

**ROYAL CIVIL SERVICE COMMISSION  
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2021  
EXAMINATION CATEGORY: TECHNICAL**

**PAPER III: SUBJECT SPECIALISATION PAPER FOR DENTAL SURGERY**

---

<b>Date</b>	: October 31, 2021
<b>Total Marks</b>	: 100
<b>Writing Time</b>	: 150 minutes (2.5 hours)
<b>Reading Time</b>	: 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 **8 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. The latest strain of covid virus in the world now is:
  - a) SARs nCoV
  - b) Delta
  - c) Lamda
  - d) Mu
  
2. Compomer restorative materials are
  - a) glass ionomer with polymer components.
  - b) composite resin for cervical restorations only.
  - c) miracle mix and glass ionomer cements.
  - d) resin systems with fluoride containing glasses.
  
3. The x- ray of choice for detection of sialolith in the submandibular salivary gland duct is
  - a) IOPAR
  - b) Bitewing x-ray
  - c) Occlusal x-ray
  - d) None of the above
  
4. If DMFT stands for decayed, missing, filled tooth/teeth, what does ‘ADA’ stand for?
  - a) Asian Dental Association
  - b) Australian Dental Association
  - c) Austrian Dental Association
  - d) American Dental Association
  
5. Allergic reaction (Steven Johnson Syndrome (SJS)) to a drug can occur due to any of the following, EXCEPT
  - a) Amoxicillin
  - b) Paracetamol
  - c) Carbamazepine
  - d) Corticosteroids
  
6. Which one of the following drug is NOT the choice of drug for the management of anaphylaxis?
  - a) Hydrocortisone
  - b) Promethazine
  - c) Adrenaline
  - d) Acetaminophen

7. Medicine prescribed to a patient allergic to penicillin for dental infection is
  - a) Metronidazole
  - b) Amoxicillin
  - c) Macrolides
  - d) Aminoglycosides
  
8. Which of the following non-steroidal anti-inflammatory drug is NOT available in our hospitals?
  - a) Indomethacin
  - b) Celecoxib
  - c) Paracetamol
  - d) Diclofenac Sodium,
  
9. An effective medicine in treating Herpes infection is
  - a) Griseofulvin
  - b) Acyclovir
  - c) Nystatin
  - d) Amoxicillin
  
10. The microorganism most commonly associated with Infective endocarditis is
  - a) Streptococcus
  - b) Staphylococcus
  - c) Lactobacilli
  - d) Bacteroids
  
11. 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.
  
12. Which one of the following drugs is safe to give during the pregnancy?
  - a) Metronidazole
  - b) Amoxicillin
  - c) Ibuprofen
  - d) Carbamazepine
  
13. The salivary duct of Parotid gland is
  - a) Stenson's duct
  - b) Wharton's duct
  - c) Bartholin's duct
  - d) Sub-mandibular duct
  
14. In patients with tuberculosis (TB) infection, the associated lymph nodes are
  - a) Enlarged and tender
  - b) Enlarged and fixed
  - c) Enlarged and rubbery
  - d) Enlarged and matted

15. The most common cyst of dental origin in the oral cavity is
- Lateral cyst
  - Peri-apical cyst
  - Dentigerous cyst
  - Odontogenic kerotocyst.
16. Tooth tissue loss due to hard brushing is properly termed as
- Attrition
  - Abrasion
  - Caries
  - Erosion
17. The term "aciduric" refers to
- bacteria producing great amount of acids.
  - bacteria capable of tolerating acidic environment.
  - bacteria unable to tolerate acidic environment.
  - None of the above.
18. The microorganisms most strongly associated with "onset of dental caries" and active progression of cavitated lesions are
- Staphylococcus aureus and Streptococcus mutans.
  - Staphylococcus aureus and lactobacilli.
  - Streptococcus mutans and lactobacilli.
  - Viridans and Actinobacillus group.
19. Nonspecific plaque hypothesis assumes that
- all plaques are pathogenic.
  - plaque is pathogenic only when signs of disease are present.
  - Both a) and b)
  - None of the above.
20. Deep veins of the face include
- Facial
  - Posterior auricular
  - Maxillary
  - Retro-mandibular
21. Clinically the earliest evidence of caries is
- sensitivity to sweets.
  - roughness on the surface of tooth.
  - brown area on tooth surface.
  - chalky white area on the tooth.
22. Fluoride-richness of surface enamel
- remains constant.
  - increases with age.
  - increases in increments.
  - decreases with time due to occlusal wear.

