

પેરિયોડોન્ટોલોજી

કુલ પ્રશ્નો:૩૦૦	પ્રાથમિક કસોટીનો અભ્યાસક્રમ	કુલ ગુણ -૩૦૦
	Part-I	
માધ્યમ: ગુજરાતી	સામાન્ય અભ્યાસ	ગુણ -૧૦૦
૧	ભારતની ભૂગોળ- ભૌગોલિક, આર્થિક, સામાજિક, કુદરતી સંસાધન અને વસ્તી અંગેની બાબતો- ગુજરાતના ખાસ સંદર્ભ સાથે	
૨	ભારતનો સાંસ્કૃતિક વારસો- સાહિત્ય, કલા, ધર્મ અને સ્થાપત્યો- ગુજરાતના ખાસ સંદર્ભ સાથે	
૩	ભારતનો ઇતિહાસ - ગુજરાતના ખાસ સંદર્ભ સાથે	
૪	ભારતની અર્થવ્યવસ્થા અને આયોજન	
૫	<p><u>ભારતીય રાજનીતિ અને ભારતનું બંધારણ:</u></p> <p>(૧) આમુખ</p> <p>(૨) મૂળભૂત અધિકારો અને ફરજો</p> <p>(૩) રાજ્યનીતિના માર્ગદર્શક સિદ્ધાંતો</p> <p>(૪) સંસદની રચના</p> <p>(૫) રાષ્ટ્રપતિની સત્તા</p> <p>(૬) રાજ્યપાલની સત્તા</p> <p>(૭) ન્યાયતંત્ર</p> <p>(૮) અનુસૂચિત જાતિ, અનુસૂચિત જનજાતિ અને સમાજના પછાત વર્ગો માટેની જોગવાઈઓ</p> <p>(૯) એટર્ની જનરલ</p> <p>(૧૦) નીતિ આયોગ</p> <p>(૧૧) પંચાયતી રાજ</p> <p>(૧૨) નાણા પંચ</p> <p>(૧૩) બંધારણીય તથા વૈધનિક સંસ્થાઓ- ભારતનું ચૂંટણી પંચ, સંઘ લોક સેવા આયોગ, રાજ્ય લોક સેવા આયોગ, કોમ્પ્યુલર એન્ડ ઓડિટર જનરલ; કેન્દ્રીય સતર્કતા આયોગ, લોકપાલ તથા લોકાયુક્ત અને કેન્દ્રીય માહિતી આયોગ</p>	
૬	સામાન્ય બૌદ્ધિક ક્ષમતા કસોટી	
૭	સામાન્ય વિજ્ઞાન, પર્યાવરણ અને ઈન્ફર્મેશન એન્ડ કોમ્યુનિકેશન ટેકનોલોજી	
૮	ખેલ જગત સહિત રોજબરોજના પ્રાદેશિક, રાષ્ટ્રીય અને આંતરરાષ્ટ્રીય મહત્વના બનાવો	

Post: Periodontology Professor Class-I, (Advt. No.07/18-19) in Government Dental College	
Total Questions:300 Syllabus of Preliminary Test Total Marks-300	
Part-I	
Medium: Gujarati	General Study
	Marks- 100
1	Geography of India- Physical, Economic, Social, Natural Resources and population related topics- with special reference to Gujarat
2	Cultural heritage of India- Literature, Art, Religion and Architecture- with special reference to Gujarat
3	History of India with special reference to Gujarat
4	Indian Economy and Planning
5	<u>Indian Polity and the Constitution of India:</u> (1) Preamble (2) Fundamental Rights and Fundamental Duties (3) Directive Principles of State Policy (4) Composition of Parliament (5) Powers of the President of India (6) Powers of Governor (7) Judiciary (8) Provisions for Scheduled Castes, Scheduled Tribes and backward classes of the society (9) Attorney General (10) NITI Aayog (11) Panchayati Raj Institutions (12) Finance Commission (13) Constitutional and Statutory Bodies: Election Commission of India, Union Public Service Commission, State Public Service Commission, Comptroller and Auditor General; Central Vigilance Commission, Lokpal and Lokayukta, Central Information Commission
6	General Mental Ability
7	General Science, Environment and Information & Communication Technology
8	Daily events of Regional, National and International Importance including Sports

