4. Short bevel extends
   (a) in almost 2/3 of the enamel
   (b) all of the enamel and half of the dentine
   (c) all of the enamel only
   (d) 1/3 of the enamel

5. The disadvantages of high-speed instrumentation is
   (a) aerosol spray inhalation
   (b) loss of tactile sensation to the operator
   (c) heat production
   (d) All of the above

6. The most effective method of maintaining dry field in dentistry is
   (a) gingival retraction
   (b) rubber dam
   (c) throat swab and cotton
   (d) suction tips

7. In managing a seven-year-old child, the dentist should keep in mind that a child at this age is
   (a) frequently negative
   (b) susceptible to praise
   (c) generally uncooperative
   (d) prone to sensation anxiety

8. The best way to help a frightened child to overcome his fear is
   (a) identifying the fear
   (b) ignoring the fear
   (c) ridiculing the frightened child
   (d) diverting the patient's attention

9. Iron content to 3M stainless steel crowns is
   (a) 20%
   (b) 30%
   (c) 60%
   (d) 10%

10. The most common cause of failure of class II restoration in children is
    (a) margin failure
    (b) proximal box fracture
    (c) inadequate width
    (d) too much width
11. In diet counselling to reduce caries
   (a) sugar is to be restricted to meals time
   (b) sugar is to be restricted to one time a day
   (c) only liquid sugars to be restricted
   (d) fibrous food to be restricted

12. Injuries to primary teeth occur mostly at:
   (a) 6–12 months
   (b) 3–4 years
   (c) 5–7 years
   (d) 1½–2½ years

13. Apexogenesis of incompletely formed root is:
   (a) inducing the formation of apical 1/3 of root
   (b) closure of apical formation in a developing tooth
   (c) inducing the formation of apical 2/3 of root
   (d) deposition of cellular cementum at open apex

14. Which of the following medicaments is indicated to obturate the canals of a primary tooth in which a pulpectomy was performed?
   (a) Gutta-percha
   (b) Calcium hydroxide
   (c) Zinc oxide-eugenol cement
   (d) Calcium hydroxide-CMCP paste

15. A 11-year-old child comes to the dental office one hour after injury to a maxillary central incisor. The tooth is vital and slightly mobile. Radiographic examination reveals a fracture at the apical third of the root. What is the best treatment at this point of time?
   (a) Render palliative therapy
   (b) Extract the tooth
   (c) Relieve the tooth
   (d) Perform immediate root canal treatment and splint

16. Exarticulation of teeth means
   (a) intrusion
   (b) extrusion
   (c) subluxation
   (d) avulsion

17. The most frequent cause of fracture of a root tip during extraction of a primary molar is
   (a) ankylosis of the tooth
   (b) improper use of cow horn forceps
   (c) presence of supernumerary premolar
   (d) root resorption between apex and bifurcation

18. The change in colour of a traumatized primary incisor usually results from all the following, except
   (a) laceration of periodontal fibres
   (b) diffusion of biliverdin into the dentinal tubules
   (c) development of a heavy layer of secondary dentin
   (d) internal resorption of dentin within the crown
19. Ideal root canal filling for primary teeth is
   (a) calcium hydroxide-tetine mixture
   (b) zinc oxide-eugenol cement
   (c) gutta-percha
   (d) ferric sulphate

20. The % formaldehyde in Buckley's formocresol is
   (a) 15%
   (b) 19%
   (c) 25%
   (d) 20%

21. Cvek pulpotomy refers to
   (a) partial pulpotomy
   (b) cervical pulpotomy
   (c) glutaraldehyde pulpotomy
   (d) formocresol pulpotomy

22. The failure of a calcium hydroxide pulpotomy done on a primary 1st molar is due to
   (a) internal resorption
   (b) external resorption
   (c) pulp calcification
   (d) pulp fibrosis

23. A large exposure of pulp within 24 hours is treated by
   (a) pulpotomy
   (b) pulpectomy
   (c) indirect PC
   (d) direct PC

24. Least cariogenic sugar is
   (a) fructose
   (b) glucose
   (c) sucrose
   (d) xyitol

25. Distal shoe space maintainer is mainly indicated to
   (a) guide eruption of premolars
   (b) guide eruption of mandibular 1st molar
   (c) prevent space closure in maxillary premolar area
   (d) None of the above

26. Treatment of U/L crossbite in a 5-year-old child is done
   (a) as early as possible
   (b) after eruption of molars
   (c) after all deciduous teeth are shed
   (d) No treatment required

27. Maxilla develops by
   (a) endochondral bone formation
   (b) intramembranous bone formation
   (c) cartilage replacement and intramembranous bone formation
   (d) mostly cartilage replacement and a little by intramembranous bone formation