23. A person suffering from xerostomia is more likely to have
- Cemental caries
  - Decrease in dental caries
  - Increase in lesions of dental caries
  - Arrested caries
24. The most reliable index for dentinal caries is
- Color difference
  - Depth of cavity
  - Tactile stimuli
  - Pain perception
25. The treatment of choice in fluorosis of teeth is
- Treatment of the cause
  - Composite or veneering
  - RCT and crowning
  - All of the above.
26. Pit and fissure sealants are generally not used in
- Molars
  - Teeth showing signs of opacity in pit or fissure
  - Patients receiving fluoride therapy
  - Cavitated lesion
27. The thinnest epithelium of the oral cavity is found on the
- Buccal mucosa
  - Oral surface of the lip
  - Soft palate
  - Floor of the mouth
28. In blood chemistry, most of the magnesium in the blood is located in the
- Albumins
  - Globulins
  - Red cells
  - Plasma
29. The primary function of the cerebellum is
- regulation of the internal environment of the body.
  - co-ordination of spinal reflexes.
  - co-ordination of autonomic activity.
  - co-ordination of voluntary movements.
30. Which formed element in the human blood has the longest life span?
- White blood cells
  - Lymphocytes
  - Eosinophilic neutrophils
  - Red blood cells

**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 Buccarum”? State the etiologies of morsicatio buccarum. Explain the Sequelae of untreated morsicatio buccarum. (1+2+2 marks)
2. What is tooth Concussion? Can it be managed in dental OPD? If so, how do you manage it? (2+3 marks)
3. If a patient with his mouth condition (as shown in the picture below) walks into your chamber, how will you approach for management? (5 marks)



4. What is Removable Orthodontics? Can it be practised at our settings? If so, how is it practised? What are the basic requirements? Name some removable orthodontic appliances? (2+1+1+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

A 69-year-old man comes to your clinic with following mouth (lip) conditions that started some 1 year ago but flared up in the last 3 months after using some topical cream prescribed by his treating doctor. He states that it started as blisters on the lower lips only with pain and burning sensation. No intact blisters were found in the mouth/lip as it had already ruptured leaving behind only ulceration and crusting. He feels that he has oral cancer and he will not be able to live a normal life again. He does not have any significant medical history. He has a history of chewing tobacco and smoking occasionally. He is allergic to penicillin. Look at the image below carefully and answer the questions that follow:



1. What is this lesion/disease? Give a detailed history relevant to this disease. (3+7 marks)
2. What are your differential diagnosis? Justify. (5+5 marks)
3. What investigations and diagnostic tests will you do for this patient? Justify your answers. (5+5 marks)
4. 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 DIF done? (2+2+2+2+2 marks)
5. How will you manage this patient? (10 marks)

**CASE II**

A 31-year-old woman came to your clinic with a severe toothache. The pain is so severe that she is not able to speak. 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 (Diclofenac sodium 75mg IM stat) and recalled the patient in half an hour. The patient comes back bit relieved but wants extraction of the tooth as she cannot even imagine the pain that just troubled 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 but somehow, after little over a minute or two of giving her the required Lignocaine Local Anaesthesia block, your patient complains of feeling 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? (5 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? (10 marks)
11. Classify different types of Mandibular 3<sup>rd</sup> molar impactions. (10 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**