

ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2022
EXAMINATION CATEGORY: TECHNICAL

PAPER III: SUBJECT SPECIALISATION PAPER FOR DENTAL SURGERY

Date	: October 9, 2022
Total Marks	: 100
Writing Time	: 150 minutes (2.5 hours)
Reading Time	: 15 Minutes (prior to writing time)

GENERAL INSTRUCTIONS:

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is 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 & 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 of your choice.
4. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
5. 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 the Section, Part and Question Number will NOT be evaluated and no marks will be awarded.
6. Begin each Section and Part in a fresh page of the Answer Booklet.
7. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
8. Use of any other paper including paper for rough work is not permitted.
9. **You must hand over the Answer Booklet to the Invigilator before leaving the examination hall.**
10. This paper has **7 printed pages**, including this instruction page.

GOOD 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. 30(c). Each question carries ONE Mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. If a patient 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.

2. Angular cheilitis is most commonly seen in
 - a) riboflavin deficiency.
 - b) iron deficiency.
 - c) vitamin c deficiency.
 - d) All of the above

3. One of the most effective medicines in treating oral infection is
 - a) Griseofulvin
 - b) Ganciclovir
 - c) Acyclovir
 - d) Amoxicillin

4. 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)

5. In serial extraction procedure the first premolars are extracted
 - a) after the permanent canines have erupted fully.
 - b) before the second premolars erupt.
 - c) before permanent canines erupt.
 - d) as soon as they erupt into the oral cavity.

6. 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) None of the above

7. One of the following is given to pregnant mothers to prevent neural tube defects and other congenital anomalies:
 - a) Vitamin D3.
 - b) Iron Tablets
 - c) Folic acid
 - d) B-12
8. 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 excruciating pain unilaterally for short durations.
9. The most abundant immunoglobulin present in human saliva is:
 - a) IgG
 - b) IgM
 - c) IgA
 - d) IgE
10. The salivary duct of the Parotid gland is
 - a) Wharton's duct
 - b) Bartholin's duct
 - c) Sub-mandibular duct
 - d) None of the above
11. Denture stomatitis is commonly seen in
 - a) Old people with dentures
 - b) People with neglected oral hygiene
 - c) Immuno-compromised people with poor oral hygiene
 - d) All of the above
12. The most common cause of oral cancer in Bhutan is
 - a) Alcohol
 - b) Doma and alcohol
 - c) Doma, tobacco and alcohol
 - d) Doma/Betel and its products
13. In patients with Lymphoma, the associated lymph nodes are
 - a) Enlarged and tender
 - b) Enlarged and fixed
 - c) Enlarged and rubbery
 - d) Enlarged and matted
14. Local anesthesia works by
 - a) Depolarization of the nerves
 - b) Hyper polarization of the nerves
 - c) Non polarization of the nerves
 - d) Repolarization of the nerve

15. Oozing of pus from the duct of a salivary gland is a sign of
- Sialolithiasis
 - Sialoadenitis
 - Mumps
 - All of the above
16. A fluctuant swelling on the lower lip that is yellowish in color can be
- Ranula
 - Mucocele
 - Fibroma
 - Lipoma
17. Non carious tooth tissue loss along the gingival margin is properly termed as
- Attrition
 - Abrasion
 - Abfraction
 - Erosion
18. The most commonly accepted theory of the mechanisms of dentinal sensitivity is
- Direct innervation theory
 - Pulpal pressure theory
 - Odontoblastic receptor theory
 - Hydrodynamic theory
19. Medicine frequently used to manage cancer pain is
- Paracetamol
 - Morphine
 - NSAIDs
 - Carbamazepine
20. More severe form of allergic reaction to a drug involving oral mucosa and skin is presented as
- Erythema Multiforme
 - Excoriation
 - Mouth ulcers and neck swelling.
 - SJS/TENS
21. The most common indication for RCT is:
- Fractured tooth
 - Carious tooth with pulp exposure
 - Tooth with root fracture
 - All of the above
22. The color of the smallest sized endo. file is:
- White
 - Grey
 - Pink
 - Purple

