

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF GRADE-III OF MIZORAM HEALTH SERVICE (DENTAL SURGEON SUB-CADRE) UNDER HEALTH & FAMILY WELFARE DEPARTMENT, GOVERNMENT OF MIZORAM. OCTOBER, 2022

TECHNICAL SUBJECT PAPER - I

Time Allowed : 2 hours

Full Marks : 200

*All questions carry equal marks of 2 each.
Attempt all questions.*

1. Numbness of lip seen with no previous dental treatment.
 - (a) Meta static Carcinoma
 - (b) Central nervous system lesion
 - (c) Osteomyelitis
 - (d) Infection
2. Which of the following is the most common site for the occurrence of a basal cell carcinoma?
 - (a) Buccal mucosa
 - (b) Hard palate
 - (c) Skin of the lower lip
 - (d) Dorsum of tongue
3. Which of the following conditions is not considered as premalignant?
 - (a) Syphilitic glossitis
 - (b) Leukoedema
 - (c) Erosive lichen planus
 - (d) Leukoplakia
4. 'Warty' or 'cauliflower' like growth is
 - (a) Torus
 - (b) Fibroma
 - (c) Lipoma
 - (d) Papilloma
5. On stretching the cheek the lesion disappears in
 - (a) Leukoplakia
 - (b) Focal hyperkeratosis
 - (c) Leukoedema
 - (d) Typhoid
6. The most common precancerous lesion for oral malignancy is
 - (a) Chronic hypertrophic candidiasis
 - (b) Leukoplakia
 - (c) Dental ulcers
 - (d) Atropic glossitis
7. During oral examination of a 57 years old man, a large keratotic patch that covers the entire palate is noted. Some 'Red spots' are also seen in the patch. The patient most likely is a
 - (a) Pipe smoker
 - (b) Cigar smoker
 - (c) Snuff chewer
 - (d) Tobacco chewer
8. Oral hairy leukoplakia is seen in which of the following conditions?
 - (a) Hepatitis B
 - (b) Smoker's keratitis
 - (c) Candidiasis
 - (d) AIDS
9. The oral mucosa becomes rigid, blanched and opaque in which of the following conditions?
 - (a) Submucous fibrosis
 - (b) Lupus erythematosus
 - (c) Pemphigus vulgaris
 - (d) Ehlers-Dantos syndrome
10. Leukoplakia with the worst prognosis is seen on the
 - (a) Dorsum of tongue
 - (b) Buccal mucosa
 - (c) Palate
 - (d) Floor of mouth

11. Which of the following is not a feature of torus mandibularis?
 - (a) Common in mongoloids.
 - (b) Present on the lingual surface of the mandible below the mylohyoid line.
 - (c) Usually bilateral.
 - (d) May or may not associated with torus palatinus.
12. The most common bone cancer is
 - (a) Osteosarcoma
 - (b) Metastatic bone cancer
 - (c) Multiple myeloma
 - (d) Squamous cell carcinoma
13. Which of the following is benign in nature?
 - (a) Lymphoma
 - (b) Lymphangioma
 - (c) Melanoma
 - (d) Leukaemia
14. Commonest site of carcinoma of tongue
 - (a) Posterior one third
 - (b) Ventral surface
 - (c) Tip of tongue
 - (d) Lateral margin
15. Definitive diagnosis of oral cancer is made by
 - (a) Complete radiographic survey
 - (b) Biopsy
 - (c) Exfoliative cytology
 - (d) Pantograph
16. Which of the following is an oral precancer?
 - (a) Oral hairy leukoplakia
 - (b) White spongy naevus
 - (c) Leukemia
 - (d) Speckled leukoplakia
17. Localization of an object is done by
 - (a) Paralleling technique
 - (b) Bisecting angle technique
 - (c) Tube shift technique
 - (d) Occlusal technique
18. Quality of X-ray beam is governed by
 - (a) mAs
 - (b) Filament current
 - (c) KVp
 - (d) Length of the X-ray tube
19. Reducing the size of X-ray beam is achieved by
 - (a) Filtration
 - (b) Photo electric effect
 - (c) Bezold-brucke effect
 - (d) Collimation
20. 1st step in developing film is
 - (a) Stirring the solution
 - (b) Washing of film
 - (c) Dip in developer
 - (d) Dip in fixer
21. Yellowish-brown staining of the IOPA dental X-ray film is due to
 - (a) Drying away of the developer solution
 - (b) Increased exposure time
 - (c) Increased temperature of developer
 - (d) Immersion in fixer without washing
22. X-ray films are insensitive to which light?
 - (a) Yellow and red
 - (b) Red
 - (c) White
 - (d) Blue and green
23. The fastest dental film currently available has the speed rating of
 - (a) "D" speed
 - (b) "C" speed
 - (c) "F" speed
 - (d) "E" speed
24. For a full mouth examination; how many IOPA's are required for a child aged 8-9 years?
 - (a) 10
 - (b) 12
 - (c) 8
 - (d) 14