Part-II Syllabus Of Preliminary Test
(Periodontology)

Medium: English

Questions:200

Marks : 200

1. APPLIED ANATOMY

Development of the Periodontium. Micro and Macro structural anatomy and biology of the periodontal tissues. Age changes in the periodontal tissue. Anatomy of the Periodontium: Macroscopic and microscopic anatomy, Blood supply of the Periodontium, Lymphatic system of the Periodontium, Nerves of the Periodontium. Temporomandibular joint, Maxillae and Mandible. Nerves of Periodontics. Tongue, oropharynx. Muscles of mastication.

2. PHYSIOLOGY

Blood. Respiratory system – Acknowledge of the respiratory diseases which are a cause of periodontal diseases (periodontal Medicine). Cardiovascular system: Blood pressure, Normal ECG, Shock. Endocrinology – hormonal influences on Periodontium. Gastrointestinal system: Salivary secretion – composition, function & regulation, Reproductive physiology, Hormones – Actions and regulations, role in periodontal disease, Family planning methods. Nervous system: Pain pathways, Taste – Taste buds, primary taste sensation & pathways for sensation.

3. BIOCHEMISTRY

Basics of carbohydrates, lipids, proteins, vitamins, proteins, enzymes and minerals. Diet and nutrition and periodontium. Biochemical testes and their significance. Calcium and phosphorus.

4. PATHOLOGY

Cell structure and metabolism. Inflammation and repair, necrosis and degeneration. Immunity and hypersensitivity. Circulatory disturbances –

edema, hemorrhage, shock, thrombosis, embolism, infraction and hypertension. Disturbances of nutrition. Diabetes mellitus. Cellular growth and differentiation, regulation. Lab investigations. Blood.

5. MICROBIOLOGY

General bacteriology: Identification of bacteria, Culture media and methods, Sterilization and disinfection. Immunology and Induction. Systemic bacteriology with special emphasis on oral microbiology – staphylococci, genus actinomycetes and other filamentous bacteria and actinobacillus actinomycetumcomitans. Virology: General properties of viruses, Herpes, Hepatitis, virus, HIV virus. Mycology: Candidiasis. Applied microbiology. Diagnostic microbiology and immunology, hospital infections and management.

6. PHARMACOLOGY

1. General pharmacology: Definition – Pharmacokinetics with clinical applications, routes of administration including local drug delivery in Periodontics. Adverse drug reactions and drug interactions.

Detailed pharmacology of

- a. Analgesics – opioid and nonopioid
- b. Local anesthetics
- c. Hematinics and coagulants, Anticoagulants
- d. Vit D and Calcium preparations
- e. Antidiabetic drugs
- f. Steroids
- g. Antibiotics
- h. Antihypertensive
- i. Immunosuppressive drugs and their effects on oral tissues
- j. Antiepileptic drugs

2. Brief pharmacology, dental use and adverse effects of

- a. General anesthetics
- b. Antipsychotics

- c. Antidepressants
 - d. Anxiolytic drugs
 - e. Sedatives
 - f. Antiepileptics
 - g. Antihypertensive
 - h. Antiangial drugs
 - i. Diuretics
 - j. Hormones
 - k. Pre-anesthetic medications
3. Drugs used in Bronchial asthma cough
4. Drug therapy of
- a. Emergencies
 - b. Seizures
 - c. Anaphylaxis
 - d. Bleeding
 - e. Shock
 - f. Diabetic ketoacidosis
 - g. Acute addisonian crisis
5. Dental Pharmacology
- a. Antiseptics
 - b. Astringents
 - c. Sialogogues
 - d. Disclosing agents
 - e. Antiplaque agents
6. Fluoride pharmacology

7. ETIOPATHOGENESIS

- 1. Classification of periodontal diseases and conditions
- 2. Epidemiology of gingival and periodontal diseases
- 3. Defense mechanisms of gingiva
- 4. Periodontal microbiology
- 5. Basic concepts of inflammation and immunity

