



JAMMU AND KASHMIR PUBLIC SERVICE COMMISSION

RESHAM GHAR COLONY, BAKSHI NAGAR, JAMMU - 180001

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Subject: Written Examination for filling up of Gazetted Vacancies in Govt. Dental College, Srinagar and Indira Gandhi Government Dental College, Jammu in Health and Medical Education Department - Provisional Answer Key thereof.

Notification No. PSC/Exam/S/2024/64

Dated: 11.10.2024

In pursuance of Rule 10 (c) of the Jammu & Kashmir Public Service Commission (Conduct of Examination) Rules, 2022, as amended upto date, the Provisional Answer Key(s) of Question Papers pertaining to the Written Examination for the post(s) of **Lecturer in the disciplines of Conservative Dentistry & Endodontics, Pedodontics, Oral & Dental Pathology/Oral Pathology, Community Dentistry, Periodontics, Prosthodontics/Prosthodontics including Dental Material in Health and Medical Education Department, held on 11.10.2024**, is hereby notified for seeking objections from candidates.

Provisional Answer Key

(Conservative Dentistry & Endodontics)

Test Booklet Question No. (Series A)	
Q1	C
Q2	C
Q3	D
Q4	C
Q5	D
Q6	B
Q7	B
Q8	B
Q9	A
Q10	D
Q11	C

Test Booklet Question No. (Series A)	
Q12	A
Q13	C
Q14	C
Q15	A
Q16	D
Q17	B
Q18	D
Q19	B
Q20	A
Q21	A
Q22	A

Test Booklet Question No. (Series A)	
Q23	B
Q24	A
Q25	D
Q26	C
Q27	B
Q28	C
Q29	A
Q30	C
Q31	B
Q32	C
Q33	B

Test Booklet Question No. (Series A)	
Q34	C
Q35	D
Q36	C
Q37	A
Q38	C
Q39	A
Q40	B
Q41	A
Q42	C
Q43	B
Q44	B
Q45	D
Q46	D
Q47	A
Q48	B
Q49	B
Q50	C
Q51	B
Q52	B
Q53	A
Q54	C
Q55	B
Q56	D

Test Booklet Question No. (Series A)	
Q57	C
Q58	A
Q59	C
Q60	A
Q61	D
Q62	B
Q63	A
Q64	D
Q65	A
Q66	C
Q67	A
Q68	A
Q69	D
Q70	B
Q71	C
Q72	D
Q73	A
Q74	D
Q75	B
Q76	B
Q77	B
Q78	A
Q79	B

Test Booklet Question No. (Series A)	
Q80	C
Q81	B
Q82	A
Q83	D
Q84	C
Q85	D
Q86	D
Q87	A
Q88	B
Q89	C
Q90	B
Q91	D
Q92	A
Q93	B
Q94	A
Q95	B
Q96	B
Q97	C
Q98	C
Q99	D
Q100	D

Provisional Answer Key

(Pedodontics)

Test Booklet Question No. (Series A)	
Q1	C
Q2	C
Q3	A
Q4	B
Q5	B
Q6	D
Q7	B
Q8	D
Q9	D
Q10	A
Q11	B
Q12	B
Q13	B
Q14	B
Q15	D
Q16	C
Q17	B
Q18	A
Q19	C
Q20	A
Q21	D
Q22	A
Q23	C
Q24	C
Q25	A
Q26	A
Q27	D
Q28	D
Q29	A
Q30	A
Q31	D
Q32	A
Q33	B
Q34	B

Test Booklet Question No. (Series A)	
Q35	A
Q36	D
Q37	B
Q38	C
Q39	D
Q40	C
Q41	A
Q42	B
Q43	C
Q44	C
Q45	B
Q46	D
Q47	B
Q48	B
Q49	A
Q50	C
Q51	C
Q52	D
Q53	D
Q54	A
Q55	A
Q56	D
Q57	C
Q58	B
Q59	D
Q60	B
Q61	C
Q62	C
Q63	A
Q64	C
Q65	C
Q66	D
Q67	C
Q68	B

Test Booklet Question No. (Series A)	
Q69	D
Q70	A
Q71	A
Q72	D
Q73	D
Q74	C
Q75	C
Q76	D
Q77	B
Q78	A
Q79	C
Q80	C
Q81	C
Q82	A
Q83	C
Q84	B
Q85	C
Q86	A
Q87	C
Q88	B
Q89	B
Q90	C
Q91	A
Q92	D
Q93	C
Q94	D
Q95	B
Q96	B
Q97	B
Q98	B
Q99	B
Q100	A

Provisional Answer Key

(Oral & Dental Pathology/Oral Pathology)

Test Booklet Question No. (Series A)	
Q1	A
Q2	A
Q3	A
Q4	A
Q5	B
Q6	B
Q7	A
Q8	A
Q9	A
Q10	D
Q11	D
Q12	A
Q13	A
Q14	B
Q15	B
Q16	D
Q17	B
Q18	C
Q19	B
Q20	B
Q21	A
Q22	D
Q23	B
Q24	A
Q25	D
Q26	B
Q27	B
Q28	D
Q29	D
Q30	D
Q31	D
Q32	B
Q33	D
Q34	D

Test Booklet Question No. (Series A)	
Q35	C
Q36	D
Q37	A
Q38	B
Q39	B
Q40	D
Q41	A
Q42	C
Q43	A
Q44	C
Q45	A
Q46	A
Q47	C
Q48	B
Q49	D
Q50	B
Q51	D
Q52	D
Q53	B
Q54	C
Q55	C
Q56	A
Q57	C
Q58	B
Q59	C
Q60	C
Q61	C
Q62	C
Q63	A
Q64	C
Q65	A
Q66	A
Q67	D
Q68	B

Test Booklet Question No. (Series A)	
Q69	C
Q70	C
Q71	A
Q72	A
Q73	A
Q74	A
Q75	D
Q76	A
Q77	C
Q78	D
Q79	D
Q80	C
Q81	C
Q82	C
Q83	A
Q84	C
Q85	D
Q86	A
Q87	D
Q88	A
Q89	B
Q90	A
Q91	D
Q92	A
Q93	A
Q94	A
Q95	C
Q96	A
Q97	A
Q98	A
Q99	A
Q100	B

Provisional Answer Key
(Community Dentistry)

Test Booklet Question No. (Series A)	
Q1	A
Q2	A
Q3	A
Q4	A
Q5	A
Q6	A
Q7	A
Q8	B
Q9	A
Q10	B
Q11	B
Q12	C
Q13	A
Q14	A
Q15	D
Q16	C
Q17	B
Q18	D
Q19	B
Q20	C
Q21	B
Q22	C
Q23	A
Q24	A
Q25	D
Q26	A
Q27	A
Q28	A
Q29	D
Q30	C
Q31	A
Q32	B
Q33	D
Q34	A

Test Booklet Question No. (Series A)	
Q35	D
Q36	A
Q37	B
Q38	D
Q39	C
Q40	A
Q41	C
Q42	A
Q43	D
Q44	A
Q45	C
Q46	D
Q47	A
Q48	A
Q49	D
Q50	B
Q51	D
Q52	A
Q53	C
Q54	C
Q55	B
Q56	A
Q57	A
Q58	C
Q59	B
Q60	D
Q61	D
Q62	B
Q63	A
Q64	D
Q65	C
Q66	A
Q67	B
Q68	C

Test Booklet Question No. (Series A)	
Q69	B
Q70	A
Q71	D
Q72	B
Q73	B
Q74	D
Q75	A
Q76	D
Q77	C
Q78	C
Q79	D
Q80	A
Q81	A
Q82	A
Q83	B
Q84	B
Q85	B
Q86	D
Q87	B
Q88	B
Q89	C
Q90	C
Q91	B
Q92	A
Q93	B
Q94	C
Q95	B
Q96	C
Q97	C
Q98	A
Q99	A
Q100	A

Provisional Answer Key
(Periodontics)

Test Booklet Question No. (Series A)	
Q1	A
Q2	B
Q3	C
Q4	C
Q5	A
Q6	C
Q7	B
Q8	A
Q9	D
Q10	A
Q11	B
Q12	A
Q13	D
Q14	A
Q15	D
Q16	D
Q17	C
Q18	B
Q19	A
Q20	D
Q21	C
Q22	B
Q23	B
Q24	B
Q25	C
Q26	D
Q27	B
Q28	B
Q29	A
Q30	A
Q31	B
Q32	A
Q33	A
Q34	A

Test Booklet Question No. (Series A)	
Q35	C
Q36	A
Q37	C
Q38	A
Q39	D
Q40	C
Q41	D
Q42	D
Q43	B
Q44	C
Q45	A
Q46	B
Q47	A
Q48	A
Q49	A
Q50	D
Q51	B
Q52	A
Q53	B
Q54	A
Q55	A
Q56	D
Q57	A
Q58	D
Q59	B
Q60	A
Q61	A
Q62	B
Q63	B
Q64	C
Q65	B
Q66	C
Q67	D
Q68	D

Test Booklet Question No. (Series A)	
Q69	B
Q70	A
Q71	A
Q72	D
Q73	C
Q74	A
Q75	A
Q76	D
Q77	B
Q78	A
Q79	B
Q80	D
Q81	A
Q82	A
Q83	B
Q84	C
Q85	C
Q86	B
Q87	D
Q88	B
Q89	C
Q90	D
Q91	A
Q92	D
Q93	B
Q94	D
Q95	C
Q96	D
Q97	D
Q98	A
Q99	A
Q100	B

Provisional Answer Key

(Prosthodontics/Prosthodontics including Dental Material)

Test Booklet Question No. (Series A)	
Q1	D
Q2	D
Q3	C
Q4	A
Q5	B
Q6	D
Q7	C
Q8	D
Q9	A
Q10	C
Q11	C
Q12	D
Q13	A
Q14	B
Q15	D
Q16	B
Q17	D
Q18	C
Q19	A
Q20	D
Q21	D
Q22	C
Q23	D
Q24	C
Q25	A
Q26	C
Q27	B
Q28	D
Q29	D
Q30	A
Q31	C
Q32	A
Q33	A
Q34	A

Test Booklet Question No. (Series A)	
Q35	D
Q36	A
Q37	B
Q38	B
Q39	B
Q40	B
Q41	C
Q42	A
Q43	D
Q44	D
Q45	D
Q46	A
Q47	B
Q48	C
Q49	B
Q50	C
Q51	B
Q52	B
Q53	B
Q54	A
Q55	C
Q56	B
Q57	C
Q58	A
Q59	C
Q60	C
Q61	B
Q62	A
Q63	A
Q64	A
Q65	A
Q66	A
Q67	A
Q68	B

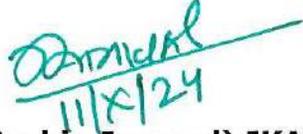
Test Booklet Question No. (Series A)	
Q69	D
Q70	A
Q71	B
Q72	D
Q73	B
Q74	C
Q75	A
Q76	A
Q77	A
Q78	A
Q79	B
Q80	A
Q81	A
Q82	C
Q83	A
Q84	A
Q85	D
Q86	D
Q87	A
Q88	B
Q89	D
Q90	A
Q91	A
Q92	C
Q93	B
Q94	A
Q95	B
Q96	A
Q97	B
Q98	D
Q99	B
Q100	A

The candidates are advised to refer to **Question Booklet (Series A)** to match the corresponding question(s) in their respective Question Booklet Series and if any candidate feels that the key to any of the question(s) is/are wrong, he/she may represent on prescribed format/proforma annexed as **Annexure-A** along with the documentary proof/evidence (**hard copies only**) and fee of Rs.500/- per question in the form of Demand Draft drawn in favour of **COE, J&K PSC** (refundable in case of genuine/correct representation) to the Controller of Examinations, Jammu & Kashmir Public Service Commission, from 14.10.2024 to 16.10.2024. **The candidates are further advised to clearly mention the question(s) objected to with reference to its serial number as it appears in the Question Booklet of Series A of the provisional answer key.**

Further, any objection/application not accompanied by the requisite Demand Draft of Rs.500/- as prescribed, shall not be considered/entertained under any circumstances. Candidates are, in their own interest, advised to adhere to these instructions and not submit any objection unaccompanied by the Demand Draft as required under extant rules.

The Commission shall not entertain any such representation(s) after the expiry of the stipulated period i.e. **after 16.10.2024 (Wednesday), 05.00 pm.**

The provisional answer key is available on the website of the Commission <http://www.jkpsc.nic.in>.


(Sachin Jamwal) JKAS,
Controller of Examinations
J&K Public Service Commission

No. PSC/Ex-Secy/2024/46

Dated: 11.10.2024

Copy to the: -

1. Director, Information and Public Relations, J&K for publication of the notice in all leading newspapers published from Jammu/Srinagar.
2. P.S. to Hon'ble Chairman, J&K Public Service Commission for information of the Hon'ble Chairman.
3. P.S. to Hon'ble Member, Shri _____ for information of the Hon'ble Member.
4. P. A. to Secretary, J&K Public Service Commission for information of the Secretary.
5. Main file/Stock file/Notice Board.

Annexure-A

Representation regarding objection(s) to any Question/Answer pertaining to the Written Test conducted for the post of Lecturer (Conservative Dentistry & Endodontics, Pedodontics, Oral & Dental Pathology/Oral Pathology, Community Dentistry, Periodontics, Prosthodontics/Prosthodontics including Dental Material) on 11.10.2024

(NOTE: USE SEPARATE FORMS FOR SEPARATE QUESTIONS)

Name of the Discipline : _____
Name of the Applicant : _____
Roll No. : _____
Correspondence Address : _____

Contact/Mobile No. : _____
Date of Application : _____ .10.2024
Demand Draft No. date & Amount : _____
Candidates Account No.(16 digit) & : _____
IFSC Code : _____

Question No. in Series A	Details of the Objection	Resource Material (copy to be enclosed)	Details of the Website (if any)

Correct Answer/Option as per candidate :

Signature of the Candidate

Note: Application for each question/answer shall be made on separate page in the given format, otherwise the first question entered in the format shall only be considered.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

Booklet Serial No. **240001**

Test Booklet Series

TEST BOOKLET
LECTURER CONSERVATIVE DENTISTRY
AND ENDODONTICS

A

Written Test - 2024
(61)

Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. *All* items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

(61) (A)/2024

[P.T.O.]

1. Consider the following statements:

Statement A: Root fractures mimic the appearance of a primary endodontic lesion with secondary periodontal involvement.

Statement B: It presents with local deepening of a periodontal pocket and acute periodontal abscess symptoms.

Which is correct Statement:

- A) Statement A is correct and Statement B is wrong
- B) Statement B is correct and Statement A is wrong
- C) Statement A and statement B both are correct
- D) Statement A and statement B both are wrong

2. The tissue dissolving ability of NaOCl irrigating solution is dependent on its

- i. Volume
- ii. pH
- iii. Concentration
- iv. Temperature

Choose the correct options :

- A) i & ii
- B) ii & iii
- C) iii & iv
- D) i & iv

3. The correct time for obturation is when which of the following requirement(s) are met

- i. The tooth is asymptomatic
- ii. There is no exudate from the canal
- iii. A negative bacterial culture is obtained
- iv. The temporary filling is intact

Choose the correct options :

- A) i & iii
- B) i & ii
- C) i, ii & iii
- D) i, ii & iv

4. In lateral condensation technique for obturation
- i. The prefitted master cone is soaked in alcohol and dried with a sterile gauze
 - ii. Entire length of the cone, that will contact dentin in root canal is coated with sealer
 - iii. Spreader is prefitted in the canal allowing its insertion to within 1-2 mm from working length
 - iv. Auxiliary cones are selected 2 sizes smaller than that of spreader

Choose the correct options :

- A) i & ii
 - B) i & iii
 - C) i, ii & iii
 - D) i, ii, iii & iv
5. Type III apical transportation is managed by
- A) Performing a thermoplasticized gutta percha obturation
 - B) Performing an MTA barrier technique
 - C) Performing a calcium hydroxide apexification
 - D) Performing a corrective surgery
6. Treatment of an exposed pulp by sealing the pulpal wound with a dental material directly on a mechanical or traumatic exposure to facilitate the formation of reparative dentin and maintenance of vital pulp. This definition best describes
- A) Indirect pulp capping
 - B) Direct pulp capping
 - C) Cvek's pulpotomy
 - D) Partial pulpotomy
7. The recommended hemostatic agent for use in vital pulp therapy procedure is
- A) Chlorhexidine solution
 - B) Sodium hypochlorite solution
 - C) Epinephrine
 - D) Hydrogen peroxide
8. The ideal thickness of MTA barrier in open apex teeth is
- A) 1-3 mm
 - B) 3-5 mm
 - C) 5-7mm
 - D) Depends on the length of the root

9. In endodontic infections, condition not requiring adjunctive antibiotic therapy is
- A) Localized fluctuant swelling
 - B) Cellulitis
 - C) Osteomyelitis
 - D) Trismus
10. A more favorable prognosis is expected in
- A) Furcal perforation
 - B) Coronal 1/3 root perforation
 - C) Middle 1/3 root perforation
 - D) Apical 1/3 root perforation
11. According to Fan et al classification for 'C' shaped canal, category IV represents
- A) Canal orifice shape resembling a semicolon
 - B) Two or more discrete and separate canals
 - C) A single, round or oval canal in the cross section
 - D) Where no canal lumen is observed near the root apex
12. Bulls eye or target is a radiographic feature of root dilaceration. It is observed when the root is dilacerated
- A) Labial
 - B) Mesial
 - C) Lingual
 - D) Distal
13. Which of the following have a similar developmental, morphological and histological characteristic of a talon's cusp
- A) Dens invaginatus
 - B) Dentoid in dento
 - C) Dens evaginatus
 - D) Dentoid in dente
14. Mineral trioxide barrier for management of permanent non vital immature teeth is recommended in
- A) Cveks stage II root development
 - B) Cveks stage III root development
 - C) Cveks stage IV root development
 - D) Cveks stage V root development

15. The shortcoming of apexification with long term calcium hydroxide include all *EXCEPT*
- A) Results in high incidence of vertical root fracture
 - B) Variability in the time required for open apices to close
 - C) Variability in the type of tissue deposited
 - D) Potential for coronal leakage and canal reinfection
16. The pH of mineral trioxide after mixing in a ratio of 3:1 is
- A) 6.5
 - B) 7.2
 - C) 9.2
 - D) 12.5
17. In the procedure of revascularization, the recommended final irrigant solution is
- A) 10% Citric acid
 - B) 17% EDTA
 - C) 1.5% Sodium hypochlorite
 - D) 3% Hydrogen peroxide
18. All of the following can be a source for coronal discoloration after revascularization procedure *EXCEPT*
- A) Use of triple antibiotic paste
 - B) Intracanal bleeding
 - C) Application of a bioactive material
 - D) Application of a dentine bonding agent
19. Which of the following is added to modify the toughness and carving characteristics of the dental wax?
- A) Gum dammar
 - B) Ceresin
 - C) Carnauba
 - D) Paraffin
20. The maximum flow of type I inlay casting wax at 37 °c should be
- A) 1 %
 - B) 4 %
 - C) 7%
 - D) 10%

21. Which type of porosity is more common with low heat as compared to high heat investment technique?
- A) Back pressure porosity
 - B) Localized shrinkage porosity
 - C) Pinhole porosity
 - D) Suck back porosity
22. The dominant color of an object is termed as:
- A) Hue
 - B) Chroma
 - C) Value
 - D) Opacity
23. Object that appears to be color-matched under one type of light may appear different under another type. This phenomenon is called
- A) Fluorescence
 - B) Metamerism
 - C) Translucency
 - D) Transparency
24. Complete wetting occurs when the contact angle is
- A) 0°
 - B) 60°
 - C) 90°
 - D) 180°
25. The minimum thickness of temporary restorative material required to reduce coronal leakage is
- A) 1.5 mm
 - B) 2 mm
 - C) 2.5 mm
 - D) 3.5 mm

26. The Obtura system heats the gutta-percha to
- A) 90°C
 - B) 120°C
 - C) 160°C
 - D) 180°C
27. The duration of pulpal anesthesia achieved for maxillary molar teeth with maxillary infiltrations of 2% lidocaine containing 1:1,00,000 epinephrine is
- A) 20 minutes
 - B) 45 minutes
 - C) 75 minutes
 - D) 90 minutes
28. For restoring a bleached tooth with an adhesive restoration, a minimum delay of how many days is considered mandatory?
- A) 1-2 days
 - B) 2-5 days
 - C) 7-14 days
 - D) 20-30 days
29. Pulp canal obliteration as a complication of traumatic dental injury is most likely to be observed in
- A) Immature extruded teeth
 - B) Mature intruded teeth
 - C) Mature extruded teeth
 - D) Immature intruded teeth
30. The onset of pulpal anesthesia for inferior alveolar nerve block usually occurs in
- A) 1-5 minutes
 - B) 5-10 minutes
 - C) 10-15 minutes
 - D) 15-20 minutes
31. A root fracture will normally be visible on an IOPA, only if the central beam of the x-ray unit, is directed within a maximum range of:
- A) 5-10° of the fracture plane
 - B) 15-20° of the fracture plane
 - C) 25-30° of the fracture plane
 - D) 35-40° of the fracture plane

32. At what pH does the enamel surface remain intact while the subsurface mineral is lost?
- A) 4.0
 - B) 4.5
 - C) 5.0
 - D) 5.5
33. The radiant exposure of the curing light required to cure a 2mm increment of composite resin is
- A) 10 J/cm²
 - B) 20 J/cm²
 - C) 30 J/cm²
 - D) 40 J/cm²
34. Photon-induced photoacoustic streaming (PIPS) uses which laser for activation of the irrigant?
- A) Diode
 - B) Nd:YAG
 - C) Er:YAG
 - D) CO₂
35. The cross sectional root anatomy of the maxillary central incisor is
- A) Circular
 - B) Round
 - C) Elliptical
 - D) Triangular
36. Consider the following statements:
- Statement A :** Referred pain is a sensation felt in a site innervated by a nerve different from the one innervating the area from which the pain originates.
- Statement B :** Pain referral commonly occurs in a laminated manner that reflects the order in which the nonceptors enters the spinal trigeminal tract
- A) Statement A is true Statement B is false
 - B) Statement A is false Statement B is true
 - C) Statement A is true Statement B is true
 - D) Statement A is false Statement B is false
37. All of the following are basic objectives in cleaning and shaping *EXCEPT*
- A) Reinforce the root
 - B) Remove infected soft and hard tissue
 - C) Give disinfecting irrigants access to the apical canal space
 - D) Create space for the delivery of medicaments and subsequent obturation

38. H- type files have a
- A) Negative rake angle
 - B) Neutral rake angle
 - C) Positive rake angle
 - D) Scraping angle
39. The splinting period for a reimplanted avulsed tooth is
- A) Two week
 - B) Three week
 - C) Four week
 - D) Five week
40. An injury to the tooth -supporting structures without abnormal loosening or displacement of the tooth but with marked reaction to percussion is
- A) Subluxation
 - B) Concussion
 - C) Extrusive luxation
 - D) Green stick fracture
41. Which of the following is the least desirable pattern of root fracture healing
- A) Interposition of granulation tissue
 - B) Interposition of bone and connective tissue
 - C) Interposition of connective tissue
 - D) Calcified tissue healing
42. All of the following are pulp sensibility test EXCEPT
- A) Cold test
 - B) Heat test
 - C) Laser doppler flowmetry test
 - D) Electric pulp test
43. Two separate canals leaving the pulp chamber and joining short of the apex to form one canal is Vertucci
- A) Type I
 - B) Type II
 - C) Type III
 - D) Type IV

44. With respect to EDTA, Consider the following statements.

1. As a chelating agent it has an ability to sequester di- and tricationic metal ions.
2. EDTA is mainly synthesized from 1,2-diaminoethane, methanal and sodium cyanide.
3. EDTA extracts bacterial surface proteins by combining with metal ions from the cell envelope, which can eventually lead to bacterial death
4. The antibacterial effect of EDTA is stronger than citric acid and 0.5% NaOCl

Choose the correct Options:

- A) Statement 1,2,3 and 4 are false
- B) Statement 1,2,3 and 4 are true
- C) Statement 2,4 are false and 1 and 3 true
- D) Statement 3,4 are false and 1 and 2 true

45. During retrieval of broken instrument which of the following statement is true

- A) For retrieval of a 3 mm broken instrument, the semi-circular space needs to be extended radicular about 2 mm on the inside curve to help the ultrasonic tip loosen it
- B) If coronal diameter of the separated instrument is smaller than 0.45 mm, a larger NiTi rotary instrument, two sizes larger than the coronal diameter of the separated instrument, should be used to enlarge the canal coronal to the separated instrument
- C) It is recommended that the ultrasonic tip be used in a clockwise direction to trough around the coronal aspect of a separated instrument
- D) During retrieval attempt with a loop device, the coronal portion of a separated instrument longer than 4.5 mm needs to be peripherally exposed by at least 0.7 mm

46. All statements pertaining to endodontic microbes associated with root canal treated teeth are correct *EXCEPT*:

- A) Resistance of *E. faecalis* to calcium hydroxide can be attributed to a functioning proton pump
- B) *Candida* species have been detected in up to 18% of the cases in root canal treated teeth
- C) Uncultivated phylotypes correspond to 55% of the tax detected in treated canals
- D) *E. faecalis* has been found to be more prevalent in root canal-treated teeth with lesions when compared with treated teeth with no periapical lesions.

