### प्रथम चरण - नियमित परीक्षा

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<th>पवा</th>
<th>विषय</th>
<th>पूर्णि</th>
<th>उत्तीर्ण श्रेणी</th>
<th>परीक्षा प्रमाणी</th>
<th>प्रत्येक प्रश्नांश X अंक</th>
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### द्वितीय चरण - अन्तःअड्डा

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**प्रमाण**

1. नियमित परीक्षा को माध्यम भाषा पेपारी वा अंकेजी अवदा नेपाली र अंकेजी दृष्टि हुनेछ।
2. नियमित परीक्षा यथायथ पाठ्यक्रम को एकलाइ भएको लागू भएको भएको।
3. वर्तमान क्षेत्रभारी (Multiple Choice) प्रश्नहरूलाई उत्तर दिन्छ र प्रश्नको बच्चा 20 प्रश्नांश अंक बढ्छ परीक्षा। त्याउँलाई उपस्थित वा उपस्थित नसकेको छैन।
4. यस पाठ्यक्रम भेटानुसार अन्तःअड्डा पवा /विषयक विषयपत्रमा जेबेको तथ्यातो फसलाउँदा पाठ्यक्रम परीक्षा कार्यक्रम, नियम तथा नीतिहरू परीक्षाको मिलि भन्न हुने ३ महीना अन्तःअड्डा (संगठन भएको वा संरचना भएको वा प्रयोग सहित) हुनेछ। कर्मवार सहकारात यस पाठ्यक्रम परीक्षा सम्पन्न हुनेछ।
5. प्रथम चरणमा परीक्षा येखानौ र द्वितीय चरणमा परीक्षा समाप्त गरिएको हुनेछ।
6. पाठ्यक्रम लगभग मिलित : 2064/09/95
1. Basic Science, Oral Anatomy and Physiology
   1.1 Basic Science
      1.1.1 Matter and its properties
      1.1.2 Work, power and energy, power, friction, momentum, temperature and temperature measuring instruments
      1.1.3 Study of electro – technology applied to dental work
         1.1.3.1 Basic electricity, current voltage, Ohm’s Law, AC, DC, electrical measurements.
      1.1.4 Physical and chemical changes of elements, mixtures and compounds.
      1.1.5 Electrolysis, electroplating
      1.1.6 General characteristics of common metal used in the dental work and their compounds

   1.2 Oral Anatomy and Physiology
      1.2.1 Definition and terminologies
      1.2.2 Skeleton system
         1.2.2.1 Review of skeleton of head and neck
         1.2.2.2 Maxilla
         1.2.2.3 Maxillary sinus
         1.2.2.4 Mandible
      1.2.3 Muscular System
         1.2.3.1 Review on facial muscles
         1.2.3.2 Muscles of mastication
      1.2.4 Temporo-mandibular joint
      1.2.5 Oral cavity
      1.2.6 Periodontium
         1.2.6.1 Gingiva
         1.2.6.2 Periodontal ligament
         1.2.6.3 Cementum
         1.2.6.4 Alveolar bone
      1.2.7 Tooth
         1.2.7.1 Growth and development of tooth
         1.2.7.2 Anatomy of tooth
         1.2.7.3 Occlusion
         1.2.7.4 Tooth numbering system
      1.2.8 Physiology of mastication & deglutition
      1.2.9 Salivary gland
         1.2.9.1 Parotid, submandibular and sublingual gland
         1.2.9.2 Saliva
      1.2.10 Neurology
2 Periodontics
2.1 Introduction, scope and historical background of periodontology/periodontics
2.2 Definition, normal clinical and microscopic features of gingiva; development of gingival sulcus; renewal of gingival epithelium; blood supply; lymphatic drainage and nerve supply of gingiva; correlation of normal clinical and microscopic features of gingiva
2.3 Definition and functions of periodontal ligament and its fibers with illustrations
2.4 Describe cementum and its structure; classify and types of cementum; cemento-enamel junction
2.5 Definition and structure of alveolar process; socket wall and interdental septum; remodelling of alveolar bone; physiologic migration of the teeth; occlusal forces and the periodontium; defense mechanism in periodontal health
2.6 Classification of gingival and periodontal diseases as described in World Workshop on Periodontal Health 1999
2.7 Definition of epidemiology, incidence and index; epidemiology, prevalence and incidence of periodontal disease; indices used in periodontics; periodontal index, gingival index, oral hygiene index and CPI TN
2.8 Definition, structure, composition, physiologic properties and microbiology of dental plaque; formation of dental plaque; role of dental plaque in periodontal disease, association of plaque micro-organisms with periodontal disease, mechanism of inflammatory cell response
2.9 Classification, composition and etiologic significance of dental calculus
2.10 Aging and its effect on periodontium
2.11 Plaque control measures and its significance; classification of plaque control methods; personal oral hygiene methods; use of disclosing agents
2.12 Tooth brush and its types; dentifrices and its composition; composition and mechanism of action of fluoride containing 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 massage / gum stimulator
2.13 Classification of chemical plaque control agents and their mechanism of action
2.14 Periodontal instrument design and classification; various diagnostic instruments; various manual periodontal instruments including hoe, files; various scalers, curettes and root planing instruments; sonic, ultrasonic and micro-electro一架ers
2.15 Anatomic descriptions and considerations during periodontal instrumentation; patient and operator position; instrument grasp; establishing finger rests; instrument angulations, activation and adaptation; various strokes of using manual instruments
2.16 Principles and objective of sharpening; various sharpening stones and materials; sharpening of sickle scalers and curettes

