

METHODS OF THE ASSESSMENT OF LEARNING OUTCOMES AND GRADUATE ATTRIBUTES (UG/PG)

1. METHODS OF ASSESSMENT OF LEARNING OUTCOMES AND UNDERGRADUATE ATTRIBUTES

Internal Assessment

Anatomy

Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards

Sr. No	I-Exam (December)			II-Exam (March)		
	Theory	Practical (Including 05 Marks for Journal & Log Book)	Total Marks	Theory	Practical Including 05 Marks for Journal & Log Book	Total Marks
1	100	50	150	100	50	150

Sr. No	Preliminary Examinations			Sr. No	Remedial internal assessment examination for Non - eligible students		
	III-Exam (July)				October		
	Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks		Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks
1	200	100	300	1	200	100	300

1. There will be 3 internal assessment examinations in the academic year. The structure of Preliminary examinations should be similar to the structure of University examination.
2. There will be only one additional examination for absent students (due to genuine reason) after approval by the Committee Constituted for the same. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
3. First internal assessment examination will be held in December, second internal assessment examination will be held in March and third internal assessment examination will be held in July.
4. Internal assessment marks for theory and practical will be converted to out of 40. Internal assessment marks, after Conversion, should be submitted to university by 7th of August.
5. The student must secure at least 50% marks for total marks (combined in theory and practical / clinical: not less than 40% marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final university examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
6. **Remedial internal assessment examination for Non - eligible students:** Student who were not eligible due to less than 50% combined or less than 40% in any theory or practical, will re appear as repeater student for Prelim exam which will be conducted before Supplementary Exam. His/her internal assessment will be calculated on the basis of this Examination marks only. Students who will not be eligible in this Examination will appear with regular batch as repeater student.
7. The internal assessment marks of the remedial examination alone shall be considered and converted into out of 40.
8. **Conversion Formula for calculation of marks in internal assessment examinations**

	First IA	Second IA	Third IA (Prelim)	Total	Internal assessment marks: Conversion formula (out of 40)	Eligibility to appear for final University examination (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)
Theory	100	100	200	400	$\frac{\text{Total marks obtained}}{10}$	16 (minimum)
Practical	50	50	100	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)
Total of Theory + Practical Must be 40.						

9. Conversion formula for calculation of marks in Remedial internal assessment examination

	Remedial Exam (Prelim)	Int. Assess. marks conversion formula (out of 40)	Eligibility to appear for Supplementary Exam. (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)
Theory	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)
Practical	100	$\frac{\text{Total marks obtained}}{2.5}$	16 (minimum)
Total of Theory + Practical Must be 40.			

While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	Final rounded marks
15.01 to 15.49	15
15.50 to 15.99	16

First Year MBBS Practical Mark's Structure (Prelim)

Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards

Anatomy													
Practical									Oral/Viva				Total
Seat No.	Soft Part	Micro Anatomy (10 Spots)	Micro Anatomy slides for Discussion (2 slides)	Axial Skeleton	Embryology Models	Clinical Anatomy Including Genetic charts (2 Spots)	Journal /logbook	Total	Appendicular Skeleton	X - ray	Surface Living Anatomy	Total	PR/Oral Total
	A	B	C	D	E	F	G	H	I	J	K	L	M
Max. Marks	25	10	05	10	10	10	10	80	10	05	05	20	100

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

First Year MBBS Practical Mark's Structure (MUHS Exam)

Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards

Anatomy												
Practical							Oral/Viva					Total
Seat No.	Soft Part	Micro Anatomy (10 Spots)	Micro Anatomy slides for Discussion (2 slides)	Axial Skeleton	Embryology Models	Clinical Anatomy Including Genetic charts (2 Spots)	Total	Appendicular Skeleton	Radiology	Surface Living Anatomy	Total	PR/Oral Total
	A	B	C	D	E	F	G	H	I	J	K	L
Max. Marks	30	10	10	10	10	10	80	10	05	05	20	100