23. To decide the treatment plan for root canal treatment, which of the following radiograph is most useful?
- OPG
 - IOPA
 - CBCT
 - Bitewing
24. Which of the following dental cement component accelerates the formation of reparative dentin?
- Eugenol
 - Zinc Oxide
 - Silica
 - Calcium hydroxide
25. One of the following restorative cement chemically bonds to the tooth:
- Composite resin.
 - Glass ionomer cement
 - Dental sealants.
 - All of the above.
26. The x- ray of choice to detect the proximal caries of the anterior teeth is:
- Periapical x-ray
 - Bitewing x-ray
 - Occlusal x-ray
 - None of the above
27. 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.
28. The x- ray of choice for detection of sialolith in the submandibular salivary gland duct is:
- Occlusal x-ray
 - IOPAR
 - Bitewing x-ray
 - None of the above
29. The microorganism most commonly associated with Infective endocarditis is
- Streptococcus
 - Staphylococcus
 - Lactobacilli
 - Bacteroids
30. Which one of the following drug is SAFE to give during pregnancy?
- Metronidazole
 - Amoxicillin
 - Ibuprofen
 - Carbamazepine

PART II: Short Answer Questions [20 Marks]

This part has 4 Short Answer Questions. Answer ALL the questions. Each question carries 5 marks.

1. What do you understand by “**Morsicatio Linguarum**”? State the etiologies of morsicatio linguarum? Explain the consequences of untreated morsicatio Linguarum. **(1, 2, 2 marks)**
2. What is “**Removable Orthodontics**”? Can it be practiced at our settings, if so how? What are the basic requirements? Name some removable orthodontic appliances? **(2, 1, 1, 1 marks)**
3. What do you understand by “**dental decay**”? State the etiologies of dental caries (common theories). Explain the Sequelae of untreated dental caries. **(1, 2, 2 marks)**
4. What is “**tooth avulsion**”? Can it be managed in dental OPD, if so how do you manage it? What is the best medium to store an avulsed tooth? **(1, 3, 1 marks)**

SECTION B: Case Study [50 marks]

Choose either Case I OR Case II from this Section. Each case carries 50 Marks. Mark for each sub-question is indicated in the brackets.

CASE I

An elderly 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. No intact blisters were found in the mouth as it had already ruptured leaving behind only ulcerations. 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 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 with justifications in this patient? **(5 marks)**
3. Give a detailed history taking in this patient as you think relevant? **(5 marks)**
 - a) Medical and dental history
 - b) Past illness
4. What investigations will you do for this patient? Give justifications for your investigations? **(5, 5 marks)**
5. What is Nikolsky’s sign? How do you do it? What is the Gold standard investigation to establish proper diagnosis in such a case? Have you heard of immune-fluorescent studies, what can you see in this study? How is (direct immune- fluorescent study) DIF done? **(2 ,2, 2, 2, 2=10 marks)**
6. Enlist your management protocol in this patient? **(10 marks)**
7. Will you manage this patient with cortico-steroids (steroids)? If so, what type of steroids will you use: mention your treatment plan? **(2, 3 Marks)**

CASE II

A 27-year-old lady, a school teacher came to your clinic with a severe toothache. 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 recurrent problems. You gave a pain killer injection (Diclofenac sodium 75mg IM stat) and recalled the patient in half an hour. The patient comes back slightly relieved from pain and wants extraction of the tooth as she cannot even imagine the pain that just baffled her. You try to convince the patient to come back later but she insists on extracting the tooth. The tooth troubling her is 47. Now, you are prepared for extraction and start the procedure, however after a little while of giving the Lignocaine Local Anesthesia block, your patient complains of feeling weak, restless, dizzy and faints. How will you proceed further? Answer the questions that follow:

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 are the complications of extraction? Write briefly? **(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 mitral valve 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