6. Microbial interactions with the host in periodontal diseases
7. Pathogenesis of plaque associated periodontal diseases
8. Dental calculus
9. Role of iatrogenic and other local factors
10. Genetic factors associated with periodontal diseases
11. Influence of systemic diseases and disorders of the periodontium
12. Role of environmental factors in the etiology of periodontal disease
13. Stress and periodontal diseases
14. Occlusion and periodontal diseases
15. Smoking and tobacco in the etiology of periodontal diseased
16. AIDS and periodontium
17. Periodontal medicine
18. Dental hypersensitivity

8. Clinical and Therapeutic periodontology and oral Implantology

I. GINGIVAL DISEASES

1. Gingival inflammation
2. Clinical features of gingivitis
3. Gingival enlargement
4. Acute gingival infections
5. Desquamate gingivitis and oral mucous membrane disease
6. Gingival disease in the childhood

II. PERIODONTAL DISEASES

1. Periodontal pocket
2. Bone loss and patterns of bone destruction
3. Periodontal response to external forces
4. Masticatory system disorders
5. Chronic periodontitis
6. Aggressive periodontitis
7. Necrotizing ulcerative periodontitis
8. Interdisciplinary approaches: Orthodontic, Endodontic.
9. Periodontics considerations in periodontal therapy

III. TREATMENT OF PERIODONTAL DISEASES

- A. **History, examination, diagnosis, prognosis and treatment planning:** Clinical diagnosis, Radiographic and other aids in the diagnosis of periodontal diseases, Advanced diagnostic techniques, Risk assessment, Determination of prognosis, Treatment plan, Rationale for periodontal treatment, General principles of anti-infective therapy with special emphasis on infection control on infection control in periodontal practice, Halitosis and its treatment. Bruxism and its treatment.
- B. **Periodontal instrumentation:** Instrumentation, Principles of periodontal instrumentation, Instruments used in different parts of the mouth.
- C. **Periodontal therapy:** Preparation of tooth surface, Plaque control, Anti-microbial and other drugs used in periodontal therapy and wasting diseases of teeth, Periodontal management of HIV infected patients, Occlusal evaluation and therapy in the management of periodontal disease, Role of orthodontics as an adjunct to periodontal therapy, Special emphasis on precautions and treatment for medically compromised patients, Periodontal splints, Management of dentinal hypersensitivity.
- D. **Periodontal surgical phase – special emphasis on drug prescription:** General principles of periodontal surgery, Surgical anatomy of periodontium and related structures, Gingival curettage, Gingivectomy technique, Treatment of gingival enlargements, Periodontal flap, Osseous surgery (respective and regenerative), Furcation; Problem and its management, The periodontic – endodontic continuum, Periodontic plastic and esthetic surgery, Recent advances in surgical techniques.
- E. **Future directions and controversial questions in periodontal therapy:** Future directions for infection control, Research directions in regenerative therapy, Future directions in anti-inflammatory therapy, Future directions in measurement of periodontal diseases.

- F. **Periodontal maintenance phase:** Supportive periodontal treatment,
Results of periodontal treatment.

IV. ORAL IMPLANTOLOGY

1. Introduction and historical review
2. Biological, clinical and surgical aspects of dental implants
3. Diagnosis and treatment planning
4. Implant surgery
5. Prosthetic aspects of dental implants
6. Diagnosis and treatment of Peri implant complications
7. Special emphasis on plaque control measures implant patients
8. Maintenance phase

V. MANAGEMETN OF MEDICAL EMERDENCIES IN PERIODONTAL PRACTICE

9. BIOSTATISTICS and RESEARCH MEHODOLOGY:

Study of Biostatistics as applied to dentistry and research. Understanding and evaluating dental research, scientific method and the behavior of scientists, understanding to logic-analogy, models, authority, hypothesis and causation, Quacks, Cranks, Abuses of Logic, Measurement and Errors of measurement, presentation of results, Reliability, Sensitivity and specificity diagnosis test measurement, Research Strategies, Observation, Correlation, Experimentation and Experimental design. Logic of statistical interference balance judgments, judgment under uncertainty, clinical vs. scientific judgment, problem with clinical judgment, forming scientific judgments, the problem of contradictory evidence, citation analysis as a Means of literature evaluation, influencing judgment : Lower forms of Rhetorical life, Denigration, Terminal, Inexactitude.

10. Current Trends and Recent Advancements in Periodontology.