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS (applicable w.e.f. Sept. 2020 & onwards examinations)	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : I	5. Total Marks : 100
	6. Total Time : 3 Hrs.
	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
	11. Web Syllabus : []
	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries **One mark**.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

- Q1. Multiple Choice Questions (Total 20 MCQ of One mark each) (4 MCO Should be clinical application based) (20x1=20)
- a) b) c) d) e) f) g) h) i) j)
k) l) m) n) o) p) q) r) s) t)

SECTION "B"

Instructions:

- 1) Use blue/black ball point pen only.
- 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) All questions are compulsory.
- 4) The number to the right indicates full marks.
- 5) Draw diagrams wherever necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)
a) b) c) d) e) f) g) h) i) j) k)
3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)
One SAQ has to be on AETCOM Module (For Anatomy 1.1, 1.5, For Physiology 1.2., 1.3 & For Biochemistry, 1.4) & Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.
a) b) c) d) e) f) g) h) i)
4. Long Answer Questions (Any Two out of Three) (2x 10= 20)
a) b) c)

Note: All questions should be structured .Wherever necessary; split up of marks should be specified.

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS <i>(applicable w.e.f. Sept. 2020 & onwards examinations)</i>	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : II	5. Total Marks : 100
	6. Total Time : 3 Hrs.
	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
	11. Web Syllabus : []
	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries One mark.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

1. Multiple Choice Questions (Total 20 MCQ of One mark each) ***(4 MCQ Should be clinical application based)*** (20x1=20)

a) b) c) d) e) f) g) h) i) j)
k) l) m) n) o) p) q) r) s) t)

SECTION "B"

Instructions:

- 1) Use blue/black ball point pen only.
- 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) All questions are compulsory.
- 4) The number to the right indicates full marks.
- 5) Draw diagrams wherever necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)
a) b) c) d) e) f) g) h) i) j) k)

3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)
Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.

4. a) b) c) d) e) f) g) h) i) (2x 10= 20)
Long Answer Questions (Any Two out of Three)
b) c)

Note: All questions should be structured .Wherever necessary, split up of marks should be specified.

Internal Assessment

Physiology

Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards

Sr. No	I-Exam (December)			II-Exam (March)		
	Theory	Practical (Including 05 Marks for Journal & Log Book)	Total Marks	Theory	Practical Including 05 Marks for Journal & Log Book	Total Marks
1	100	50	150	100	50	150

Sr. No	Preliminary Examinations			Sr. No	Remedial internal assessment examination for Non - eligible students		
	III-Exam (July)				October		
	Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks		Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks
1	200	100	300	1	200	100	300

1. There will be 3 internal assessment examinations in the academic year. The structure of Preliminary examinations should be similar to the structure of University examination.
2. There will be only one additional examination for absent students (due to genuine reason) after approval by the Committee Constituted for the same. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
3. First internal assessment examination will be held in December, second internal assessment examination will be held in March and third internal assessment examination will be held in July.
4. Internal assessment marks for theory and practical will be converted to out of 40. Internal assessment marks, after Conversion, should be submitted to university by 7th of August.
5. The student must secure at least 50% marks for total marks (combined in theory and practical / clinical: not less than 40% marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final university examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
6. **Remedial internal assessment examination for Non - eligible students:** Student who were not eligible due to less than 50% combined or less than 40% in any theory or practical, will re appear as repeater student for Prelim exam which will be conducted before Supplementary Exam. His/her internal assessment will be calculated on the basis of this Examination marks only. Students who will not be eligible in this Examination will appear with regular batch as repeater student.
7. The internal assessment marks of the remedial examination alone shall be considered and converted into out of 40.
8. **Conversion Formula for calculation of marks in internal assessment examinations**

	First IA	Second IA	Third IA (Prelim)	Total	Internal assessment marks: Conversion formula (out of 40)	Eligibility to appear for final University examination (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)	
Theory	100	100	200	400	$\frac{\text{Total marks obtained}}{10}$	16 (minimum)	Total of Theory + Practical <u>Must be 40.</u>
Practical	50	50	100	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)	