25. In a patient having dense bones, penetration is best achieved by
(a) Increase in mA (b) Increase in KVp
(c) Increased exposure time (d) Increased developing time
26. X-rays are a type of
(a) Atomic radiation (b) Ultrasonic radiation
(c) Electromagnetic radiation (d) Particulate radiation
27. In the Bisecting technique, the film is placed
(a) Parallel to the tooth (b) As close as possible
(c) Parallel to the bisector (d) Perpendicular to the bisector
28. The operator should stand at a distance of _____ while taking-rays?
(a) 6 feet (b) 8 feet
(c) 10 feet (d) 3 meters
29. Which of the following is best method for radiation protection of the operator?
(a) Standing behind a lead barrier
(b) Wearing of lead apron
(c) Following the "position and distance" rule
(d) Standing 6-feet away from the Xray tube during exposure
30. Which of the following confirmed values meet the diagnostic threshold for diabetes?
(a) Fasting blood glucose \geq 140 mg/dl (b) Random glucose $>$ 160 mg/dl
(c) 2 hour post prandial glucose \geq to 126 mg/dl (d) Fasting blood glucose \geq 126 mg/dl
31. The vitamin essential for blood clotting is
(a) Vitamin A (b) Vitamin B
(c) Vitamin K (d) Vitamin C
32. The haemoglobin pigment delivers oxygen to the _____ of the body.
(a) Bones (b) Tissues
(c) Red blood cells (d) Nails
33. In a sample of blood, doctors look for which of these elevated levels to confirm Hepatitis?
(a) Interferons (b) Calcium
(c) Liver enzymes (d) White blood cells
34. Difference between systolic BP and diastolic BP is called?
(a) Pulse deficit (b) Pulse pressure
(c) Mean arterial pressure (d) Arterial pressure
35. If blood pressure cuff is too narrow or wrapped too loosely, the blood pressure is
(a) Difficult to hear because sound will be muffled (b) Falsely low
(c) Falsely high (d) Normal bp
36. The most important cell which contributes to the severity of periodontal disease is
(a) Lymphocyte (b) Neutrophil
(c) Mast cell (d) Plasma cell
37. Which of the following is the common factor for the initiation of both dental caries and periodontal disease?
(a) Bacterial plaque (b) Lactic acid
(c) Calculus (d) No common factor
38. Sub-gingival scaling alters the microflora of periodontal pocket
(a) Never gets altered (b) Aerobes only
(c) Gets altered (d) Anaerobes only

