

प्रदेश लोक सेवा आयोग

कर्णाली प्रदेश

स्थानीय तह अन्तर्गतका प्राविधिक तर्फ स्वास्थ्य सेवा, डेन्टिष्ट्रि समूह, सहायक पाँचौं तह, डेन्टल हाइजेनिष्ट पदको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

पाठ्यक्रमको रूपरेखा:— यस पाठ्यक्रमको आधारमा निम्नानुसार चरणमा परीक्षा लिइने छ:

लिखित परीक्षा

पूर्णाङ्क:— १००

अन्तर्वार्ता

पूर्णाङ्क:— २०

प्रथम चरण:- लिखित परीक्षा योजना (Examination Scheme)

विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या X अङ्क भार	समय
सेवा सम्बन्धी	१००	४०	वस्तुगत: बहुवैकल्पिक (Multiple Choice)	७० प्रश्न X १ अङ्क = ७०	१ घण्टा
			विषयगत: छोटो उत्तर (Short Answers)	६ प्रश्न X ५ अङ्क = ३०	३० मिनेट

द्वितीय चरण

विषय	पूर्णाङ्क	परीक्षा प्रणाली
व्यक्तिगत अन्तर्वार्ता	२०	मौखिक

द्रष्टव्य:

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनसक्नेछ ।
- लिखित परीक्षाको वस्तुगत र विषयगत प्रश्नहरूको लागि छुट्टा छुट्टै उत्तरपुस्तिका परीक्षा सुरु हुनु अगावै दिइनेछ । परीक्षार्थीले वस्तुगत र विषयगत प्रश्नहरूको उत्तर सम्बन्धित उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- पाठ्यक्रमका एकाईवाट निम्नानुसार प्रश्नहरू सोधिनेछन् ।

एकाई	१	२	३	४	५	६	७	८	९	१०
वस्तुगत	२	८	८	८	८	८	८	५	५	१०
विषयगत	१	१	१	१	१	१	१	१	१	१

- वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरूको उत्तर सही दिएका प्रत्येक सही उत्तर बापत १ (एक) अङ्क प्रदान गरिनेछ भने गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- यस पाठ्यक्रममा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका ऐन, नियमहरू तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधनभई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको अन्तर्वार्तामा सम्मिलित गराइनेछ ।
- पाठ्यक्रम लागू मिति:- २०७८/०९/२४

## **1. Health Service System**

- 1.1. Health service system in Nepal
- 1.2. History of the development of dental health services in Nepal
- 1.3. Purpose and characteristics of a dental health care system
- 1.4. Ayurvedic approaches to dental health care
- 1.5. Types of health service organizations in Nepal including dental health services
- 1.6. Code of conduct for Dental Hygienist and its purpose
- 1.7. Health Service Act, 2053 and Regulation, 2055

## **2. Periodontics**

- 2.1. Historical background of periodontics
- 2.2. Normal clinical and microscopic features of gingiva
- 2.3. periodontal ligament: Functions, fibres and periodontal diseases
- 2.4. Cementum: structure, classification, types
- 2.5. Alveolar process: structure, socket wall and interdental septum
- 2.6. Dental plaque and calculus: definition, structure, composition, microbiology, its complication and control measures
- 2.7. Aging and its effect on periodontium
- 2.8. Tooth brush and its types; dentifrices and its composition; composition and mechanism of action of fluoridated toothpastes and desensitizing toothpastes; various types of tooth brushing methods and their significance in different patients; use of toothpick, dental floss, inter-dental brushes and gum stimulator
- 2.9. Periodontal instrument design and classification
- 2.10. Patient and operator position
- 2.11. Periodontal instrumentation: Principles functions and its objective

## **3. Oral Pathology and Microbiology**

- 3.1. Tooth: Anatomical structure, physiology and tooth function
- 3.2. Inflammation and abscess: concept, causes, types and its complication
- 3.3. Facial spaces, its infection and complications;
- 3.4. Oral microbiology, common oral ulcerations and lesions afflicting oral cavity (bacterial, viral, fungal, protozoal, amoebic)
- 3.5. Source, types, clinical features and sequelae of infection

- 3.6. Infection control: sterilization and disinfection
- 3.7. Definition and procedures followed in universal precaution
- 3.8. Waste management: clinical wastes and procedure of waste management of dental operatory, dental amalgam waste management

#### **4. Oral Medicine and Radiology**

- 4.1. Oral medicine: definition, scope and clinical application
- 4.2. Principles of oral diagnosis, swelling, ulcer, sinus, fistula, mucosal lesions, pain and TMJ problems definitions
- 4.3. Case history and components; physical examination methodologies (general-extra oral, intra oral)
- 4.4. Concepts of provisional diagnosis and differential diagnosis
- 4.5. Clinical chair side investigations and radiological investigations - hematological, microbiological, histopathological
- 4.6. Final/confirmed diagnosis formulation of treatment plan referral for opinions
- 4.7. Dental disorders- Developmental malformations, discoloration of teeth
- 4.8. Tongue: Structure, diseases and its systemic manifestations
- 4.9. Concept of pre-malignancy: premalignant lesions and conditions and complications
- 4.10. Oral cancer etiology, epidemiology, screening, clinical features, diagnosis, prevention and management and complications
- 4.11. Diseases of salivary glands and complications
- 4.12. Biological effects of radiation and radiation protection
- 4.13. Basic radiographic techniques: IOPA, OPG, Lateral Ceph
- 4.14. Advanced radiographic techniques: panoramic radiography, cephalometric radiography, CT scans, radionuclide diagnosis, digital radiography, applications of imaging in oral medicine - MRI, ultra sound