47. Post endodontic pain in routine is best managed with
- A) Ibuprofen
 - B) Acetaminophen
 - C) Tramadol
 - D) Codeine
48. The critical level of root surface temperature required to produce irreversible bone damage is
- A) 15 °C
 - B) 10 °C
 - C) 7.5 °C
 - D) 5 °C
49. Which of the following is classified as longitudinal tooth fracture
- A) Cervical root fracture
 - B) Crown root fracture
 - C) Vertical root fracture
 - D) Ellis class III fracture
50. Which of the following is not a regenerative endodontic technique?
- A) Revascularization via blood clotting
 - B) Postnatal stem cell therapy
 - C) Apexogenesis
 - D) Pulp implantation

51. Which of these is NOT a phase of wound healing after micro endodontic surgery
- A) Inflammation
 - B) Differentiation
 - C) Proliferation
 - D) Maturation
52. According to the eighth report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 8), In patients with cardiovascular disease, EXCEPT those with severe cardiovascular disease or other specific risk factors, the safe dose of epinephrine is
- A) 0.018 to 0.036 mg
 - B) 0.036 to 0.054 mg
 - C) 0.054 to 0.064 mg
 - D) 0.064 to 0.080 mg
53. In surgery of the posterior mandible when a vertical releasing incision is indicated, it typically is made at the
- A) Mesial line angle of the mandibular canine
 - B) Distal line angle of the mandibular canine
 - C) Mesial line angle of the first premolar
 - D) Distal line angle of the first premolar
54. For a sulcular flap design, the vertical incision should join the horizontal incision lateral to the papilla at a
- A) 45-degree angle
 - B) 60-degree angle
 - C) 90-degree angle
 - D) 120-degree angle

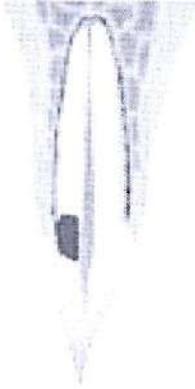
55. In micro endodontic surgery, the bur shape best suited for removing osseous tissue is
- A) Straight fissure
 - B) Round
 - C) Tapered fissure
 - D) Flame shaped
56. Which of these solutions has not been advocated for root surface modification:
- A) Citric acid
 - B) Tetracycline
 - C) Ethylenediaminetetraacetic acid (EDTA)
 - D) Polyglycolic acid
57. For root end preparation ultrasonic tips with a curvature are more susceptible to fracture if the curvature is greater than
- A) 50 degrees
 - B) 60 degrees
 - C) 70 degrees
 - D) 90 degrees
58. The apex of which root and tooth is closest to the floor of the maxillary sinus
- A) Mesio Buccal root of the maxillary second molar
 - B) Distobuccal root of the maxillary second molar
 - C) Mesio Buccal root of the maxillary first molar
 - D) Distobuccal root of the maxillary first molar
59. During palatal flap repositioning, surgical gauze slightly moistened with sterile saline should be applied with gentle but firm pressure for
- A) 1 minute
 - B) 3 minutes
 - C) 5 minutes
 - D) 7 minutes
60. All statements are true regarding orthograde retreatment of teeth EXCEPT
- A) Orthograde retreatment is not indicated for clinically asymptomatic teeth with inadequate obturation, no periapical radiolucency requiring replacement of deficient coronal restoration.
 - B) Orthograde retreatment is not indicated for clinically asymptomatic teeth with periapical lesion at 2 year follow up
 - C) Orthograde retreatment is not preferred over surgical intervention for clinically symptomatic teeth with complex post and crown restoration
 - D) Orthograde retreatment should be preferably performed prior to surgical correction for clinically symptomatic teeth with periapical radiolucency and inadequate coronal restoration.

61. All factors influence post removal EXCEPT
- A) Post type
 - B) Interocclusal space
 - C) Luting cement
 - D) Direct core restoration
62. All statements are true regarding ultrasonic disassembly of screw post EXCEPT
- A) A Start-X #3 or ProUltra #3 ultrasonic tip can be used to remove the luting cement around the screw post
 - B) Ultrasonic tip is rotated clockwise (CW) around the screw post to dislodge it.
 - C) In the case of an amalgam core, the high-speed bur should be moved from the periphery toward the location of the post so as to not damage
 - D) One- or two-minute breaks are recommended between ultrasonic sessions.
63. The Post Removal System is designed to remove post types with cross-sectional diameters of
- A) 0.60 mm
 - B) 1.80 mm
 - C) 2.0 mm
 - D) 0.50 mm
64. Which statement is false regarding the MB2 canal
- A) MB2 canal can be identified in over 75% of the cases without a microscope
 - B) MB2 canal can be identified in over 90% of the cases with a microscope
 - C) MB1-MB2 canal exhibit Vertucci's 2-1 configuration in 40% cases
 - D) MB1-MB2 canal exhibit Vertucci's 2-2 configuration in 30% of the cases
65. The most efficient method of GP removal from an inadequately obturated root canal system is
- A) Rotary instruments
 - B) Heat
 - C) Chemical method
 - D) H-file
66. Which statement is false regarding broken instrument removal
- A) If one-third of the overall length of an obstruction can be exposed, it can usually be removed.
 - B) Stainless steel instruments are easier to remove than Ni-Ti instruments
 - C) Ultrasonic instrument is placed in intimate contact against the obstruction and typically activated within the higher power settings
 - D) Titanium ultrasonic tips are preferred when trephining deeper within a canal

67. Correct sequence in management of blocked canal is
- A) Preshape short of block- back and forth reciprocating motion of precurved file- NaOCl irrigation-repeat three times
 - B) Preshape in contact with block- lubricate with glyde- NaOCl irrigation- back and forth reciprocating motion of precurved file
 - C) Preshape short of block- back and forth reciprocating motion of precurved file- NaOCl irrigation- obturate till block after 5 unsuccessful attempts
 - D) Preshape in contact with block- lubricate with glyde- back and forth reciprocating motion of precurved file- NaOCl irrigation - obturate till block after 5 unsuccessful attempts
68. Preferred barrier material for perforation repair with a adhesive material is
- A) Calcium sulfate
 - B) Colla cote
 - C) Super EBA
 - D) DFDB
69. All are minimally destructive coronal disassembly methods *EXCEPT*
- A) Metalift
 - B) WAMkeys
 - C) Kline crown remover
 - D) Coronaflex
70. After traumatic dental injuries, the initial radiographic signs of external inflammatory resorption can be seen as early as
- A) 1 to 2 weeks
 - B) 3 to 4 weeks
 - C) 5 to 6 weeks
 - D) 6 to 7 weeks

71. Which of the following statement is correct about internal root resorption
- Statement A:** Apical to the resorption, necrotic infected tissue is found in the root canal
- Statement B:** Without bacterial stimulation of the clastic cells, the resorption is self-limiting.
- A) Statement A is true B is false
B) Statement A and B are true
C) Statement A is false B is true
D) Statement A and B are false
72. Which of the following statement is false regarding the pericanalar resorption-resistant sheet (PRRS)
- A) It is a nonuniform layer/area with a thickness of 70 up to 490 μm
B) PRRS consists of dentine and occasionally bone-like tissue
C) In root filled teeth, there is no PRRS area due to its removal during the mechanical preparation
D) None of the above
73. External cervical resorption is most commonly detected in a
- A) Maxillary central incisor tooth
B) Maxillary lateral incisor tooth
C) Maxillary canine tooth
D) Mandibular first molar tooth
74. Which of the following is not a feature of external cervical root resorption
- A) Orthodontic treatment is the most common predisposing factor
B) In the initial stage, the outline of the canal wall will be visible and intact
C) Pinkish discoloration at cervical third of the tooth
D) ECR starts at the cementum coronal to the gingival epithelium
75. Decoronation is recommended in all of the following types of ECR EXCEPT
- A) 3-4Cp
B) 2-4Cp
C) 3-4Dp
D) 3-4Dd

76. External replacement resorption is most commonly associated with
- Extrusive luxation
 - Intrusive luxation
 - Lateral luxation
 - None of the above
77. Identify the Heithersay class of external cervical resorption



- Class 1
 - Class 2
 - Class 3
 - Class 4
78. Shiny, rounded margins on casting are indicative of
- Incomplete casting, reducing atmosphere of carbon monoxide left by residual wax.
 - Incomplete casting, oxidizing atmosphere of carbon dioxide left by residual wax.
 - Incomplete casting, reducing atmosphere of carbon dioxide left by residual wax.
 - Complete or incomplete casting, oxidizing atmosphere of carbon monoxide left by residual wax.
79. Consider the following statements.
- The wax pattern should be decreased in dimension from sprue end to other end.
 - The number of sprues to be used is dictated by size of pattern and not by pattern configuration.
 - The length of sprue is dictated by length of casting ring and spatial location of pattern within the ring.
 - Placement of sprue at 45° to pattern do not create the turbulence and avoid ingress of molten metal.
- Choose the correct statement or (s):**
- 2 and 3 are correct.
 - 1 and 3 are correct
 - Only 3 is correct
 - 2 and 4 are correct

80. Eliminate the odd one out:

- A) Suck back porosity is due to hotspot created by the molten metal impinging from the sprue channel on a point of mold wall.
- B) Hotspot causes the local region to solidify last.
- C) Suck-back porosity often occurs at an occluso axial or inciso axial line angle that is well rounded.
- D) Suck back porosity can be eliminated by flaring the sprue attachment and reducing the mold-melt temperature differential.

81. All of the following are causes for fins or spines EXCEPT

- A) Water film
- B) Compressive stresses on inner layer of investment
- C) Cracks in the investment
- D) Rapid heating of investment

82. Identify the correct match from the following

- | | |
|---------------------------------|---|
| 1) Back-pressure porosity | i) Usually seen in interior of crown near sprue |
| 2) Suck back porosity | ii) Inability of air to escape from mold |
| 3) Localized shrinkage porosity | iii) Absorption of gases by molten metal |
| 4) Rough casting | iv) High liquid: powder ratio |
| 5) Pinhole porosity | v) No reservoir |

Choose the correct option:

- A) 1-ii, 2-i, 3-v, 4-iv, 5-iii
- B) 1-iii, 2-v, 3-i, 4-iv, 5-ii
- C) 1-ii, 2-v, 3-i, 4-iii, 5-iv
- D) 1-iii, 2-i, 3-v, 4-iv, 5-ii

83. Identify the reason for surface irregularities on the cavity side of a casting in the given image



- A) Suck-back porosity
- B) Gas inclusion porosities
- C) Back pressure porosity
- D) Sub-surface porosity

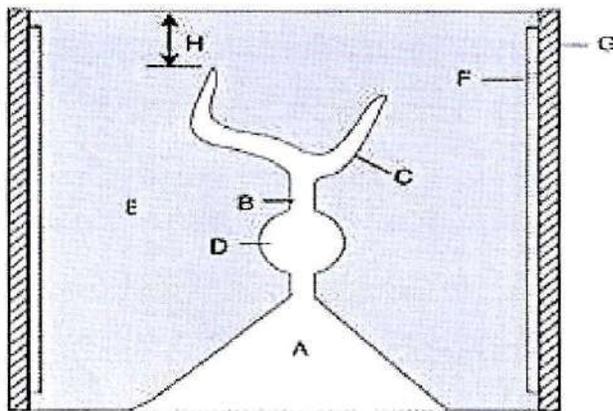
84. **Assertion (A):** Casting pressure required for phosphate investment is greater than that for a gypsum mold.

Reason (R): The permeability of the phosphate investment is low compared with that of a gypsum-bonded investment.

Choose the correct options:

- A) A is true, R is false
- B) A is false, R is true
- C) A and R is true, R is correct explanation of A
- D) A and R is true, R is not correct explanation of A

85. From the image given below, the maximum thickness of investment above the pattern is represented by letter "H". For the phosphate bonded investment, H should be _____, to avoid _____.



- A) 4-6 mm, backpressure porosity
- B) 3-4 mm, backpressure porosity
- C) 4-6 mm, distortion
- D) 3-4 mm, distortion

86. All of the following are casting ring liner materials EXCEPT.

- A) Cellulose
- B) Asbestos
- C) Aluminosilicate ceramic
- D) DETCO liner

87. Dental Cements used for luting applications have a film thickness of?

- A) Less than 25 μm .
- B) Less than 50 μm .
- C) Less than 20 μm .
- D) Less than 15 μm .

88. Which of the following luting cements that should be removed as soon as the prosthesis seating is completed?
- Zinc polycarboxylate
 - Glass ionomer
 - Zinc phosphate
 - Resin cements
 - Zinc oxide eugenol
- Choose the correct options:**
- i, ii, iii, v
 - i, ii, iv
 - i, ii
 - i, iii, v
89. Setting reaction of glass ionomer hybrid cement is by
- Hydration of silicates
 - Light- or chemically activated polymerization and acid-base reaction
 - Acid-base reaction and hydration of calcium aluminate cement
 - Light- or chemically activated polymerization
90. Identify the correctly matched pair.
- Type 1 ZOE cement - liner
 - Type 2 ZOE cement - long-term luting agent for fixed prostheses
 - Type 3 ZOE cement - intermediate restoration
 - Type 4 ZOE cement - permanent restoration
91. Working length determination in elderly patients may be more difficult because of which of the following?
- Increased bone density, making radiographs harder to interpret
 - Increased gag reflex, making it difficult to take radiographs
 - Difference in tissue electrical resistance, making apex locators unreliable
 - Increased cementum deposition, changing the apical anatomy
92. All of the following are indications for bicuspidization *EXCEPT*
- Deep furcation
 - Furcal perforation
 - Furcal pathosis from periodontal disease
 - Buccolingual cervical caries or fracture line in to furcation
93. Consider the following statements:
- Statement 1:** After trauma, yellowish or yellowish- brown discoloration is due to pulpal hemorrhage and deposition of hemosiderin in dentinal tubules
- Statement 2:** After trauma, bluish or bluish- blackish discoloration is due to increased dentine deposition and loss of translucency
- Choose the correct options:**
- Statement 1 is true statement 2 is true
 - Statement 1 is false statement 2 is false
 - Statement 1 is true statement 2 is false
 - Statement 1 is false statement 2 is true

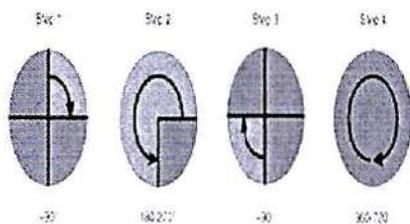
94. Consider the following statements:

Statement 1: Glidden drills have non cutting tips and elliptical shape

Statement 2: Peeso reamers are similar to gates- Glidden drills in all aspects except that they have parallel cutting sides

Choose the correct options:

- A) Statement 1 is true statement 2 is true
 - B) Statement 1 is false statement 2 is false
 - C) Statement 1 is true statement 2 is false
 - D) Statement 1 is false statement 2 is true
95. Grey MTA (GMTA) presents initial and final setting times that are higher than the White MTA (WMTA) due to:
- A) higher levels of tricalcium aluminate and sulfur in the WMTA
 - B) lower levels of tricalcium aluminate and sulfur in the WMTA
 - C) higher levels of tricalcium aluminate and sulfur in the GMTA
 - D) lower levels of tricalcium aluminate and sulfur in the GMTA
96. Which of the factors governing the potential for Nickel - Titanium rotary instrument fracture is most important
- A) Root canal anatomy
 - B) Combination of torsional load, bending and axial fatigue
 - C) Clinicians handling
 - D) Manufacturing process and quality
97. The schematic represents which root canal instrumentation technique?



- A) Hybrid
 - B) Crown down
 - C) Balanced force
 - D) Telescopic
- (61) (A)

98. During diagnosis of VRF using CBCT, AAE states that "Fine vertical cracks appear not to be revealed unless the radiolucency width is greater than
- A) 0.05 mm
 - B) 0.1 mm
 - C) 0.15 mm
 - D) 0.2 mm
99. During cold testing, the temperature of the dry ice is approximately -78°C . However, when applied on the tooth surface the effective temperature is
- A) -26°C
 - B) -36°C
 - C) -46°C
 - D) -56°C
100. In the VITA Linear 3D-Master Shade guide, Tabs are marked using a number-letter-number code. This corresponds to
- A) Hue-chroma-value
 - B) Hue-value-chroma
 - C) Value-chroma-hue
 - D) Value-hue-chroma
-

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Booklet Serial No. **240065**

Test Booklet Series

**TEST BOOKLET
LECTURER PEDODONTICS**

A

Written Test - 2024

(63)

Time Allowed: Two Hours

Maximum Marks: 100

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3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. *All* items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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(63) (A)/2024

[P.T.O.]

1. What is the name of the technique used for localization of structure in Intra Oral Peri apical Radiography?
 - A) Long Cone Technique
 - B) Short Cone Technique
 - C) Parallax technique
 - D) ALARA principle

2. The mucosa of tongue in children can be best described as
 - A) Stratified Squamous epithelium
 - B) Hyalinized Stratified Squamous epithelium
 - C) Keratinized Stratified Squamous epithelium
 - D) Pseudo-stratified columnar epithelium

3. Prominent Enamel Striae in Children are due to :
 - A) Metabolic disturbances in early age
 - B) Normal maturation lines
 - C) Variation in shape of ameloblast lining
 - D) Structural defects in dentin and enamel

4. Which of the following technique of Intra oral peri apical radiography with RVG sensor is recommended for maxillary posterior region in children?
 - A) Paralleling Technique
 - B) Bisecting angle Technique
 - C) Bitewing method
 - D) None of the above

5. Which parameter is important while calculating safe dosage of local anaesthetic drug for children while injecting for dental extraction?
 - A) Age of the child
 - B) Weight of the child
 - C) Surface area of the child
 - D) Region where intra oral injection is supposed to be given

6. Which of the following immunoglobulin is found in higher levels in saliva of children ?
 - A) IgG
 - B) IgE
 - C) IgM
 - D) IgA

7. Which of the following is common term used for explaining ullrich Turner Syndrome in Children?
- A) Trisomy 45
 - B) Monosomy 45
 - C) Trisomy 21
 - D) Trisomy 46
8. Which feature is unusual to find in cases with Papillon Lefvre Syndrome in Children ?
- A) Destruction of bone around permanent first molars
 - B) Unusual mobility of anterior teeth
 - C) Calcification of dura
 - D) Unusually large tongue
9. Which of the following oral finding can be safely corroborated with Riboflavin deficiency in pediatric population?
- A) Pale Mucosa
 - B) Unusually prominent papillae on tongue
 - C) Bleeding from interdental papilla
 - D) Magenta tongue
10. Which of the following is most initial detectable sign in a child before he/ she goes into anxiety induced syncope?
- A) Tachycardia
 - B) Hyperventilation
 - C) Unusual seating on forehead
 - D) Hypertension
11. Which of the following muscle gets penetrated first while inserting needle for classical inferior alveolar nerve block in 6 years old children?
- A) Lower belly of Medial Pterygoid
 - B) Buccinator Muscle
 - C) Medial belly of Lateral Pterygoid
 - D) Lateral belly of Lateral Pterygoid

12. Which of the following term can best describe the non-cariogenic sweetener 'Xylitol'
- A) Synthetic sugar substitute
 - B) Natural five carbon sugar
 - C) Natural Amino acid
 - D) Natural Starch derivative
13. Many important vessels pass through the Parotid Gland .Which of the following vessel does not pass through this gland?
- A) External Carotid Artery
 - B) Internal Carotid Artery
 - C) Superficial Temporal Artery
 - D) Posterior Auricular Artery
14. Which of the following statement is true regarding size of maxillary sinus in children in relation to adults?
- A) Its size is relatively larger in children as compared to adults
 - B) Its size is relatively smaller in children as compared to adults
 - C) Maxillary sinus expands after development of roots of primary posterior teeth
 - D) Maxillary sinus size reduced with development of roots of primary posterior teeth
15. Which of the following method is best suited for detection of cracks in teeth?
- A) Intra oral scan
 - B) IOPAX ray
 - C) Use of disclosing agent on teeth
 - D) Transillumination through the tooth surface
16. Which of the following type of gingivitis is seem more commonly in association with HIV infection in children?
- A) Juvenile gingivitis
 - B) Acute necrotizing gingivitis
 - C) Linear gingival erythema
 - D) Necrotizing ulcerative gingivitis

17. Which of the following chromogenic bacteria is commonly responsible for black stains in adolescent girls?
- A) Flavobacterium
 - B) Actinomyces
 - C) Aspergillus
 - D) Streptococcus
18. Acute herpetic gingivostomatitis in children is caused by:
- A) Herpes simplex virus type 1
 - B) Herpes simplex virus type 2
 - C) Herpes simplex virus type 6
 - D) Cytomegalovirus
19. Which of the following statement is not true about trauma from occlusion in children:
- A) Trauma from occlusion is reversible.
 - B) Trauma from occlusion doesn't cause pockets or gingivitis.
 - C) Marginal gingiva is affected by trauma from occlusion.
 - D) Trauma from occlusion changes the shape of alveolar crest
20. Which of the following regions is likely to have more bone loss than other regions in oral cavity of an adolescent affected with moderate symptoms of Down's Syndrome?
- A) Mandibular anterior
 - B) Mandibular posterior
 - C) Maxillary anterior
 - D) Maxillary posterior
21. The most common initial clinical symptom of early juvenile periodontitis is:
- A) Deep, dull radiating pain in the teeth
 - B) Deep periodontal pockets
 - C) Denuded root surface sensitive to thermal and tactile stimuli
 - D) Unusual mobility of first molar and incisor

22. The recommended diameter of soft tooth brushes for adolescent children is ?
- A) 0.007 inch
 - B) 0.012 inch
 - C) 0.018 inch
 - D) 0.024 inch
23. The following gingival score of the gingival index is associated with moderate degree of gingivitis in children?
- A) 0.1-1.0
 - B) 1.0-2.0
 - C) 1.1-2.0
 - D) 1.1-2.1
24. After sugar exposure the pH drops in plaque and the time for which pH drops is variable. How many minutes is average time of plaque pH drop in interproximal plaque?
- A) 20 minutes
 - B) 60 minutes
 - C) 120 minutes
 - D) 180 minutes
25. While giving inferior alveolar nerve block, sometimes we encounter jaw opening restriction. Which of the following muscle Trismus has been labelled as main cause for this problem?
- A) Medial pterygoid
 - B) Facial nerve irritation
 - C) Superior constrictor
 - D) Buccinators

26. Which of the following condition is not associated with Bald tongue in children ?
- A) Pyogenic stomatitis
 - B) Peiter disease
 - C) Atopic lichen planus
 - D) Psoriasis
27. Silver Diamine Fluoride (SDF) is now being used very commonly in Dentistry. What is the pH of standard SDF solution ?
- A) 7-9
 - B) 8-9
 - C) Below 7
 - D) 10-13
28. Maxilla articulates with all of the following bones, except:
- A) Frontal
 - B) Zygomatic
 - C) Palatine
 - D) Temporal
29. Muscle which pulls the disk of TMJ downward:
- A) Lateral pterygoid
 - B) Medial pterygoid
 - C) Digastric
 - D) Mylohyoid
30. Dental plaque adheres to tooth surface by:
- A) Dextran
 - B) Epithelial cells
 - C) Bacteria
 - D) Sucrose
31. Which of the following is most likely to occur after trauma to primary teeth?
- A) Intrusion
 - B) Extrusion
 - C) Crown fracture
 - D) Subluxation
32. Which of the following conditions, we need to do direct pulp capping in children?
- A) Accidental iatrogenic exposure
 - B) Carious exposed tooth
 - C) Fracture of crown root junction
 - D) Pulp exposure with pulp calcifications

33. Which of the following agent can be safely recommended for use in vital pulp therapy procedure hemostatic agent in children ?
- A) Chlorhexidine solution
 - B) Sodium hypochlorite solution
 - C) Epinephrine
 - D) Hydrogen peroxide
34. What should be the minimum length of MTA barrier in a central incisor in a 9 years old child?
- A) 1-2 mm
 - B) 3-5 mm
 - C) 7-10 mm
 - D) Full root length
35. Which of the following condition does not require use of adjunctive antibiotic prescription in children
- A) Central incisor with localized fluctuant swelling
 - B) Carious exposed tooth with local cellulitis
 - C) Carious exposed tooth and signs of osteomyelitis in adjoining bone
 - D) Carious exposed tooth with local lymphadenopathy and elevated body temperature
36. All of the following can be a source for coronal discoloration after revascularization procedure except
- A) Use of triple antibiotic paste
 - B) Intracanal bleeding
 - C) Application of a bioactive material
 - D) Application of a dentine bonding agent
37. Object that appears to be color-matched under one type of light may appear different under another type. This phenomenon is called
- A) Fluorescence
 - B) Metamerism
 - C) Translucency
 - D) Transparency

38. Which of the following temperature range indicates values displayed in a hot GP obturation system
- A) 90-100°C
 - B) 110-120°C
 - C) 160-170°C
 - D) 200-220°C
39. Which shape resemble the cross sectional of middle half of the root anatomy of the maxillary central incisor?
- A) Circular
 - B) Round
 - C) Elliptical
 - D) Triangular
40. The cutting instruments and its efficacy is defined with certain angles in its cross section. Which term describes the angle in a typical H- type file?
- A) Negative rake angle
 - B) Neutral rake angle
 - C) Positive rake angle
 - D) Scraping angle
41. The recommended splinting period for a reimplanted avulsed central incisor in a 9 years old boy is :
- A) Two weeks
 - B) Four weeks
 - C) Six weeks
 - D) Eight weeks

