### लोक सेवा आयोग

नेपाल स्वास्थ्य सेवा, डेन्टिष्ट्री समूह, पेरियोडोण्टिष्ट उपसमूह, नवौँ (९) तहको खुला र आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

### **<u>Paper II:</u>** Technical Subject

### 1. History of Periodontics, scope and limitations

## 2. **Periodontium**

- 2.1 Normal Periodontium
  - 2.1.1 Gingiva
  - 2.1.2 Periodontal ligament
  - 2.1.3 Cementum
  - 2.1.4 Alveolar bone
- 2.2 Development of Periodontium
- 2.3 Aging and the Periodontium

### 3. Classification and Epidemiology of Periodontal diseases

- 3.1 Classification of Periodontal diseases and conditions
- 3.2 Epidemiology of Gingival and Periodontal diseases

### 4. Etiopathogenesis

- 4.1 Defense mechanism of gingiva
- 4.2 Normal microflora of oral cavity
- 4.3 Periodontal microbiology
- 4.4 Periodontal pathogens
- 4.5 Inflammation, immunity and oral infection
- 4.6 Host Microbial interaction in periodontal diseases
- 4.7 Pathogenesis of plaque associated periodontal diseases
- 4.8 Role of virus in Periodontal diseases
- 4.9 Dental calculus
- 4.10 Role of iatrogenic and other local factors
- 4.11 Role of genetics in Periodontal diseases
- 4.12 Role of tobacco in Periodontal diseases
- 4.13 Role of stress in Periodontal diseases
- 4.14 Occlusion and Periodontal diseases
- 4.15 Food impaction

# 5. Relationship between Periodontal disease and systemic health

- 5.1 Influence of systemic conditions on the Periodontium
- 5.2 Impact of Periodontal Infection on systemic health
  - 5.2.1 Periodontal disease and Cardiovascular diseases
  - 5.2.2 Periodontal disease and Respiratory diseases
  - 5.2.3 Periodontal diseases and Diabetes mellitus
  - 5.2.4 Periodontal diseases and Adverse pregnancy outcomes

# 6. Periodontal Pathology

- 6.1 Gingival diseases
  - 6.1.1 Gingival inflammation
  - 6.1.2 Clinical features of gingivitis
  - 6.1.3 Gingival enlargement

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- 6.1.4 Acute gingival infections
- 6.1.5 Gingival diseases in childhood
- 6.1.6 Desquamative gingivitis
- 6.2 Periodontal diseases
  - 6.2.1 Periodontal pocket
  - 6.2.2 Mechanism of tissue destruction
  - 6.2.3 Bone loss Mechanisms and pattern of bone destruction
  - 6.2.4 Periodontal response to external forces
  - 6.2.5 Chronic Periodontitis
  - 6.2.6 Aggressive Periodontitis
  - 6.2.7 Necrotizing Ulcerative Periodontitis

#### 7. Masticatory system disorders

#### 8. Treatment of Periodontal disease

- 8.1 Diagnosis, prognosis and treatment planning
  - 8.1.1 Clinical diagnosis
  - 8.1.2 Radiographic and other aids in the diagnosis of periodontal diseases
  - 8.1.3 Advanced diagnostic techniques
  - 8.1.4 Risk assessment
  - 8.1.5 Determination of prognosis
  - 8.1.6 Treatment plan
  - 8.1.7 Rationale for periodontal treatment
  - 8.1.8 Levels of clinical significance
  - 8.1.9 Periodontal treatment of Medically compromised patients
  - 8.1.10 Periodontal therapy in the female patient
  - 8.1.11 Periodontal treatment for older adults
  - 8.1.12 Treatment of aggressive and atypical forms of periodontitis

### 8.2 **Treatment of Periodontal emergencies**

- 8.2.1 Treatment of acute gingival disease
- 8.2.2 Treatment of Periodontal abscess

#### 8.3 Non surgical therapy

- 8.3.1 Phase I Periodontal therapy
- 8.3.2 Plaque control
- 8.3.3 Scaling and root planing
- 8.3.4 Sonic and ultrasonic instrumentation and irrigation
- 8.3.5 General principles of anti-infective therapy with special emphasis on infection control in Periodontal practice
- 8.3.6 Antimicrobial and other chemotherapeutic agents in periodontal therapy
- 8.3.7 Host modulation
- 8.3.8 Occlusal evaluation and therapy
- 8.3.9 Adjunctive role of orthodontic therapy

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- 8.3.10 Special emphasis on precautions and treatment for medically compromised patients
- 8.3.11 Periodontal splints
- 8.3.12 Management of dentinal hypersensitivity

### 8.4 Surgical therapy

- 8.4.1 Phase II Periodontal therapy
- 8.4.2 Surgical anatomy of periodontium and related structures
- 8.4.3 General principles of periodontal surgery.
- 8.4.4 Conscious sedation
- 8.4.5 Gingival surgical technique
- 8.4.6 Periodontal flap
- 8.4.7 Treatment of gingival enlargement
- 8.4.8 Flap technique for Pocket therapy
- 8.4.9 Root biomodification
- 8.4.10 Resective osseous surgery
- 8.4.11 Reconstructive Periodontal Surgery
- 8.4.12 Furcation involvement and treatment
- 8.4.13 Periodontal plastic and esthetic surgery
- 8.4.14 Recent advances in surgical technology
  - Periodontal microsurgery
  - Lasers in periodontal therapy
  - Photodynamic therapy
  - Electrosurgery
  - Tissue Engineering

# 9. Periodontal maintenance phase

9.1 Supportive periodontal treatment

# 10. Interdisciplinary and supportive care

- 10.1 Inter relationship between Periodontics and Orthodontic therapy
- 10.2 Inter relationship between Periodontics and Restorative therapy
- 10.3 Inter relationship between Periodontics and Prosthodontic therapy

# 11. Management of Medical emergencies in Periodontal practice

### 12. Oral Implantology

- 12.1 Introduction and historical review
- 12.2 Rationale for implants
- 12.3 Surgical and radiological anatomy
- 12.4 Biologic, clinical and surgical aspects of dental implants
- 12.5 Diagnosis and treatment planning
- 12.6 Standard implant surgical procedures
- 12.7 Advanced implant surgery and bone grafting techniques.
- 12.8 Biomechanics and Prosthetic considerations
- 12.9 Diagnosis and management of Implant related complications and failures
- 12.10 Maintenance of dental implants