#### **5. Oral and Maxillofacial Surgery**

- 5.1. Principles of surgery
- 5.2. Local anaesthesia in dentistry: classification, composition, mechanism of action, ideal properties, complications
- 5.3. Mandible and maxilla fracture types and its basic management and complications
- 5.4. Exodontia and its complications
- 5.5. Impacted teeth, wisdom teeth and its significance with complications

- 5.6. Oro-facial pain
- 5.7. Common medical emergencies, odontogenic space infections, fungal and viral infections of head and neck in dental practice and their complications
- 5.8. Incisional and excisional biopsy
- 5.9. Assisting Dental Surgeons during various dental procedures

## **6. Conservative and Endodontics**

- 6.1. Definition, etiology, types, clinical features, sequelae and prevention of dental caries
- 6.2. Definition, causes, clinical features and treatment options of attrition, abrasion and erosion
- 6.3. Diseases of pulp and periapical tissues
- 6.4. Classification, etiology, clinical features and sequelae of pulp and periapical tissues
- 6.5. Classify dental injuries and storage of avulsed tooth following tooth avulsion
- 6.6. Classify instruments for restorative and endodontic procedures
- 6.7. Manipulation of various materials such as amalgam, composite, cements, calcium hydroxide, sealers

## **7. Dental Materials, Instruments and Dental Assisting**

- 7.1. Dental materials: Importance and disinfection
- 7.2. Gypsum products: Application, manipulation and disinfection
- 7.3. Impression materials: Definition, classification, desirable properties, process of transfer and storage of impression materials
- 7.4. Impression compound: Ideal requirements and manipulation process
- 7.5. Types of dental waxes and manipulation process of modeling wax
- 7.6. Dental models, cast and die materials and different dental materials used for making them; manipulation process of dental plaster, dental stone and die stone; laboratory process of pouring and base forming of cast
- 7.7. Identification and classification of dental instruments
- 7.8. Classification and types of impression trays; methods of sterilization of impression trays
- 7.9. Various parts of dental chair and their functions
- 7.10. Various positions of the operator and the assistant; various steps of patient preparation before operative procedure; post treatment instructions after various dental procedures
- 7.11. Different methods of saliva control and isolation
- 7.12. Cleaning and disinfection of dental equipment

## **8. Prosthodontics**

- 8.1. Define partial edentulism
- 8.2. Etiology, clinical features, classification and sequel of partial edentulous situation
- 8.3. Prevention of partial edentulism
- 8.4. Define edentulism
- 8.5. Etiology and clinical features of edentulous situation
- 8.6. Prevention of edentulism
- 8.7. Instruments for various prosthodontic procedures
- 8.8. Sterilization and maintenance of instruments and equipment
- 8.9. Manipulation of various materials such as alginate, impression compound, various luting cements, zinc oxide eugenol

## **9. Orthodontic**

- 9.1. Squeal of malocclusion
- 9.2. Complication of orthodontic treatment
- 9.3. Removable appliance
- 9.4. Clinical features and complication of deep bite and cross bite
- 9.5. TMJ problem related to orthodontic treatment
- 9.6. Ideal age for orthopedic correction
- 9.7. Immediate treatment required cases for referral
- 9.8. Proclination of upper anterior, orthopaedics problems cross bite

## **10. Pedodontics**

- 10.1. Complication of extraction in children
- 10.2. Treatment modalities in deciduous tooth
- 10.3. Complication of thumb sucking habit
- 10.4. Avulsion of a tooth and storing media
- 10.5. Different space maintainers used in children
- 10.6. Child psychology and behavioral management
- 10.7. Difference between primary and secondary tooth
- 10.8. Tooth eruption sequence and exfoliation age
- 10.9. Nursing bottle caries: Introduction, clinical features, management and its complication
- 10.10. Bacterial and viral disease related to child patient
- 10.11. Fluoride: Introduction, types, indication, contraindication, advantage, disadvantage and method of fluoride application
- 10.12. Trauma, tooth fracture and management in child patient
- 10.13. Restoration materials in primary and secondary tooth

## 10.14. Eruption cyst

### वस्तुगत प्रश्नहरू (Objective Questions)

1. Which of the following Local Anesthesia is used in Dentistry ?
  - a. 2% lidocaine with 1:100000 epinephrine
  - b. 4% lidocaine with 1:100000 epinephrine
  - c. 0.5% bupivacaine with 1:100000 epinephrine
  - d. 2% articaine with 1:100000 epinephrine
2. What is the best storage media for avulsed tooth ?
  - a. Milk
  - b. Patient's own Salvia
  - c. HBSS (Hank's Balanced Salt Solution)
  - d. Coconut water
3. Sterilization of RCT files is best done with
  - a. Autoclave
  - b. Hot air oven
  - c. Glass bead sterilizer
  - d. Chemical
4. Best Restorative material for deciduous teeth
  - a. Zinc phosphate
  - b. Composite
  - c. Glass ionomer
  - d. Amalgam
5. Eruption Age of permanent first molar is
  - a. 8-9 years
  - b. 10-13 years
  - c. 6-7 years
  - d. 17-21 years
6. 6 years old patient presents with pain in lower left back region. On examination 775 is carious and tender to percussion. what is the best choice of treatment ?
  - a. Gic restoration
  - b. Extraction
  - c. Composite restoration

d. Pulpectomy

छोटी उत्तर प्रश्नहरू (Short Answer Questions)

1. Define calculus and write its composition. Mention the method of plaque formation and enlist brushing technique. [1+1+2+1]
2. Write the sequence of primary and secondary teeth eruption and differentiate between them. [2+3]
3. Enlist dental diseases. Define dental caries, its types, etiology and management [1+4]