

PAPER III: SUBJECT SPECIALISATION PAPER DENTAL SURGERY

**ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2024
EXAMINATION CATEGORY: TECHNICAL**

PAPER III: SUBJECT SPECIALIZATION PAPER DENTAL SURGERY

Date	: October 5, 2024
Total Marks	: 100
Examination Time	: 150 minutes (2.5 hours)
Reading Time	: 15 Minutes (prior to examination time)

GENERAL INSTRUCTIONS:

1. Write your Roll Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is being provided to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO SECTIONS**, namely SECTION A and SECTION B:
 - **SECTION A** has two parts: Part I - 30 Multiple-Choice Questions
Part II - 4 Short Answer Questions

All questions under SECTION A are COMPULSORY.

- **SECTION B** consists of two Case Studies. Choose only **ONE** case study and answer the questions under your choice.
4. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating any or correct Section, Part and Question Number will NOT be evaluated and no marks would be awarded.
 5. Begin each Section and Part in a fresh page of the Answer Booklet.
 6. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
 7. Use of any other paper including paper for rough work is not permitted.
 8. You are required to hand over the Answer Booklet to the Invigilator before leaving the examination hall.
 9. This paper has **8** Printed pages in all, including this instruction page.

BEST OF LUCK

SECTION A

Part I – Multiple Choice Questions (30 Marks)

Choose the Correct answer and write down the letter of the correct answer chosen in the Answer Booklet against the question number. E.g. 31 (a). Each question carries ONE Mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. Deep veins of the face include
 - a) Facial
 - b) Posterior auricular
 - c) Maxillary
 - d) Retro-mandibular
2. If a patients walks into your chamber with an avulsed tooth in his hands and a bleeding mouth after RTA, what will you do?
 - a) Ask him to throw the tooth and start examining him
 - b) Collect the tooth, examine other injuries and send him home with medicines
 - c) Collect the tooth, examine the patient for other problems , fix the avulsed tooth and splint it
 - d) Medicate and send him
3. At what intrauterine age does tooth start to develop:
 - a) At 6 weeks
 - b) 4 months
 - c) 6 months
 - d) 12 months
4. Development of body of mandible involves which of the following?
 - a) Reichert's cartilage
 - b) Meckel's cartilage
 - c) Intra-membranous bone development
 - d) Endochondrial ossification of Meckel's cartilage
5. A 5 year old boy has minute white specks on the buccal mucosa opposite to first molars. A bluish red ring surrounds these spots. There is a blotchy reddish rash behind his ears and on his face. This child is suffering from
 - a) Herpangina
 - b) Scarlet fever
 - c) Mumps
 - d) Measles(koplicks spots)
6. The volume of blood in human body is usually.....% of its body weight
 - a) 6%
 - b) 8%
 - c) 12%
 - d) 15%
7. The most common cause of Root canal treatment failure and persisting pain is
 - a) Irritating irrigants & antiseptics passed beyond apical foramen
 - b) Failure to sterilize the canals
 - c) Poor condensation and improper filling of the canals
 - d) Use of too much caustic irrigants

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8. One of the following is given to pregnant mothers to prevent neural tube defects and other congenital anomalies
 - a) Calcium
 - b) Iron Tablets
 - c) Folic acid
 - d) B-12
9. The first antibody synthesized by the human fetus
 - a) IgG
 - b) IgM
 - c) IgA
 - d) IgE
10. The natal teeth are commonly found in
 - a) Male children
 - b) Female children
 - c) Lower jaw
 - d) Upper jaw
11. Local anesthesia works by
 - a) Repolarization of the nerve
 - b) Depolarization of the nerves
 - c) Hyper polarization of the nerves
 - d) Non polarization of the nerves
12. Angular cheilitis is **most** commonly seen in :
 - a) Xerostomia
 - b) HIV/AIDs
 - c) Vitamin C deficiency
 - d) Fungal infection
13. One of the **most effective** medicine in treating oral candidiasis at our set up is:
 - a) Griseofulvin
 - b) Penicillin
 - c) Miconazole
 - d) Amoxicillin
14. Trigeminal neuralgia is characterized by:
 - a) Paralysis of face on the affected side
 - b) Unilateral pain with twitching of the face on the affected side
 - c) Extended episodes of excruciating sharp pain
 - d) Sharp shooting excruciating pain for short durations
15. The salivary duct of Parotid gland is:
 - a) Stenson's duct
 - b) Wharton's duct
 - c) Bartholin's duct
 - d) Sub-mandibular duct
16. Denture stomatitis is found among:
 - a) All denture wearers
 - b) Healthy individuals
 - c) Smokers
 - d) Old and unhealthy denture wearers