39. Severe alveolar bone loss, as observed in juvenile periodontitis is associated with:-
(a) Cyclic neutropenia
(b) Lysis of neutrophils
(c) Increased phagocytosis
(d) Neutrophil chemotactic defects or impaired neutrophil chemotaxis
40. The gingival crevicular fluid is increased in all except
(a) Gingivitis
(b) Smoking
(c) Periodontal pocket
(d) Trauma from occlusion
41. The primary etiologic factor in the development of furcation defect is-
(a) Calculus
(b) Plaque
(c) Cemental caries
(d) Root infection
42. In periodontal disease, ground substance is dissolved by
(a) Hyaluronidase
(b) Coagulase
(c) Phosphorylase
(d) Acid phosphatase
43. Periodontitis is caused by
(a) Malnutrition
(b) Supragingival plaque
(c) Bio-film
(d) Faulty tooth brushing
44. Earliest clinical sign of gingivitis is
(a) Bleeding on probing
(b) Change in colour
(c) Change in contour
(d) Change in size
45. Clinical signs of gingivitis appear in
(a) Initial gingivitis
(b) Early gingivitis
(c) Late gingivitis
(d) Advanced gingivitis
46. Gingival abscess involves
(a) Marginal
(b) Attached
(c) Interdental
(d) Marginal and interdental
47. Which of the following drugs is associated with gingival hyperplasia?
(a) Dihydropyridines
(b) Tetracyclines
(c) Cyclosporin
(d) Metronidazole
48. Dilantin hyperplasia is treated with
(a) Gingivectomy
(b) Gingivoplasty
(c) Apically repositioned flap
(d) Curettage
49. Gingival enlargement with leathery consistency with characteristic minutely pebbled surface is seen in
(a) Idiopathic gingival enlargement
(b) Drug induced gingival enlargement
(c) Pregnancy gingival enlargement
(d) Puberty gingival enlargement
50. Mouthwash used in ANUG is
(a) Chlorhexidine
(b) Normal saline
(c) Hydrogen peroxide
(d) Stannous fluoride
51. Most common cause of chronic inflammation of the gingiva in a preschool child
(a) Acute necrotising gingivostomatitis
(b) Acute necrotising gingivitis
(c) Aphthous stomatitis
(d) Vitamin deficiency
52. What is the difference between gingivitis and periodontitis?
(a) Gingival sulcus
(b) Periodontal pocket
(c) Loss of epithelial attachment
(d) Mobility of tooth

53. The treatment for acute periodontal abscess is
- (a) Incision and drainage followed by flap surgery after the symptoms subside
 - (b) The drainage of abscess through incision only
 - (c) Incision should not be given through ultrasonic tip
 - (d) Incision should be given only external level
54. Pulp chamber and root canals in deciduous teeth
- (a) Wide and deep
 - (b) Shallow and narrow
 - (c) Wide and narrow
 - (d) Shallow and wide
55. The pulp of first primary molar contains
- (a) Four pulp horn and three root canal
 - (b) Three pulp horn and three root canal
 - (c) Two pulp horn and two root canal
 - (d) Two pulp horn and three root canal
56. Which of the premolars is usually the smallest
- (a) Maxillary first
 - (b) Mandibular first
 - (c) Maxillary second
 - (d) Mandibular second
57. The shortest root on a maxillary first molar is
- (a) Mesio-buccal
 - (b) Disto-buccal
 - (c) Lingual
 - (d) All are of equal length
58. In a comparison to maxillary central incisor, maxillary canine has a height of contour that is
- (a) More
 - (b) Less
 - (c) Same
 - (d) Different on different tooth
59. On which of the following permanent teeth is it most difficult to distinguish between mesial and distal aspects?
- (a) Maxillary central incisor
 - (b) Mandibular central incisor
 - (c) Mandibular lateral incisor
 - (d) Mandibular second premolar
60. Tooth with most variable occlusal anatomy
- (a) Maxillary third molar
 - (b) Mandibular third molar
 - (c) Maxillary second premolar
 - (d) Mandibular second premolar
61. Which cusp is poorly developed in a permanent maxillary second molar
- (a) DB
 - (b) DL
 - (c) MB
 - (d) ML
62. Cervical cross section of maxillary first premolar is
- (a) Dumbbell
 - (b) Kidney shape
 - (c) Elliptical
 - (d) Oval
63. The maxillary tooth exhibiting the greatest variation in root alignment is
- (a) Central incisor
 - (b) First premolar
 - (c) Third molar
 - (d) Second molar
64. Average of length of maxillary cuspid is
- (a) 26mm
 - (b) 33mm
 - (c) 21mm
 - (d) 18mm
65. Crown formation of all permanent teeth except third molars is completed between
- (a) Birth to 8 years
 - (b) Birth to 12 years
 - (c) Birth to 6 years
 - (d) 6 years to 12 years
66. Following eruption, the root of the maxillary central incisor completes development at what approximate age?
- (a) 7 years
 - (b) 8 years
 - (c) 9 years
 - (d) 10 years

