



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 ORAL MEDICINE AND RADIOLOGY

The syllabus for TMU Research Aptitude Test (TRAT) in Oral Medicine and Radiology 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:

Neoplasia:

1. Introduction.
2. Pre malignant and malignant lesions of oro facial region
3. Classification of Tumors.
4. Characteristics of benign and malignant tumors.
5. Carcinogenesis & Carcinogens - Chemical, Viral and Microbial.
6. Grading and Staging of Cancer, tumor Angiogenesis, Paraneoplastic Syndrome.
7. Spread of tumors.
8. Management: Chemotherapy, Radiotherapy.

Muco-cutaneous Lesions:

1. Red and white lesions.
2. Vesiculo - bullous lesions
3. Immunologically mediated

4. Genetic/Hereditary
5. Infections. Bacterial, Viral, Fungal and protozal
6. Mis

Bone in Health and Disease:

1. Introduction
2. Phatho-Physiology of Bone remodeling
3. Diseases effecting the jaw bones
4. Syndromes affecting bone

Psychosomatic aspects of oral diseases:

- Salivary gland disorders
- Tongue in oral and systemic diseases
- TMJ dysfunction and diseases
- Oral manifestations of systemic diseases
- Oro - facial pain
- Congenital and Hereditary disorders involving tissues of oro facial region, and Molecular Biology
- Hematological, Dermatological, Metabolic, Nutritional, &Endocrinal conditions with oral manifestations
- Neuromuscular diseases affecting oro -facial region
- Immunity as related to oro - facial lesions, including AIDS, Allergy and other miscellaneous conditions
- Cysts, Neoplasms, Odontomes, and fibro - osseous lesions
- Oral changes in Osteo - dystrophies and chondro - dystrophies
- Forensic odontology
- Therapeutics in oral medicine -clinical pharmacology and Evidence based oral care in treatment planning
- Radiation Physics, Production of X-ray, Factors controlling X-ray production, Units of Radiation and Dosimetry
- Radiation Biology, Effects on the body and mucous membrane, and radiation protection.
- Radiographic technique, Intraoral and extraoral radiograpy processing. Faults and Interpration
- Radiotherapy.
- Advanced Imaging.