

५. वस्तुगत बहुउत्तर (Multiple Choice) प्रश्नहरूको उत्तर सही दिएमा प्रत्येक सही उत्तर बापत पुरा 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।
६. द्वितीय पत्रको विषयगत प्रश्नका लागि तोकिएका १० अङ्कका प्रश्नहरूको हकमा १० अङ्कको एउटा लामो प्रश्न वा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू -Short notes_ सोध्न सकिने छ।
७. द्वितीय पत्रको पाठ्यक्रमलाई ४ वटा खण्ड/एकाईमा विभाजन गरिएको छ, ४ वटा खण्ड/एकाईको लागि ४ वटै उत्तरपुस्तिका दिइनेछ र परिक्षार्थीले प्रत्येक खण्ड/एकाईका प्रश्नहरूको उत्तर सोही खण्ड/एकाईको उत्तर पुस्तिकामा लेख्नु पर्नेछ।
८. यस पाठ्यक्रममा जेसुकै लेखिएको भएता पनि पाठ्यक्रममा परेका ऐन, नियमहरू परीक्षाको मिति भन्दा ३ (तीन) महिना अगाडि (संशोधन भएका वा संशोधन भई हटाइएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा रहेको सम्झनु पर्दछ।
९. तृतीय पत्र नेपाल प्रहरी सेवा सम्बन्धी विषयवस्तु र प्रश्नसंख्या तृतीय पत्रको पाठ्यक्रममा उल्लेख गरिएको छ।
१०. प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको अन्तर्वार्तामा सम्मिलित गराइनेछ।
११. अन्तर्वार्ताको अंकभार सम्बन्धमा प्रहरी सेवाको पदमा नियुक्ति र बढुवा गर्दा अपनाउनु पर्ने सामान्य सिद्धान्त, २०६९ को अनुसूची-१९ मा व्यवस्था भए बमोजिम हुनेछ।
१२. पाठ्यक्रम लागू मिति :-

नेपाल सरकार
गृह मन्त्रालय
प्रहरी प्रधान कार्यालय
(मानवश्रोत विकास विभाग, भर्ना तथा छनौट शाखा)
प्राविधिक प्रहरी निरीक्षक (चिकित्सक), डेन्टिस्ट्री समूह को खुल्ला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

Section A – 20 Marks

1. GENERAL MEDICINE & GENERAL SURGERY

10%

- Sign, Symptoms, Diagnosis, Management and its Dental Implication

1.1 GENERAL MEDICINE (5%)

- 1.1.1 Acid Peptic Disease
 - 1.1.2 Cirrhosis of liver
 - 1.1.3 Hepatitis
 - 1.1.4 Worm Infestation
 - 1.1.5 Crohn's Diseases
 - 1.1.6 Anemia, Leukemia
 - 1.1.7 Purpuras
 - 1.1.8 Hemophilia
 - 1.1.9 Bleeding and clotting disorder and it's management
 - 1.1.10 Cerebro-vascular accident
 - 1.1.11 Meningitis
 - 1.1.12 Encephalitis
 - 1.1.13 Epilepsy
 - 1.1.14 Diabetes Mellitus
 - 1.1.15 Thyrotoxicosis
 - 1.1.16 Myxoedema
 - 1.1.17 Cushing's syndrome
 - 1.1.18 Addison's disease
 - 1.1.19 Hyperparathyroidism
 - 1.1.20 Tetany
 - 1.1.21 Rheumatoid arthritis
 - 1.1.22 Systemic lupus erythematosus
 - 1.1.23 Osteoarthritis
 - 1.1.24 Nephrotic syndrome
 - 1.1.25 Enteric fever
 - 1.1.26 Valvular and Ischaemic Heart Diseases
 - 1.1.27 Infective endocarditis
- #### 1.2 GENERAL SURGERY (5%)
- 1.2.1 Enteric fever
 - 1.2.2 Mumps
 - 1.2.3 Sinus
 - 1.2.4 Fistulas
 - 1.2.5 Ulcer
 - 1.2.6 Tumor
 - 1.2.7 Shock
 - 1.2.8 Peptic ulcer