28. In Scammon's growth curve, Palae is
   (a) neural tissues—most of the growth is completed by 6 years
   (b) lymphoid tissues—growth reaches 200% by the age of 13 years and regresses afterwards
   (c) genital tissues—most of the growth is completed by the age of puberty
   (d) None of the above
29. The cranial vault increases rapidly postnataally. By the age of six years what % of cranial growth is completed?
   (a) 60%
   (b) 80%
   (c) 90%
   (d) 100%

30. Earlier closure of a suture is called
   (a) synchondrosis
   (b) synostosis
   (c) synchondrosis
   (d) epiphyysis

31. Development of face occurs in the following planes
   (a) transverse, sagittal, vertical
   (b) transverse, sagittal, vertical
   (c) sagittal, vertical, transverse
   (d) vertical, transverse, sagittal

32. Father of modern orthodontics is
   (a) Dewey
   (b) Angle
   (c) Andrew
   (d) Clark

33. The 'ugly duckling' stage of the transitional dentition is characterized by all of the following, except
   (a) deep overbit
   (b) distoangular axial inclination of the maxillary incisors
   (c) mandibular lateral incisors erupting lingual to the mandibular central incisors
   (d) possible overjet

34. Intercanine width is increased with
   (a) eruption of lateral incisors
   (b) eruption of permanent canines
   (c) eruption of premolars
   (d) eruption of peg laterals

35. After mixed dentition stage, the arch length from 1st molar to 1st molar usually
   (a) remains same
   (b) increases
   (c) decreases
   (d) doubles

36. The most common local cause of malocclusion is
   (a) premature exfoliation of deciduous maxillary central incisors
   (b) prolonged retention of primary teeth
   (c) ankylosis of permanent teeth
   (d) impaction of permanent teeth

37. Which one of the following has maximum familial tendency?
   (a) Protruded maxillary incisors
   (b) Open bite
   (c) Deep bite
   (d) Upper and lower crossbite

38. A child is brought to the clinic with complaint of irregular teeth. The maxillary central incisor is rotated in an otherwise normal occlusion. What should be the next step?
   (a) Check for supernumerary teeth
   (b) Resection of supracrestal fibres
   (c) Exarting a couple on tooth
   (d) Fixed orthodontic appliances are to be given
39. Blanch test is used in diagnosis of
   (a) abnormal frenal attachments
   (b) pseudo class III
   (c) tongue thrusting
   (d) thumb sucking

40. Xeroradiography was invented by
    (a) Chester F. Carlson in 1937
    (b) Simon
    (c) Hudson Kempula and Dickson in 1957
    (d) Hofrath and Broad Bent in 1934

41. In which one of the following mixed dentition analysis of deciduous dentition, there is no use of radiographs?
    (a) Carey’s analysis
    (b) Moyer’s analysis
    (c) Nance Carey’s analysis
    (d) Pont’s index

42. Four dentists did study model analysis by Johnson and Tanaka, Moyer, Stanley and Kerber, and Wits. Which one will give the best results?
    (a) Johnson and Tanaka
    (b) Moyer
    (c) Stanley and Kerber
    (d) Wits

43. The face that is long and narrow is said to be
    (a) mesoprosopic
    (b) leptoprosopic
    (c) euryprosopic
    (d) brachyprosopic

44. In orthodontic treatment, rapid tooth movement will cause all, except
    (a) devitalisation of teeth
    (b) resorption of roots
    (c) diffusing calcification of pulp
    (d) ankylosis

45. Which of the following enzymes decreases the orthodontic movement?
    (a) Cyclooxygenase
    (b) Metalloprotein
    (c) Alkaline phosphatase
    (d) Protein kinase

46. Frontal resorption is caused due to
    (a) light continuous force
    (b) heavy continuous force
    (c) heavy interrupted force
    (d) light interrupted force
47. Palatal secretions affect the setting of all the impression materials, except (a) silicone  
   (b) agar-agar  
   (c) impression paste  
   (d) impression plaster

48. Incorporation of peripheral seal in an impression is necessary to obtain (a) stability  
   (b) functionally moulded periphery  
   (c) harmonious occlusion  
   (d) posterior palatal seal

49. When making complete denture, the occlusal plane should be parallel to the (a) Frankfort horizontal plane only  
   (b) interpupillary line only  
   (c) Camper's plane only  
   (d) Camper's plane and interpupillary line

50. In centric occlusion, the cusp tip of the maxillary canine is in alignment with which mandibular tooth? (a) Facial embrasure of canine and premolar  
   (b) Incisal embrasure of canine and premolar  
   (c) Distal ridge of the cusp of mandibular canine  
   (d) Mesial ridge on the facial cusp of mandibular first premolar