42. A 12 years old child is brought to you by school teacher with history of cricket ball injury to front tooth. On examination, you do not find injury to the tooth -supporting structures or any mobility or displacement. However, there is marked reaction to percussion. Which is your diagnosis?
- A) Subluxation
 - B) Concussion
 - C) Extrusive luxation
 - D) Green stick fracture
43. Which method can not be categorised as pulp sensibility test?
- A) Cold test
 - B) Heat test
 - C) Laser doppler flowmetry test
 - D) Electric pulp test
44. Now a days, several new terms are being used for pulp regeneration attempts. Which of the following is not a regenerative endodontic technique?
- A) Revascularization via blood clotting
 - B) Postnatal stem cell therapy
 - C) Apexogenesis
 - D) Pulp implantation
45. Which of the following is NOT a stage of wound healing after mucosal surgery?
- A) Inflammation
 - B) Differentiation
 - C) Proliferation
 - D) Maturation
46. Which of these solutions has not been recommended for root surface modification before replantation of avulsed tooth in a 10 years old boy?
- A) Citric acid
 - B) Tetracycline
 - C) Ethylenediaminetetraacetic acid (EDTA)
 - D) Polyglycolic acid

47. After traumatic dental injuries, the initial radiographic signs of external inflammatory resorption can be seen as early as
- A) 1 to 2 weeks
 - B) 3 to 4 weeks
 - C) 5 to 6 weeks
 - D) 6 to 7 weeks
48. Which type of trauma most often results in External replacement resorption ?
- A) Extrusive luxation
 - B) Intrusive luxation
 - C) Lateral luxation
 - D) None of the above
49. What should be the ideal film thickness of luting cement while cementing a Stainless Steel Crown in a Primary tooth ?
- A) Less than 25 μm .
 - B) Less than 50 μm .
 - C) Less than 75 μm .
 - D) Less than 100 μm .
50. Which of the following technical term correctly describes the setting reaction of glass ionomer hybrid cement?
- A) Hydration of silicates
 - B) Light- or chemically activated polymerization and acid-base reaction
 - C) Acid-base reaction and hydration of calcium aluminate cement
 - D) Light- or chemically activated polymerization

51. How much minimum safe distance should be kept while using open-ended irrigating needle in a root canal so that needle does not bind to the canal?
- A) 1 mm from the apical foramen/working length
 - B) 2 mm from the apical foramen/working length
 - C) 3 mm from the apical foramen/working length
 - D) 4 mm from the apical foramen/working length
52. In biostatistics 'Mode' is defined as
- A) Measure of average in a group
 - B) Number of values closest to the arithmetic mean
 - C) When values are arranged in ascending or descending order, the most centrally placed value
 - D) Most frequently occurring observation
53. What kind of effects can happen due to higher amounts of Proline Rich Protines (PRP) on caries causation?
- A) Caries promoting since they help in bacterial adherence
 - B) Make tooth surface resistance to caries sine it enhance fluoride action
 - C) It has role during tooth mineralization only therefore no effects on caries
 - D) Aid in supersaturation of saliva therefore make tooth surface resistance to caries
54. Which of the following combination gives us composition of commercially available KRI paste?
- A) Iodoform, camphor, parachlorophenol and menthol
 - B) Iodoform and ZOE
 - C) camphor, parachlorophenol and menthol
 - D) calcium hydroxide and iodoform

55. Vipeholm study was conducted to:
- A) To find out role of non sticky form of sugars on caries
 - B) To find out role of water fluoridation on caries
 - C) To find out role of xylitol on caries
 - D) None of the above
56. The foolproof method to check the effectiveness of diet counselling for high caries risk children after one week is:
- A) Lactobacillus test
 - B) Snyder test
 - C) Vinegar test
 - D) None of the above
57. Non parametric test used to compare the medians of two independent samples:
- A) T-test
 - B) Chi square test
 - C) Mann Whitney test
 - D) Z test
58. Which of the following category we consider Randomized Clinical trials according to hierarchy of evidence for scientific literature?
- A) Level I evidence
 - B) Level II evidence
 - C) Level III evidence
 - D) Level IV evidence
59. Which of the following technical term is used for siren like cry of child?
- A) Compensatory
 - B) Frightened
 - C) Hurt
 - D) Obstinate
60. As per standard colour coding for gas cylinders, which colour will you find a nitrous oxide cylinder?
- A) Red
 - B) Blue
 - C) White
 - D) Black

61. Earliest histological change visible in response of pulpitis is:
- A) Cyst formation
 - B) Calcification
 - C) Hyalinization
 - D) Formation of dental granuloma
62. Sometimes we observe dental Caries associated with pre eruptive enamel hypoplasia. Which of the following technical term is used for this type of caries?
- A) Secondary caries
 - B) Chronic caries
 - C) Occult caries
 - D) Incipient caries
63. When parents are being counselled for caries prevention using dietary advise. Which of the following types of sugar is being termed as least cariogenic?
- A) Raw starch
 - B) Cooked starch
 - C) Sucrose
 - D) Fructose
64. Which of the following effect is achieved by the use of ammonia releasing agents in oral cavity?
- A) Increase in plaque formation
 - B) Increase in calculus formation
 - C) Decrease in plaque formation
 - D) Precipitation of salivary protein
65. At what age is a child expected to have 12 primary teeth and 12 permanent teeth?
- A) 6 and half years
 - B) 7 and half years
 - C) 8 and half years
 - D) 10 and half years
66. How many teeth in the primary dentition normally have a cingulum?
- A) 6
 - B) 8
 - C) 10
 - D) 12

67. All of the following are disaccharide sugar EXCEPT
- A) Sucrose
 - B) Maltose
 - C) Mannose
 - D) Lactose
68. Which of the following refers to the congenital absence of many, but not all, teeth?
- A) Hypodontia
 - B) Oligodontia
 - C) Anodontia
 - D) Hypsodontia
69. A 3 year old boy is being rushed by his mother to finish up his ice-cream. He is unwilling to bite into it because it hurts his teeth. The reason for such sensitivity to thermal changes in children is that:
- A) Newly erupted teeth have more dentin than older teeth
 - B) Newly erupted teeth have more differentiated mesenchymal cells
 - C) Newly erupted teeth have less ground substance
 - D) Newly erupted teeth have larger dental pulps
70. Which structure below is NOT a derivative of the dental follicle ?
- A) Pulp
 - B) Cementum
 - C) Alveolar bone
 - D) Periodontal ligament
71. Which type of collagen is found in abundance in dentin and bone?
- A) Type I
 - B) Type II
 - C) Type III
 - D) Type IV

72. Vitamin A overdose causes injury to
- A) Ribosomes
 - B) Mitochondria
 - C) Cell membranes
 - D) Lysosomes
73. Which of the following areas of the pulp is also known as the "zone of weil"?
- A) Fibroblastic layer
 - B) Odontoblastic layer
 - C) Cell rich zone
 - D) Cell free zone
74. At what age male adolescents achieve maximum thickness of lip during soft tissue development of face?
- A) 12 years
 - B) 14 years
 - C) 16 years
 - D) 19 years
75. A child reports with inability in raising arm above horizontal and shrugging shoulder. Which of the following nerve is most likely to be damaged?
- A) IX
 - B) VI
 - C) XI
 - D) X

76. Which muscle resists proper placement of RVG sensors in floor of mouth for lower, posterior region IOPA X ray ?
- A) masseter
 - B) Medial pterygoid
 - C) Lateral pterygoid
 - D) Mylohyoid
77. Which is the following type of malocclusion does not require retention after treatment?
- A) Class II correction
 - B) Anterior cross bite
 - C) Enlarged arches
 - D) Maxillary constriction
78. Which of the following Sequence of extraction is recommended while following Dewel's method of serial extraction?
- A) CD4
 - B) D4C
 - C) DC4
 - D) C4D
79. Which of the following sub type of cerebral palsy is characterised by main clinical feature of Bruxism ?
- A) Spastic
 - B) Aphasic
 - C) Dyskinetic
 - D) Seen in all
80. Parachute reflex is:
- A) baby sneezes when nose is tickled
 - B) Withdrawal of limbs when subjected to offensive stimuli
 - C) Extension of arms by an infant when his body is rotated quickly
 - D) Reflex flexion at knee when child's knee is lightly tapped with a rubber hammer

81. Which of the following treatment can be effectively done using technique called as Low Level Laser Therapy (LLLT) for children?
- A) Soft tissue excisions with a diode laser
 - B) Cavity preparation
 - C) Bio stimulation of an oral ulcer
 - D) Treating tongue tie
82. Which of the following coloured container should be used for disposal of Infected or infective solid plastic waste as per standard infection prevention and control practices?
- A) Red
 - B) Green
 - C) Blue
 - D) Yellow
83. In snyder's test, what does the colour change after 48 hours in half of the snyder's medium indicate?
- A) Mild caries activity
 - B) Moderate caries activity
 - C) Severe caries activity
 - D) Limited caries activity
84. First principle in management of a child at high caries risk:
- A) Diet counseling
 - B) Parent counseling
 - C) Fluoride application
 - D) Oral prophylaxis
85. Which of the following results from inadequate secretion of thyroid hormones during fetal life or early infancy?
- A) Myxedema
 - B) Gigantism
 - C) Cretinism
 - D) Plummer disease

86. While reporting a clinical trial, which of the following guideline should be followed
- A) CONSORT
 - B) STROBE
 - C) PRISMA
 - D) STRAD
87. Which of the following property of MTA makes it very friendly material for use in apical sealing
- A) Its flow to cover all irregularities in apical region
 - B) Compressive strength
 - C) Very fast setting
 - D) Very high pH
88. Which of the following hormone is not released by the Anterior Pituitary
- A) Growth Hormone
 - B) Anti Diuretic Hormone
 - C) Follicle stimulating Hormone
 - D) Luteinizing Hormone
89. If the peri-apical abscess of relatively longer lower central incisor perforates the lingual plate of mandible, which of the following spaces will be first involved in the region?
- A) Sublingual space
 - B) Sub-mental space
 - C) Submandibular space
 - D) Para-pharyngeal space
90. Thermal regulation is an important function of the Autonomic Nervous System. Which of the following anatomic structure controls the thermal regulation of the body in general?
- A) Thyroid gland
 - B) Vagus Nerve
 - C) Hypothalamus
 - D) Adrenal Glands

91. The newer modification of conventional appliance popularly known as "Blue Grass Appliance" is mainly indicated in cases of ?
- A) Tongue Thrusting habit
 - B) Mouth Breathing habit
 - C) Thumb sucking habit
 - D) Lip biting habit
92. Among the methods of presentation of data "Forest plot" is commonly used in ?
- A) Rain forest in ecology
 - B) Mean and standard deviation of sample
 - C) p value of sample
 - D) Meta-analysis
93. In the 'study of tobacco consumption pattern among school going and non-going children' in a village in a remote district, the investigators could not get the experiment group and control group subjects with similar age and gender distribution. In terms of analysis of this research data, which type of problems you anticipate.
- A) Gender confounders
 - B) Faulty design of the study
 - C) Selection Bias
 - D) Measurement Bias
94. Which type of study design shall be suitable while planning to study the load distribution on gingiva as well as adjoining teeth using finite element analysis of new design of prosthesis for children?
- A) Prospective cohort study
 - B) Retrospective cohort study
 - C) Epidemiological study
 - D) Analytical Observational

95. Which of the following statement describes the 'power of study' in best possible way?
- A) The power of the study is better if the sample size and design cannot detect small difference between experimental and control group
 - B) The power of study helps us to detect the significant differences between experimental and control group
 - C) The power of study can be increased by reducing the sample size
 - D) The power of study is a measure of combined effect of study design, sample size, bias reduction methods, appropriate statistical analysis and data presentation as per the objectives.
96. What is Positive Predictive Value (PPV) in terms of diagnostic tests?
- A) How many times the diagnostic test detects the disease when it is not in reality
 - B) How many times the diagnostic test detects the disease when it is present in reality
 - C) How many times the diagnostic test fails to detect when the disease is absent
 - D) How many times the diagnostic test fails to detect when the disease is present.
97. The Global Disease burden study was undertaken in 2015 using massive database from across the continents. The oral health professionals studies this data carefully and derived that Disability Adjusted Life Years (DALYs) due to oral diseases are very significant. Which type of data collection and usage was done by the dental professionals?
- A) Post hoc analysis
 - B) Secondary data analysis
 - C) Primary data collection
 - D) Health related quality of life analysis
98. Which of the following non-carious lesions of dental tissues does not actually lead to tooth substance loss?
- A) Attrition
 - B) Abfraction
 - C) Abrasion
 - D) Erosion

99. How much saliva is expected to be produced by a healthy adult male of age 35 years and weight of 70 kg in India?
- A) 100-150 ml per day
 - B) 300-500 ml per day
 - C) 1000 -1500 ml per day
 - D) 3000-5000 ml per day
100. After a typical Inferior alveolar nerve block, a 14 years old boy develops muscle trismus and is unable to open jaw in next morning. Which of the following muscle has undergone trismus in this case?
- A) Medial Pterygoid
 - B) Lateral pterygoid
 - C) Temporalis
 - D) Masseter

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Booklet Serial No. **240089**

Test Booklet Series

TEST BOOKLET
LECTURER ORAL AND DENTAL PATHOLOGY/
ORAL PATHOLOGY

Written Test - 2024

(64)

A

Time Allowed: Two Hours

Maximum Marks: 100

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 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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(64) (A)/2024

[P.T.O.]

1. The most common site of oral cavity for metastases is:
 - A) Gingiva
 - B) Palate
 - C) Tongue
 - D) Buccal mucosa

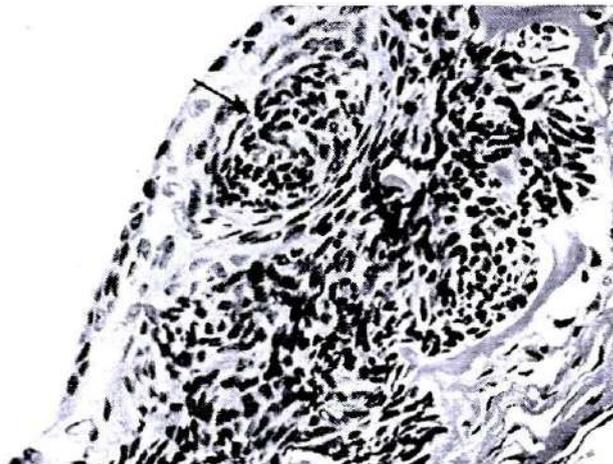
2. The special stain for demonstration of fat is :
 - A) Sudan IV
 - B) PAS
 - C) Congo red
 - D) Reticulin stain

3. Metastases to maxillofacial bones involve most commonly?
 - A) Mandible molar area
 - B) Mandible incisor area
 - C) Maxilla molar area
 - D) Maxilla incisor area

4. Psammomatoid ossifying fibroma presents mostly in the age range of
 - A) 16-30 years
 - B) 8-12 years
 - C) 30-40 years
 - D) 40-50 years

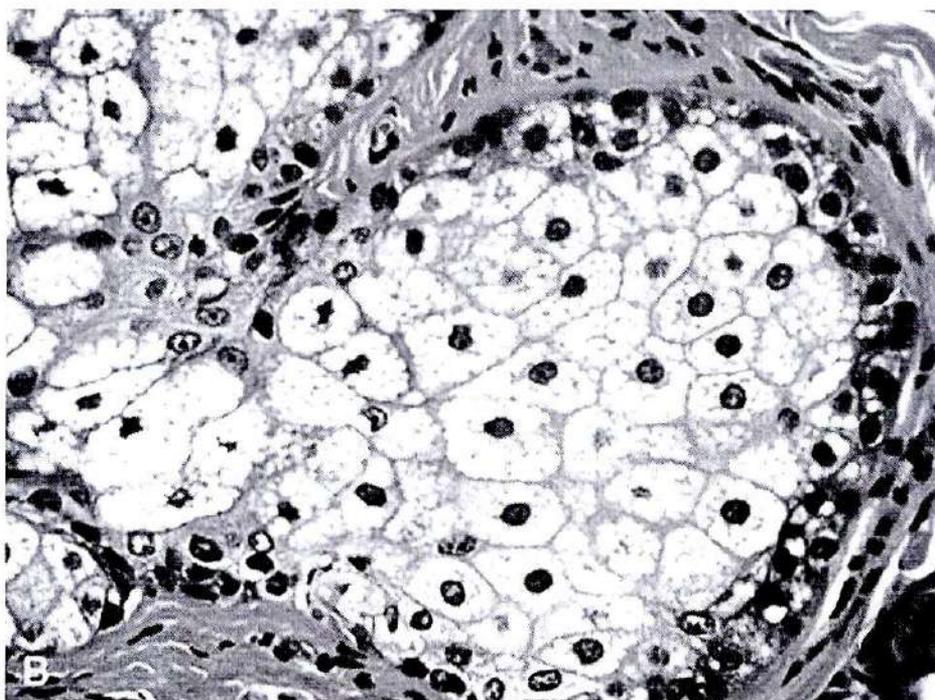
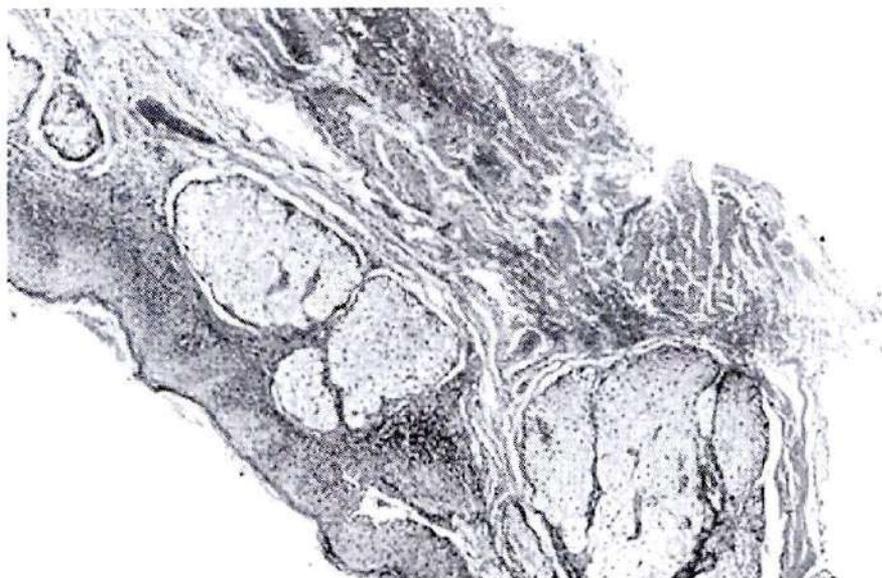
5. All of the following are true about cemento-osseous dysplasia EXCEPT?
 - A) Associated with vital teeth
 - B) Common in white males
 - C) Can be associated with simple bone cysts, osteogenesis imperfecta
 - D) Can be associated with delayed eruption and retained deciduous teeth

6. All of the following are the giant cell lesions EXCEPT:
- A) Aneurysmal bone cyst
 - B) Traumatic bone cyst
 - C) Central giant cell granuloma
 - D) Browns tumor of Hyperparathyroidism
7. Which of the following is the most common site for oral lymphoepithelial cyst?
- A) Floor of the mouth
 - B) Ventral tongue
 - C) Posterolateral tongue
 - D) Soft palate
8. Most of the adenoid cystic carcinomas results from fusions of the following oncogenes?
- A) MYB
 - B) PAG1 gene
 - C) MECT1 gene
 - D) MAML2
9. Name the structure labelled with the arrow?



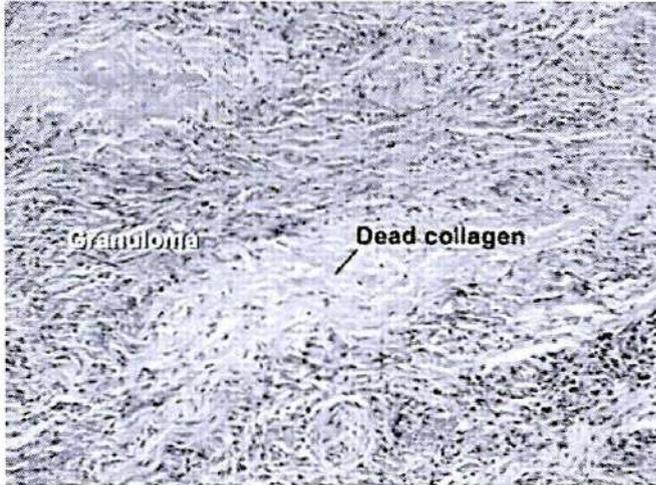
- A) Epithelial spheres
- B) Lymphocytosis
- C) Leukoclastosis
- D) Emperipolesis

10. The biopsy from the retromolar region of a 72 year old male revealed the following histology. Which of the following is the diagnosis?

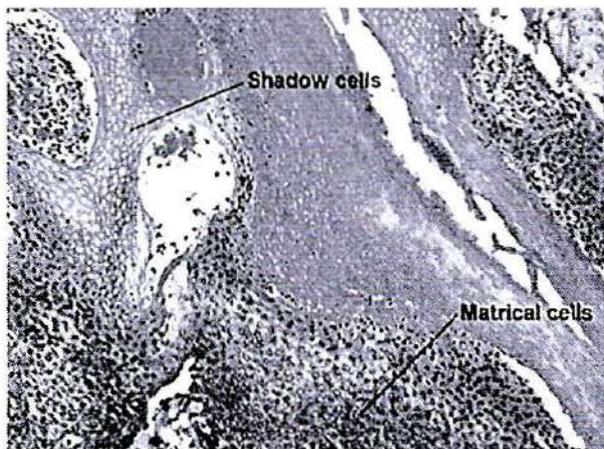


- A) Mucoepidermoid carcinoma
- B) Sebaceous carcinoma
- C) Sebaceous cyst
- D) Fordyce Granules

11. All of the following tissue types can be choristomas of the oral cavity, EXCEPT?
- A) Glial (central nervous system)
 - B) Gastrointestinal
 - C) Hair follicles
 - D) Cervical
12. The following histology depicts which of the following condition?



- A) Necrobiosis
 - B) Munro microabscess
 - C) Medlar bodies
 - D) Leukocytoclasia
13. 33 year old female presented with the following histology, the features are characteristic of which of the following entity?



- A) Pilomatricoma
- B) Molluscum contagiosum
- C) Trichoepithelioma
- D) Spongiform pustule of Kogoj

14. A 28 year old male presented with hard swelling in left mandible region. Orthopantomogram revealed multilocular radiolucent lesion extending from 34 to 38 region. Oral examination revealed buccal and lingual cortical expansion. Histopathology reveals the following features. What would be the histopathological diagnosis?



- A) Squamous odontogenic tumor
B) Follicular ameloblastoma
C) Basal cell carcinoma
D) Plexiform ameloblastoma
15. In the oral cavity, reversible change in differentiation pattern as a pathological response to tobacco smoke and an alteration from non-keratinizing to keratinizing squamous epithelium is known as:
- A) Dysplasia
B) Squamous metaplasia
C) Hyperplasia
D) Atypia
16. Which of the following variant of ameloblastoma shows squamous metaplasia of stellate reticulum like cells?
- A) Plexiform
B) Follicular
C) Granular cell
D) Acanthomatous

17. Which of the following tumor shows calcifying epithelial odontogenic tumor- like areas?
- A) Squamous odontogenic tumor
 - B) Adenomatoid odontogenic tumor
 - C) Odontogenic myxoma
 - D) Ameloblastoma
18. Autophagic vacuoles are seen in :
- A) Hyperplasia
 - B) Hypertrophy
 - C) Atrophy
 - D) Metaplasia
19. The action of putrefactive bacteria on necrotic tissue results in :
- A) Infarction
 - B) Gangrene
 - C) Embolism
 - D) Caseation
20. Features of familial multiple neurofibroma with café-au-lait spots of the skin are typical of:
- A) Juvenile Trabecular ossifying fibroma
 - B) Von Recklinghausen's disease of skin
 - C) Juvenile Psammomatoid ossifying fibroma
 - D) Fibrous dysplasia
21. Recent WHO classification of Odontogenic and maxillofacial tumors has reclassified the following entity as non neoplastic entity and included it into cystic lesions:
- A) Calcifying cystic odontogenic tumor
 - B) Dentinogenic ghost cell tumor
 - C) Ameloblastoma, unicystic type
 - D) Uncystic ameloblastoma

22. Which of the following verrucous lesion is a oral potentially malignant disorder?
- A) Papilloma
 - B) Verruca vulgaris
 - C) Condyloma acuminatum
 - D) Proliferative verrucous leukoplakia
23. The following variant of squamous cell carcinoma shows best prognosis after treatment?
- A) Papillary oral squamous cell carcinoma
 - B) Verrucous carcinoma
 - C) Carcinoma cuniculatum
 - D) Conventional oral squamous cell carcinoma
24. Which benign sinonasal tumor is characterized by its propensity to recur locally despite being histologically benign, often causing nasal obstruction and epistaxis, and is composed of a mixture of epithelial and mesenchymal components?
- A) Inverted papilloma
 - B) Olfactory neuroblastoma
 - C) Angiofibroma
 - D) Esthesioneuroblastoma
25. A patient presents with a painless mass in the sublingual gland area. Biopsy reveals a tumor composed of spindle-shaped cells arranged in Antony A and Antony B area. Which of the following is the most likely diagnosis?
- A) Adenoid cystic carcinoma
 - B) Pleomorphic adenoma
 - C) Fibrosarcoma
 - D) Schwannoma

26. Which imaging modality is typically used for the initial evaluation and staging of head and neck sarcomas?
- A) Ultrasound
 - B) Magnetic Resonance Imaging (MRI)
 - C) Positron Emission Tomography (PET)
 - D) Computed Tomography (CT) scan

27. Consider the following clinical features

- i. Odontogenic keratocysts
- ii. Calcified falx cerebri
- iii. Short fourth carpal
- iv. Enlarged head circumference

Which of the above sign/symptoms are likely to present in Basal Cell Carcinoma Syndrome

- A) i and ii Only
- B) i, ii and iv only
- C) i, ii, iii and iv
- D) iii and iv only

28. Consider the following odontogenic tumors

- i. Odontogenic fibroma
- ii. Granular cell odontogenic tumor
- iii. Odontogenic myxoma
- iv. Cementoblastoma

Which of the following originates from odontogenic mesenchyme?

