



TEERTHANKER MAHAVEER UNIVERSITY

(Established under Govt. of U. P. Act No. 30, 2008)

Delhi Road, Moradabad (U.P.)

SYLLABUS FOR TMU RESEARCH APTITUDE TEST IN PERIODONTOLOGY

The syllabus for TMU Research Aptitude Test (TRAT) in Periodontology is divided in two parts viz. Part A and Part B as described below:

PART – A

Part A of the TRAT shall be designed to assess the research skills/aptitude of the candidate consisting of questions from the following areas:

- 1. Research Methodology:** meaning, characteristics, and ethical issues in research; types of research; research methods.
- 2. Logical Reasoning:** arguments, deductive and inductive research; logical and Venn diagram; inferences; analogies.
- 3. Data Interpretation:** interpretation of data; mapping and analysis of data, tools for data analysis; quantitative and qualitative research.
- 4. General Awareness about Basic Science:** basic science up to the level of SSC.
- 5. Mathematical Reasoning:** number series, letter series, codes; relationships, classification.

PART – B

Part-B of RAT is designed to assess the subject specific knowledge of the candidate covering the syllabus given as below:

- 1. ETIOPATHOGENESIS:**
 - Defense mechanisms of gingival
 - Periodontal microbiology
 - Pathogenesis of plaque associated periodontal diseases
 - Dental calculus
 - Influence of systemic diseases and disorders of the periodontium
 - Stress and periodontal diseases
 - Occlusion and periodontal diseases
 - Periodontal medicine
- 2. PERIODONTAL DISEASES:**
 - Periodontal pocket
 - Bone loss and patterns of bone destruction
 - Periodontal response to external forces
 - Masticatory system disorders

- Chronic periodontitis
- Aggressive periodontitis
- Necrotising ulcerative periodontitis
- Interdisciplinary approaches
 - Orthodontic
 - Endodontic
- Periodontic considerations in periodontal therapy

3. 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 in periodontal practice
- Halitosis and its treatment
- Bruxism and its treatment

(B) Periodontal therapy

- Preparation of tooth surface
- Plaque control
- Role of orthodontics as an adjunct to periodontal therapy
- Management of dentinal hypersensitivity

(C) Periodontal surgical phase – special emphasis on drug prescription

- Osseous surgery (resective and regenerative)
- Furcation; Problem and its management
- The periodontic – endodontic continuum
- Periodontic plastic and esthetic surgery
- Recent advances in surgical techniques

(D) Future directions and controversial questions in periodontal therapy

- Research directions in regenerative therapy
- Recent advances on periodontal Microsurgery