

**ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2019
EXAMINATION CATEGORY: TECHNICAL**

PAPER III: SUBJECT SPECIALISATION PAPER FOR DENTAL SURGERY

Date	: October 13, 2019
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 are required to 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. 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) Xerostomia
 - b) HIV/AIDs
 - c) Vitamin C deficiency
 - d) Fungal infection

3. One of the **most effective** medicine in treating oral candidiasis at our set up is
 - a) Griseofulvin
 - b) Penicillin
 - c) Nystatin
 - d) Amoxicillin

4. The microorganism **most** commonly associated with tooth caries is
 - a) Streptococcus salivaris
 - b) Streptococcus mitis
 - c) Streptococcus mutans
 - d) Lactobacilli

5. Which one of the following is given to expecting mothers to prevent neural tube defects and other congenital anomalies?
 - a) Calcium
 - b) Iron Tablets
 - c) Folic acid
 - d) B-12

6. 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.

7. Bell's Palsy is characterized by:
- paralysis of facial muscles on the affected side.
 - unilateral pain with twitching of the face on the affected side.
 - extended episodes of excruciating sharp pain.
 - sharp excruciating pain unilaterally for short durations.
8. The salivary duct of Parotid salivary gland is
- Stenson's duct
 - Wharton's duct
 - Bartholin's duct
 - Sub-mandibular duct
9. Denture stomatitis is commonly seen in
- old patients.
 - old people with neglected oral hygiene.
 - immune-compromised people with poor oral and denture hygiene.
 - All of the above.
10. The most common cause of **oral submucous fibrosis** in Bhutan is
- alcohol.
 - betel nut and alcohol.
 - betel nut and tobacco.
 - betel nut and its products.
11. In cancer patients, the associated lymph nodes are
- enlarged and tender.
 - enlarged and fixed.
 - enlarged and rubbery.
 - enlarged and matted.
12. Local anesthesia works by
- repolarization of the nerves.
 - depolarization of the nerves.
 - hyper polarization of the nerves
 - non polarization of the nerves.
13. The most common cyst of dental origin in the oral cavity is
- lateral cyst.
 - peri-apical cyst.
 - dentigerous cyst.
 - All of the above.
14. Pain with swelling and oozing of pus from the duct of a sublingual gland is a sign of
- Sialolithiasis
 - Sialoadenitis
 - Mumps
 - Parotitis

15. A fluctuant swelling on the lower lip that is bluish in colour and often changes in size can be
- Ranula
 - Mucocele
 - Fibroma
 - Lipoma
16. Chronic cheek biting in a patient with the habit of nail biting is also termed as
- Morsicatio linguarum
 - Kerato-acanthosis
 - Irritation fibroma
 - Morsicatio buccarum
17. Non carious tooth tissue loss along the cusps and incisal edges of a tooth/teeth is scientifically termed as
- Attrition
 - Abrasion
 - Abfraction
 - Erosion
18. The most commonly accepted dentinal hyper-sensitivity theory is
- Hydrodynamic theory
 - Direct innervation theory
 - Pulpal pressure theory
 - Dentinal sensitivity theory
19. If AIDS stands for “acquired immune deficiency syndrome” then, DMFT stands for
- Dental, Missing, Filled, Tooth
 - Decayed, Missing, First, Tooth
 - Decay Must Fill Today
 - Decayed, Missing, Filled, Tooth
20. Most frequently used anti-inflammatory analgesic to manage dental pain at our setting is
- Paracetamol
 - Amoxicillin
 - Ibuprofen
 - Carbamazepine
21. More severe form of allergic reaction Steven Johnson Syndrome (SJS) to a drug involving oral mucosa and skin may be due to
- Amoxicillin
 - Paracetamol
 - Carbamazepine
 - Ibuprofen