- 1.2.9 Liver abscess
- 1.2.10 Pain Abdomen
- 1.2.11 Bronchial carcinoma
- 1.2.12 Head injuries
- 1.2.13 Goiter
- 1.2.14 Cellulites
- 1.2.15 Candidiasis
- 1.2.16 Urticaria
- 1.2.17 Herpes zoster
- 1.2.18 Lichen planus
- 1.2.19 Pemphigus
- 1.2.20 Drug eruption
- 1.2.21 HIV/AIDS
- 1.2.22 Diplopia
- 1.2.23 Sinusitis
- 1.2.24 Tonsillitis
- 1.2.25 Peritonsillar abscess
- 1.2.26 Ludwig's angina
- 1.2.27 Indication of tracheostomy
- 1.2.28 Maxillo-facial Fracture
- 1.2.29 TMJ Dislocation
- 1.2.30 Crush injury
- 1.2.31 Osteomyelitis
- 1.2.32 Tetanus
- 1.2.33 Infection control
- 1.2.34 Fluid and electrolyte therapy
- 1.2.35 Blood transfusion

2. GENERAL AND ORAL PATHOLOGY

10%

- 2.1 Interpretations of laboratory results
- 2.2 Normal values of biochemical tests, Hematological tests
- 2.3 Developmental disorders of teeth
- 2.4 Dental caries
- 2.5 Pulpitis
- 2.6 Apical periodontitis
- 2.7 Hypercementosis
- 2.8 Gingivitis & Periodontitis
- 2.9 Cysts of the jaw : Non odontogenic and odontogenic cysts
- 2.10 Odontogenic tumors
- 2.11 Infective Stomatitis
- 2.12 Oral Premalignant Lesion
- 2.13 Oral Cancer
- 2.14 Common benign mucosal swelling
- 2.15 Cervical lymphadenopathy
- 2.16 Pain., anxiety and Neurological disorders of face and oral cavity
- 2.17 Diseases of temporomandibular joint
- 2.18 Signs and symptoms of anaemia and leukamia related to oral cavity

- 2.19 Haemorrhagic diseases related to oral cavity
- 2.20 Development disorders of the oral and maxillofacial region
- 2.21 Clinical features and pathogenesis of all major salivary glands

3. ORAL AND MAXILLO-FACIAL SURGERY AND ANAESTHESIA 10%

3.1 ORAL AND MAXILLO-FACIAL SURGERY (5%)

- 3.1.1 Diagnosis of different oral conditions with its surgical management
- 3.1.2 Management of extraction –simple and complicated teeth
- 3.1.3 Management of oro facial infections by proper incision, drainage and antibiotic therapy
- 3.1.4 Carry out biopsies of oral issues
- 3.1.5 Diagnosis and management of the odontogenic cysts & different types of oral tissue bioopsies
- 3.1.6 Apicoectomy
- 3.1.7 Closure of oro-antral fistula
- 3.1.8 Diagnosis and treatment of TMJ dislocation
- 3.1.9 The principles of pain control in maxillofacial surgery
- 3.1.10 Principles of radiotherapy, chemotherapy and other adjuvant therapy in the management of malignant tumors
- 3.1.11 Basic principles in the management of Facial Trauma Cases in relation with :
 - 3.1.11.1 Nutritional consideration
 - 3.1.11.2 Systemic evaluation of the traumatized patient
 - 3.1.11.3 Airway management
 - 3.1.11.4 Shock, fluid resuscitation and management
 - 3.1.11.5 Control of bleeding due to facial trauma
 - 3.1.11.6 Antibiotic and analgesic
 - 3.1.11.7 Plan and Management of fixation of jaw fracture with closed reduction using arch bar and IMF
 - 3.1.11.8 Proper splinting of dento-alveolar injury
 - 3.1.11.9 Diagnosis and classification of different types of maxillary & mandibular fractures
 - 3.1.11.10 Diagnosis of benign lesions and malignant lesions of oral cavity
 - 3.1.11.11 Post operative complications of jaw fractures
 - 3.1.11.12 Management of soft tissue wound of orb facial structure
- 3.1.12 Ameloblastoma
- 3.1.13 Oro-facial defects : Cleft lip and palate
- 3.1.14 Osteomyelitis of jaw bones.