- A) i only
- B) i and ii only
- C) i, ii and iii only
- D) i, ii, iii and iv

29. Consider the following

- i. Chronic painless ulcer
- ii. Low grade fever
- iii. Weight loss
- iv. Night sweats

Which of the following will be associated with oral tuberculosis?

- A) i only
- B) i and ii only
- C) i, ii and iii only
- D) i, ii, iii and iv

30. Which subtype of sarcoma is characterized by the presence of small round cells and a specific chromosomal translocation involving the EWSR1 gene?

- A) Osteosarcoma
- B) Rhabdomyosarcoma
- C) Chondrosarcoma
- D) Ewing's sarcoma

31. Which embedding medium is commonly used for frozen tissue sections due to its ability to preserve tissue morphology and antigenicity?

- A) Paraffin wax
- B) Gelatin
- C) Polyethylene Glycol (PEG)
- D) Optimal Cutting Temperature (OCT) compound

32. Which of the following is the most appropriate gauge needle for obtaining a cytological sample through Fine Needle Aspiration Cytology (FNAC) from a superficial lymph node?

- A) 18-gauge needle
- B) 22-gauge needle
- C) 25-gauge needle
- D) 27-gauge needle

33. Which type of PCR involves real-time monitoring of DNA amplification using fluorescent probes?
- A) Nested PCR
 - B) Multiplex PCR
 - C) Reverse Transcription PCR (RT-PCR)
 - D) Quantitative real-time PCR (qPCR)
34. In PCR, what is the purpose of the annealing step in the thermal cycling process?
- A) To denature DNA strands
 - B) To amplify DNA sequences
 - C) To synthesize new DNA strands
 - D) To allow primers to bind to target DNA sequences
35. Which of the following genetic alterations can be detected using FISH?
- A) Single Nucleotide Polymorphisms (SNPs)
 - B) DNA methylation patterns
 - C) Chromosomal translocations
 - D) Protein expression levels
36. What is the primary advantage of using FISH over traditional cytogenetic techniques for detecting genetic abnormalities?
- A) Lower cost
 - B) Faster results
 - C) Ability to visualize individual gene mutations
 - D) Higher resolution and sensitivity
37. Which of the following microorganisms is the most common causative agent of chronic osteomyelitis in the jaw?
- A) Staphylococcus aureus
 - B) Streptococcus pyogenes
 - C) Escherichia coli
 - D) Pseudomonas aeruginosa

38. Which type of leukemia is characterized by the presence of a "Philadelphia chromosome" resulting from a reciprocal translocation between chromosomes 9 and 22, leading to the formation of the BCR-ABL fusion gene?
- A) Acute Lymphoblastic Leukemia (ALL)
 - B) Chronic Myeloid Leukemia (CML)
 - C) Acute Myeloid Leukemia (AML)
 - D) Hairy Cell Leukemia (HCL)
39. Which subtype of leukemia is characterized by the presence of "Auer rods" in the cytoplasm of leukemic cells, often seen in peripheral blood or bone marrow smears?
- A) Acute Lymphoblastic Leukemia (ALL)
 - B) Acute Myeloid Leukemia (AML)
 - C) Chronic Lymphocytic Leukemia (CLL)
 - D) Myelodysplastic Syndrome (MDS)
40. Which type of DNA damage repair pathway is commonly associated with repairing single-strand breaks and base excision repair, playing a crucial role in preventing mutations that can lead to carcinogenesis?
- A) Nucleotide Excision Repair (NER)
 - B) Homologous Recombination (HR)
 - C) Mismatch Repair (MMR)
 - D) Base Excision Repair (BER)
41. Which autoimmune disorder involves the destruction of the mucosal lining of the oral cavity and other mucous membranes, leading to painful blisters and erosions, and is associated with autoantibodies against desmoglein proteins?
- A) Pemphigus vulgaris
 - B) Erythema multiforme
 - C) Lichen planus
 - D) Bullous pemphigoid

42. Which hematologic condition is characterized by the presence of a monoclonal protein (M protein), often seen in the blood and urine, and can lead to the development of lytic bone lesions and hypercalcemia, potentially affecting the oral cavity?
- A) Hemophilia A
 - B) Essential thrombocythemia
 - C) Multiple myeloma
 - D) Polycythemia vera
43. Which hematologic malignancy can present with swollen, painless lymph nodes in the neck, accompanied by anemia, thrombocytopenia, and hepatosplenomegaly, and can lead to oral manifestations like petechiae and ecchymoses?
- A) Hodgkin lymphoma
 - B) Multiple myeloma
 - C) Chronic myeloid leukemia
 - D) Non-Hodgkin lymphoma
44. Which aggressive fibro-osseous lesion of the jaw typically affects younger patients, exhibits rapid growth, and can cause facial asymmetry and pain, often appearing as a well-defined radiolucent area with areas of radiopacity?
- A) Fibrous dysplasia
 - B) Cemento-osseous dysplasia
 - C) Juvenile ossifying fibroma
 - D) Florid cemento-osseous dysplasia
45. Which fibro-osseous lesion of the jaw is characterized by the presence of mature bone and cementum-like material, often displaying a radiographic appearance resembling "ground-glass," and histologically showing a mixture of fibrous tissue, trabeculae of bone, and cementum-like material?
- A) Fibrous dysplasia
 - B) Cemento-osseous dysplasia
 - C) Juvenile ossifying fibroma
 - D) Ossifying fibroma

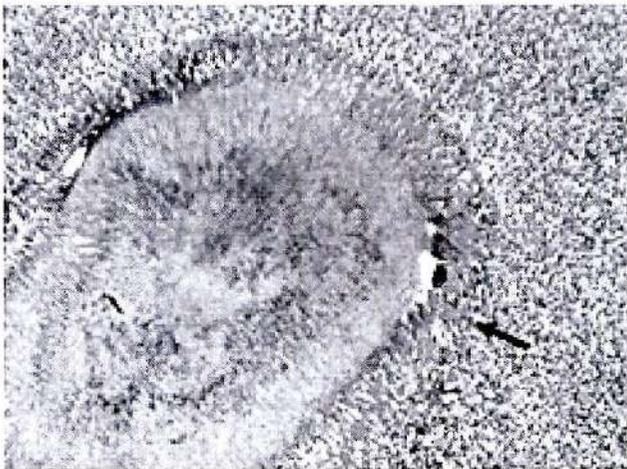
46. What is the primary mode of entry for Mucorales fungi causing mucormycosis in the oral cavity?
- A) Inhalation of spores
 - B) Ingestion of contaminated food
 - C) Direct skin contact
 - D) Bloodborne transmission
47. Which of the following is a common clinical manifestation of oral mucormycosis?
- A) Painless white patches
 - B) Chronic halitosis
 - C) Ulcerations with black necrotic eschar
 - D) Erythematous papules
48. Which aggressive malignant sinonasal tumor is characterized by its propensity for perineural invasion and distant metastases, often presenting with symptoms of facial pain, diplopia, and cranial nerve deficits?
- A) Olfactory neuroblastoma
 - B) Adenoid cystic carcinoma
 - C) Sinonasal undifferentiated carcinoma
 - D) Squamous cell carcinoma
49. Which histological feature is a common diagnostic criterion for distinguishing melanoma from other skin tumors?
- A) Presence of hyaline cartilage islands
 - B) Formation of psammoma bodies
 - C) Infiltration of eosinophils
 - D) Nested or pagetoid growth of melanocytes
50. Consider the following vesiculobullous lesions
- i. Pemphigus vulgaris
 - ii. Paraneoplastic pemphigus
 - iii. Mucous membrane pemphigoid
 - iv. Bullous pemphigoid
- Which of the above shows subepithelial and intraepithelial clefting?
- A) i only
 - B) ii only
 - C) i and ii only
 - D) i, ii and iii only

51. "Hair-on-end" on lateral skull radiographs is seen
- A) Only Sickle cell Anemia
 - B) Only Thalassemia
 - C) Only Iron deficiency anemia
 - D) Disorders of Haemoglobin
52. Which of the following statements is true in relation of Fibrous Dysplasia?
- A) Monostotic Fibrous Dysplasia accounts for 80-85 % of all the cases.
 - B) Maxillary lesion are not strictly monostotic
 - C) Postnatal mutation of GNAS1 may occur during infancy
 - D) Teeth involved in Fibrous Dysplasia usually become loose and get displaced by bony mass
53. Which of the following best describes junctional Epidermolysis Bullosa?
- A) Blistering of the hands and feet; mucosal involvement uncommon; blisters heal without scarring; prognosis usually good
 - B) Severe blistering at birth; granulation tissue around the mouth; oral erosions common; pitted enamel hypoplasia; often fatal
 - C) Extremities primarily affected
 - D) Defect in type VII collagen
54. Which of the following types of pemphigus affects oral mucosa?
- A) Pemphigus vulgaris and Pemphigus erythematosus
 - B) Pemphigus vulgaris and Pemphigus foliaceus
 - C) Pemphigus vulgaris and Pemphigus vegetans
 - D) Pemphigus vegetans and Pemphigus foliaceus

55. Which of the following best describes Mucous membrane pemphigoid?
- A) Intraepithelial clefting
 - B) Subepithelial and intraepithelial clefting
 - C) Subepithelial clefting
 - D) Subepithelial edema and perivascular inflammations
56. Which of the following is a Acquired cause of Macroglossia?
- A) Amyloidosis
 - B) Cretinism
 - C) Lymphangioma
 - D) Hemangioma
57. Which of the following is true EXCEPT in case of congenital syphilis?
- A) Hutchinson triad is seen in congenital syphilis
 - B) Hutchinson triad includes Eighth nerve deafness
 - C) Majority of patients of congenital syphilis exhibit all three features of Hutchinson triad
 - D) In addition to Hutchinson triad, a number of other alterations may be seen, such as saddle-nose deformity may also be seen in congenital syphilis
58. Actinomyces refers to
- A) Gram positive anaerobic bacteria
 - B) Gram positive aerobic bacteria
 - C) Gram negative anaerobic bacteria
 - D) Gram negative aerobic bacteria

59. According to TNM classification for cutaneous melanoma, tumor thickness between 2.01-4.0 mm should be considered under
- A) T1
 - B) T2
 - C) T3
 - D) T4
60. Which of the following factors can promote the colonization of metastatic cancer cells in distant organs?
- A) High oxygen levels
 - B) Immune system activation
 - C) Similar tissue microenvironment
 - D) Rapid cell division in the primary tumor
61. Which type of anemia is characterized by a deficiency of intrinsic factor, leading to impaired vitamin B12 absorption?
- A) Aplastic anemia
 - B) Hemolytic anemia
 - C) Pernicious anemia
 - D) Sickle cell anemia
62. Which of the following characteristics is commonly associated with Malignant Peripheral Nerve Sheath Tumors (MPNSTs)?
- A) Benign growth and lack of invasiveness
 - B) Originating from blood vessel walls
 - C) Frequent metastasis and aggressive behavior
 - D) Association with hormonal imbalances

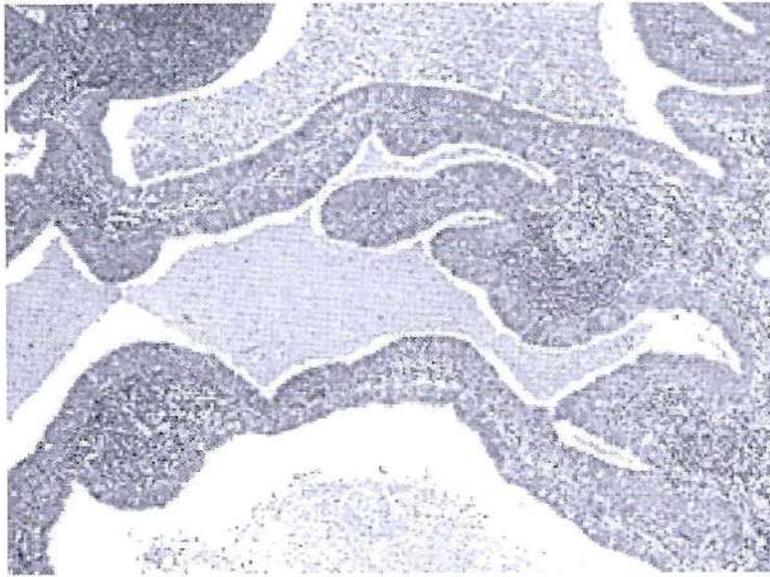
63. Which of the following is the most common precursor condition for Malignant Peripheral Nerve Sheath Tumors (MPNSTs)?
- A) Neurofibromatosis type 1 (NF1)
 - B) Neurofibromatosis type 2 (NF2)
 - C) Multiple endocrine neoplasia type 1 (MEN1)
 - D) Von Hippel-Lindau syndrome (VHL)
64. HPV 16 is associated with
- A) Oral squamous papilloma
 - B) Inverted sinonasal papilloma
 - C) Oropharyngeal squamous cell carcinoma
 - D) Condyloma acuminatum
65. A patient complains of a draining fistula of the right submandibular area. Histological examination reveals the following picture.



Which is correct for the organism?

- A) Gram positive anaerobic bacteria
- B) Gram positive aerobic bacteria
- C) Gram negative anaerobic bacteria
- D) Gram negative aerobic bacteria

66. Identify the following



- A) Warthin Tumor
- B) Mucoepidermoid carcinoma
- C) Salivary duct carcinoma
- D) Squamous cell carcinoma

67. Which of the following entity is newly introduced into the WHO classification of Odontogenic tumors, 2022 under benign epithelial odontogenic tumours?

- A) Ameloblastoma, unicystic
- B) Ameloblastoma, extraosseous/peripheral
- C) Ameloblastoma, conventional
- D) Adenoid ameloblastoma

68. Which of the following is true regarding anatomic site and the most common cervical lymph nodes metastases of squamous cell carcinoma

- A) Level III from oropharynx
- B) Level II from oropharynx
- C) Left supraclavicular from oropharynx
- D) Level II from larynx

69. Staging of tumor is based on all the following EXCEPT: -

- A) Size of tumor
- B) Presence of metastasis by hematogenous route
- C) Differentiation of tumor cells
- D) Spread to regional lymph nodes

70. A patient presented with multiple white keratotic plaques with roughened surface projections in the oral cavity. Which of the following investigations will be required for making/confirming the diagnosis?

- i. FNAC
- ii. X-Ray
- iii. Biopsy
- iv. Urine microscopy

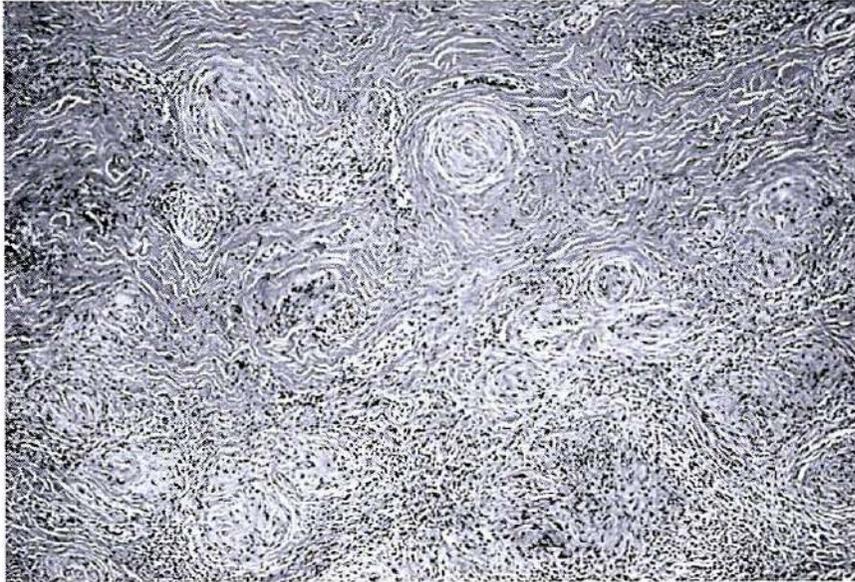
Options

- A) i only
- B) i and ii only
- C) i, ii and iii only
- D) i, ii, iii and iv

71. Parotid metastases arise most commonly from

- A) Melanoma
- B) Merkel cell carcinoma
- C) Basal cell carcinoma
- D) Sebaceous carcinoma

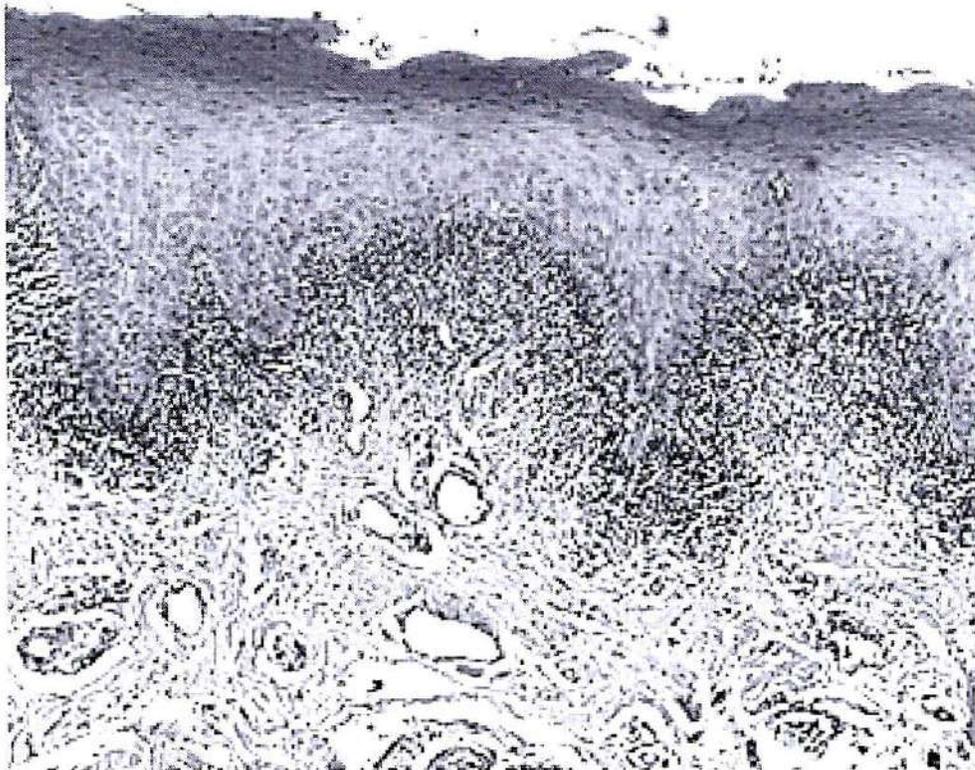
72. A 56-year-old female presented with severe nasal congestion, anosmia with a mass involving the nasal cavity and maxillary sinus. The lesion showed following histologic features and spindle cell fibrotic areas reacted with vimentin and were nonreactive with smooth muscle actin, Beta-catenin, CD34, desmin, and S-100 protein. The features are suggestive of ?



- A) Eosinophilic angiocentric fibrosis
B) Angiofibroma
C) Schwannoma
D) Fibromatosis
73. Which of the following entity shows histologically fibrinoid necrosis and usually contains granulomas?
- A) Churg-Strauss syndrome
B) Angiofibroma
C) Schwannoma
D) Fibromatosis

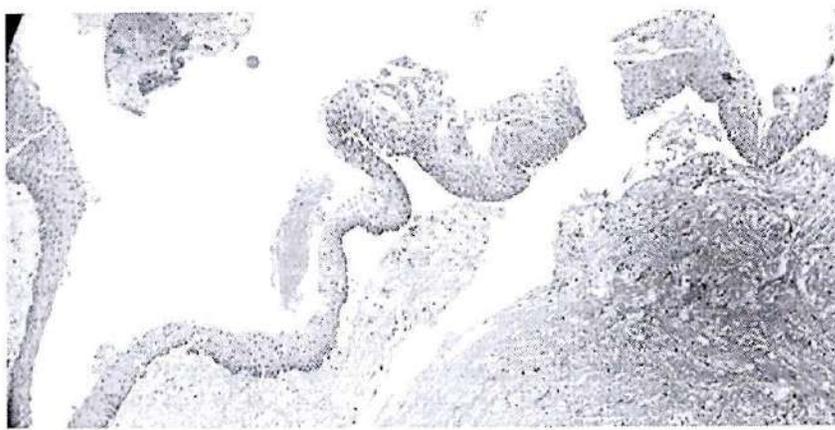
74. Following entity mostly affects head and neck, lung and kidney and classic histologic triad: substantial necrobiosis, especially prominent in the form of "geographic necrosis," vasculitis, a paucity of foreign body-type giant cells.
- A) Granulomatosis with polyangiitis
 - B) NK-/T-cell lymphoma
 - C) Cocaine abuse
 - D) Chronic fungal sinusitis
75. Which of the following entities can show presence of positive serum cytoplasmic antineutrophil cytoplasmic antibodies and proteinase 3 antibodies?
- A) Wegener granulomatosis
 - B) Churg-Strauss syndrome
 - C) Granulomatosis with polyangiitis
 - D) All of the above
76. All of the following are the most significant prognostic factors EXCEPT?
- A) Conventional histologic grading
 - B) Tumour size
 - C) Depth of invasion
 - D) Distant metastases
77. The following markers can be used to distinguish benign fibrous lesions from sarcomas?
- A) Pan CK and vimentin
 - B) Keratin 8/18 and desmin
 - C) MDM2 and CDK4
 - D) S100 and BCL2

78. Hyperparathyroidism jaw tumor syndrome due to mutation in HRPT2 gene includes parathyroid adenoma or carcinoma, renal cysts, Wilm's tumor and the following jaw tumor:
- A) Fibrous dysplasia
 - B) Familial giantiform cementoma
 - C) Chondroblastoma
 - D) Ossifying fibroma
79. A 36 year old female patient reported with complaint of burning sensation on tongue and buccal mucosa and presented with white non scrapable lesion with following histopathology features. What would be the most likely diagnosis?

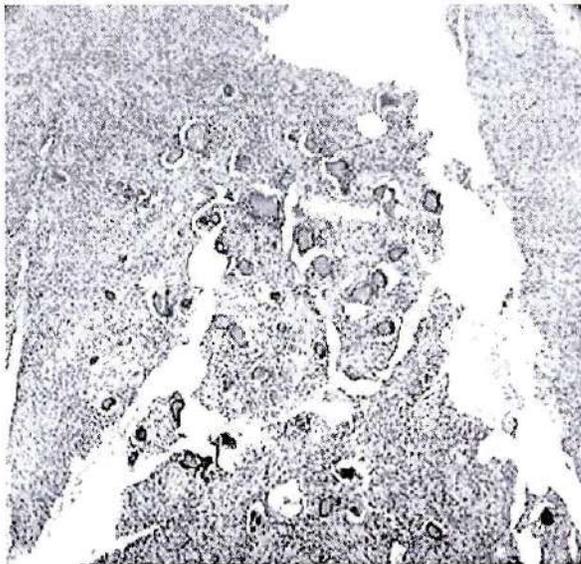


- A) Oral submucous fibrosis
- B) Moderate dysplasia
- C) Oral pemphigus
- D) Oral lichen planus

80. A 36 year old female presented incidentally on orthopantomogram revealed multilocular radiolucent lesion extending from 46 to ramus region. Oral examination revealed no carious teeth and minimal cortical expansion. Histopathology reveals the following features. What would be the histopathological diagnosis?