67. Cusp of carabelli is present on
(a) Permanent maxillary 1st molar (b) Permanent mandibular 1st molar
(c) Permanent maxillary 2nd molar (d) Permanent mandibular 2nd molar
68. Which of the following grooves separate cusp ridges from marginal ridges?
(a) Supplemental (b) Developmental
(c) Mesio marginal developmental (d) Marginal ridge developmental
69. Minimum number of lobes required for tooth formation?
(a) 5 lobes (b) 2 lobes
(c) 3 lobes (d) 4 lobes
70. The ridge that descends from the cuspal tip towards the central part of the occlusal surface in a maxillary molar is
(a) Triangular ridge (b) Marginal ridge
(c) Transverse ridge (d) Oblique ridge
71. A developmental disturbance in the enamel of mandibular first molar crown usually occurs between which of the following ages?
(a) 8 months prenatal to one year postnatal (b) Birth to 3 years postnatal
(c) 3 years postnatal to 5 years postnatal (d) 6 years postnatal to 8 years postnatal
72. A patient with maxillofacial injuries should be carried in
(a) Supine position (b) Lateral position
(c) Prone position (d) Sitting position
73. A patient with maxillofacial injuries should be carried in a supine position only when there is
(a) Spinal, cervical injury (b) Bilateral parasymphysis fracture
(c) Unconsciousness (d) Excessive mobility of fractured maxilla
74. Immediate management of nasal bleed in facial injuries is
(a) Reduction of nasal bones manually (b) Paraffin gauze packing
(c) Positioning of patient in supine position (d) Positioning the patient in prone position
75. Glasgow coma scale is used
(a) To ascertain motor responsiveness (b) Verbal responsiveness
(c) Eye response (d) To ascertain level of consciousness
76. The method commonly used to differentiate nasal discharge from CSF in fracture of middle third of face
(a) Examining level of glucose (b) Examining level of chlorides
(c) Drying the discharge on a piece of cloth (d) Examining the level of protein
77. Placing a nasal pack during nasal bleeding and CSF leak carry the danger of
(a) Fracture of ethmoidal plates (b) Redirecting the CSF to oropharynx
(c) Meningitis (d) Redirecting CSF to orbit
78. A patient with maxillofacial injury complains of regurgitation, absence of gag reflex and weakening of voice, he may have
(a) Laryngeal trauma (b) Injury to middle cranial fossa
(c) These symptoms are due to acute pain (d) Paralysis of IX N
79. The crystalloid which should be given first after maxillofacial trauma
(a) Normal saline (b) 5% dextrose
(c) Ringer's lactate (d) 10% dextrose