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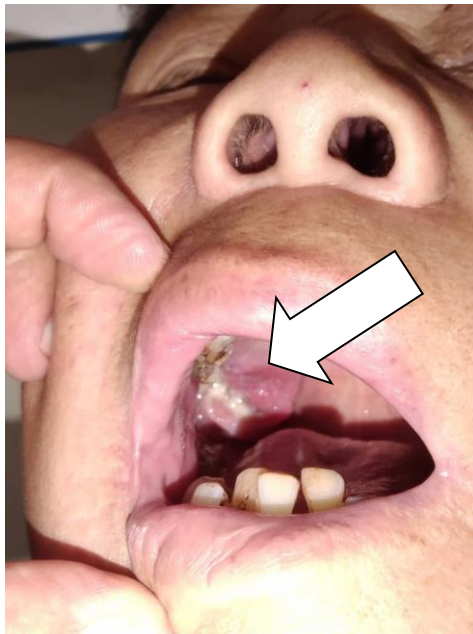
17. The most common cause of **oral cancer** in Bhutan is:
- Alcohol and betel products including doma
 - Betel nut and alcohol
 - Betel nut and tobacco
 - Betel nut, tobacco and alcohol
18. In patients suspected with oral cancers, the associated lymph nodes are:
- Enlarged and tender
 - Enlarged and fixed
 - Enlarged and rubbery
 - Enlarged and matted
19. Compomer restorative materials are:
- Glass ionomer with polymer components
 - Composite resin for cervical restorations only.
 - Miracle mix and glass ionomer cements
 - Resin systems with fluoride containing glasses
20. The drug of choice for management of Bell's palsy is:
- Paracetamol
 - Acyclovir
 - Prednisolone
 - Amoxicillin
21. Severe allergic reaction (Steven Johnson Syndrome (SJS)), most commonly occurs with:
- Amoxicillin
 - Paracetamol
 - Carbamazepine
 - Corticosteroids
22. One of the following drug is **NOT** the choice of drug for the management of anaphylactic shock:
- Hydrocortisone
 - Promethazine
 - Adrenaline
 - Paracetamol
23. Most common medicine prescribed to a patient allergic to penicillin for dental infection is:
- Metronidazole
 - Amoxicillin
 - Clindamycin
 - Aminoglycosides
24. An effective medicine in treating Herpes zoster infection is
- Metronidazole
 - Acyclovir
 - Nystatin
 - Amoxicillin

25. In serial extraction procedure the first premolars are extracted
- After the permanent canines have erupted fully
 - Before the second premolars erupt
 - Before permanent canines erupt
 - As soon as they erupt into the oral cavity
26. The x- ray of choice for detection of a Peri-apical tooth abscess is:
- IOPAR
 - Bitewing x-ray.
 - Occlusal x-ray.
 - None of the above.
27. The microorganism most commonly associated with Infective endocarditis following dental infection is
- Streptococcus
 - Staphylococcus
 - Lactobacilli
 - Bacteroids
28. The most common cyst of dental origin in the oral cavity is
- Lateral cyst
 - Peri-apical cyst
 - Dentigerous cyst
 - Odontogenic kerotocyst.
29. Presence of Kaposi sarcoma in the oral cavity indicates the presence of:
- STDs
 - HIV & AIDS
 - Lymphoma
 - Nectrotising Sialometaplasia
30. Which medicine for topical application is recently added in EDL?
- Fluocinolone Acetonide oral paste
 - Clobetasol Propionate oral paste
 - Triamcinolone Acetonide oral paste
 - Chlorhexidine gluconate oral gel

PART II: Short Answer Questions (20 Marks)

Answer ALL four Questions. Each question carries 5 marks.

