Finalized in the meeting of the Committee for Courses & Studies, Department of Pulmonary Medicine meeting held on 5th March, 2008

Report on Examination Reforms MD (Pulmonary Medicine) 2008

The examination is conducted to evaluate and certify the candidate's level of knowledge, skill and competence and how far the objectives of the course have been achieved at the end of the training. The examination shall be held at the end of the third year. The examination consists of 1) theory, 2) clinical, 3) practical, and 4) viva-voce.

I. THEORY EXAMINATION

(a) Title of Papers and composition

A change in the title of papers and topics covered under each has been necessitated by the advances and developments in the field of Pulmonary Medicine. This will allow a more comprehensive and equitable coverage of important areas. The changes proposed are as under:

Existing Provisions	Proposed Amendments
The topics covered under each paper are as follows:	The topics covered under each paper shall be as follows:
Paper 1 :Applied Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Immunology, Microbiology and PathoPhysiology in relation to Tuberculosis and Respiratory Diseases	Paper I: Preclinical and Paraclinical Sciences in relation to Pulmonary Medicine Paper II: Pulmonary Infections Paper III: Pulmonary Diseases other than Infections
Paper II: Clinical aspects of Tuberculosis Paper III: Clinical aspects of Respiratory Diseases other than Tuberculosis Paper IV: Epidemiology, Control Programmes, Social-Preventive Rehabilitative aspects of Tuberculosis and Respiratory Diseases	Paper IV: Recent advances, Epidemiology, Control Programmes, Occupational and Environmental Health, Social and Preventive aspects including Rehabilitation, as applied to Pulmonary Medicine

(b) Pattern of Questions

A need is felt to frame the question papers with the objective to test the candidate's fundamentals, comprehension and clinical skills in management. In order to allow more areas to be covered, short-note and short-answer questions need top be increased.

Existing Provisions/conventions	Proposed Amendments
The questions include a mix of two-thirds as	The questions in the papers will cover the
essay-type questions and remaining as short-	areas listed against each and include a mix of
notes	essay type and short-note questions with greater emphasis on the latter. The essay type questions may be on clinical scenarios.

(c) **Duration of Examination**

Existing Provisions	Proposed Amendments
The duration of examination in each paper	No change
shall be of 3 hours.	

(d) Marks

At present, the papers are examined but no marks are given. The examiners form a subjective impression about the candidates performance in theory. It is felt that an objective system of evaluation needs to be adopted. The system should be uniform for all disciplines under the Faculty of Medical Sciences.

Existing Provisions	Proposed Amendments
No marks are awarded for theory papers	Whenever the University adopts a system of
	evaluation through marks/grades for
	disciplines under the Faculty of Medical
	Sciences, the same shall apply automatically

II. PRACTICAL EXAMINATION

The examination consists of Clinical and Practical examination and Viva-voce.

A. Clinical Examination

A need is felt to change the system of assessing the clinical skills of the candidates and also incorporate examination of critically ill patients to examine the appropriateness of response to a given clinical situation. There is also no standard and objective system of evaluation of the candidates performance. The proposed changes in the pattern of clinical examination and evaluation are given below.

Existing Provisions	Proposed Amendments
The Clinical Examination consists of	The Clinical Examination will consist of
examination and discussion of 1 long case	examination and discussion of 1 long case, 1
and 2 short cases	short case and 1 bedside examination of an
	ICU/noncritical patient with file discussion.
Long case includes a detailed history and	
examination of the patient followed by	Long case will include a detailed history and
presentation to the Board of examiners who	examination of the patient followed by
examine the candidate on all aspects of	presentation to the Board of examiners who
management including diagnosis,	will examine the candidate on all aspects of
investigations and treatment. The short cases	management including diagnosis,
consist of examination of the patient	investigations and treatment. The short case
followed by presentation and discussion on	will consist of examination of the patient
management.	followed by presentation. The focus shall be
	on elicitation and demonstration of physical
The candidates are evaluated on a subjective	signs and a systematic approach to possible
impression by the examiners or by non-	diagnosis and differential diagnosis. The
standardized grades for each case separately.	bedside examination of ICU/noncritical

patient will focus on physical signs and assessment of current state. Investigations carried out shall be provided to the candidate and the management skills of the candidate will be evaluated. Emphasis in clinical examination is to be laid on Objective Structured Clinical Examination (OSCE) consisting of writing of the case sheet, written documentation of the diagnosis, investigations and management. Each case shall be evaluated separately. An objective system of evaluation is desirable. Whenever the University adopts a system of evaluation through marks/grades for disciplines under the Faculty of Medical Sciences, the same shall apply automatically

B. Practical Examination

A need is felt to make the practical examination more objective and also introduce a formal system of evaluation. The proposed changes are given below.