- 80.** Hypovolemic shock develops after loss of
(a) 10% blood (b) 20% blood
(c) 30% blood (d) 40% blood
- 81.** Failure of primary suturing occurs in facial wounds when
(a) Fine silk has not been used (b) Catgut has been used
(c) Dead space develops (d) Continuous suturing is done
- 82.** Diplopia would result if fracture line around zygomatico-frontal suture passes
(a) Below the Whitnall's tubercle
(b) Above the Whitnall's tubercle
(c) Through zygomatico-frontal suture
(d) Tearing the periosteum of orbital surface of zygomatic bone
- 83.** In Le Fort I fracture infraorbital rim is
(a) Bilaterally involved (b) Not involved
(c) Involved medially (d) May or may not be involved
- 84.** On palpation there is a step at bilateral infraorbital margins and mobility of midface is detectable at nasal bridge a possible diagnosis would be fracture
(a) Le Fort I (b) Le Fort II
(c) Le Fort III (d) Le Fort III and II
- 85.** A patient presents with open bite on left side and with tenderness at nasal bones, it could be fracture
(a) Unilateral Le Fort I on right side
(b) Subcondylar on left side and zygoma on right side
(c) Le Fort II on right side
(d) Zygoma on right side and subcondylar on right side
- 86.** A patient with bilateral subcondylar fracture present with
(a) Anterior open bite (b) Inability of open mouth
(c) On opening mandible moves forward (d) Closed bite
- 87.** The term vertical in 'vertical favourable' fractures connotes
(a) The fracture line running in vertical direction
(b) The displacement of fracture is in vertical plane
(c) The direction of view of the observer is in vertical direction
(d) Fracture can be reduced vertically
- 88.** Best radiograph for fractures of middle third of face
(a) Submentovertex (b) Reverse Towne's view
(c) OPG (d) Occipitomental view
- 89.** While doing circum-mandibular wiring there are chances of injuring
(a) Facial nerve (b) Facial artery & vein
(c) Epiglottis (d) Lingual nerve
- 90.** If fracture angle result following extraction of mandibular impacted 3rd molar the immediate treatment should be
(a) IMF only
(b) Bone plating under GA
(c) Transosseous wiring at the lower border and IMF
(d) Superior border trans-osseous wiring and IMF

91. While removing mandibular 3rd molar which part of bone should be used as a fulcrum
(a) Lingual cortical bone (b) Mesial inter-radicular bone
(c) Buccal alveolar bone (d) Distal surface of adjacent crown
92. 'White line' described by George Winter is a line drawn
(a) Along occlusal surfaces of erupted mandibular molars extending to impacted third molar region
(b) From crest of bone lying distal to third molar to crest of the interdental septum between 1st and 2nd molar
(c) From perpendicular to 'amber line'
(d) From perpendicular to 'red line'
93. If in a mesioangular mandibular impaction there is 'apical notch' visible on a radiograph the tooth should
(a) Not be removed (b) Be removed by lingual split technique
(c) Be removed by splitting the tooth (d) Remove only crown and left root portion behind
94. Lateral trepanation technique of Bowdler Henry is indicated for
(a) Extraction of impacted canines
(b) Removal of impacted premolars
(c) Removal of partially formed unerupted third molars
(d) Treating dentigerous cysts with enclosed third molars
95. The chisel should be used with
(a) Bevel towards the bone which is to be saved
(b) Bevel towards the bone which is to be sacrificed
(c) Bevel direction is not important
(d) Flat surface parallel to direction of grains of bone
96. While making vertical incision for flap for mandibular third molar impaction are one can injure
(a) Buccal pad of fat (b) Branches of lingual nerve
(c) Branches of facial nerve (d) Branches of facial artery/vein
97. Dry socket commonly occurs after
(a) 24 hours (b) 2 days
(c) 3-4 days (d) 10-15 days
98. The complication of using air rotor at 30,000 Rpm for impacted molars is
(a) Necrosis of bone (b) Dehiscence
(c) Tissue laceration (d) Emphysema
99. The most important suture while closing Ward's incision for impacted mandibular third molar is
(a) Suturing of vertical limb
(b) Suturing of retromolar limb
(c) Suture of area immediately distal to 2nd molar
(d) Use of catgut suture material
100. In case of extraction of maxillary molars if maxillary tuberosity also fractures, the fractured bone:
(a) Should be removed
(b) Should be replaced and allowed to heal by secondary intention
(c) Should be replaced and retained by primary suturing of soft tissues
(d) Should be fixed by transosseous wiring or bone plating