

**ROYAL CIVIL SERVICE COMMISSION
CIVIL SERVICE COMMON EXAMINATION FOR TECHNICAL GRADUATES -2008
PART III: SUBJECT SPECIALISATION
(DENTISTRY)**

Date: December 20, 2008

Maximum time: 150 min

Maximum marks: 100

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. *Under the provision of the Civil Service Common Examination for Technical Graduates Procedures of the Royal Civil Service Commission, candidates shall write only his/her Registration No. on the Question and Answer Book.*
2. *No other particulars, which would indicate the identity of a candidate, shall be written on the question/answer book. Any candidate found guilty of writing his/her particulars and making any identification marks on these books shall be disqualified from the consideration for future employment.*
3. *This Paper consists of Two Sections, Section A and Section B. Section A (50 Marks) consists of 30 multiple choice questions each carrying one mark, and 4 short answer questions carrying 5 marks each. All questions in section A are compulsory. Section B (50 Marks) consists of 2 case studies out of which you are required to answer only one of them.*
4. *All answers should be written on the Answer Sheet provided to you.*
5. *This Paper consists of 7 pages including this page.*

Section A (50 marks)

Answer all questions in section A

I. Multiple choice questions. You must write the Question No. clearly and the correct answer against it in the answer sheet provided to you. Each question is worth 1 mark (30 marks).

1. Most common chronic disease of childhood is:
 - A. Asthma
 - B. Seasonal allergies
 - C. Dental caries
 - D. Otitis media

2. A consequence of untreated dental caries is:
 - A. Oral pain
 - B. Diarrhea
 - C. Inflammation of the tongue
 - D. Sinusitis

3. Condition associated with periodontal disease is:
 - A. Asthma
 - B. Preterm labor
 - C. Arthritis
 - D. Sinusitis
 - E. Hypothyroidism

4. Following medication is linked to gingival hyperplasia:
 - A. Phenytoin
 - B. Amoxicillin
 - C. Digoxin
 - D. Coumadin

5. One of these classes of medications is not generally associated with decreased salivary flow.
 - A. Antihistamines
 - B. Antibiotics
 - C. Corticosteroids
 - D. Anticholinergics
 - E. Diuretics

6. A patient undergoing chemotherapy for cancer is at risk of these oral complications due to the effects of chemotherapy.
 - A. Osteonecrosis of alveolar bone
 - B. Gingival hyperplasia
 - C. Oral mucositis
 - D. Dental fractures

7. Which of the following is one of topical fluoride's mechanism of action in reducing the risk of caries?
- A. It inhibits demineralization of the teeth.
 - B. It reduces remineralization of the teeth.
 - C. It enhances the growth of oral bacteria.
 - D. It increases enamel solubility by being incorporated into its structure.
8. One of the following infections NOT potentially caused by direct extension from a dental source is:
- A. Otitis media
 - B. Sinusitis
 - C. Brain abscess
 - D. Facial cellulitis
9. The suggested common pathway linking chronic periodontitis and conditions such as diabetes, coronary artery disease and adverse pregnancy outcomes is:
- A. Direct bacterial extension
 - B. Poor nutrition
 - C. Circulating antibodies
 - D. Inflammation
10. Early Childhood Caries is:
- A. Dental decay in children from 2 – 10 years of age
 - B. An infectious chronic disease
 - C. Deformities in a child's teeth that are caused by excessive fluoride
 - D. Dental decay caused by a lack of fluoride in a child's diet
11. Oral bacteria and dietary sugars are two of the three parts of the "Etiology Triad" of Early Childhood Caries. The third part of the triad is:
- A. Acids which eat away the tooth
 - B. Bacterial toxins which attach the teeth's calcium matrix
 - C. Saliva which provides a moist environment for the oral bacteria
 - D. The warm environment in the mouth which stimulates bacterial growth
12. Which of the following is a consequence of Early Childhood Caries?
- A. Learning disabilities
 - B. Caries in permanent dentition
 - C. Weight gain
 - D. Gastroesophageal Reflux Disease (GERD)
13. Which of the following is a risk factor for developing Early Childhood Caries?
- A. High fat diet
 - B. A patient's age
 - C. Excessive levels of fluoride
 - D. Caries in siblings or caretakers

14. The mother of your 10 month-old patient asks for a prescription for supplemental fluoride. She reports that the family lives in a suburban area and obtains their water from a well. What is your best course of action?
- A. Assume the well water contains no fluoride and prescribe a systemic fluoride supplement
 - B. Tell her that you will have to know the well water's Fluoride level before prescribing any Fluoride supplements
 - C. Tell her that a Fluoride supplement is not indicated because her child has neither white spots or caries
 - D. Call your local health department to obtain the Fluoride level in water wells near the family's home before prescribing the Fluoride supplement
15. Which dental procedure does NOT require prophylaxis for individuals at risk of bacterial endocarditis?
- A. Dental extractions
 - B. Periodontal procedures
 - C. Post-operative suture removal
 - D. Prophylactic cleaning of teeth if bleeding is anticipated
 - E. Re-implantation of avulsed teeth
16. Head and neck radiation can cause all of the following oral manifestations EXCEPT which?
- A. Severe mucosal inflammation and ulcers
 - B. Xerostomia
 - C. Aggressive tooth decay
 - D. Geographic tongue
17. How does periodontal disease most often initially manifest itself?
- A. Gingivitis
 - B. "White spots" on permanent teeth
 - C. Red leukoplakia
 - D. Tobacco-stained enamel
18. Which of the following is NOT a common site for oral cancers?
- A. The tongue
 - B. Floor of mouth
 - C. Hard palate
 - D. Lower lip
19. What increases the likelihood of poor oral health in the elderly?
- A. Alzheimers dementia
 - B. Cancer chemotherapy
 - C. A stroke causing weakness of the dominant hand
 - D. All of the above
20. Risk factors for adult caries include all but which of the following?
- A. Low socioeconomic status
 - B. Existing tooth restoration