	Existing Provisions/Conventions	Proposed Amendments
The F	Practical Examination consists of	The Practical Examination will consist of
exerc	ises on the identification, abnormalities	exercises on the identification, abnormalities
detec	ted, diagnosis and treatment with	detected, diagnosis and treatment with
answ	ers to questions on ten spots selected out	answers to structured questions on ten spots
of the	e following:	selected out of the following:
i)	Pathology Specimens	i) Pathology Specimens
ii)	Microbiology and Pathology Slides	ii) Microbiology and Pathology Slides
iii)	Pulmonary function tests and arterial	iii) Pulmonary function tests and arterial
	blood gas data	blood gas data
iv)	ECG	iv) ECG
v)	Polysomnograhy records	v) Polysomnograhy records
vi)	Instruments, needles etc	vi) Instruments, needles etc
vii)	Any other spot as decided by	vii) Any other spot as decided by
	examiners	examiners
There	e is no formal system of evaluation by	Whenever the University adopts a system of
mark	s or grades.	evaluation through marks/grades for
		disciplines under the Faculty of Medical
		Sciences, the same shall apply automatically

C. Viva-voce examination

At present, there is no formal system of evaluation of a candidate's performance in the viva-voce although non-standard grading systems are followed. In order to make the evaluation more objective, a standard system needs to be adopted.

Existing Provisions/Conventions	Proposed Amendments
The candidate is asked questions on different	The candidate is to be asked questions
aspects of pulmonary diseases including the	on different aspects of pulmonary diseases
diagnosis and treatment, epidemiology,	including the diagnosis and treatment,
control programmes and recent advances.	epidemiology, control programmes and
The questions cover a broad range of topics	recent advances. The questions should cover
to comprehensively evaluate the knowledge	a broad range of topics to comprehensively
and skills acquired by the student during his	evaluate the knowledge and skills acquired
training. Investigation reports, radiographs	by the student during his training.
and data are provided by the examiners to the	Investigation reports, radiographs and data
students for their interpretation.	would be provided by the examiners to the
	students for their interpretation. The number,
The candidates are evaluated on a subjective	content and level of questions should be
impression by the examiners or by non-	uniform for all students. Performance is to be
standardized grades.	graded as above based on an objective
	assessment of the viva-voce examination.
	An objective system of avaluation is
	An objective system of evaluation is
	desirable. Whenever the University adopts a
	system of evaluation through marks/grades
	for disciplines under the Faculty of Medical
	Sciences, the same shall apply automatically

D. Internal assessment

It is felt that a system of internal assessment should be introduced. This will allow a better assessment of how well the objectives of the course have been achieved by a candidate. The frequency of assessments, evaluation and weightage to be given in the final examination. should be uniform for all disciplines under the Faculty of Medical Sciences.

Existing Provisions	Proposed Amendments
There is no provision for Internal assessment	It is desirable to have Internal Assessment.
	This would be in the form of formal theory
	and clinical examinations periodically
	throughout the three-years course.
	The frequency of assessments, evaluation and
	weightage to be given in the final
	examination will be as per the system the
	University adopts for disciplines under the
	Faculty of Medical Sciences at any time in
	future and the same shall apply automatically

Overall Assessment and Final Result

At present, after examining the candidate in each of the four components of the examination (theory, clinical and practical Examination and Viva-voce), the final result is based on a global assessment that is subjective or based on a non-standard system of grading and the result is declared as "Passed or Failed". A need is felt to make the examination more objective that would also facilitate re-checking if required. A uniform marking/grading system is required. As and when the University introduces a more objective system of evaluation in the disciplines of the Faculty of Medical sciences, the same would apply automatically.

Existing Provisions	Proposed Amendments
There is no practice of awarding marks for	In order to have objectivity in assessment and
the theory papers, clinical examination and	to allow a review at a later date, the
viva-voce.	performance of the students should be graded
	objectively in each of the four components of
The thesis must be accepted by both the	the examination (theory, Clinical
reviewers or by the referee in case it is sent to	Examination Practical Examination Viva-
him.	voce examination). The candidate should
	secure passing grades in each of the four
The final result is declared as "Passed or	components separately to be declared as
Failed" at present based on a global	successful.
assessment or a non-standard system of	French on the there's word by a country discharge
grading of the four components of the	Further, the thesis must be accepted by both
examination (theory, Clinical Examination Practical Examination Viva-voce	the reviewers or by the referee in case it is sent to him.
examination)	sent to mm.
examination)	Whenever the University adopts a system of
	evaluation through marks/grades for
	disciplines under the Faculty of Medical
	Sciences, the same shall apply automatically
	services, the same shall apply automatically