51. When establishing balanced occlusion, lingual cusps of maxillary posterior teeth on the nonworking side should contact (a) the facial incline of the lingual cusp of mandibular posterior teeth  
   (b) the lingual incline of the lingual cusp of mandibular posterior teeth  
   (c) the lingual incline of the facial cusp of mandibular posterior teeth  
   (d) the central fossa of mandibular posterior teeth

52. The finished edge used in anterior metal ceramic jacket crown is (a) facially shoulder, lingually featheredge  
   (b) facially shoulder, lingually shoulder  
   (c) facially shoulder with bevel, lingually chamfer  
   (d) facially shoulder, lingually chamfer

53. 'Lost salt technique' is used to fabricate (a) Maryland bridge  
   (b) Rochette bridge  
   (c) Caulliflower bridge  
   (d) Virginia bridge

54. The mean denture-bearing area in the edentulous mandible is approximately (a) 12.25 cm² (14 cm²)  
   (b) 16.25 cm²  
   (c) 18.12 cm²  
   (d) 20.25 cm²
55. Vomiting during impression-making procedures may be prevented by
(a) sedating the patient
(b) injecting local anaesthetic
(c) asking patient to come empty stomach
(d) changing the impression material

56. Muscle which has influence in the formation of buccal frenum of maxilla is
(a) levator anguli oris
(b) quadratus labii superioris
(c) triangularis
(d) inferioris

57. Incorporation of peripheral seal in an impression is necessary to obtain
(a) stability
(b) functionally moulded periphery
(c) harmonious occlusion
(d) posterior palatal seal

58. In determining the posterior limit of a maxillary denture base, which of the following is on the posterior border?
(a) Hamular notch
(b) Hamular process
(c) Fovea palatine
(d) Vibrating line

59. Patient has difficulty in swallowing as a CD wearer. The most probable cause is:
(a) decreased vertical dimension
(b) increased vertical dimension
(c) thickness of flange
(d) decreased retention

60. The width of the central incisor as compared to the bizygomatic width is
(a) 1:13
(b) 1:14
(c) 1:15
(d) 1:16

61. Discrepancies in the occlusion of a denture can be clearly detected from
(a) observation of the denture in the mouth
(b) masticatory efficiency
(c) clicking sounds at temporo-mandibular joint
(d) remounting procedure of the denture

62. The cuspal inclines of the maxillary buccal cusps and the mandibular lingual cusps should be grounded if they are in defective occlusion in contact in
(a) working position only
(b) balancing position only
(c) both working and balancing positions
(d) central position

63. Will's gauge is used to measure
(a) vertical height
(b) bizygomatic width
(c) intercondylar distance
(d) interpapillary width
64. Lateral shift (Bennett movement) influences
(a) faciolingual position of teeth
(b) mesiodistal position of teeth
(c) Both of the above
(d) None of the above.

65. In complete denture setting, for better aesthetics, the maxillary anteriors are set
(a) parallel to the middle of the face profile
(b) parallel to the profile of the lower of the face
(c) Skeletal profile has no role in aesthetic teeth setting
(d) parallel to the inner canthus (angle of the mouth line)

66. When the height and taper of the preparation are same, which of the following provides better resistance?
(a) Large diameter molar
(b) Small diameter molar
(c) Large diameter premolar
(d) Small diameter premolar

67. Ante's law concerns the
(a) degree of tipping allowable in an abutment tooth
(b) amount of curvature acceptable in the plane of occlusion
(c) amount of increase in retentive factor with a full crown versus a three
(d) None of the above

68. The finish line used in complete metal cast crown is
(a) chamfer
(b) chamfer with bevel
(c) featheredge
(d) shoulder

69. The walls of full gold crown preparation
(a) should be parallel
(b) should have angle of convergence 5°
(c) should have angle of divergence 5°
(d) should be roughened to increase retention

70. A pontic as compared to a missing posterior tooth should be
(a) of same dimensions as that of natural teeth
(b) of same dimensions mesiodistally but less faciolingually
(c) of same dimensions faciolingually but less mesiodistally
(d) larger than natural tooth, to exert same forces of mastication

71. Pontic should be
(a) convex buccolingually
(b) convex mesiodistally
(c) convex buccolingually and concave mesiodistally
(d) concave mesiodistally
72. If the keyway of the nonrigid connector is placed on the distal side of the pier abutment:
(a) occlusal forces will seat the key into keyway
(b) occlusal forces will unseat the key from keyway
(c) occlusal forces have no effect
(d) the effect will be variable

73. The most common cause of failure of fixed partial dentures is:
(a) caries on abutment
(b) periapical lesion
(c) retained root
(d) wearing of the pontic

74. Kennedy’s classification that is more suitable for an internal attachment is:
(a) class 1
(b) class 2
(c) class 3
(d) class 4