3.2 ANAESTHESIA (5%)

- 3.2.1 Principles of administering safe General anaesthesia, Local anaesthesia
- 3.2.2 Pre – anesthetic drugs
- 3.2.3 Block and local anaesthesia of oral cavity
- 3.2.4 Infiltration anaesthesia of oral cavity
- 3.2.5 Post operative complication of general anaesthesia
- 3.2.6 Management of complication of intra oral local anaesthesia

4. ORAL MEDICINE AND DENTAL RADIOLOGY 10%

4.1 Oral Medicine

- 4.1.1 Introduction and scope of oral medicine
- 4.1.2 Case history discussion and patient examination
- 4.1.3 Diagnostic investigations
- 4.1.4 White lesions of oral cavity

- 4.1.5 Red lesions of oral cavity
- 4.1.6 Pigmented lesions of oral cavity
- 4.1.7 Diseases of the tongue
- 4.1.8 Infections of oral cavity
- 4.1.9 Systems review – Systemic disease and their oral manifestations and dental management
 - 4.1.9.1 Cardiovascular disease
 - 4.1.9.2 Respiratory disease
 - 4.1.9.3 Gastro intestinal disease
 - 4.1.9.4 Urinary disease
 - 4.1.9.5 Blood dyscrasias – with special reference to anaemic patients, leukaemia patients and patients on anticoagulant therapy
 - 4.1.9.6 Endocrine disorders
- 4.1.10 Oral premalignant lesions and oral cancer and other malignant lesion
- 4.1.11 Ulcerative and vesiculobullous lesions
- 4.1.12 Salivary gland disorders
- 4.1.13 Oro facial pain- different diagnosis and management
- 4.1.14 TMJ disorders
- 4.1.15 Immunodeficiency diseases with special reference to AIDS

4.2 DENTAL RADIOLOGY:

- 4.2.1 X-Ray equipments, developing and processing,
- 4.2.2 Radiation hazards and protection
- 4.2.3 Use of Periapical radiography, Bitewing radiography, Occlusal radiography, Oblique lateral radiography, O.P.G. view of mandible, Cephalometric radiography, Tomography, O.M view of maxilla, P.A. view of mandible,
- 4.2.4 Radiological interpretation of different radiological images of different bony and soft tissue, lesions of Oro-facial structure including all types of Oro-facial trauma.

Section C – 30 Marks

5. ORTHODONTICS

10%

- 5.1 Definition, scope and objectives of orthodontia
- 5.2 Indication for orthodontics treatment
- 5.3 Limitation of orthodontic treatment
- 5.4 Growth and development: Jaws, Teeth, Face, Skull
- 5.5 Occlusion
- 5.6 Normal development of oral functions: Mastication, Swallowing, Speech, Occlusal function
- 5.7 Normal occlusion: It's development, Characteristics and variation
- 5.8 Genetics-applied to orthodontics
- 5.9 Malocclusion: Classification, Etiology
- 5.10 Orthodontic records
- 5.11 History and examination
- 5.12 Study models
- 5.13 Radiography
- 5.14 Preventive and interceptive orthodontics
- 5.15 Extractions in orthodontics
- 5.16 Orthodontic appliances: Removable, Functional, and Fixed

- 5.17 Tissue response to orthodontic tooth movement
- 5.18 Stability and retention
- 5.19 Oral surgery for orthodontic patients
- 5.20 Materials related to orthodontics

