Curriculum for M.Med.Sc (Medical Microbiology) Course

❖ Aim & Objectives

Aim
To provide postgraduate master candidates with an overview of the clinical and microbiological aspects of bacteriology, virology, parasitology, mycology as well as advanced immunology and molecular biology and the application of these subjects to community medicine and clinical medicine with respect to promotive, preventive and curative aspects

Objectives
1. To impart up-to-date knowledge in bacteriology, virology, immunology, parasitology, mycology and molecular biology and also the essentials of medical statistics and epidemiology
2. To teach laboratory skills in the above disciplines at the university and at affiliated places of learning
3. To encourage research culture and research activity and publications
4. To improve communication and English language skills by means of journal reading, presentations, seminars and discussions
5. To promote application of knowledge and skills to community and clinical medicine
6. To integrate the knowledge of microbiology with related disciplines

❖ Duration of the course 1 year
• First Year - structured taught course
• Second Year - research and thesis writing
Extension can be granted six months at a time up to one year (total 3 year)

❖ Contents
• First year course
  - Bibliographical methods 3 hours
  - General Microbiology 35 hours
  - Systematic Bacteriology 160 hours
  - Immunology 150 hours
  - Molecular Biology 70 hours
  - Virology 140 hours
  - Mycology 35 hours
  - Medical Parasitology 140 hours
  - Applied Microbiology 56 hours
  - Public Health Microbiology 14 hours
  - Medical Entomology 5 hours
  - Medical Statistics and Epidemiology 25 hours
  - Research Methodology Course 10 hours
  - Bloc Postings 20 weeks

(Clinical Microbiology Section of General Hospital, National Health Laboratory, Department of Medical Research and Department of Food and Drug Administration)

❖ Teaching-learning Methods
Teaching-learning methods include lectures, discussions, seminars, presentations, journal reading, clinical / research / practical laboratory work, clinico-microbiological conferences and
symposiums, scientific talks (local and international), bloc posting to DMR, NHL, FDA and Hospital laboratories for clinical and research purposes.

- Assessment

  Formative Assessment
  - Written assignments
  - Class tests after completion of each discipline.
  - Journal reading and presentation

  Summative Assessment
  Theory (3 hours paper)
  - Common Final Examination for the first year course, for standardization of all universities in which a convener system will be adopted.
    Paper (1) – General Microbiology and Bacteriology
    Paper (2) - Immunology and Molecular Biology
    Paper (3) - Virology and Mycology
    Paper (4) - Parasitology, Public Health Microbiology and Applied Microbiology

  Practical (2½ days)
  - 4 components (Bacteriology, Immunology, Parasitology, Virology)

  Viva
  - All examiners (co-examiners and external examiners) must be present for every candidate.

- Weightage for each paper

  Class work - formative assessment will not be included in the final count but will be taken into consideration
  Theory - 100 marks for each paper
  Practical - 100 marks for each component…..Final 100%
  Viva voce - 100 marks for each component….Final 100%

- Pass Marks
- Distinction Marks
- Credit Marks

- Supplementary/ Second attempt

  The supplementary examination will be held within a period of 6 weeks to 6 months after the first year examination. A candidate who fails the supplementary examination twice will not be permitted to continue the M.Med.Sc (Microbiology) Course.

- Second Year Course

  This course comprises entirely of research work and writing up of the thesis. Candidates are required to submit the research protocol three months before the end of the first year final examination.

- Thesis

  Candidates who pass the first year examination will conduct research work and writing up of the thesis in their second year. Thesis must be submitted to the Board of Studies (Microbiology)
by the last week of October. There will be a verbal defense of the thesis which will be assessed by three examiners on the research aspect, background knowledge and the style and format of the thesis.

If approved, and after major or minor amendments have been done as required, four copies of the final bound version of the thesis must be submitted by the end of December, together with a CD version. The final official result must be approved by the rector and must be posted before 31st December of that year.