- A) Radicular cyst
 - B) Lateral periodontal cyst
 - C) Odontogenic keratocyst
 - D) Unicystic ameloblastoma
81. A 5 year old boy presented with swelling in maxilla, radiographically showing mixed radiopaque- radiolucent lesion. Histopathologically it revealed following features. Features are suggestive of:



- A) Juvenile Trabecular ossifying fibroma
- B) Cemento-osseous dysplasia
- C) Juvenile Psammomatoid ossifying fibroma
- D) Fibrous dysplasia

82. A 38 year old male presented with swelling in maxilla, radiographically showing osteolytic lesion in the right maxilla. Histopathologically revealed basaloid appearing hyperchromatic pleomorphic cells with amphophilic cytoplasm. Tumor cells showed immunopositivity for pan Ck and immunonegativity for CD117, Calponin, p40. Features are suggestive of:
- A) Adenoid cystic carcinoma
 - B) Basaloid squamous cell carcinoma
 - C) Sinonasal undifferentiated carcinoma
 - D) Sebaceous carcinoma
83. A 42 year old female presented with ulcerative lesion in posterior alveolus region with impacted upper third molar which did not heal even after the extraction of the third molar since 3 months. Histopathologically revealed cells with basophilic hyperchromatic and angular nuclei and scanty cytoplasm proliferating in the form of cribriform pattern and ducts within the stroma and showed no squamous differentiation. Tumor cells showed immunopositivity for CD117 and calponin. Features are suggestive of:
- A) Adenoid cystic carcinoma
 - B) Poorly differentiated squamous cell carcinoma
 - C) Sinonasal undifferentiated carcinoma
 - D) Malignant melanoma
84. Which of the following is the most common lymphoma in the oral cavity?
- A) Burkitt's lymphoma
 - B) Small cell non-Hodgkin's lymphoma
 - C) Diffuse Large B cell Lymphoma
 - D) Lymphoblastic lymphoma
85. A 63 year old man presented with proliferative lesion on the maxillary alveolus extending to palate. Histology reveals poorly circumscribed lesion composed of fascicles of spindle-shaped cells with hyperchromatic nuclei and associated with extensive stromal collagenization. The atypical pigmented epithelial cells were immunonegative for cytokeratin, neuron-specific enolase, Leukocyte common antigen and mucicarmine stain and immunopositive for S-100, vimentin and HMB-45. What is the most likely diagnosis?
- A) Mucoepidermoid carcinoma
 - B) Anaplastic large-cell lymphomas
 - C) Poorly differentiated carcinomas
 - D) Oral malignant melanoma

86. Which of the following tumor shows calcifying epithelial odontogenic tumor- like areas?
- A) Adenomatoid odontogenic tumor
 - B) Squamous odontogenic tumor
 - C) Odontogenic myxoma
 - D) Ameloblastoma
87. All of the following syndromes is associated with odontogenic keratocyst ?
- A) Van der Woude syndrome
 - B) Popliteal pterygium syndrome
 - C) Pierre Robin Sequence
 - D) Gorlin Goltz syndrome
88. Which of the following is the most common developmental cyst in head and neck region?
- A) Thyroglossal duct cyst
 - B) Branchial cleft cyst
 - C) Dermoid cyst
 - D) Intraoral lymphoepithelial cyst
89. Which of the following cyst is now believed to represent posterior extension of incisive canal cyst?
- A) Odontogenic keratocyst
 - B) Median palatine cyst
 - C) Globulomaxillary cyst
 - D) Median alveolar cyst
90. Behcet's syndrome is most commonly associated with
- A) HLA-B51
 - B) HLA-B47
 - C) HLA-DR2
 - D) HLA-DR3

91. Following histological factors are associated with a worse prognosis EXCEPT?
- A) Depth of invasion >10 mm
 - B) Mandibular medullary invasion
 - C) Worst pattern of invasion
 - D) Cohesive pattern of invasion
92. Which of the following mimics Carcinoma cuniculatum?
- A) Condyloma acuminatum
 - B) Necrotising sialometaplasia
 - C) Multifocal epithelial hyperplasia
 - D) Oral melanoacanthoma
93. Which of the following is the most common location of Necrotising sialometaplasia?
- A) Hard palate
 - B) Tongue
 - C) Floor of the mouth
 - D) Buccal mucosa
94. Which of the following distinguishes HPV-associated dysplasia from conventional OED?
- A) Prominent karyorrhectic/apoptotic cells
 - B) Tongue
 - C) Floor of the mouth
 - D) Buccal mucosa

95. Adenosquamous carcinoma is a variant of which of the following carcinoma?
- A) Adenoid cystic carcinoma
 - B) Adenoid ameloblastoma
 - C) Oral squamous cell carcinoma
 - D) Adenomatoid odontogenic tumor
96. Which of the following is a more sensitive marker for malignant mucosal melanoma?
- A) SOX 10
 - B) S100
 - C) HMB45
 - D) BRAF MUTATION
97. The tumor cells of Ewing sarcoma shows nuclear immunopositivity for which of the following markers?
- A) FLI1
 - B) NUT
 - C) CK5/6
 - D) CD99
98. Adamantinoma like Ewing sarcoma is diffusely positive for the following marker?
- A) P40
 - B) NUT
 - C) SMA
 - D) SATB2

99. Which of the following variant of squamous cell carcinoma of oral cavity shows worse prognosis?
- A) Acantholytic SCC
 - B) Papillary SCC
 - C) Verrucous SCC
 - D) Carcinoma cuniculatum
100. Which of the following variant of squamous cell carcinoma most are EBV-positive?
- A) Acantholytic SCC
 - B) Lymphoepithelial carcinoma
 - C) Papillary SCC
 - D) Verrucous SCC
-

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Booklet Serial No. **240109**

Test Booklet Series

TEST BOOKLET
LECTURER COMMUNITY DENTISTRY

A

Written Test - 2024

(65)

Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use "**ONLY BALL POINT PEN**".
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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(65) (A)/2024

[P.T.O.]

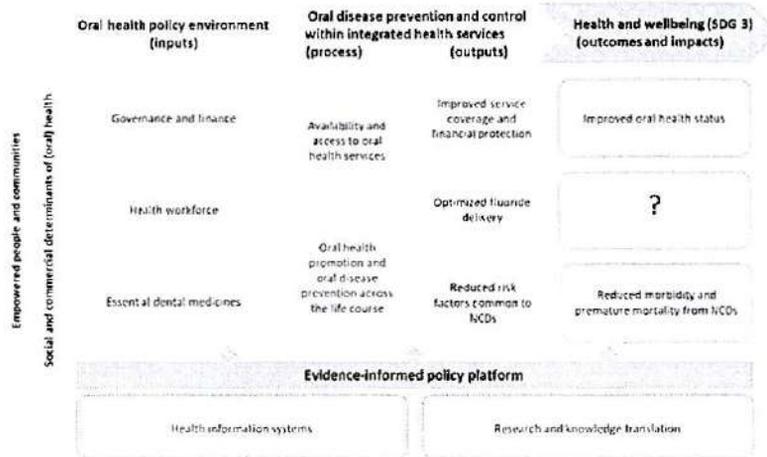
1. In Caries-Associated with Restorations and Sealants (CARS) Detection Criteria
 - i) Cavitation at the margin of the restoration or sealant less than 0.5mm, in addition to either an opacity or discoloration consistent with demineralization that is not consistent with the clinical appearance of the sound enamel or with a shadow of discolored teeth.
 - ii) If the restoration margin is placed on enamel the tooth must be viewed wet. When wet there is an opacity consistent with demineralization or discoloration that is not consistent with the clinical appearance of the sound enamel.
 - A) Score (i) is greater than score (ii)
 - B) Score (ii) is greater than score (i)
 - C) Both the scores are equal and consistent
 - D) Both the scores are equal and inconsistent

2. The evolution of noncommunicable disease and risk factor framing from 4×4 to 6×6 included which disease and risk factor most recently.
 - A) Disease - Mental Disorders and condition, Oral disease and condition
 - i. Risk factor- Air Pollution, Sugar
 - B) Disease - Mental Disorders and condition, Chronic Respiratory Disease
 - i. Risk factor- Air Pollution, Tobacco
 - C) Disease - Mental Disorders and condition, Cancers
 - i. Risk factor- Air Pollution, Unhealthy Diet
 - D) Disease - Cardiovascular Disease, Oral disease and condition
 - i. Risk factor- Air Pollution, Sugar

3. The National Oral Health Policy envisages integration as an efficient strategy for higher gains in the following areas
 - A) Relevant National Health Programs and Inter-Ministerial Collaborations
 - B) Educational Institutions and Oral Health Management Information
 - C) Oral Health System Strengthening & Relevant National Health Programs
 - D) Oral Health Research and Educational Institutions

4. The policy commits to abide by the latest Indian Public Health Standards for provision of primary and secondary oral health services. It encompasses access to the highest quality tertiary oral health services in the country. This National Oral Health Policy abides by the value and principles of
 - A) Affordable, Patient Centered, Accessible, Quality care
 - B) Dynamism and Adaptiveness & Inclusive Partnerships
 - C) Evidence-based policy development, Quality Care and implementation
 - D) Decentralization and flexibility, Quality Care & Community Participation

5. According Post Exposure Prophylaxis (PEP) protocol, after a needlestick injury with an HIV+, low risk patient, what should be done
- Recommend three- drug regimen
 - Recommend two drug regimen; third drug optional
 - Consider two-drug regimen only
 - Recommend Five drug regimen
6. The overall responsibility for monitoring and supervision of field activities is with the Primary Health Centre Medical Officer. Review of the oral cancer component of the NPNCDC programme should be an integral a part of monthly review meetings, field supervision, and data monitoring. Recording and reporting at all levels would be aligned with the guidelines. The following indicators would be used to monitor the programme, and these would be synergized with existing records and reports under the NPNCDC programme.
- % of population over 30 years who were screened for Oral Cancer
 - % of population over 30 years who were screened for Oral and Potentially Malignant Lesion & Oral Cancer
 - % of population over 20 years who were screened for Oral Cancer
 - % of population over 60 years who were screened for Oral Cancer
7. What is the missing link in the monitoring framework of the Global Oral Health Action Plan from the WHO Global Oral Health Action Plan (2023 - 2030)?



- Reduced Oral Health Inequalities
- Strengthened Oral Health Policy
- Improved Universal Health Coverage
- Reduced Oral Health Trauma

8. A 50 year old patient reported with a ragged, corrugated, blackish pigmented and irregular white patch on left side of lateral border of the tongue. Patient gave a history of occasional bleeding from his gums in the morning time & gave history of tobacco chewing. The lesion was non-scrapable on examination. What could be the most probable diagnosis?
- A) Oral candidiasis
 - B) Hairy leukoplakia
 - C) Linea alba
 - D) Herpetic- gingivo stomatitis
9. An oral health school program for all the municipal schools in north district of a city involved interventions like tooth brushing and hand hygiene demonstration, diet modification in the mid-day meal plan, cascade learning from dentists to teachers to students and taking feedback at each level. This program fulfills which all principle of health education?
- A) Interest, Motivation, Learning by doing, Participation
 - B) Empowerment, Motivation, Learning by doing, Perception
 - C) Known to unknown, Motivation, Comprehension, Good human relationship
 - D) Interest, Participation, Learning by doing, Innovation
10. A typical cartridge of e cigarette contains about as much nicotine as a pack of _____ regular cigarettes and can act as a potential source for nicotine addiction and other harmful effects
- A) 10
 - B) 20
 - C) 30
 - D) 50
11. Consider the following statements:
- Statement A:** Burning Mouth Syndrome is an intraoral burning or dysesthetic sensation, recurring for >2 h per day for >3 months with evident causative lesions during the clinical examination
- Statement B:** The pain is usually bilateral and in addition there is subjective xerostomia, dysesthesia, and altered taste in two-thirds of reported cases.
- Which one of the following is correct in respect of the above statements?
- A) Statement A is correct, Statement B is incorrect
 - B) Statement B is correct, Statement A is incorrect
 - C) Statement A and B is correct
 - D) Statement A and B is incorrect

12. Consider the following statements:

Statement A: Web of Science is not a Database, it's a Platform

Statement B: Access will differ on Institution's Subscription

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statement A and B is correct
- D) Statement A and B is incorrect

13. Consider the following statements:

Statement A: I^2 value of 10 % could respond to substantial heterogeneity while an I^2 value of 90% could correspond to trivial heterogeneity

Statement B: I^2 value tells about variability of effect size

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statement A and B is correct
- D) Statement A and B is incorrect

14. Consider the following statements:

Statement A: In a Meta-Analysis a significance test is used to choose between the fixed-effect and random- effect models.

Statement B: If the effect size is statistically significant the treatment in a Meta-Analysis works in all population.

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statement A and B is correct
- D) Statement A and B is incorrect

15. After observing the high number of systematic reviews with poorly reported literature searches, we sought to create an extension to the PRISMA statement called as _____. Our aims were four-fold: To provide extensive guidance on reporting the literature search components of a systematic review. To create a checklist that could be used by authors, editors, and peer reviewers to verify that each of a search was completely reported and therefore reproducible. To develop an interdisciplinary checklist applicable to all method-driven literature searches for evidence synthesis. To complement the PRISMA Statement and its extensions.

- A) PRISMA - C
- B) PRISMA - A
- C) PRISMA - X
- D) PRISMA - S

16. Consider the following statements:

Statement X: The World Health Organization has released a new guideline on Non-Sugar Sweeteners (NSS), which recommends NOT to use NSS to control body weight or reduce the risk of noncommunicable diseases.

Statement Y: The recommendation is based on the findings of a systematic review of the available evidence which suggests that use of NSS does not provide any long-term benefit in reducing body fat in adults.

Statement Z: It is also suggested that there may be potential undesirable effects from long-term use of NSS, such as an increased risk of type 2 diabetes, cardiovascular diseases, and mortality in adults.

Which one of the following is correct in respect of the above statements?

- A) Statements X & Y are correct, Statement Z is incorrect
- B) Statements X & Z are correct, Statement Y is incorrect
- C) Statements X, Y & Z are correct
- D) Statements X, Y & Z are incorrect

17. Bowie & Dick test is used in

- A) Performance of dental laser unit
- B) Performance of steam sterilisers in a hospital set up
- C) Performance of dental hand piece system
- D) Performance of electric microwave/ oven

18. The index teeth for recording OHI-S in a five year old are:

- A) 51, 55, 61, 65, 75, 85
- B) 51, 55, 65, 75, 81, 85
- C) 55, 61, 65, 71, 75, 85
- D) 51, 55, 65, 71, 75, 85

19. Early caries lesions consist of non-cavitated subsurface demineralization caused by the dissolution of hydroxyapatite from the surface to the subsurface area of the enamel. Such lesions cannot be re-mineralized effectively by the conventional treatment. Thus, there is a need for a noninvasive technique capable of delivering the re-mineralizing agent to subsurface sites. For this purpose, fluoride iontophoresis (IP) using weak currents has been investigated. Because enamel remineralization involves the role of fluid from dentin, the presence of enamel fluid is necessary to determine the repair associated with the physiological condition. Hence _____ is the ideal method for rapid enamel remineralization and recrystallization of fluoroapatite/fluorohydroxyapatite in primary prevention of dental caries.

- A) Anodal iontophoresis (AIP) of 2% NaF for 40 s
- B) Cathodal iontophoresis (CIP) of 5% NaF for 40 s
- C) Anodal iontophoresis (AIP) of 10% SrCl for 40 s
- D) Cathodal iontophoresis (CIP) of 5% AgNO₃ for 40 s

20. Consider the following statements:

Statement A: Smoking cessation counseling is a crucial part of periodontal therapy; otherwise, limited benefits would be observed among heavy smokers, hindering the effect of treatment.

Statement B: Periodontal Pocket Depth reduction and Clinical Attachment Loss gain are decreased in active smokers as compared with nonsmokers

Which one of the following is correct in respect of the above statements?

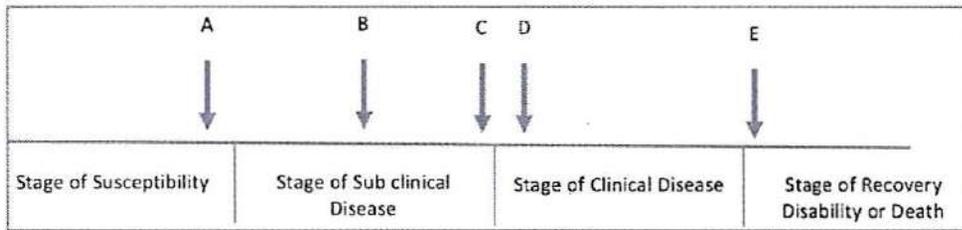
- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statements A & B are correct
- D) Statements A & B are incorrect

21. Soft and medium bristle toothbrushes provide comparable cleaning efficiency independently of the brushing force applied and duration of brushing. Cleaning efficiency increased with increasing brushing forces during longer brushing. These are in vitro results. What can be the confounding factors in actual life as far as cleaning efficiency in concerned?

- A) Toothbrush angle, toothbrush head width, toothpaste
- B) Toothbrush angle, toothbrush head width, toothbrush bristle pattern
- C) Toothbrush head width, toothpaste, toothbrush bristle pattern
- D) Toothbrush handle length, toothpaste, thickness of bristle in one tuft

22. Women's oral health practices before pregnancy can be predictor of her practices during pregnancy. The complex nature of the attitude component DOES NOT include
- A) Locus of control
 - B) Sense of self efficacy
 - C) Health care utilization
 - D) Perceived importance
23. In an outbreak of varicella (chickenpox) in Oregon in 2022, varicella was diagnosed in 36 of 304 vaccinated children compared with 6 of 14 unvaccinated children. Calculate the risk ratio.
- A) 28 % Decreased risk for the exposed children
 - B) 56% Increased risk for the unexposed children
 - C) 84% Protective effect for the unexposed children
 - D) 56% Harmful effect for the exposed children
24. Public health surveillance includes which of the following activities:
- i) Diagnosing whether a case of encephalitis is actually due to West Nile virus infection
 - ii) Soliciting case reports of persons with symptoms compatible with SARs from local hospitals
 - iii) Creating graphs of the number of dog bites by week and neighborhood
 - iv) Writing a report on trends in seat belt use to share with the state legislature
 - v) Disseminating educational materials about ways people can reduce their risk of Lyme disease
- A) ii, iii & iv
 - B) i, ii & iii
 - C) iii, iv & v
 - D) i, iii & iv
25. A study in which children are randomly assigned to receive either a newly formulated vaccine or the currently available vaccine, and are followed to monitor for side effects and effectiveness of each vaccine, is an example of which type of study?
- i) Experimental
 - ii) Observational
 - iii) Ambi-Directional Cohort
 - iv) Case-control
 - v) Latin Square Quasi Trial
- A) ii & iii
 - B) i & ii
 - C) iii & iv
 - D) i & v

26. In the following figure; C, D and A represents the following



- A) Onset of symptoms, Usual time of Diagnosis and Exposure
- B) Onset of symptoms, Exposure and Usual time of Diagnosis
- C) Usual time of Diagnosis, Exposure and Onset of symptoms
- D) Exposure, Onset of symptoms and Usual time of Diagnosis

27. Which of the following are frequency measures?

- i) Birth rate
 - ii) Incidence
 - iii) Mortality rate
 - iv) Prevalence
- A) i, ii, iii & iv
 - B) i & iii
 - C) ii & iv
 - D) iii, iv & i

28. Use the following choices for the characteristics or features listed below:

- i) Incidence
 - ii) Prevalence
1. Measure of risk
 2. Generally preferred for chronic diseases without clear date of onset
 3. Used in calculation of risk ratio
 4. Affected by duration of illness
- A) i - 1,3 : ii - 2,4
 - B) i - 1,2 : ii - 3,4
 - C) i - 2,3 : ii - 1,4
 - D) i - 2,4 : ii - 1,3

29. For an investigation of an outbreak, what is the logical conceptual order of the steps listed below:

- 1) Analyze data by time, place, and person
 - 2) Conduct a case-control study
 - 3) Generate hypotheses
 - 4) Conduct active surveillance for additional cases
 - 5) Verify the diagnosis
 - 6) Confirm that the number of cases exceeds the expected number
 - 7) Talk with laboratorians about specimen collection
- A) 1-2-3-4-5-6-7
B) 5-6-4-1-2-3-7
C) 6-5-3-1-2-7-4
D) 6-5-7-4-1-3-2

30. Consider the following statements:

Statement A: Dental hygienists integrated into medical teams provided full-scope dental hygiene care to patients and expanded access to dental services and was associated with reduction in untreated decay.

Statement B: Integrating dental hygienists into primary care medical practices has potential to improve oral health-related outcomes however access to restorative dental care remains a challenge.

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
B) Statement B is correct, Statement A is incorrect
C) Statements A and B are correct
D) Statements A and B are incorrect

31. Consider the following statements:

Statement A: All proportions are ratios, but not all ratios are proportions.

Statement B: The crude mortality rate reflects the mortality rate and eliminates any differences in the age distribution.

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
B) Statement B is correct, Statement A is incorrect
C) Statements A and B are correct
D) Statements A and B are incorrect

32. Read the two statements below and select the best option:

- i. The effect of periodontal therapy carried out in pregnant women on the frequency of Adverse Pregnancy Outcomes (APOs) showed unclear evidence of its effectiveness in reducing the APOs significantly.
 - ii. If this correlation is confirmed one way or the other, it will be an important finding as this risk factor is modifiable and thus preventable
- A) Both statements are CORRECT
 - B) Statement (i) is CORRECT and statement (ii) is INCORRECT
 - C) Statement (ii) is CORRECT and statement (i) is INCORRECT
 - D) Both statements are INCORRECT

33. The photo below violates which section of COTPA implementation



- A) Section 5a
- B) Section 5b
- C) Section 6a
- D) Section 6b

34. The wildlife conservation society has identified "deadly dozen" that could spread into new regions and affect human health as a result of climate change. One among them is

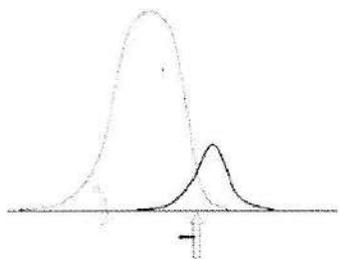
- A) Plague, corona virus, avian Flu
- B) E coli, parasites, algal blooms
- C) Cholera, S mutans, tuberculosis
- D) P gingivalis, lyme disease, corona virus

35. What are the advantages of a vertical health program?
- A) Can accommodate extra work in disasters
 - B) Program is dependent on donors for funding, which may affect sustainability and autonomy for local authority
 - C) It facilitates the placement of workers after the completion of program
 - D) Operational planning is focused and is easy to deliver.
36. Regular professional applications of a Fluoride Varnish (FV) during treatment with fixed orthodontic appliances can prevent the development of White Spot Lesions adjacent to brackets. This is which level of prevention?
- A) Primary Prevention
 - B) Secondary Prevention
 - C) Tertiary Prevention
 - D) Primordial Prevention
37. First time the potential of risk reversal for oral and pharyngeal cancers following cessation of Betel Quid -Tobacco and for oral cancer in long-term quitters (greater than 10 years) of Betel Quid +Tobacco. The suggestive evidence from this systematic review further supports the imperative need of a strong policy to reduce the initiation of Betel Quid use and inclusion of interventions for Betel Quid cessation in cancer control efforts especially in geographic regions where BQ chewing is prevalent. Select the levels of prevention.
- A) Primordial and Primary
 - B) Primary and Secondary
 - C) Primordial and Secondary
 - D) Secondary and Tertiary
38. Which committee gave these landmark recommendations?
- i) No patents in pharmaceutical products
 - ii) More emphasis on preventive work
 - iii) 15% government expenditure on health care
- A) Mukherjee Committee (1966)
 - B) Chadha Committee (1963)
 - C) Mudaliar Committee (1962)
 - D) Bhore Committee (1943-46)

39. Influenza pandemic occurs after every 7 - 10 years. This kind of disease distribution in time is known as:
- A) Secular trend
 - B) Short time fluctuation
 - C) Cyclical trend
 - D) Seasonal trend
40. What are the main vehicles of economic evaluations among the four listed below?
- i) EE based on national statistics
 - ii) EE based on individual patients (for example, in a clinical trial)
 - iii) EE based on models
 - iv) EE based on consultations with experts
- A) ii, iii
 - B) i, ii
 - C) ii, iii, iv
 - D) i, iii, iv
41. Consider the following statements:
- Statement A:** Role of Carboxymethylcellulose Sodium is that of binding agent in toothpaste composition.
- Statement B:** Sodium lauryl sulphate helps to spread the toothpaste throughout the mouth for effective cleaning
- Which one of the following is correct in respect of the above statements?
- A) Statement A is correct, Statement B is incorrect
 - B) Statement B is correct, Statement A is incorrect
 - C) Statements A and B are correct
 - D) Statements A and B are incorrect

42. Apart from the Conductance Methods for Detection of Carious Lesions the most popular newer technique for caries detection is
- A) Fibre Optic Trans Illumination
 - B) Moist Laser Fluorescence
 - C) Wet Laser Fluorescence
 - D) Visual and radiographic combined
43. Based on the guidance of the WHO NCD Accountability Framework, including Global Monitoring Framework for NCD prevention and control in alignment with the extension of the NCD global action plan to 2030, and considering the non-progress of the Region on the targets of the *Strategy for oral health in South-East Asia, 2013-2020*, the action plan adopts two overall targets, with 2013 as the baseline
- Target 1:** a 30% relative reduction of premature mortality from oral cancer by 2030
- Target 2:** a 15% relative reduction of prevalence of untreated dental caries of permanent teeth by 2030.
- A) Target 1 is correct, Target 2 is incorrect
 - B) Target 2 is correct, Target 1 is incorrect
 - C) Both Targets 1 and 2 are correct
 - D) Both Targets 1 and 2 are incorrect
44. The *Action plan for oral health in South-East Asia 2022-2030* identifies six broad strategic action areas, building on the *Strategy for oral health in South-East Asia, 2013-2020*, and aligning with the Global strategy on oral health. One strategic action area is oral health governance, leadership and resources. For achieving this expected outcome, one of the core OR additional area are.
- A) Establish an effective national oral health coordinating entity led by a dedicated and skilled national Chief Dental Officer or focal person
 - B) Establish a school oral health programme, including daily supervised toothbrushing, preventative fluoride application and referral for advanced care, in collaboration with education sector
 - C) Integrate oral health workforce planning into national workforce planning and strategies
 - D) Expand the oral health workforce by training non-dental personnel (community health workers etc) in accordance with national legislation

45. A committee of experts is asked to advise on the choice of a cut-point for a screening test. The curves in this diagram represent the distribution of scores on a screening test for people with the condition to be detected (red) and others without (green). Moving the cut point (indicated by the block arrow) in the picture towards the left will increase the:



- A) Predictive value of a positive test
B) Area under the receiver operating characteristic curve
C) False positive rate and improve the negative predictive value
D) True negative rate and positive predictive value
46. What is the first step in undertaking a construct validation study?
- A) Choose an appropriate gold standard
B) Undertake a careful item analysis
C) Establish the best way to score the scale
D) Establish a theoretical definition of what is being measured
47. "Fidelity versus bandwidth" refers to :
- A) Collecting and evaluating a range of empirical evidence on the performance of each question in a questionnaire
B) Psychological interpretation of the meaning of a question in a questionnaire
C) Comparing the response rates to a number of questions
D) A second-order factor analysis of items in a health measure
48. The main mechanism by which fluoride protects against dental caries is?
- A) An intra oral topical effect by which fluoride is incorporated into the enamel during remineralisation
B) A systemic effect during the period of tooth development where fluoride is incorporated into the enamel during its formation
C) An intra-oral effect where fluoride inhibits the activity of streptococcus mutans
D) A life-long systemic effect whereby ingested fluoride is incorporated into the tooth enamel for form fluoroapatite

49. During history taking, a patient complains of pain. Which of the following characteristics of the pain complaint is least relevant?
- A) Character & Radiation
 - B) Site & Associations
 - C) Severity & Duration
 - D) Tolerance & Threshold
50. Which of the following is not a reason for failure to achieve adequate anaesthesia?
- A) Inadequate amounts of local anaesthetic administered
 - B) Resistance due to lack of inflammation
 - C) Poor clinical technique
 - D) Variation in patient's anatomy
51. Which of the following muscles initiates elevation of the mandible?
- A) Masseter
 - B) Temporalis
 - C) Lateral pterygoid
 - D) Medial pterygoid
52. The predictive value positive of a screening test is typically very low because:
- A) The screening test is never 100% specific and the prevalence of pre-clinical disease is typically low.
 - B) The screening test is never 100% sensitive and the prevalence of pre-clinical disease is typically low.
 - C) Length biased sampling results in more false positive results.
 - D) The screening test is never 100% specific and the prevalence of pre-clinical disease is typically high.