- C. Decreased salivary flow
 - D. A vegetarian diet
 - E. Physical disabilities
21. Which of the following patients require bacterial endocarditis antibiotic prophylaxis?
- A. A 26 year old woman with mitral valve prolapse undergoing routine teeth cleaning.
 - B. A 64 year old man with a prosthetic mitral valve who is undergoing a root canal beyond the apex of the tooth.
 - C. A 16 year old boy with a ventricular septal defect completely repaired in infancy who is in for an extraction of an impacted wisdom tooth.
 - D. A 32 year old man who had bacterial endocarditis 5 years ago who is undergoing orthodontic appliance adjustment.
22. Which of the following is not a normal age-related tooth change?
- A. Gingival recession
 - B. Root caries
 - C. Yellowing of teeth
 - D. Thinning of teeth with exposed dentin
23. Which of the following are true statements concerning xerostomia, or dry mouth?
- A. Xerostomia is caused by a decrease in the production of saliva.
 - B. Xerostomia can cause a burning sensation, change in taste, and difficulty swallowing.
 - C. Medications can contribute to the decrease in saliva production.
 - D. A decrease in saliva can increase the development of caries.
 - E. All of the above.
24. Which antibiotic is the drug of choice for intra-oral infections?
- A. Ciprofloxacin
 - B. Doxycycline
 - C. Penicillin
 - D. Cefuroxime
25. When should an avulsed tooth in a 35 year old patient be optimally re-implanted?
- A. It should not be re-implanted
 - B. Less than 5 minutes
 - B. Within 1 hour
 - C. Within 12 hours
 - D. Within 24 hours
26. Tongue piercings put patients at most risk for what condition?
- A. Oral pain
 - B. Periodontal disease
 - C. Abscessed teeth
 - D. Tooth fractures
27. Which of the following statements is NOT true concerning oral health and pregnancy?

- A. Gingivitis is common in pregnancy
- B. Periodontitis is associated with preterm birth
- C. Treatment of periodontitis in pregnancy increases the risk of preterm birth
- D. Deep root scaling is safe during pregnancy

28. Which of the following is a TRUE statement:

- A. Mothers with extensive caries pass their genetic predisposition for caries on to their babies
- B. Mother with extensive caries pass bacteria to their babies in-utero which increases the risk for childhood caries
- C. Mother with extensive caries pass bacteria to their infants early in life which increases their risk for childhood caries
- D. All of the above

29. The best treatment for a pregnancy granuloma is:

- A. Biopsy to exclude malignancy
- B. Excision during pregnancy even if asymptomatic to avoid complications
- C. Observation
- D. Steroid injection

30. A pregnant patient asks you for guidance about her having dental treatments during her pregnancy. What would you say?

- A. Dental treatments should never be done during the first trimester.
- B. Dental treatments are best done only during the third trimester because organogenesis is complete and the mother is more comfortable.
- C. Dental treatment is optimally done during the second trimester for comfort and safety reasons.
- D. Dental treatment should never be done during pregnancy due to risk to the fetus.

II. Short answer questions (20 marks). Each question is worth 5 marks. Answer all questions

- (1) 30 years old patient comes to the clinic with submandibular swelling. Give your differential diagnosis and management?
- (2) A young adult visits your clinic with broken central and lateral incisors. Describe your Management?
- (3) 7 years old patient comes with a cariously exposed lower left 1st molar. Describe your management.
- (4) 35 years old patient visits with a c/o severe trismus and pain in the L/Lt retromolar area. Discuss the management for the patient?

Section B (50 marks)

Answer any one from the two. Each question carries 50 marks.

- I) A 40-year old patient comes to the clinic complaining of severe pain following complicated extraction the previous day. On examination, the extracted socket is dry. He has no relief on medication.
- (1) Give your differential diagnosis?
 - (2) What is the most likely diagnosis?
 - (3) Why did he suffer from the problem?
 - (4) What is "alveolar osteitis"?
 - (5) How would you prevent it?
 - (6) Describe your management in detail.
- II) A 17-year old boy comes to the clinic following a sports injury to his central incisors. But he gives a H/O chronic discharge from the right upper central incisor for 1 year. Patient has H/O RHD.
- (1) What is the diagnosis.
 - (2) What are the possible causes of chronic discharge from the gingiva.
 - (3) What is the most probable cause of discharge in this patient.
 - (4) If the patient gives a H/O allergy to the penicillin group, what would be the drug of choice in such patients.
 - (5) What precautions you would take in him with H/O RHD.
 - (6) Give your treatment plan in detail in this patient?