22. The best bone graft that can be utilized for reconstruction is
- Costo chondral graft
 - Calvarial graft
 - Iliac crest graft
 - Metatarsal bone graft
23. Which of the following dental cement components accelerates the formation of reparative dentin?
- Eugenol
 - Calcium hydroxide
 - Zinc Oxide
 - Silica
24. Which of the following is not considered a host factor for dental caries?
- Age
 - Bacteria
 - Immunity
 - Race
25. The primate spaces are related to the position of the diastema that are
- distal to the maxillary primary canines and mesial to the mandibular primary canines.
 - mesial to the maxillary primary canines and distal to the mandibular primary canines.
 - distal to both maxillary and mandibular primary canines.
 - mesial to both maxillary and mandibular primary canines.
26. Which of the following is common in all forms of shock?
- Sepsis
 - Hypovolemia
 - Vaso constriction
 - Impaired tissue perfusion
27. Which of the following is a non-steroidal anti-inflammatory drug with a tendency to produce a blood dyscrasias?
- Indomethacin
 - Ibuprofen
 - Ketorolac
 - Acetaminop
28. Primary dentition period is
- from birth to 11 years of age.
 - from 6 months to 11 years of age.
 - from 6 months to 6 years of age.
 - from 6 years to 11 years of age.

29. Which of the following NSAID is commonly used to treat acute gout?
- Aspirin
 - Ibuprofen
 - Indomethacin
 - Diclofenac sodium
30. 1 cartridge of 2% lignocaine contains
- 2 ml and 40 mg of lignocaine
 - 1.8 ml and 36 mg of lignocaine
 - 1.5 ml and 30 mg of lignocaine
 - 1 ml and 20 mg of lignocaine

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 is “Dental caries”? State the theories/etiologies of dental caries. Briefly mention the consequences of untreated dental caries.
2. 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?
3. If a patient with a persistent oozing from an infected canine visits with a draining sinus on the cheek walks into your chamber? What would be your differential diagnosis and how will you approach for management?
4. What is a “dentifrice”? Have you heard of “fluoride”? If yes, does it have any role in caries prevention, how? What are the different forms of fluoride available in the world and in Bhutan?

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 some 10 days ago and increased progressively over the period. He states that it started as blisters and vesicles on the mouth and skin over the trunk, inner 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 2 years back** (not on any medications now).

Answer the following questions based on the 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 of this patient. (5 marks)
3. Give a detailed history of this patient as you think relevant. (5 marks)
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 marks)
6. Enlist your management protocol of 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 young adult male aged 21 years old comes to the Dental clinic with a swollen Rt. Sub-mandibular region. He gives the following medical/dental histories.

Histories: H/O RHD when young and has been to Cardiac center in India and has a prosthetic Mitral valve replacement for the last 3 years. He is on regular medications. H/O repeated swelling of the Rt. Sub-Mandibular region for the last two years. He was repeatedly given some medicines and sent back, but the problem persists on and off and suffers from trismus and is not able to eat his normal diet. He is desperate to get rid of the dental problem once and for all.

Answer the following questions with this history:

1. What is his medical problem? What could be the medicines that this patient has to take regularly after the Mitral valve replacement prosthetic surgery? (2+3 marks)
2. What are the precautions a Dentist has to take for any invasive procedures he has to undergo? Write down the New York Heart Association (NYHA) Guidelines of various Antibiotic Prophylaxis prior to Dental treatment in patients with Rheumatic heart disease. (5+5 marks)
3. What are other cardiac diseases that a patient has to take Antibiotic prophylaxis prior to any invasive Dental therapy? (5 marks)
4. What other cardiac diseases in a dental patient do not need Antibiotic prophylaxis? (5 marks)
5. Write the differential Diagnosis for his recurrent Dental problem. (5 marks)
6. What other investigations should be carried out in such a case prior to any Dental invasive procedures? (5 marks)
7. Describe the management of his Dental problem such that he will not suffer again from the same problem. (10 marks)
8. What would be the most appropriate treatment for this patient, describe briefly? (5 marks)

TASHI DELEK