6. DENTAL MATERIAL

10%

- 6.1 Aim and scope
- 6.2 Structure and behavior of matters, Biological consideration,
- 6.3 Physical and mechanical properties of dental materials
- 6.4 Gypsum products
- 6.5 Impression materials:
 - 6.5.1 Impression compound
 - 6.5.2 ZnO-Eugenol
 - 6.5.3 Agar-agar
 - 6.5.4 Alginate
 - 6.5.5 Rubber base impression materials
- 6.6 Synthetic resins:
 - 6.6.1 Properties
 - 6.6.2 As denture base material
 - 6.6.3 Repair and reline material
 - 6.6.4 Soft liner
 - 6.6.5 Tissue conditioners
- 6.7 Resins as restorative materials:
 - 6.7.1 Unfilled and filled resins
 - 6.7.2 Light cure
 - 6.7.3 Dentin bonding agent
 - 6.7.4 Acid etch
- 6.8 Metal alloys:
 - 6.8.1 Dental amalgam alloys
 - 6.8.2 Dental casting gold alloys
 - 6.8.3 Stainless steel
 - 6.8.4 Chrome cobalt alloy
 - 6.8.5 Nickle titanium alloy
 - 6.8.6 Titanium alloy
 - 6.8.7 Vitallium
- 6.9 Waxes: different types of dental waxes used in dentistry
- 6.10 Welding and Soldering,
- 6.11 Dental cement:
 - 6.11.1 Zinc Oxide Eugenol
 - 6.11.2 Zinc phosphate
 - 6.11.3 Polycarboxylate
 - 6.11.4 Glass Ionomers
 - 6.11.5 Cavity liners
 - 6.11.6 Cavity varnishes
 - 6.11.7 Calcium hydroxide
- 6.12 Dental porcelain: Porcelain fused to metal, porcelain furnace and fusing
- 6.13 Abrasive and polishing agents.

7. CONSERVATIVE AND ENDODONTICS

10%

7.1 CONSERVATIVE

7.1.1 Scope of conservative Dentistry and Endodontics

7.1.2 Patient examination, diagnosis and treatment planning in Conservative and Endodontics including various diagnostic aids