53. Consider the following statements:

Statement A: The inverse association between fluoride exposure and IQ was particularly strong in the studies at high risk of bias.

Statement B: Current evidence does not allow us to state that fluoride is associated with neurological damage, indicating the need for new epidemiological studies that could provide further evidences regarding this possible association.

Which one of the following is correct in respect of the above statements.

- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statements A and B are correct
- D) Statements A and B are incorrect

54. Consider the following statements:

Statement A: The conventional objectives of phase I clinical trial are determination of dose and schedule for phase II trial, safety and toxicity evaluation and pharmacokinetic assessment.

Statement B: The nocebo effect, happens when a placebo makes you feel worse.

Which one of the following is correct in respect of the above statements?

- A) Statement A is correct, Statement B is incorrect
- B) Statement B is correct, Statement A is incorrect
- C) Statements A and B are correct
- D) Statements A and B are incorrect

55. Consider the following statements:

Statement X: Subjects with limited Oral Health Literacy (OHL) levels had poorer periodontal health.

Statement Y: Improving the OHL of patients may help in the efforts to improve the adherence to socio economic condition.

Statement Z: Oral health literacy can be improved with communication with patients like Start with empathy ; Use the "Teach-back" technique and implement "Motivational Interviewing".

Which one of the following is correct in respect of the above statements?

- A) Statement X & Y are correct, Statement Z is incorrect
- B) Statement X & Z are correct, Statement Y is incorrect
- C) Statements X, Y & Z are correct
- D) Statements X, Y & Z are incorrect

56. The eDant Seva (www.edantseva.gov.in) website and mobile app of MoHFW, GoI fulfills which all component of Mobile technologies for oral health implementation guide



- 1) mOral Health literacy module
 - 2) mOral Health training module
 - 3) mOral Health early detection module
 - 4) mOral Health surveillance module
- A) 1, 2 & 3
 B) 2, 3 & 4
 C) 1, 3 & 4
 D) 1, 2 & 4
57. What are the upper and lower range of markings on a CPITN Probe? Soft debris covering more than $\frac{1}{3}$ and less than $\frac{2}{3}$ of the exposed tooth surface is given a debris score of _____ for the Oral Hygiene Index Simplified.



- A) 8.5 to 11.5 , 3.5 to 5.5 , 2
 B) 8.5 to 11.5 , 3.5 to 5.5 , 1
 C) 7.5 to 11.5 , 3.5 to 5.5 , 1
 D) 8.5 to 11.5 , 2.5 to 5.5 , 2

58. Ayushman Bharat is a public health care scheme with a potential to transform the health care landscape of our nation. It is for the national health protection of the country. What are the twin pillars of Ayushman Bharat?
- A) 2.5 lakh Health and Wellness Centre and Pradhan Mantri Matritva Yojana
 - B) 2.5 lakh Health and Wellness Centre and Pradhan Mantri Jan Arogya Yojana
 - C) 1.5 lakh Health and Wellness Centre and Pradhan Mantri Jan Arogya Yojana
 - D) 1.5 lakh Health and Wellness Centre and Pradhan Mantri Matritva Yojana
59. Consider the following statements:
- Statement 1:** Ayushman Bharat -National Health Protection Scheme seeks to cover nearly 5000 procedures through a country wide network of empaneled hospitals in a cashless and paperless manner
- Statement 2:** It covers oral and maxillofacial surgeries but not dental treatments like Root Canal Treatment and Partial Dentures.
- Which one of the following is correct in respect of the above statements?
- A) Statement 1 is correct and Statement 2 is incorrect
 - B) Statement 1 is incorrect and Statement 2 is correct
 - C) Both Statement 1 and Statement 2 are correct
 - D) Both Statement 1 and Statement 2 are incorrect
60. What is the important measure primary prevention method that a public health dentist should propagate in masses regarding the prevention of NIPAH Virus?
- A) full family vaccination
 - B) thorough cleaning and disinfection of farms with appropriate detergents
 - C) advice people on immediate animal premises quarantine
 - D) establishing a wildlife surveillance system, using a One Health approach burial or incineration of carcasses
61. Digital technologies are becoming an important resource for health services delivery and public health. These digital technologies are particularly relevant, due to their ease of use, broad reach and wide acceptance. According to International Telecommunication Union (ITU), 2018 data that DOES NOT supports the absolute use of this technology are
- A) 48 percent of the world household have a computer
 - B) 70 percent of the world population have active mobile broadband subscription
 - C) 58 percent of the world household have internet access at home
 - D) 80 percent of the world household have paid newspaper circulation

62. A 40 year old lady comes to the primary health care facility with a chief complain of oral ulcer of duration more than three weeks in the buccal mucosa of the left lower oral cavity. What is the correct sequence of approach for the early diagnosis of oral cancer in this case scenario

- i) Ask about the history of tobacco, alcohol and areca nut consumption
- ii) Enquire the family history of similar situation
- iii) Conduct oro-visual examination with a tongue blade
- iv) Prescribe anti- oxidants and local application anaesthetics
- v) Wait and watch for another one month
- vi) Referral to the facility with biopsy facility
- vii) Palliative care with indigenous system of medicine

- A) i ii iv vi
- B) i iii iv vi
- C) i iii v vi
- D) i iii iv vii

63. Identify the most important barriers to mHealth implementation and the scaling of projects.

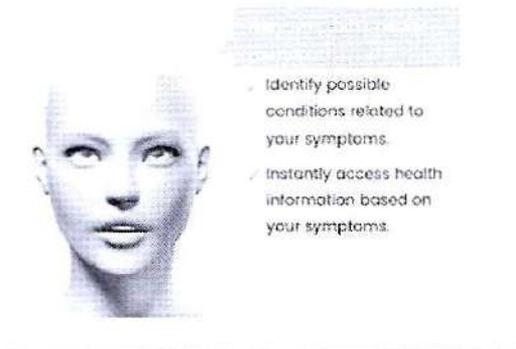
- A) conflicting health system priorities
- B) underdeveloped infrastructure
- C) lack of knowledge concerning applications of mHealth and public health outcomes
- D) non recognizing mHealth as an approach to health-related issues in e health policy

64. WHO recommends the use of digital tracking combined with both decision support and targeted client communication under these conditions:

- A) tasks that are already defined as not within the scope of practice for the health worker
- B) where potential concerns about data privacy and transmitting sensitive content to clients cannot be addressed.
- C) Where individual will have no opportunity to join and avail direct knowledge
- D) in settings where the health system can support the implementation of these intervention components in an integrated manner

SYMPTOM CHECKER >

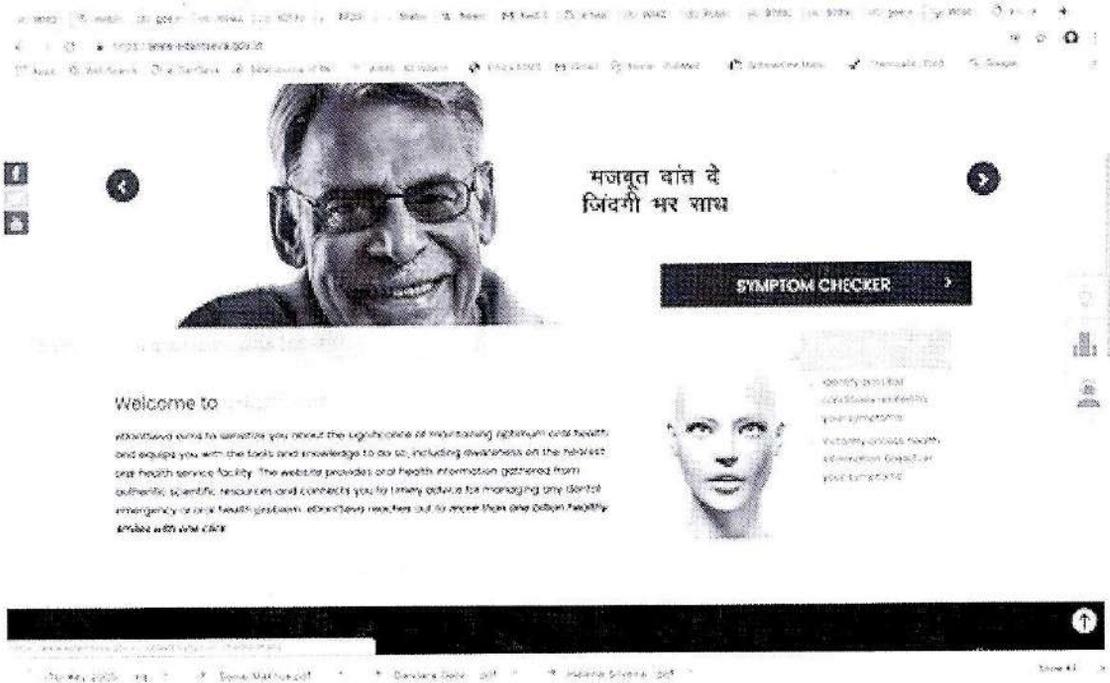
65.



Which is this feature of e- dant seva ?

- A) Enables the viewers to understand the oral hygiene methods
 - B) Motivates the viewers to attempt dental quiz
 - C) Access the various signs of oral disease in the viewers
 - D) Update the viewers regarding upcoming oral health programmes
66. The technology that reaches out to the tobacco users of all categories who want to quit tobacco use and support them towards successful quitting and is very widely used in India is
- A) mCessation
 - B) Tobacco Quitline numbers
 - C) Call centres for regional counselling
 - D) National Tobacco Control Programme

67.



"eDant" Seva is a website that provides oral health information gathered from authentic scientific resources and connects public to timely advice for managing any dental emergency or oral health problem. eDantSeva reaches out to more than one billion healthy smiles with one click. This website aims to focus on which form of prevention

- A) Primordial Prevention
- B) Primary Prevention
- C) Secondary Prevention
- D) Tertiary Prevention

68. The main goal of location-based health information services is to allow better presentation of the distribution of health and healthcare needs and Internet resources answering them across a geographical area, with the aim to provide users with better support for informed decision-making. Personalised information delivery requires the acquisition of high quality metadata about not only information resources, but also information service users, their geographical location and their devices. A public health dentist can utilize such platforms to improve oral health by



- A) Keeping a track of the oral health facilities across the country
 - B) Create awareness among the primary health workers
 - C) Enable citizens to locate their personalised services
 - D) Help citizens to provide feedback on the oral care provision
69. Who gave the concept of “Multifactorial Causation”?
- A) MacMahon & Pugh
 - B) Pettenkofer of Munich
 - C) John Snow
 - D) Trendly Dean
70. “An attribute or exposure that is significantly associated with the development of a disease”
- A) Risk Factor
 - B) Causative Factor
 - C) Contributory Factor
 - D) Predictive Factor

71. For the year 2016 World No Tobacco Day, WHO and the Secretariat of the WHO Framework Convention on Tobacco Control are calling on countries to “measures to restrict or prohibit the use of logos, colours, brand images or promotional information on packaging other than brand names and product names displayed in a standard colour and font style”. This initiative is called as.....
- A) Tobacco related Simple Packaging
 - B) Say no to Tobacco
 - C) Get Ready for Packaging
 - D) Get Ready for Plain Packaging
72. The recommendations in guidelines by WHO for sugar intake can be used by policy-makers and programme managers to assess current intake levels of free sugars in their countries relative to a benchmark. They can also be used to develop measures to decrease intake of free sugars, where necessary, through a range of public health interventions including all except
- A) Food and nutrition labelling, consumer education
 - B) Individual counselling of patients chair side at treatment center
 - C) Regulation of marketing of food and non-alcoholic beverages that are high in free sugars
 - D) Fiscal policies targeting foods and beverages that are high in free sugars
73. The mission of “Swachh Bharat” Campaign launched for 2014 - 2019 are all except
- A) Launch of awareness programmes on clean environment and how to make our country clean.
 - B) Construction of toilets in construction sites
 - C) Programmes to eliminate open defecation .
 - D) Making Documentaries on Social Issues.
74. The diagnostic power of a test to correctly exclude a disease is reflected by
- A) Sensitivity
 - B) Specitivity
 - C) Positive Predictivity
 - D) Negative Predictivity
75. The WHO STEP wise approach to Surveillance (STEPS) is a simple, standardized method for collecting, analysing and disseminating data in WHO member countries. By using the same standardized questions and protocols, all countries can use STEPS information for all of the following EXCEPT
- A) Decrease the disease burden
 - B) Monitoring within-country trends
 - C) Making comparisons across countries.
 - D) Collection of small amounts of useful information on a regular basis

76. Hospital cases when compared to hospital controls can have bias if the exposure increases the chance of admission. Thus cases in a hospital will have disproportionately higher number of subjects with that exposure. This kind of bias is called
- A) Lead Time Bias
 - B) Hawthorne Bias
 - C) Reporting Bias
 - D) Berkson's Bias
77. The WHO Oral Health Programme applies the philosophy "think globally - act locally" The development of programmes for oral health promotion in targeted countries focus on all except
- A) WHO Mega Country programme
 - B) Community-based demonstration projects for oral health promotion
 - C) Macro Country Health Evaluation and Planning
 - D) Analyse the processes and outcomes national oral health programmes
78. Which of the following brushing techniques is recommended for cleaning in areas with progressive gingival recession:
- A) Bass method
 - B) Stillman method
 - C) Modified Stillman method
 - D) Charters method
79. If the Oral Cancer stages are recorded using the symbols 0, I, II, III, IV. We say that the scale used is:
- A) Alphanumeric
 - B) Numerical
 - C) Nominal
 - D) Ordinal

80. The Biostatistics, Student's t test is:
- A) a parametric test for comparing averages
 - B) a nonparametric test for comparing averages
 - C) a parametric test for comparing variances
 - D) a nonparametric test for comparing variances
81. In biostatistics, which of the following tests is an example of non-parametric test:
- A) Mann Whitney
 - B) One way ANOVA
 - C) Student 't' test
 - D) Pearson's correlation
82. While drawing conclusion after a statistical test, the denoted p value should be interpreted as:
- A) the null hypothesis H_0 is rejected if $p < 0.05$
 - B) the null hypothesis H_0 is rejected if $p > 0.05$
 - C) the alternate hypothesis H_1 is rejected if $p > 0.05$
 - D) the null hypothesis H_0 is accepted if $p < 0.05$
83. Secondary colonizers of the dental plaque are all of the following, except:
- A) *Prevotella intermedia*
 - B) *Streptococcus sanguis*
 - C) *Porphyromonas gingivalis*
 - D) *Fusobacterium nucleatum*
84. Which of the following microorganisms is identified as predominant pathogen in localized juvenile periodontitis?
- A) *Prevotella gingivalis*
 - B) *Actinobacillus actinomycetemcomitans*
 - C) *Streptococcus sanguis*
 - D) *Actinomyces viscosus*

85. What is the limitation of systematic review
- A) It is too hard to do and coordinate with author of multi speciality
 - B) The research cannot be defined into the impact of a single variable
 - C) They are particularly complicated
 - D) The research community finds it complicated
86. Which is not a common opportunistic infection in an AIDS patient?
- A) Candidiasis
 - B) Herpes
 - C) Cytomegalovirus infection
 - D) Rubella infection
87. The common side effect of use of Phenytoin is :
- A) Teeth staining
 - B) Gum hyperplasia
 - C) Hypertension
 - D) Nausea
88. The dry mouth feeling after tooth brushing is due to
- A) Use of sodium Lauryl sulphate
 - B) Use of glycol
 - C) Use of sweeteners
 - D) Mechanical friction
89. Which of the following lesion has least possibility of development into a oral cancer?
- A) Leukoplakia
 - B) Erythroplakia
 - C) Oral candidiasis
 - D) Sub mucous fibrosis
90. If a diabetic patient on insulin suddenly feels dizzy during dental appointment, what will you do?
- A) Inject Insulin
 - B) Inject antibiotics
 - C) Give sugar solution
 - D) Inject Sodium Bicarbonates

91. In a known hypertensive patient, the nurse has reported the blood pressure of 170/120 mm Hg on the day of appointment for oral prophylaxis. What will you do?
- A) Perform Oral prophylaxis without any problem
 - B) Send the patient to physician for evaluation
 - C) Inject anti hypertensive drug and continue the treatment
 - D) Give diuretics to patient and start treatment
92. Which of the following components is more in Stimulated saliva than unstimulated saliva?
- A) Bicarbonate ion
 - B) Hydrogen ion
 - C) Sodium
 - D) Chloride
93. Usual range of diameters for adult tooth brush bristles is from (in inch)
- A) 0.005-0.009
 - B) 0.007-0.015
 - C) 0.010-0.012
 - D) 0.006-0.009
94. The health authorities are launching a smoking cessation program by designing different activities for the smokers. These are very expensive but still useful as a large proportion of lung cancer will be eliminated if smoking is stopped. This proportion of lung cancer can be indicated by:
- A) Relative risk
 - B) Attributable risk
 - C) Attributable fraction
 - D) Incidence density
95. In lactobacillus colony count test, Quebec's counter shows a reading of 8,000 CFU /ml saliva. What is the extent of caries activity in such patient?
- A) Slight active
 - B) Moderately active
 - C) Marked activity
 - D) No activity

96. Which of the following properties is a must for an ideal pit and fissure sealant
- A) Low volatility
 - B) Moderate water sorption and solubility
 - C) Adequate working time
 - D) Thermal conductivity higher than tooth
97. The Fluoride available in 8% Stannous Fluoride solution (in ppm)
- A) 12,300
 - B) 18,500
 - C) 19,500
 - D) 9,200
98. Which of the intermediate product of 8% Stannous Fluoride is responsible for metallic taste?
- A) Stannous hydroxy phosphate
 - B) Stannous trifluorophosphate
 - C) Calcium trifluorophosphate
 - D) Stannous trifluoro phosphate
99. In Fluoroprotector varnish, amount of Fluoride in ppm is:
- A) 7,000 ppm
 - B) 7,500 ppm
 - C) 8,000 ppm
 - D) 9,000 ppm
100. Which of the following is the most appropriate media for storage of avulsed permanent tooth after dental trauma in a rural school in India
- A) Milk and saliva
 - B) Plain water and coconut milk
 - C) In an hankerchief after washing the tooth
 - D) Ice top and ice in the mouth
-

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

Booklet Serial No. **240133**

Test Booklet Series

**TEST BOOKLET
LECTURER PERIODONTICS**

A

Written Test - 2024

(66)

Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

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 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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(66) (A)/2024

[P.T.O.]

1. The unexplained curtailment of disease progression called as burn out of the disease is associated with:
 - A) Localised aggressive periodontitis
 - B) Generalized aggressive periodontitis
 - C) Refractory periodontitis
 - D) Chronic periodontitis

2. How is toothbrush bristle diameter related to its hardness?
 - A) Directly proportional to bristle diameter
 - B) Directly proportional to square of the bristle diameter
 - C) Inversely proportional to bristle diameter
 - D) Inversely proportional to square of the bristle diameter

3. What is the ideal form of pontic design in areas of aesthetic concern?
 - A) Ridge lap Pontic
 - B) Modified Ridge lap
 - C) Ovate Pontic
 - D) Saddle Pontic

4. All the strains of *A. actinomycetemcomitans* are susceptible to which antibiotic:
 - A) Augmentin
 - B) Metronidazole
 - C) Ciprofloxacin
 - D) Tetracycline

5. Countersink drill is used :
 - A) To widen the entrance of osteotomy site.
 - B) To confirm position and angulation
 - C) To create screw threads in areas of dense bone
 - D) To make the initial marking for preparation of implant site

6. Which chemokine receptor type often serves as point of entry for HIV into the cell?
 - A) CCR1
 - B) CCR3
 - C) CCR5
 - D) CCR7

7. Lingua Plicata refers to:
- A) Lingual Frenum
 - B) Scrotal Tongue
 - C) Hairy tongue
 - D) Ankyloglossia
8. Which of the following statement regarding tooth mobility is not incorrect:
- A) All the teeth have slight degree of physiologic mobility.
 - B) Tooth mobility is greatest during night time
 - C) Single rooted tooth have less mobility than multirooted teeth.
 - D) Physiologic tooth mobility is the movement up to 0.2mm horizontally and no movement axially.
9. The term used to describe the changes in phenotype or gene expression that result from mechanisms other than changes in the underlying DNA sequence is:
- A) Splicing
 - B) Frameshift mutation
 - C) Linkage disequilibrium
 - D) Epigenetics
10. The most prevalent type of gingival disease in childhood is :
- A) Chronic marginal gingivitis
 - B) Herpetic gingivostomatitis
 - C) Puberty gingivitis
 - D) Localized juvenile spongiotic gingival hyperplasia
11. Endotoxins are _____ in nature:
- A) Glycoprotein
 - B) Lipopolysaccharide
 - C) Lipoprotein
 - D) Disaccharide

12. Which Risk Factor Assessment tool is offered free of charge by Clinical Research Foundation and University of Bern:
- A) Periodontal Risk Assessment (PRA)
 - B) Periodontal Risk Calculator (PRC)
 - C) Periodontal Assessment Tool (PAT)
 - D) Periodontal Attrition Index (PAI)
13. Which of the following is absolute contraindication for implant therapy:
- A) Oral Bisphosphonate Therapy
 - B) HIV/AIDS
 - C) Osteoporosis
 - D) Psychological and mental conditions
14. What dictates the form of gingiva and determines the residual pocket depth:
- A) Bone
 - B) PDL
 - C) Tooth Root
 - D) Junctional epithelium
15. Third step in resective osseous surgery is
- A) Radicular blending
 - B) Vertical grooving
 - C) Gradualizing marginal bone
 - D) Flattening of interproximal bone
16. Which standard Gracey curette design does not have extended shank modification (After Five series):
- A) Gracey #1-2
 - B) Gracey #5-6
 - C) Gracey #7-8
 - D) Gracey #9-10

17. The distance between the mucogingival junction and the projection on the external surface of the bottom of the gingival sulcus or the periodontal pocket is known as:
- A) Biological width
 - B) Width of keratinized gingiva
 - C) Width of attached gingiva
 - D) Critical probing depth
18. Primary characteristic of established lesion of gingivitis is characterized by predominance of:
- A) Neutrophils
 - B) Plasma cells
 - C) Lymphocytes
 - D) Mast cells
19. A gene mapping approach that tests whether one allele of a gene occurs more often in patients with the disease than in subjects without the disease is termed as:
- A) Candidate gene approach
 - B) Genome wide analyses
 - C) Linkage analyses
 - D) Segregation analyses
20. Which bacteria in subgingival microflora increases significantly in pregnancy:
- A) Porphyromonas gingivalis
 - B) Treponema denticola
 - C) Campylobacter rectus
 - D) Prevotella intermedia
21. A full mouth radiographic survey consists of minimum of how many intraoral and posterior bitewing films:
- A) 10 Intraoral and 6 Posterior bitewing films
 - B) 12 Intraoral and 6 Posterior bitewing films
 - C) 14 Intraoral and 4 Posterior bitewing films
 - D) 16 Intraoral and 4 Posterior bitewing films

22. Severity of chronic periodontitis is characterized based on:
- A) Pocket depth
 - B) Attachment loss
 - C) Bone loss
 - D) Bleeding on probing
23. Which of the following is not false regarding JP2 strain:
- A) Is a virulent strain of *P.gingivalis*.
 - B) Has a 530 bp deletion in its leukotoxin gene operon.
 - C) Associated with 100-200 fold higher production of leukotoxin.
 - D) Associated with SNP of gene encoding for IL-1 and IL-6 production
24. Which microbial flora has been reported to produce eicosanoids leading to release of pro-inflammatory mediators which leads to development of necrotizing periodontal disease:
- A) Spirochetes
 - B) *Candida albicans*
 - C) Herpes virus
 - D) Fusiform bacteria
25. The only fusion inhibitors drug currently approved by U.S. FDA for management of HIV infection is:
- A) Efavirenz
 - B) Etravirine
 - C) Enfuvirtide
 - D) Emtricitabine