3 Oral Pathology and Microbiology
3.1 Concept, causes and types of inflammation and abscess
3.2 Definition of facial space and enumerate spaces of pre-facial region; cellulitis and its complications; common oral space infections and its complications; Ludwig’s angina and its complications
3.3 Common oral ulcerations and lesions afflicting oral cavity; common viral lesions afflicting oral cavity; various pre-cancerous lesions and conditions
3.4 Oral manifestations of diabetes mellitus, leukemia, anemia, syphilis, tuberculosis, AIDS; candidiasis and oral thrush; HIV/AIDS and its prevention, mode of infection and oral manifestations; infective endocarditis and risk factors; clinical features and prophylaxis of infective endocarditis.
3.5 Oral microbiology and normal oral flora of human being from birth to old age
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 Diseases of the tongue and its manifestations in systemic diseases
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 Biologic effects of radiation and radiation protection
4.13 Principles of radiotherapy – preparation of patient for oral radiotherapy, management of post radiation oral complications
4.14 Basic radiographic techniques - IOPA, OPF, Lateral Ceph
4.15 Advanced radiographic techniques - panoramic radiography, cephalometric radiography, CT scans, radionucleide 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 Type of mandible and maxilla fracture 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 in brief
5.7 Common medical emergencies, odontogenic space infections in brief, 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, clinical features, sequelae and prevention of dental caries

6.2 Definition, causes, clinical features and treatment options of attrition, abfraction and erosion

6.3 Diseases of pulp and peripulpal tissues

6.4 Classification, etiology, clinical features and sequelae of pulp and periradicular 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 Discuss the manipulation of various materials such as amalgam, composite, cements, calcium hydroxide, sealers

7 Dental Materials, Instruments and Dental Assisting

7.1 Commonly used dental materials; importance of disinfection of dental materials; requirement of shelf life and storage of dental materials

7.2 Gypsum products and its application in dentistry; manipulation process of gypsum products; calculation of recommended water power ratio; process of disinfection of gypsum materials

7.3 Definition and classification of impression materials; desirable properties, process of transfer and storage of impression materials

7.4 Ideal requirements and manipulation process of impression compound, zinc oxide eugenol impression paste, alginate, elastomeric impression material

7.5 Types of dental vases 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; cotton roles for saliva control

7.12 Cleaning of dental equipment including suction apparatus, amalgamator, scaling machine, autoclave, light cure machine, compressor

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 prosthetic procedures

8.8 Sterilization and maintenance of instruments and equipments

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 Limitation of removable appliance
9.4 Complication of deep bite
9.5 TMJ problem referral
9.6 Referral - cross bite
9.7 Ideal age for orthopedic correction
9.8 Immediate treatment required cases for referral
9.9 Proclamation of upper anterior, orthopaedics problems cross bite
9.10 Root resorption

10 Pedodontics
10.1 Complication of extraction in children
10.2 Treatment modalities in open apex in permanent teeth
10.3 Complication of thumb sucking habit
10.4 Avulsion of a tooth and storing media
10.5 Different space maintainers used in children

11 Health Service System
11.1 Health service system in Nepal
11.2 History of the development of dental health services in Nepal
11.3 Purpose and characteristics of a dental health care system
11.4 Ayurvedic, homeopathic and allopathic approaches to dental health care
11.5 Health Management and Dental Health Management
11.6 National Health Policy and National Oral Health Policy
11.7 Code of conduct for Dental Hygienist and its purpose

भाग (B): 20 Marks

12 सामाज्य जान तथा ऐतिहासिक विषयों
12.1 नेपालको भौगोलिक, दैनिक, सामाजिक, सार्वजनिक, आर्थिक र राष्ट्रीय मान्यता सम्पन्न जानकारी
12.2 रात्रिविद्या र अर्थविद्या महत्वका समाजसामाजिक विषय (शिक्षा, आर्थिक, सामाजिक र राष्ट्रीय)
12.3 विश्वेदर्शना नेपालको सामाजिक र सामाजिक जानकारी
12.4 सामाज्य प्रति धारा सम्बन्धी सामाजिक जानकारी
12.5 सामाज्य प्रति धारा एवं, २०६५ र सामाज्य प्रति धारा निविडकारी, २०७२

यस परलोकपालिक प्रश्नात्मक प्रश्नमात्रा सामाज्य जानकारी सामाजिक जानकारी शामिल गरिएकोहो।

| विषय | विषयक विवरण | प्रश्न संख्या | विवरण
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