75. The primary area of support for the lower RPD is the:
(a) crest of the ridge
(b) buccal shelf region
(c) lingual slopes of the residual ridge
(d) Both (b) and (c)

76. The advantage of wide palatal bar over narrow bar is:
(a) less discomfort
(b) less bulk
(c) more tough
(d) more tissue coverage (area of basal seat)

77. When removing a rubber dam, the first step is to:
(a) remove the clamp
(b) release the holder
(c) apply a water-soluble lubricant
(d) cut the interseptal rubber with scissors

78. For class V cavity for amalgam:
(a) mesiodistal walls are parallel and occlusogingival walls are converging
(b) mesiodistal walls are diverging and occlusogingival walls are converging
(c) mesiodistal walls are diverging and occlusogingival walls are diverging
(d) mesiodistal walls and occlusogingival walls are parallel

79. Caries detection dye stains the following, except:
(a) granular necrotic tissue
(b) dry leathery dentin
(c) reversibly denatured collagen
(d) irreversibly denatured collagen

80. Which is the recommended force for condensation of dental amalgam?
(a) 35 lb
(b) 3 lb
(c) 15 lb
(d) 25 lb
81. The particle size in microfilled composite is
   (a) 0.02 mm to 0.04 mm
   (b) 0.05 micron to 1.0 micron
   (c) 0.01 micron to 0.1 micron
   (d) 0.3 mm to 0.4 mm

82. The ideal ratio of pin-in-pin restoration between dentin and exposed surface of pin is
   (a) 3 : 1
   (b) 2 : 1
   (c) 1 : 1
   (d) 1 : 2

83. What % of lower 1st molar shows two distal canals?
   (a) 10%
   (b) 30%
   (c) 60%
   (d) 75%

84. The root canals most likely to share a common apical opening are
   (a) mesial and distal roots of mandibular premolars
   (b) mesinbuccal and mesiolingual roots of mandibular 1st molar
   (c) Both (a) and (b)
   (d) None of the above

85. The ICRI paste is composed of
   (a) iodoform, camphor, parachlorophenol and menthol
   (b) iodoform and ZOE
   (c) parachlorophenol, camphor and menthol
   (d) calcium hydroxide and iodoform

86. The retention for class 5 restoration are placed
   (a) in mesial and distal areas
   (b) in occlusal and gingival areas
   (c) in all except the axial wall
   (d) at the expense of axial wall

87. The reason for sealing caries during cavity preparation is
   (a) to eliminate the need for eventual direct pulp capping
   (b) to produce an aseptic field when pulp exposure is inevitable
   (c) to allow the formation of secondary dentin before excavation
   (d) to produce a hard surface as a foundation for subsequent restoration

88. The function of proximal grooves in a class II cavity is
   (a) resistance form
   (b) retention form
   (c) increased strength
   (d) resistance and retention form

89. Which of the following cements is most kind to pulp?
   (a) Glass ionomer
   (b) Polycarboxylate
   (c) Silicate
   (d) Resin cement

90. Admixed high copper alloy powder contains
   (a) 9%-20% copper
   (b) 13%-20% copper
   (c) 9%-30% copper
   (d) 13%-30% copper
91. Creep rate decreases with
(a) increase of force of condensation
(b) decrease of force of condensation
(c) under- or overtrituration
(d) delay in time between trituration and condensation

92. The light from the UV light curing unit can cause
(a) iritis
(b) cataract
(c) retinal damage
(d) corneal ulceration

93. The etching of intact enamel with phosphoric acid produces
(a) an increase in surface area
(b) a decrease in surface area
(c) an increase in chemical bonding capabilities
(d) a decrease in chemical bonding capabilities

94. Increased size of filler particle in composite
(a) increases strength
(b) decreases surface roughness
(c) increases exposure time
(d) decreases viscosity

95. The advantages of light-activated composite resins are
(a) extended working time
(b) reduced resistance to wear or abrasion
(c) better resistance to wear or abrasion
(d) All of the above

96. The major constituent in composite is
(a) Bis-GMA and UDMA
(b) glycol and glycidine
(c) GIC and silica(e)
(d) zinc oxide

97. Which lasers can be used to cure composite resins?
(a) Argon
(b) Nd:YAG
(c) Er:YAG
(d) CO₂

98. Medical condition contraindicated for endodontic therapy is
(a) rheumatic heart disease
(b) patient with pacemaker
(c) controlled diabetes
(d) None of the above

99. The temperature of glass bead steriliser is
(a) 425 °F-475 °F for 5 secs
(b) 475 °F-525 °F for 5 secs
(c) 425 °F-475 °F for 10 secs
(d) 425 °F-525 °F for 10 secs

100. In an endodontically treated tooth
(a) resorption is more as compared to a normal tooth
(b) resorption is less
(c) resorption is same
(d) resorption is more after 2 years