7.1.3 Instruments and Equipment used in Conservative and Endodontics :

7.1.3.1 Hand instruments

7.1.3.2 Rotary instruments

7.1.4 Sterilization in Conservative dentistry and Endodontics

7.1.5 Clinical significance of dental anatomy, histology, physiology and occlusion

7.1.6 Dental caries

7.1.7 Fundamentals in tooth preparation :

7.1.7.1 Nomenclature of teeth

7.1.7.2 Caries terminology

7.1.7.3 Tooth preparation terminology

7.1.7.4 Principles of tooth preparation

7.1.8 Principles of isolation and moisture control

7.1.9 Pain control in Conservative and Endodontics

7.1.10 Cavity preparation for various types of restorative material

7.1.10.1 Amalgam

7.1.10.2 Composite

7.1.10.3 Glass Ionomer Cement

7.1.10.4 Cast restoration

7.2 ENDODONTICS

7.2.1 Pulp development, structure and function

7.2.2 Periapical pathology

7.2.3 Tooth morphology and access opening

7.2.4 Working length determination

7.2.5 Cleaning and shaping the root canal system

7.2.6 Obturation of the root canal system

7.2.7 Traumatic injuries : Diagnosis and management

7.2.8 Root resorption

7.2.9 Surgical endodontics

7.2.10 Pulp capping and pulpotomy

7.2.11 Bleaching of teeth

7.2.12 Restoration of endodontically treated teeth

7.2.13 Endo – Perio lesions

7.2.14 Endodontic failures and retreatment

7.2.15 Endodontic emergencies

7.2.16 Drugs used in Conservative and Endodontics

7.2.17 Irrigants and medicaments

8. PROSTHODONTICS AND CROWN AND BRIDGE

10%

8.1 Prosthodontics

8.1.1 Examination, diagnosis, treatment planning and prognosis

8.1.2 Retention and stability

8.1.3 Impression making

- 8.1.4 Preparation of casts, trays and temporary denture bases
 - 8.1.5 Methods of jaw registration
 - 8.1.6 Identification of artificial teeth : Selection, arrangement and aesthetics
 - 8.1.7 Complete denture :
 - 8.1.7.1 Principles of occlusion and articulation in complete dentures
 - 8.1.7.2 Trial in complete dentures
 - 8.1.7.3 Steps of processing and finishing denture
 - 8.1.7.4 Correction of occlusal discrepancies
 - 8.1.7.5 Steps in delivery and adjustments of complete dentures
 - 8.1.7.6 Sequelae of ill fitting dentures
 - 8.1.7.8 Rebasing and relining of dentures
 - 8.1.8 Immediate dentures
 - 8.1.9 Implant dentures
 - 8.1.10 Obturators
 - 8.1.11 Partial Dentures
 - 8.1.11.1 Scope of removable partial dentures
 - 8.1.11.2 Classification of removable partial dentures
 - 8.1.11.3 Components removable partial dentures
 - 8.1.11.4 Mouth preparation for removable partial dentures
 - 8.1.11.5 Impression making
 - 8.1.11.6 Designs of removable partial dentures and associated problems
 - 8.1.11.7 Principles on fabrication of cast metal framework
 - 8.1.11.8 Jaw relation records, Selection and arrangement of teeth
 - 8.1.11.9 Trial of partial dentures
 - 8.1.11.10 Steps of processing, finishing, delivery and maintenance of partial dentures
 - 8.1.11.11 Uses of immediate partial dentures.
- 8.2 CROWN AND BRIDGE**
- 8.2.1 Indication and Contra-indication
 - 8.2.2 Examination, diagnosis and treatment planning
 - 8.2.3 Principles of selection and choice of abutment teeth
 - 8.2.4 Principles of tooth reduction
 - 8.2.5 Preparation of abutment teeth
 - 8.2.6 Temporary protections of prepared tooth
 - 8.2.7 Gingival retractions and impression procedures
 - 8.2.8 Construction of dies and working methods, direct and indirect techniques.

Section D– 20 Marks

9. PERIODONTOLOGY

10%

- 9.1 Definition, scope, aim and objectives of periodontology
- 9.2 Normal periodontium: Gingiva, Periodontal ligament, Cementum, Alveolar bone
- 9.3 Aging and periodontium
- 9.4 Defense mechanisms of gingiva
- 9.5 Classification of diseases of Periodontium
- 9.6 Epidemiology of periodontal diseases
- 9.7 Etiology of periodontal diseases:
 - 9.7.1 Dental plaque/periodontal microbiology

- 9.7.2 Material alba, food debris and stains
- 9.7.3 Dental calculus
- 9.7.4 Food impaction
- 9.7.5 Host response
- 9.7.6 Dental occlusion/ Trauma from occlusion (TFO)/bruxism and other parafunctional habits
- 9.7.7 influence of systemic diseases on periodontium- diabetes, sexhormones, nutrition, AIDS, haemorrhagic diseases
- 9.8 Etiology,pathogenesis, clinical signs and symptoms and management of: Plaque associated gingivitis, Systematically aggravated gingivitis, Acute gingival infection-ANUG, acute herpetic gingivostomatitis, pericoronitis, Desquamative gingivitis, Allergic gingivitis,
- 9.9 Gingival enlargement, Gingival abscess
- 9.10 Periodontal pocket
- 9.11 Periodonitis: Adult peridontitis, Rapidly progressive periodontitis, Early onset peridontitis, Juvenile periodontitis associated with systemic diseases, Periodontal abscess
- 9.12 Clinical diagnosis and Diagnostic aids
- 9.12 Prognosis
- 9.13 Treatment plan and rationale for periodontal treatment
- 9.14 Periodontal treatment of medically compromised patients
- 9.15 General principles of periodontal therapy
- 9.16 Definition- Periodontal regeneration, repair, new attachment, Re attachment
- 9.17 Plaque control : mechanical and chemical
- 9.18 the periodontal instrumentarium, Principles of periodontal instrumentation
- 9.19 Anti-microbial and other chemotherapeutic agents in periodontal therapy
- 9.20 Coronoplasty in periodontal therapy
- 9.21 General principles of periodontal surgery, root planning
- 9.22 Gingival curettage
- 9.23 Gingivectomy
- 9.24 Flap surgery
- 9.25 Resective osseous surgery : Osseous defects and osseous surgery including bone grafts
- 9.26 Reconstructive osseous surgery: Root conditioning /guided tissue regeneration (GTR)
- 9.27 Furcation involvement and management
- 9.28 Endo-perio therapy
- 9.29 Mucogingival surgery
- 9.30 Periodontal splints, Periodontal pack
- 9.31 Dentinal hypersensitivity
- 9.32 Dental implant
- 9.33 Prosthetic and restorative procedures in management of periodontal disease
- 9.34 Maintenance phase of periodontal therapy or supportive periodontal treatment
- 10. PAEDODONTICS AND COMMUNITY DENTISTRY 10%
- 10.1 PAEDODONTICS (5%)
- 10.1.1 Definition, Scope and importance of Paedodontics
- 10.1.2 Morphology of dentitions and its application
- 10.1.3 Applied morphology and histology of deciduous and permanent teeth
- 10.1.4 Importance of 1st permanent molar
- 10.1.5 Anomalies of developing dentition:
 - 10.1.5.1 tooth eruption