1. What do you understand by the term “**Pericoronitis**”? Can it be managed in the dental OPD, if so how do you manage it? What is the best treatment option for a recurrent Pericoronitis?
2. If a patient with a persistent oozing from the mandible visits your chamber, what would be your differential diagnosis and how will you approach for management?
3. What is Denture Stomatitis? Types and management of different types of denture stomatitis?
4. If a patient comes to you with the clinical feature as seen in the image below (unhealing ulcer on the buccal mucosa encroaching the alveolus and palate), how will you proceed further? Give a brief management protocol for this patient?



SECTION B (50 Marks)

CASE STUDY

Choose either Case 1 or Case 2 from this Section. Each case carries 50 Marks. Mark for each sub-question is indicated in the brackets.

CASE 1

An 80 year old man comes to your clinic with blistering mouth and skin lesions that started suddenly a week ago and increased progressively over the period. He states that it started as blisters and vesicles on the mouth and skin over the back, thighs and genitalia. Few intact blisters were found in the mouth. He thinks that he has oral cancer and he will not be able to live a normal life again. He gives a history of hypertension, diabetes and rheumatoid arthritis and has taken medicines like systemic steroid (prednisolone) and methotrexate for many years. He has **stopped** all the medicines **since last 2 years** (not on any medications now). Answer the questions based on this complaint of the patient (complaint based treatment):

1. Name some common vesiculo-bullous lesions/ diseases (autoimmune, inflammatory and infectious)? **(5 marks)**
2. Give your differential diagnosis in this patient and state the reasons supporting them? **(5 marks)**
3. Give a detailed history taking in this patient as you think relevant? **(5 marks)**
4. What investigations will you do for this patient? Give justifications for your investigations? **(10 marks)**
5. What is Nikolsky's sign? How do you do it? What is the Gold standard investigation for proper diagnosis in such a case? What is immune-fluorescent study? How is (direct immune- fluorescent study) DIF done? **(10 marks)**
6. Discuss your management protocols in this patient? **(10 marks)**
7. How will you manage this patient? What precautions do you need to take while prescribing steroids **(5 marks)**

CASE 2

An 18 year old girl, a high school student comes to your clinic with a severe toothache and swelling. The pain is so severe that she is not able to speak also. After taking her medical and dental history, you examined her tooth condition and advised that she should extract her tooth as it might give her repeated problems. You gave a pain killer injection (Inj.Pethidine IV) and recalled the patient in half an hour. The patient comes back and wants to get rid of her tooth. You try to convince the patient to come back later but she insists on extracting the tooth. The tooth troubling her is 36 (first molar). Now, you are prepared for extraction, however, after little over a minute or two of giving her the required Lignocaine Local Anesthesia block, your patient complains of feeling dizzy, vomits and faints. How will you proceed further? Answer the questions below:

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1. What is this condition commonly called? **(2 marks)**
2. What is the percentage of Lignocaine used for Dental LA and what is the maximum dose you can administer to your patient? **(2 marks)**
3. What is the ratio of Adrenaline: Lignocaine commonly used in dental LA? **(2 marks)**
4. What do you understand by “exodontia”? Explain. **(2 marks)**
5. Was history taking complete? If not what else should have been taken additionally? **(2 marks)**
6. How do you manage the above case of fainting? **(5 marks)**
7. Will you extract the tooth? **(2 marks)**
8. What sort of complications do you need to rule out in this patient immediately? **(3 marks)**
9. What other treatment options you can have, explain? Briefly write the complications of extraction? Elaborate appropriately **(15 marks)**
10. How do you go about managing a post extraction bleeding case that comes to you after about one/two hours of extraction? What prophylaxis would you give if your patient has a cardiac prosthesis? **(5 marks)**
11. Classify different types of Mandibular 3rd molar impactions? **(5 marks)**
12. What is alveolar osteitis? Is it manageable at our set up? Explain how do you manage a case of Post extraction dry socket? **(5 marks)**

TASHI DELEK