26. In human periodontal pockets , the depth of penetration of periodontal probe in the connective tissue apical to junctional epithelium is about:
- A) 0.8 mm
 - B) 1.0 mm
 - C) 0.1 mm
 - D) 0.3 mm
27. Who invented the mainstay therapy for sleep apnea:
- A) Donaldson and Goodchild
 - B) Prof. Colin Sullivan
 - C) Martinez
 - D) Resnick and Redline
28. Pattison Gracey Lite #1-2 is :
- A) Micro Mini five Gracey curette
 - B) Periodontal maintenance curette
 - C) Mini Five curette
 - D) After Five curette
29. In 1877, who recorded the first case of pregnancy gingivitis:
- A) Pinard
 - B) Prichard
 - C) Pitcarin
 - D) Pindborg
30. Fibrin morphology in platelet rich fibrin is
- A) Trimolecular
 - B) Tetramolecular
 - C) Pentamolecular
 - D) Octahedral
31. What level of sedation is conscious sedation:
- A) Minimal sedation
 - B) Moderate sedation
 - C) Deep sedation
 - D) General anesthesia

32. Duration of action of lorazepam as oral sedative is:
- A) 4-8 hours
 - B) 6-8 hours
 - C) 2-4 hours
 - D) 1 hour
33. To be competent in nitrous oxide sedation, ADA recommends a minimum course of _____ including a clinical component:
- A) 14 hours
 - B) 14 days
 - C) 14 weeks
 - D) 10 days
34. The organism most often encountered in infective endocarditis are:
- A) Alpha hemolytic streptococci
 - B) Beta hemolytic streptococci
 - C) Non streptococci organisms
 - D) Black pigmented bacteria
35. Marx suggested that a laboratory blood test for serum _____ that could be used to assess an individual risk of developing bisphosphonate related osteonecrosis of the jaw (BRONJ):
- A) Alkaline phosphatase
 - B) Vitamin D
 - C) C terminal telopeptide fragment of type I collagen
 - D) Metabolite of bisphosphonate
36. What is the radiation dose received by patient from panoramic radiograph:
- A) 20 μ Sv
 - B) 47 μ Sv
 - C) 5 μ Sv
 - D) 98 μ Sv

37. The minimum mesiodistal space required for two standard diameter (4mm) implants is:
- A) 10 mm
 - B) 8 mm
 - C) 14 mm
 - D) 18 mm
38. What is the minimum amount of interocclusal space required for the restorative stack (Implant crown, abutment and screw) on an external hex type implant is:
- A) 7 mm
 - B) 14 mm
 - C) 12 mm
 - D) 10 mm
39. Full form of CBCT is:
- A) Compact Beam Computerized Tomography
 - B) Computer Beam Conical Tomography
 - C) Conical Beam Computerized Tomography
 - D) Cone Beam Computed Tomography
40. American Academy of Oral and Maxillofacial Radiology recommends _____ radiograph as the initial evaluation of dental implant patient, supplemented with _____ radiographs as needed.
- A) Periapical, Panoramic
 - B) Panoramic, CBCT
 - C) Panoramic, Periapical
 - D) CBCT, Periapical
41. An implant in which the abutment and the implant are one contiguous piece are known as:
- A) Platform switched implant
 - B) Morse Taper implant
 - C) External hex implant
 - D) Solid body implant

42. Technique in which graft attain expansion by alternate incision on opposite sides of the graft was suggested by:
- A) Han and Associates
 - B) Grupe and Warren
 - C) Levine and Associates
 - D) Rateitschak and colleague
43. Langer and langer procedure is related to:
- A) Free Gingival Autograft
 - B) Subepithelial Connective tissue graft
 - C) Pouch and Tunnel technique
 - D) Laterally Displaced Pedicle Flap
44. Excessive gingival display caused due to incomplete exposure of anatomic crown is referred as:
- A) Bimaxillary protrusion
 - B) Vertical maxillary excess
 - C) Altered passive eruption
 - D) False enlargement
45. The ideal width to length ratio of clinical crown of maxillary central incisor should fall between:
- A) 0.78 and 0.85
 - B) 0.75 and 1.11
 - C) 0.65 and 1.05
 - D) 0.75 and 1.25
46. Placement of implant that allows for bone healing within extraction site, which typically requires 4 to 6 months or longer is known as:
- A) Delayed implant Placement
 - B) Staged Implant Placement
 - C) Simultaneous Implant placement
 - D) Late Implant placement

47. The maxillary sinus bone augmentation procedure was first described in 1960 by:
- A) Boyne PJ
 - B) Boyan BD
 - C) Cho SC
 - D) Chen D
48. The Osteotome Sinus Floor Elevation (OSFE) technique was described by:
- A) Summers
 - B) De Marco
 - C) Simion and coworkers
 - D) Toffler M
49. Dentogingival unit comprises of:
- A) Junction epithelium and gingival fibers.
 - B) Sulcular epithelium and gingival fibers
 - C) Sulcular epithelium and periodontal fibers
 - D) Junction epithelium and periodontal fibers
50. Electronic device used for measuring the amount of GCF collected on a blotter is called:
- A) Periopaper
 - B) Periotome
 - C) Periotest
 - D) Periotron

51. PerioPredict™ and ILUSTRA terms are associated with:
- A) Chairside kit based on DNA Probes for predictable detection of periodontopathic bacteria
 - B) Commercially available test based on genetic variation at IL-1 α and IL-1 β cytokine gene.
 - C) Computer software tool for Periodontal Risk Assessment.
 - D) Chairside kit to predict the site of future attachment loss.
52. Junctional epithelium is attached to tooth by:
- A) Internal basal Lamina
 - B) External basal lamina
 - C) Hemidesmosomes
 - D) Reduced enamel epithelium
53. Presence of pus in periodontal pocket :
- A) Is primary sign
 - B) Is secondary sign
 - C) Is indicative of depth of periodontal pocket
 - D) Suggestive of destruction of supporting tissue
54. Area of collagen degeneration or areas in which collagen fibrils have not been fully mineralized initially is called :
- A) Pathologic granules
 - B) Advanced Glycation endproducts
 - C) Zone of semi destroyed connective tissue fibres
 - D) Plaque free zone

55. The distance between apical extent of calculus and alveolar crest in human periodontal pockets is:
- A) 1.97 mm
 - B) 2.07 mm
 - C) 2.071 mm
 - D) 1.04 mm
56. The range of effectiveness in which bacterial biofilm can induce bone loss:
- A) 0.5 to 1.5 mm
 - B) 2.0 to 3.5 mm
 - C) 1.0 to 2.8 mm
 - D) 1.5 to 2.5 mm
57. The average rate of bone loss for facial surfaces as reported by L oe and colleagues is:
- A) 0.2 mm per year
 - B) 0.3 mm per year
 - C) 0.5 mm per year
 - D) 0.7 mm per year
58. According to L oe and coworkers, what percentage of people had moderate progressive periodontal disease with yearly loss of attachment of 0.05 mm to 0.5 mm.
- A) 8%
 - B) 11%
 - C) 18%
 - D) 81%
59. According to L oe and coworkers, attachment loss precede bone loss by about:
- A) 1-2 months
 - B) 6-8 months
 - C) 10-12 months
 - D) 1-2 years

60. As the age increases, the width of attached gingiva
- A) Increases
 - B) Decreases
 - C) Remains constant throughout the life
 - D) First increases then decreases
61. The drifting movement of teeth into spaces created by unreplaced missing teeth is example of:
- A) Primary trauma from occlusion
 - B) Secondary trauma from occlusion
 - C) Spontaneous repositioning of tooth
 - D) Buttressing bone formation
62. Trauma from occlusion is
- A) Irreversible
 - B) Reversible
 - C) Causes pocket formation
 - D) Causes Apical migration of Junctional epithelium
63. On which of the following animal model did the University of Gothenburg studied the trauma from occlusion:
- A) Squirrel monkeys
 - B) Beagle dogs
 - C) Cynomolgus monkeys
 - D) Cotton top marmoset
64. In what percentage of maxillary and mandibular molars , the furcation entrance diameter is narrow than the width of conventional periodontal curette:
- A) 18%
 - B) 28%
 - C) 58%
 - D) 78%

65. Incubation Period for hepatitis B virus is:
- A) 15-50 days
 - B) 50-160 days
 - C) 15-150 days
 - D) 180-200 days
66. Odland bodies are found in :
- A) Stratum corneum
 - B) Stratum basale
 - C) Stratum spinosum
 - D) Stratum granulosum
67. Type of collagen found in basal lamina is:
- A) Type I
 - B) Type II
 - C) Type III
 - D) Type IV
68. Civatte bodies are seen in:
- A) Pemphigus Vulgaris
 - B) Mucous Membrane Pemphigoid
 - C) Systemic Lupus Erythematosus
 - D) Lichen Planus
69. What percentage of oral lichen planus may develop into squamous cell carcinoma:
- A) 0.1%
 - B) 1%
 - C) 5%
 - D) 10%
70. Sulcular epithelium lacks:
- A) Stratum corneum
 - B) Stratum basale
 - C) Stratum spinosum
 - D) Basement membrane

71. Identify the correct sequence:
- A) Examination, Diagnosis, Prognosis, Treatment
 - B) Examination, Prognosis, Diagnosis, Treatment
 - C) Examination, Diagnosis, Treatment, Prognosis
 - D) Examination, Prognosis, Treatment, Diagnosis
72. Which of the following does not contain chlorhexidine:
- A) Chlosite
 - B) PerioChip®
 - C) PerioCol®-CG
 - D) Actisite®
73. Which Phase of clinical trial is considered as gold standard:
- A) Phase I
 - B) Phase II
 - C) Phase III
 - D) Phase IV
74. Ligosan® Slow Release is:
- A) 14% doxycycline gel
 - B) 2% lignocaine
 - C) Lignocaine spray
 - D) Lignocaine mouth dissolving tablets
75. The probability of type I error gives:
- A) Level of significance
 - B) Beta
 - C) Odds Ratio
 - D) Sensitivity

76. Blood supply to cementum of mandibular central incisor is by:
- A) Branches from mandibular artery and vein
 - B) Branches from incisive artery and vein
 - C) Branches from lingual artery and vein
 - D) Cementum do not have blood supply
77. Surface area of dorsal tongue mucosa is:
- A) 15 cm square
 - B) 25 cm square
 - C) 45 cm square
 - D) 55 cm square
78. A bacteria responsible for very strong breath malodor in a rare atrophic condition of nasal mucosa with the appearance of crusts is:
- A) *Klebsiella ozaenae*
 - B) *Mogibacterium timidum*
 - C) *Capnocytophagagingivalis*
 - D) *Helicobacter pylori*
79. Yaegaki and Sanade recommended a value of _____ as the limit for social acceptance for halitosis:
- A) 50 ppb
 - B) 75 ppb
 - C) 100 ppb
 - D) 125 ppb
80. Distal wedge technique using two horizontal incisions was given by:
- A) Braden
 - B) Ramfjord
 - C) Badersten
 - D) Robinson

81. A subset of CD4+ T cells that are characterized by their cytokine secretion profile and activates cellular immunity belongs to:
- A) Th1 Cells
 - B) Th 2 cells
 - C) Th 17 cells
 - D) Regulating T cells
82. In PICO, "P" stands for:
- A) Population
 - B) Plaque
 - C) Prognosis
 - D) Periodontal
83. What type of source of evidence are systematic reviews and Meta Analysis:
- A) Primary
 - B) Secondary
 - C) Tertiary
 - D) None
84. Major Sheath Protein (MSP), a 53-64 kDa periplasmic protein, acts as a multifunctional adhesion that promote binding to host and bacterial receptors is associated with which bacteria:
- A) P. gingivalis
 - B) F. nucleatum
 - C) T. denticola
 - D) A. a
85. Chediak Higasi Syndrome is autosomal recessive condition caused due to mutation in which gene:
- A) Cathepsin C gene
 - B) CIR gene
 - C) LYST gene
 - D) HSS gene

86. Which of the following bacteria have the ability to form intracellular apatite crystals :
- A) Peptostreptococcus
 - B) Veillonella
 - C) Actinomyces
 - D) Actinobacillus Actinomycetemcomitans
87. Which of the following newly identified pathogen in etiology of periodontitis belong to phylum Synergistetes:
- A) Desulfobelbus
 - B) Filifactor Alocis
 - C) Mogibacterium Timidum
 - D) Fretibacterium
88. Target molecule for Biolise test is :
- A) Proteinase
 - B) Elastase
 - C) MMPs
 - D) AST
89. Most common site for occurrence of medication-related osteonecrosis of the jaw (MRONJ):
- A) Anterior mandible
 - B) Anterior maxilla
 - C) Posterior mandible
 - D) Posterior maxilla
90. Main etiologic factor for acute inflammatory gingival enlargement is: _
- A) Plaque
 - B) Habits
 - C) Virus
 - D) Trauma

91. Which of the following bacteria is a secondary colonizer:
- A) Eubacterium nodatum
 - B) Eikenella corrodens
 - C) Capnocytophaga Sputigena
 - D) Veillonellaparvula
92. Local chemokine paralysis which leads to delayed PMN leukocyte transmigration is due to:
- A) P.gingivalis manipulating TLR-4 receptors
 - B) P.gingivalis is able to interfere with complement system
 - C) P.gingivalis suppress activation of degradation of C3
 - D) P.gingivalis inhibiting synthesis of IL-8
93. Growth of *Porphyromonas Gingivalis* is enhanced by metabolic byproduct _____ produced by T. denticola:
- A) Protoheme
 - B) Succinate
 - C) Lactate
 - D) Isobutyric acid
94. P.gingivalis provides _____ that stimulate growth of T. denticola:
- A) Protoheme
 - B) Succinate
 - C) Lactate
 - D) Isobutyric acid
95. Who gave Ecological Plaque Hypothesis:
- A) Socransky and haffajee
 - B) Hajishengallis
 - C) Marsh
 - D) Löesche
96. Which of the following structure has least inorganic content:
- A) Dental Calculus
 - B) Bone
 - C) Enamel
 - D) Dentine

97. Localized and Generalized forms of aggressive periodontitis are categorized on the basis of:
- A) Involvement of less or more than 30% of teeth
 - B) Age
 - C) Loss of attachment
 - D) Specific clinical phenotype
98. Which of the following is an example of true periodontal end point:
- A) Tooth loss
 - B) Bleeding on probing
 - C) Probing depth
 - D) Microbial measures
99. What is the name of the official publication of European Federation of Periodontology:
- A) Journal of Clinical Periodontology
 - B) Journal of Periodontology
 - C) Journal of Periodontal Research
 - D) Periodontology 2000
100. Periodontics was recognized as a specialty of dentistry by American Dental Association in the year:
- A) 1950
 - B) 1947
 - C) 1938
 - D) 1958
-

Booklet Serial No. **240177**

Test Booklet Series

TEST BOOKLET
LECTURER PROSTHODONTICS/PROSTHODONTICS
INCLUDING DENTAL MATERIAL

Written Test - 2024

(67)

A

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THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

1. In cases with severely resorbed residual ridges, which one is most important for the retention of the complete denture?
 - A) Maximal extension of the denture base
 - B) Maximal area of contact between the mucous membrane and the denture base.
 - C) Intimate contact of denture base and the basal seat
 - D) The physiologic muscular force.

2. Which of these statements represents the viscoelastic character of denture-supporting tissue?
 - A) There is continuous elastic compression of soft tissue on instant application of load
 - B) Elastic deformation of the tissues takes place instantly and continues to increase as the duration of load is extended
 - C) Initially slow elastic decompression occurs when the pressure is removed
 - D) Continuous delayed elastic recovery of tissues when force is removed.

3. Bilateral balance occlusion balance is necessary with which type of prosthesis:
 - A) Cast partial denture for Kennedy class-II situation.
 - B) Implant retained hybrid prosthesis
 - C) Implant- tissue supported overdenture
 - D) Implant retained complete denture

4. Which statement is correct for the shape and position of the condyle?
 - A) Condyle fills condylar fossa laterally as well as Antero posteriorly
 - B) Condyle is wider laterally than Antero posteriorly
 - C) The outer extremity of the condyle extends beyond the meatus.
 - D) The shape of the condyle varies greatly and so does the long portion of the condyle.

5. The new definition of centric relations says it's an anterior-superior position of the condyle against the articular eminence while the previous definition states it's a most retruded position of the condyle in the temporal fossa. Why this difference exists:
 - A) Position of condyle has changed with time
 - B) The posterior part of the temporal fossa has a thin bone hence not able to withstand the forces.
 - C) The posterior part of the temporal fossa has less blood supply hence bone may be resorbed with time under pressure.
 - D) The shape of the condyle has changed with development.

6. A young patient reported pain and clicking in the TMJ region, On clinical examination dentist observed he has a misalignment of teeth. So to confirm the diagnosis of whether occlusal is related to temporomandibular disorder in this case he has to give what type of splint to the patient:
 - A) Directive splint
 - B) Pivoting splint.
 - C) Anterior repositioning splint
 - D) Permissive splint.

7. At the time of insertion of a complete denture dentist notices that the maxillary denture is loose, while the mandibular denture has a retention almost similar to the final impression, while the final impression for the maxillary arch also had good retention. What could be the possible region for the loss of retention maxillary denture in this case?
- The size of the basal seat has changed with time.
 - The patient may be an old denture wearer and has not discontinued the denture before final impressions.
 - Mucosa in mid palatal region lack resiliency.
 - The patient may have xerostomia so there is a lack of capillary action of saliva.
8. A 50-year-old female patient reported to a dentist for replacement of mandibular central incisors on clinical examination dentist observed she had tongue thrust so what type of prosthesis will have a poor prognosis?
- Cast partial denture.
 - Flexible partial denture
 - Tooth-supported fixed prosthesis
 - Implant retained fixed prosthesis
9. A poor edentulous patient with severely resorbed mandibular residual ridge reported to the dentist for complete denture fabrication, in such cases which anatomical structure must be covered but relief should be provided to avoid trauma after the insertion of complete denture:
- Genial tubercle
 - Mylohyoid ridge
 - Labial cortical bone
 - External oblique ridge.
10. An edentulous patient reported to the dentist with a chief complaint of being unable to use or wear the mandibular denture, especially during function, while she has no problem with a maxillary denture, on clinical examination dentist noticed the mandibular residual ridge is thin but rounded, so what is suitable in this case to make mandibular denture functional.
- Relief entire crest of the residual ridge
 - Use a soft liner in the mandibular denture
 - 2 or 4 implant tissue supported over the denture
 - Slightly reduce the vertical dimension to favor the mandibular residual ridge.
- Options are:**
- 1 and 2 are correct
 - 2 and 4 are correct
 - All are correct
 - 3 and 4 are correct

11. Linguoalveolar and linguodental sounds for complete denture fabrication use to check
1. The proper placement of anterior teeth
 2. Thickness of denture base in the anterior part of the hard palate
 3. Silverman's closest speaking space
 4. Vertical positions of upper anterior teeth.

Options are:

- A) 1 and 3 are correct
 - B) 2,3 and 4 are correct
 - C) 1,2 and 3 are correct
 - D) 1,2,3 and 4 are correct.
12. A patient suffering from temporomandibular disorder reported with following clinical and radiographic findings
1. Restricted (20-25mm) mouth opening.
 2. During wide opening Md deviates towards the affected side
 3. No deviation of the mandible during lateral movements
 4. Condyle is resting on retrodiscal tissues.

These clinical findings represent patient is suffering with:

- A) Disc displacement with reduction
 - B) Structural incompatibility of articular surfaces
 - C) Adhesion between Disc and Fossa
 - D) Disc displacement without reduction.
13. A 40-year-old patient reported stiffness in the temporomandibular joint area with a relatively normal mouth opening with rough and jumpy mandibular movement. So this patient is suffering from;
- A) Adhesion between Condyle and disc
 - B) Adhesion between fossa and disc
 - C) Short steep posterior slope followed by longer flatter anterior slope
 - D) Intermittent locking of the disc.

14. A patient suffering from temporomandibular disorders, reported these symptoms:
1. Deviation of the mandible during opening and closing movement only
 2. No deviation during eccentric movements
 3. Pain on the angle of the mandible on the right side after some amount of mouth opening.
 4. MRI shows no deformity in joint space or associated structures.

So this patient is suffering with:

- A) Intra capsular disorder
- B) Muscular disorder
- C) Steepness of articular eminence
- D) Subluxation

15. To make a successful diagnosis and treatment plan for an edentulous patient, During the first appointment with the patient-doctor should;
1. Start with personal conversation
 2. Develop a positive repo with the patient
 3. Collect essential information from the patient
 4. Find out the patient's desires and expectations of the patient.
- The correct options are;**
- A) 1 and 2 only
 - B) 1,2 and 4 only
 - C) 1 and 4 only
 - D) 2,3 and 4 only.
16. Which statement is not correct regarding the subjective evaluation of an edentulous patient?
- A) The observation and evaluation of the patient started as soon as he/she entered the dental clinic
 - B) All observations must be remembered/noted but should not be correlated with physical examination.
 - C) Patient requiring support for walking/seating or standing give an idea of motor coordination
 - D) While conversing with the patient observe the philtrum, nasolabial fold and labiomental groove for hollowness or puffiness.
17. Patients horizontal condylar guidance are recorded at 6 mm of protrusive movement because:
- A) In many cases it's not possible to move the mandible beyond 6 mm.
 - B) Beyond 6 mm of protrusive movement of the mandible lateral component is introduced.
 - C) 6 mm of protrusive movement is required to achieve bilateral balanced occlusion
 - D) Till 6 mm of protrusive movement mandible moves in an almost straight line.
18. A maxillectomy patient having Aramany class I defect reported for prosthetic rehabilitation, so what type of cast clasp is indicated on remaining teeth to follow the principle of maximum retention:
- A) Cast circumferential clasp
 - B) Backaction clasp
 - C) Embrasure clasp
 - D) I bar clasp
19. Which statement is true for a cast metal alloy having a lower modulus of elasticity?
- A) Long-span FPD will flux in mesiodistal direction as forces are applied on the pontic therefore abutments will be subjected to dislodging forces.
 - B) Cannot be used to form the retentive terminal of a clasp assembly in a cast partial denture.
 - C) Can be used to form the major connector in a cast partial denture.
 - D) Marginal adaptation in a crown cannot be achieved

20. Which statement is correct for an internal rest seat?
- A) It is not indicated in Kennedy's class II situation or I.
 - B) Its main advantage is that it permits the location of the rest seat in a more favorable position about the horizontal axis of an abutment.
 - C) Its main advantage is that it is near vertical walls provides stabilisation and floor retention
 - D) Its main advantage is that it provides all the functions of a cast clasp assembly i.e. occlusal support, retention and stabilization.
21. An occlusal rest seat used in a cast partial denture serves all the purposes EXCEPT one:
- A) Maintain the components of a cast partial denture in their planned position.
 - B) Maintain the occlusal relationship by preventing the settling of the denture.
 - C) Prevent impingement of metal framework on the soft tissues.
 - D) Direct and distribute occlusal load between abutment teeth and edentulous area.
22. Mandibular lingual bar major connector is not indicated when:
- 1. Lingual inclination of mandibular pre-molar and incisor teeth can't be corrected
 - 2. When severe lingual tori can't be removed
 - 3. When the space between the gingival margin of teeth and lingual vestibule is more than 8mm.
 - 4. When severe and abrupt lingual tissue undercut existed.
- Options are:**
- A) 1 and 2 only
 - B) 3 only
 - C) 1,2 and 4 only
 - D) 2 and 3 only
23. The finish lines in a cast partial denture serve the following functions EXCEPT the one:
- A) Creates a definite limit to the plastic of the denture base. In this way, the plastic ends in a bulk of material. Thin areas of plastic are weak, flexible, and subject to fracture.
 - B) Undercut finish lines provide mechanical retention for the plastic denture base .
 - C) Provide a smooth transition from the plastic base to the RPD metal framework.
 - D) Indicate the final extension of a cast metal framework.
24. For efficient cutting or grinding of any surface.
- A) The tensile and shear stresses of the substrate should be more than those produced in the rotary instrument.
 - B) The tensile and shear stresses of the substrate should be equal to those produced in the rotary instrument.
 - C) The tensile and shear stresses of the substrate should be less than the those produced in the rotary instrument
 - D) The pressure applied during cutting or grinding is the major factor that, governs the efficiency of cutting.

25. An alloy has high ductility. Which statement is true for that alloy?
- A) A thin wire can be formed from that alloy.
 - B) Ductility is inversely proportional to the plastic deformation of an alloy.
 - C) Casting made from a ductile alloy has poor marginal adaptation and therefore needs to be burnished
 - D) The ductility of an alloy indicates very thin sheet can be formed out of it.
26. Which syndrome is characterized by rapid generalized destruction of alveolar bone and Palmer plantar hyperkeratosis?
- A) Chidiak- Higashi syndrome
 - B) Chronic Granulomatous disease
 - C) Papillon- Lefevre syndrome
 - D) Peutz- Jeghers Syndrome
27. Sprue for the casting of base metal alloys is attached
- A) In the thinnest area of wax Pattern
 - B) In the thickest area of the wax pattern
 - C) We can Attach anywhere but it should be thin at the point of attachment
 - D) In the thickest area of the wax pattern and point of attachment should be flared
28. Which of these factors will enhance the incidence of microfracture of bone in a patient with decreased bone density?
- A) Shortened cantilever length
 - B) Narrow occlusal table
 - C) RP-4 restoration
 - D) Fixed prosthesis
29. A cast clasp remains passive during:
- A) Placement of cast partial denture
 - B) Removal of cast partial denture
 - C) Dislodging masticatory forces applied to cast partial denture
 - D) Swallowing at the end of the chewing cycle.
30. Combination clasp in a cast partial denture is used in a case when:
- A) Only a mesial undercut exists on the principle abutment in the Kennedy class I situation.
 - B) Only a Distal undercut exists on the principle abutment in the Kennedy class II situation.
 - C) Only a mesial undercut exists on the principle abutment in the Kennedy class III situation.
 - D) Retentive clasp is required on anterior abutment teeth in the Kennedy class IV situation.