- 10.1.5.2 tooth exfoliation
- 10.1.5.3 tooth number
- 10.1.5.4 tooth structure
- 10.1.5.5 tooth color
- 10.1.6 Orofacial growth and its modification
- 10.1.7 Management of common dental and oral diseases in children
- 10.1.8 Diagnosis and management of orodental trauma in child patient
- 10.1.9 Oral manifestation of systemic disease in children
- 10.1.10 Paedodontic treatment plan
- 10.1.11 Psychological development and behavioural attitude in paediatric group
- 10.1.12 Common oral surgical procedures undertaken in children
- 10.1.13 Sedation and anaesthesia used in children for dental procedures
- 10.1.14 Pulp therapy in primary and young permanent tooth
- 10.1.15 Space maintainer : Indication, Classification and techniques of fabrication
- 10.1.16 Management of pain, anxiety and stress in child patient
- 10.1.17 Orthodontic treatment in primary dentition
- 10.2 COMMUNITY DENTISTRY (5%)
- 10.2.1 Concept of health and attitude towards illness
- 10.2.2 Community survey and family case study
- 10.2.3 Doctor, patient relationship
- 10.2.4 Epidemiology of oral diseases in Nepal
- 10.2.5 Fluorides
- 10.2.5.1 fluoride mechanisms
- 10.2.5.2 fluorosis
- 10.2.5.3 systemic fluorides
- 10.2.5.4 topical fluorides
- 10.2.6 Food which prevent dental decay
- 10.2.7 Concept of health education
- 10.2.8 Motivation and incentives
- 10.2.9 Methods and media of oral health education
- 10.2.10 Nutrition and health
- 10.2.11 Growth and development
- 10.2.12 Breast feeding
- 10.2.13 Motivation to community people and school teachers
- 10.2.14 National Oral Health Policy

नेपाल सरकार
गृह मन्त्रालय
प्रहरी प्रधान कार्यालय
(मानवश्रोत विकास विभाग, भर्ना तथा छनौट शाखा)
प्राविधिक प्रहरी निरीक्षक (चिकित्सक), डेन्टिस्ट्री समूह को खुल्ला प्रतियोगितात्मक परीक्षा

वस्तुगत बहुउत्तर नमूना प्रश्नहरू (Sample Questions)

1. The material of choice in pulp capping is

- A. zinc oxide and eugenol
- B. steroids in combination with antibiotics
- C. polycarboxylate cements
- D. calcium hydroxide

Correct Answer:- (D)

2. Most prevalent form of malocclusion is

- A. Angle's class I
- B. Class II div I
- C. Class II div II
- D. Class III

Correct Answer:- (A)

3. Sialorrhea can occur in all EXCEPT

- A. stomatitis
- B. cholinergic drugs
- C. heavy metals
- D. diabetes mellitus

Correct Answer:- (D)

4. A tooth that supports a fixed or removable prosthesis is called

- A. retainer
- B. pontic
- C. abutment
- D. bridge

Correct Answer:- (C)

5. Plaque tends to form most rapidly

- A. during sleep
- B. while eating food
- C. while drinking fruit juices
- D. formation is at a constant rate

Correct Answer:- (A)

विषयगत नमूना प्रश्नहरू (Sample questions)

1. Define Juvenile periodontitis. Describe its clinical features, radiological findings, microbiological findings and its management in detail.

2. Define prognosis. Describe in detail overall and individual prognosis of a tooth.

3. write short notes on (5 X 2)

- a. Furcation involvement
- b. Endo-Perio Lesions