BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY) DENTAL COLLEGE AND HOSPITAL, PUNE

Syllabus with time-table of Pre - PhD Course Work

PERIODONTOLOGY

I. Research Methodology and Biostatistics (4 Credits means total 60 Hours)

- 1. Introduction, definition and branches of biostatistics
- 2."Collection of data, sampling, types, bias and errors
- 3. Compiling data-graphs and charts
- 4. Measures of central tendency (mean, median and mode), standard deviation and variability
- 5. Tests of significance (chi square test '(' test and Z-test)
- 6. Null hypothesis
- 7. Study designs
- 8. Descriptive Studies
- 9. Case control Studies
- 10. Cohort studies
- 11. Experimental Studies
- 12. Evaluation of New test
- 13. Qualitative methods in research
- 14. Systematic review and meta analysis
- 15. Data management in medical research
- 16. Descriptive statistics
- 17. Inferential statistics
- 18. Sampling methods
- 19. Sample size
- 20. Questionnaire designing
- 21. Critical appraisal of research paper
- 22. Reference searching
- 23. Ouality of research
- 24. Writing research proposal/paper/ dissertation

II. Recent advances in Periodontology (4 Credits means total 60 Hours)

Student will present seminar on following topics

- 1. Etiopathogenesis of Periodontal Diseases
- 2. Periodontal Microbiology
- 3. Genetics in Periodontics
- 4. Periodontal Vaccines
- 5. Periodontal Medicine
- 6. Periodontal Regeneration.
- 7. Host Modulation in Periodontology.
- 8. Neutraceutical approaches in Periodontal Therapy.
- 9. Advanced diagnostic aids/ techniques in Periodontology.
- 10. Periodontal Plastic Surgery
- 11. LASER.
- 12. Microsurgery in Periodontics
- 13. Interdisciplinary Periodontics

14. Clinical Approaches for reconstruction of the deficient alveolar ridge (soft & hard tissue) & Implant site development)

15. Implant Surgery & Management of Complications / failures

Ill. Review of Literature on proposed research work : (Periodontology)

(4 Credits means total 60 Hours)

a) Presentation on review of literature on proposed topic: (2 Credits means total 30 Hours)

b) Presentation on specified area of research : (2 Credits means total 30 Hours)

IV. Research and publication ethics (RPE): (Periodontology)

<u>Sr.no.</u>	<u>Topic</u>	No.of Hours
<u>1</u>	Introduction to Philosophy and Ethics	4
2	Scientific conduct – Intellectual honesty & research integrity Falsification, fabrication & Plagiarism Redundant publications Selective reporting & misunderstanding of data	6
3	Publication ethics – Definition, introduction & importance Best Practices Conflict of Interest (COI) Publication misconduct Violation of Publication ethics, authorship and contributorship Predatory publisher and journals	10
4	Data based & research metrics – Indexing databases Citation databases: Scopus, Pubmed etc Impact factor and citation scores H-index, i-10 index etc	10

(2 credits = 30 clock hours)