31. The effect of Bennett's movement on the cusp path:
1. Depending on the value of side shift cusp path vary in maxillary and mandibular teeth.
 2. The balancing and working cusp path in maxillary and mandibular teeth not effected with the different type of side shifts.
 3. Greater The Bennett movement , shorter the cusps and shallower the fossa
 4. Lesser the Bennett movement longer the cusps and shallower the fossa

Which statements are correct:

- A) 1,2 and 3 are correct
- B) 2,3 and 4 are correct
- C) 1,3 and 4 are correct
- D) 1,2 and 4 are correct

32. The amount of lateral translation movement is determined by:
1. The degree to which the medial wall of the mandibular fossa departs medially from the rotating condyle
 2. The degree of lateral movement permitted by the temporomandibular ligaments.
 3. The distance between the medial wall of the mandibular fossa and the medial pole of the orbiting condyle.
 4. The direction taken by the rotating condyle during the bodily movement.

Options are:

- A) 1,2 and 3
- B) 2,3 and 4
- C) 1,2 and 4
- D) 1,3 and 4

33. An otherwise healthy 45 yr old man having severe wear of all teeth reported for full mouth rehabilitation. Which philosophy of full-mouth rehabilitation is more suitable for this patient ?
- A) Pankey-Mann-Schuyler
 - B) Freedom in centric
 - C) Nyman lindhae
 - D) Yuodelis concept

34. The Hobo and Takayama philosophy for full-mouth rehabilitation states:
1. Incisal guidance should not be 5° steeper than the condylar guidance to achieve uniform disocclusion.
 2. Cusp angle is more reliable than the condylar and incisal guidance.
 3. Condylar guidance/path is influenced by anterior guidance.
 4. Incisal guidance can be use as sole guide to rehabilitate the occlusion.

Which statements are correct:

- A) 1,2 and 3
- B) 2,3 and 4
- C) 1, 3 and 4
- D) 1,2 and 4

35. According to Pankey-Mann-Schuyler philosophies lower anterior has to be restored first because:
- They are easy to prepare
 - Require less chair-side time for preparation.
 - Mandible is movable.
 - Have definite landmarks to develop the lower incisal plane.
36. A 58-year-old patient reported mutilated dentition, after through examination he planned for tooth-supported fixed restorations to achieve full mouth rehabilitation. What type of occlusion will be detrimental to the health of restored teeth?
- Maximum number of occlusal contacts on posterior teeth and no contacts on anterior teeth during centric occlusion.
 - Anterior guidance in harmony with condylar guidance.
 - Anterior group function in protrusion.
 - Canine guidance or anterior group function in lateral excursions.
37. Pankey- Mann- Schuyler philosophy recommended, Broadrick occlusal plane analyzer to determine the occlusal plane. From the following statements which statements are correct for Broadrick occlusal plane analyzer
- Upper posterior occlusal plane
 - Lower posterior occlusal plane
 - To determine the occlusal plane a point of intersection is made on graph paper fixed on the upper member of the articulator
 - A four-inch diameter is used to draw the occlusal plane.
- Options are :**
- 1 only
 - 2 and 3 only
 - 2 and 4 only.
 - 2 only
38. The Hobo and Takayama philosophy has few advantages over Pankey - Mann- Schuyler philosophy for occlusal rehabilitation. Tick the correct one from the options given below:
- It is a two-stage procedure
 - Multiple occlusal records are not required
 - Customization of incised guidance not required
 - A semi-adjustable articulator is good enough for occlusal reconstruction
- Options are:**
- 1,2 and 3 only
 - 2 and 3 only
 - 2 and 4 only
 - 2,3 and 4 only

39. Marginal discrepancy in a fixed tooth retained crown may be due to:
1. Improper selection and failure to establish the margin properly.
 2. Failure to do a gingival retraction
 3. Improper impression procedure
 4. Selection of margin design
- Options are:**
- A) 1,2 and 3 only
 - B) 1,2,3 and 4
 - C) 2 and 3 only
 - D) 2,3 and 4 only
40. A tooth-supported FPD de-cemented due to
1. Mobility of one or more abutments
 2. Poor initial fit of the casting
 3. Insufficient retention in the abutment preparation
 4. Technique of cementation
- Options are:**
- A) 1,2 and 3 only
 - B) All are correct
 - C) 2,3 and 4
 - D) 2 and 3 only
41. A 55-year-old male patient reported to a dentist for replacement of missing right second premolar and 1st molar with tooth-supported FPD. What type of occlusion will be most suitable for this patient?
- A) Canine guided using a reorganized approach
 - B) Group function using a reorganized approach
 - C) Either canine-guided or group function using a confirmative approach
 - D) Canine guided using a confirmative approach
42. Frontal plane rotation' is most commonly seen with:
- A) Lateral Mandibular discontinuity defect
 - B) Medial Mandibular discontinuity defects
 - C) Lateral Mandibular continuity defects
 - D) Condylar resection
43. A wax framework is casted for the fabrication of a metal framework for the cast partial denture. In this case, casting shrinkage will be mainly compensated by:
- A) Setting expansion of the investment
 - B) Hygroscopic expansion of the investment
 - C) Hydrosopic expansion of the investment
 - D) Thermal expansion of the investment

44. Even though the length of the retentive arm of a bar clasp is longer than the circumferential clasp, it provided less retention because:
- Flexibility is not proportionate to its length
 - It lies in several planes
 - It starts from gingival side
 - It lies in several planes thereby preventing its flexibility
45. Base metal alloys as compared to gold alloys have:
- Low density
 - High modulus of elasticity
 - High percentage elongation
 - Poor burnishability
- Options are:**
- 1,2 and 3 are correct
 - 2,3 and 4 are correct
 - 1,3 and 4 are correct
 - 1,2 and 4 are correct
46. As the intercondyle distance increases:
- Distance between the condyle and the tooth increases
 - The tooth is placed nearer the mid-sagittal plane relative to the rotating condyle
 - Decrease in angle between mediotrusive and laterotrusive pathways
 - Increase in cusp height.
- The correct options are:
- 1,2 and 3
 - 2,3 and 4
 - 1,3 and 4
 - 1,2 and 4
47. Reorganizing occlusion for prosthodontic management relates to:
- Fabrication of restorations in existing centric occlusion
 - Reestablishing the centric occlusion and occlusal contacts.
 - Elimination of occlusal interferences in eccentric movements
 - Reestablishing the centric occlusion but eccentric contacts should be the same as previously.
48. Protective muscle splinting refers to:
- Limited mouth opening due to tonic contraction of muscles due to infection
 - Chronic resistance of muscles to passive stretch
 - Reduced jaw motion to avoid pain due to movement
 - Sudden involuntary contraction of muscles
49. A cusp tip is reduced:
- When the mesial incline on the upper tooth is reduced
 - When it gives an interfering contact in centric, working and balancing positions
 - When the fossa is deepened
 - When the distal incline of the lower is reduced

50. Bisphosphonate act by:
- A) Increasing the osteoid formation
 - B) Increasing the mineralization of osteoid
 - C) Decreasing the osteoclast-mediated resorption of bone
 - D) Decreasing the parathyroid hormone secretion
51. The implant's direct bone interface is less resilient than a tooth. Because there is no cortical lining around the implant, it indicates that the forces are not ideally dissipated at the implant/bone interface. Instead, the energy imparted by occlusal forces is transmitted by a higher-intensity force to where?
- A) Evenly distributed throughout the body/bone interface
 - B) Crestal contiguous bone interface
 - C) Mid-implant interface
 - D) Apical bone interface
52. It is well accepted that mobility of an implant can develop under occlusal trauma.
- Statement (1)** Once the offending occlusal trauma (force) is eliminated, an implant can return to its original rigid (non-mobile) condition.
- Statement (2)** Once an implant's health is compromised, failure of the entire implant system is usually imminent.
- Which of the following statement is correct?**
- A) For the above sentences, 1 is true, and 2 is false
 - B) For the above sentences, 1 is false, and 2 is true
 - C) For the above sentences, both statements are true
 - D) For the above sentences, both statements are false
53. Which of the following types of bone surrounds a dental implant?
- A) Cortical
 - B) Trabecular
 - C) Combination of cortical and trabecular
 - D) Collagenous
54. Which of the following presents the greatest risk factor for implant complications?
- A) Bruxism
 - B) Clenching
 - C) Crown height
 - D) Masticatory dynamics

55. Which of the following is the definition of an RP-4 prosthesis?
- A) Fixed prosthesis; replaces the crown and a portion of the root; crown contour appears normal in the occlusal half but is elongated or hyper-contoured in the gingival half
 - B) Fixed prosthesis; replaces missing crowns and gingival color and a portion of the edentulous site; prosthesis most often uses denture teeth and acrylic gingiva but may be porcelain to metal
 - C) Removable prosthesis; overdenture supported completely by implants (usually with a superstructure bar)
 - D) Removable prosthesis; overdenture supported by both soft tissue and implants (may or may not have a superstructure bar)
56. Bruxism primarily concerns which of the following:
- A) Vertical nonfunctioning grinding of teeth
 - B) Horizontal, nonfunctional grinding of teeth
 - C) Both horizontal and vertical nonfunctional grinding of teeth
 - D) The constant force exerted from one occlusal surface to the other without movement
57. What is the required minimal occlusal vertical space needed when performing a metal-acrylic Hybrid prosthesis (FP-3)?
- A) ≥ 11 mm dimension
 - B) ≥ 13 mm dimension
 - C) ≥ 15 mm dimension
 - D) ≥ 17 mm dimension
58. Which of the following describes the bone quality locations from most to least
- A) Anterior mandible, anterior maxilla, posterior mandible, posterior maxilla
 - B) Anterior mandible, posterior mandible, anterior maxilla, posterior maxilla
 - C) Posterior mandible, anterior mandible, anterior maxilla, posterior maxilla
 - D) Posterior maxilla, anterior maxilla, posterior mandible, anterior mandible
59. When the following rules are followed: (i) allowing 1.5 mm or more for each implant from the adjacent natural tooth, (ii) a 3-mm space between each implant, and (iii) adding the diameter of the implant, what would be the maximum number of 4.0 mm diameter implants that could ideally be placed in a 29-mm edentulous span?
- A) Two
 - B) Three
 - C) Four
 - D) Five
60. Regarding Weibull modulus, which of the following is true:
- A) Low Weibull modulus reflects higher homogeneity in the measured strength value.
 - B) Most ceramics exhibit m value (Weibull modulus) value between 50 to 100
 - C) Weibull modulus is useful to represent distribution of flaws for brittle materials such as resin based composites and ceramics.
 - D) Most ceramics exhibit Weibull modulus above 20

61. When making the provisional restoration care must be taken to achieve the following features:
1. Attain blanching of tissues
 2. Emergence in a narrow "S" form, narrower coming off the head of the implant, and gradually widening to the apical aspect
 3. Gingival embrasures open slightly
 4. Lack of occlusal contact throughout the excursive range of mandible
- Choose the correct option:**
- A) All are correct
 - B) 2, 3, 4 are correct
 - C) 1, 3, 4 are correct
 - D) 1, 2, 3 are correct
62. Three forces may be imposed on dental implants within the oral environment: compression, tension, and shear. Which of the following is correct?
- A) Bone is strongest when loaded in compression, 30% weaker when subjected to tensile forces, and 65% weaker when loaded with shear forces.
 - B) Bone is strongest when loaded with tensile forces, 30% weaker when subjected to compression forces, and 65% weaker when loaded with shear forces.
 - C) Bone is strongest when loaded with shear forces, 30% weaker when subjected to tensile forces, and 65% weaker when loaded with compressive forces.
 - D) Bone is strongest when loaded with tensile forces, 30% weaker when subjected to shear forces, and 65% weaker when loaded with compressive forces.
63. True regarding resistance form in tooth preparation for a partial coverage crown is
- A) Maximum resistance (resistance area) to rotation around the linguogingival margin is provided by the lingual wall of the groove, which should be perpendicular to direction of action of force.
 - B) Maximum resistance (resistance area) to rotation around the linguogingival margin is provided by the dimension of the groove and not the geometry
 - C) Maximum resistance (resistance area) to rotation around the linguogingival margin is provided by the labial wall of the groove, which should be perpendicular to the direction of action of force.
 - D) Maximum resistance (resistance area) to rotation around the linguogingival margin is provided by the cement used to lute the crown.
64. Which amongst the following represents the correct therapy for candida induced stomatitis?
- A) Local therapy is preferred over systemic therapy
 - B) Local therapy comprises of ketoconazole or fluconazole
 - C) Treatment with antifungals can extend beyond 4 weeks
 - D) To prevent relapse dentures should be worn as little as possible and immersed in 10 % solution of chlorhexidene when not worn

65. When a V-threaded implant is subject to a dynamic load (a load that constantly changes, such as with chewing), where does more bone develop relative to the thread?
- Bottom of the thread (pressure side)
 - Top of the thread (tensile side)
 - Both the top and bottom are equal
 - It is unpredictable
66. The bone over the coronal aspect of the implant prevents seating of the abutment/ healing abutment/ prosthetic components. What instrument will you use to remove this bone?
- Profiling bur or bone mill
 - Round surgical bur
 - Round bur in an air rotor
 - Bone tap
67. Consider the following statements
- Statement-1.** Occlusal stress occurs most at the crestal region of an implant design.
- Statement-2.** A larger crest module diameter than the implant body increases surface area; therefore, further increasing stress at the crestal region.
- Which of the following statement is correct?**
- The first sentence is true, and the second sentence is false
 - The first sentence is false, and the second sentence is true
 - Both sentences are true
 - Both sentences are false
68. When using the Intra oral scanner (IOS) for recording impression for implants:
- It is recommended to use the IOS for 3 or less units
 - Splinting is recommended for multiple scan body impressions
 - For multiple scan bodies it is recommended to start placing the scan bodies from posterior to anterior
 - Current IOS abilities are limited to relatively fixed structures (ie, teeth, restorations, scan bodies, attached gingiva).
- Choose the correct option:**
- All are correct
 - 1, 3 and 4
 - 2 and 3
 - 2, 3 and 4
69. When tightening an old prosthetic screw holding the restoration or abutment to the implant:
- The amount of torque must be 50 N-cm
 - The amount of torque must be beyond 50 N-cm
 - The amount of torque must be between 30 N-cm to 50 N-cm
 - Manufacturer specified value should be followed
70. As resorption of the residual ridge occurs the buccal shelf :
- Does not resorb because of its muscle attachment on posterior and lateral borders
 - Resorbs medially
 - Does not resorb because of its muscle attachment anteriorly
 - Resorbs laterally

71. The common problem with porcelain fused to metal implant restorations is :
- Metal fatigue
 - Chipping of porcelain
 - Wear of porcelain
 - Excessive force transmission
72. Regarding tightening of prosthetic screws for a multi unit prosthesis, it is recommended:
- Correct sequence of tightening should be light finger tightening, followed by maximum finger tightening, and final torque wrench at the end
 - To avoid settling in, the abutment or prosthetic screws should be tightened 1st with tight finger pressure and followed by using the torque wrench
 - To overcome settling or embedment relaxation, second retorquing after 5-10 min is done to regain the lost preload
 - To avoid settling in, the abutment or prosthetic screws should be tightened in 1 attempt by using the torque wrench
- Choose the correct option:**
- 1,2 and 3
 - 2 and 3
 - 4 only
 - 1 and 3
73. When placing a provisional or definitive screw retained restoration, which of the following should be taken care of:
- All the prosthetic or abutment screws should be tightened in the sequence of implants as such, one after the other with a torque wrench
 - All the prosthetic or abutment screws should be tightened moving between implants, from one side to another, with slow progression of torque.
 - All the prosthetic or abutment screws should be tightened moving between implants, from one side to another, with the torque wrench
 - All the prosthetic or abutment screws should be tightened in the sequence of implants as such, one after the other with slow progression of torque.
74. The benefits if using titanium temporary abutment are all except:
- Unbreakable
 - Does not flex open and close at IAJ
 - Always adjusted intraorally
 - The grayness can be overcome by application of opaque composite
75. The recommended threshold for ISQ value for immediate loading is :
- Above 65
 - Above 66 Newton-cm
 - Above 40
 - Above 40 Newton-cm

76. The primary role of the immediate provisional restoration at the initial stage is :

- A) To support and maintain peri implant soft tissue
- B) Aesthetics
- C) Function including chewing or tearing of food
- D) Phonetics

77. Which of the following holds true regarding a single unit screw retained restorations:

- 1. Screw retained zirconia or emax restorations use a UCLA abutment
- 2. The main short coming of UCLA restoration is the higher porcelain failure and increasing rarity of technicians trained in the fabrication
- 3. The zirconia milled and cemented on the abutment for a single screw retained restoration uses a temporary cement like zinc oxide eugenol for cementation in the patient's mouth
- 4. While a smaller screw retained restorations of Zirconia are cemented on the TiBase, larger restorations (such as molars or cantilevers) are better fabricated on the custom milled titanium base

Choose the correct option:

- A) 2 and 4 are correct
- B) 1 and 3 are correct
- C) 2 and 3 are correct
- D) All are correct

78. The options of restoration in esthetic zones when the screw access exists through facial surface of the tooth is :

- 1. Screw retained restoration
- 2. Angle correction of screw access with a special grooved ball headed screw driver
- 3. Straight stock abutment and cement retained restoration
- 4. Custom abutment with cement retained restoration

Choose the correct option:

- A) 2 and 4
- B) 1 and 3
- C) 1, 2 and 3
- D) 1 and 4

79. Essential to use of a cement retained implant restoration are:

- 1. Use of a permanent resin cement
- 2. Custom abutment
- 3. Margins of abutment to be no more than 1 mm deep subgingivally in aesthetic zones
- 4. In non aesthetic zones, equigingival or supra gingival margin placement of the abutment

Choose the correct option:

- A) All of the above
- B) 2, 3 and 4
- C) 2 and 4
- D) 1 only

80. A suitable method to overcome the grey hue of Titanium abutments in thin gingiva biotype or with semitranslucent crown material is :
- A) Anodization to a gold hue
 - B) Use of ceramic layering
 - C) Use of composite layering
 - D) Use of UCLA abutments
81. Which is the cement of choice for cementing implant restorations?
- A) There is still no consensus
 - B) Zinc oxide eugenol
 - C) Resin cement
 - D) GIC
82. When making implant impression for a single unit:
- A) Open tray impression coping is preferred as it has been documented to have greater accuracy
 - B) Closed tray impression coping is preferred as it has been documented to have greater accuracy
 - C) The decision to select a type of impression coping depends on practicality, specifically mouth opening
 - D) Pressed impression copings are the most easy and most accurate
83. When making impression for a single crown with intra oral scan body:
1. For a screw type scan body, the requirement of a separate unique driver must be checked prior to use
 2. If reduced interocclusal space prohibits the use of a driver, a haemostatic can be used to secure the intra oral scanner
 3. The accuracy of impression with an Intra oral scan body is dependent on the technique of scanning and speed
 4. Intra oral scan body yields the most accurate impressions when compared to closed tray or open tray

Choose the correct option:

- A) 1 and 3
- B) 1, 2 and 3
- C) 4 only
- D) 3 only

84. Which of the following is true for multiunit, splinted impressions?
1. Non engaging, open tray impression coping is required to overcome the challenge of variations in parallelism among the implants
 2. The material used for making the scaffold for splinting is extremely important to accomplish the accuracy of impression
 3. The material chosen for splinting should not exhibit shrinkage and hence flowable composite is not chosen
 4. When pattern resin is applied on the scaffold of splinted impression copings, small, alternating increments throughout the scaffold should be used, rather than one large amount of resin

Choose the correct option:

- A) 1, 3 and 4
- B) 2 only
- C) 3 and 4
- D) 4 only

85. Regarding cantilever for overdentures, which is the most appropriate:
- A) Square arch forms can have the maximum cantilever
 - B) If the AP spread of implants is less, the number of implants can be less to enable a longer cantilever
 - C) In the presence of other force factors such as parafunction, the length of cantilever should be increased
 - D) Cantilever extent is measured to the point of prosthetic mobility, not the end of bar or the attachment system and this can be considered as the hidden cantilever
86. True regarding long term performance of implant and tissue supported overdentures is
1. Denture teeth wear faster in overdenture as compared to teeth of a complete denture
 2. Food impaction due to shorter extension of the denture flanges
 3. Frequent replacement of attachments and relines of dentures is a concern
 4. The implant overdentures render a hassle free service for more than 10 years

Choose the correct option:

- A) All are correct
- B) 2 and 3 are correct
- C) 3 is correct
- D) 1,2,3 are correct

87. What is true regarding overdentures:
1. If an overdenture doesn't move during function, it is actually a fixed restoration and should be supported by same number of implants as a fixed restoration
 2. The movement of overdentures can be different from movement of independent attachments, and depends on position and number of attachments
 3. The acronym PM pertains to overall range of motion for the individual attachment
 4. There are 6 possible directions in which movement of a prosthesis can occur

Choose the correct option:

- A) 1,2 and 4 are correct
- B) 3 and 4 are correct
- C) 1,3 and 4 are correct
- D) 1 and 4 are correct

88. A longer healing period prior to implant placement is needed in which specific situation of sinus lift (SA4) cases:
- A) Presence of large number of septa in the sinus
 - B) Less autologous bone available to harvest
 - C) Larger graft volume used in the inferior third of the antrum
 - D) Smaller size of sinus
89. In overdenture treatment plan, what are the features that can incorporate retention, stability, and support ?
- A) Amount of retention is related to implant number
 - B) Support is related to implant position
 - C) Stability is related to the attachments used
 - D) Support is related to implant number and bar design in posterior region
90. When doing a trial of a complete denture for restorative assessment, at what distance of the labial position of wax rim from the residual ridge will you consider a bone graft ?
- A) More than 5 mm
 - B) More than 7 mm
 - C) More than 3 mm
 - D) More than 8 mm
91. What metrics should be borne in mind for apical position during placement of the anterior implant?
- A) 3 mm apical to the Free gingival margin on the midfacial region of the tooth to be replaced
 - B) Less than 2 mm apical to the Free gingival margin on the midfacial region of the tooth to be replaced
 - C) Always equicrestal regardless of the collar of the implant
 - D) 4-5 mm apical to the Free gingival margin on the midfacial region of the tooth to be replaced
92. Regarding wear of occlusal material:
- A) Surface hardness is a good indicator of wear rate
 - B) When 2 occluding surfaces occlude, Wear rate is more significant than total volume wear
 - C) When 2 occluding surfaces occlude, the sum of both surfaces is more relevant to maintain occlusal contact than understanding which particular surface wears more
 - D) Porcelain opposing porcelain wears less than porcelain opposing gold

93. While selecting the restorative material for definitive prosthesis, which of the following is true?
1. Porcelain obtains its strength by its bulk
 2. Porcelain opposing porcelain is the combination chosen for parafunction
 3. Inadequate bulk of acrylic is a concern for fracture , especially in fixed than in removable restorations
 4. The ideal thickness of porcelain to prevent breakage is about 2 mm.

Choose the correct option:

- A) All are correct
 - B) 3 and 4 are correct
 - C) 1 and 2 are correct
 - D) 4 is correct
94. Which of the following technique is most appropriate for cementation of an implant crown?
- A) Application of the cement at the margin of the crown and rim the crown for approximately $1/4^{\text{th}}$ the axial wall
 - B) Brushing the cement into intaglio surface of the crown including the occlusal surface
 - C) Completely filling the crown with the cement except at the margin
 - D) Filling $2/3^{\text{rd}}$ of the crown with the cement all the way upto the margin
95. Chief considerations for implant placement in posterior maxilla are:
- A) Progressive shift of crest of residual alveolar bone medially towards the palate that can create lingual offsets
 - B) If force factors like bruxism is present then 1 implant should replace each missing tooth
 - C) Splinting of implants is not done as this can result in peri-implantitis
 - D) If both premolars and a molar is missing, and the available bone does not permit an implant in the molar region, then the molar implant can be cantilivered from 2 implants in the two premolars
96. For any screw joint the suggested torque for preload is limited to
- A) 75 % of the value to reach permanent deformation of the screw
 - B) 90 % of the value to reach permanent deformation of the screw
 - C) 80 % of the value to reach permanent deformation of the screw
 - D) 100% of the value to reach permanent deformation of the screw

97. True regarding RP-5 prosthesis is

1. These should be used as transitional prosthesis and patients should be educated to upgrade to RP-4 or FP-3 type of prosthesis when they can afford
2. Anterior bone loss is a concern with 2 or 3 implant overdenture
3. If an upper denture is opposing a mandibular RP-5 prosthesis, then there is a possibility of combination syndrome to make the clinical situation more complex
4. The number of implants for RP-4 should be equivalent to that of a fixed prosthesis

Choose the correct option:

- A) All of the above
- B) 1,3 and 4
- C) 1 and 3 only
- D) 3 only

98. The minimum amount of keratinized mucosa that can prevent soft tissue complications around implants is :

- A) 3 mm
- B) 1.5 mm
- C) 4 mm
- D) 2 mm

99. Scientific evidence has shown that in those implants with less than adequate Keratinized mucosa can have :

- A) No relation with pro inflammatory mediators like PgE2
- B) High levels of PgE2
- C) High levels of osteoblastin
- D) High levels of pectin

100. The vestibular depth that may be associated with lack of keratinized mucosa and that may preclude personalised oral hygiene measures is :

- A) <4 mm
- B) <6 mm
- C) <5 mm
- D) <7 mm