9. Conversion formula for calculation of marks in Remedial internal assessment examination

	Remedial Exam (Prelim)	Int. Assess. marks conversion formula (out of 40)	Eligibility to appear for Supplementary Exam. (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)	
Theory	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)	Total of Theory + Practical <u>Must be 40.</u>
Practical	100	$\frac{\text{Total marks obtained}}{2.5}$	16 (minimum)	

While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	Final rounded marks
15.01 to 15.49	15
15.50 to 15.99	16

First Year MBBS Practical Mark's Structure Internal Assessment Examinations I & II (Applicable for batch admitted in M.B.B.S Course from Academic Year 2019-20 & onwards)

Physiology					
	Hematology	Clinical Examination/Human Physiology expt. / Short exercises	Journal/Logbook	Oral Viva	Total
	A	B	C	D	E
Max. Marks	15	20	5	10	50

First Year MBBS Physiology Practical Mark's Structure (Prelim exam)

(Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards)

Seat No.	Exercise 1				Exercise 2	Exercise 3 *	Exercise 4 **		Practical (Total)	Oral/Viva (Total)	PR/Oral Total
	Clinical Examination										
	C.V.S	R.S	C.N.S. & Special Senses	General Exam & Abdomen	Hematology	Short exercise	Human Physiology Experiment	Journal & Log book			
	A	B	C	D	E	F	G	H	I	J	K
Max. Mark's	10.0	10.0	10.0	10.0	10.0	15.0	15.0	10.0	90	10.0	100

*Short exercises 3 marks each(3X5)

- Case based scenarios/ endocrine disorders photographs .2. Interpretation of function tests. 3. One skeletal graph
4. One cardiac graph 5. Calculation

** Exercise 4: Human Physiology Experiment 1. Basic Life Support in a simulated environment 2. ECG 3. Spirometry 4. PEFR 5. EEG Interpretation 6. Ergography 7. Harward step test 8. Perimetry

* Suggested Methods of Assessment

Preclinical exam & OSPE

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

First Year MBBS Physiology Practical Mark's Structure(MUHS)

(Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards)

	Exercise 1				Exercise 2	Exercise 3 *	Exercise 4**	Practical (Total)	Oral/Viva (Total)	PR/Oral Total
	Clinical Examination									
	C.V.S	R.S	C.N.S. & Special Senses	General Exam & Abdomen	Hematology	Short exercises	Human Physiology Experiment			
	A	B	C	D	E	F	G	H	I	J
Max. Mark's	10.0	10.0	10.0	10.0	10.0	15.0	15.0	80	20.0	100

*Short exercises 3 marks each(3X5)

1. Case based scenarios/ endocrine disorders photographs .2. Interpretation of function tests. 3. One skeletal graph

4. One cardiac graph 5. Calculation

** Exercise 4: Human Physiology Experiment 1. Basic Life Support in a simulated environment 2. ECG 3. Spirometry 4. PEFR 5. EEG Interpretation
6. Ergography 7. Harward step test 8. Perimetry

* Suggested Methods of Assessment

Clinical exam & OSPE

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS <i>(applicable w.e.f. Sept. 2020 & onwards examinations)</i>	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : I	5. Total Marks : 100
	6. Total Time : 3 Hrs.
	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
	11. Web Syllabus : []
	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries One mark.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

Q1. Multiple Choice Questions (Total 20 MCQ of One mark each) **(4 MCQ Should be clinical application based)** (20x1=20)

- a) b) c) d) e) f) g) h) i) j)
 k) l) m) n) o) p) q) r) s) t)

SECTION "B"

Instructions:

- 1) Use blue/black ball point pen only.
- 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) All questions are compulsory.
- 4) The number to the right indicates full marks.
- 5) Draw diagrams wherever necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
- 7) Use a common answerbook for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)

- a) b) c) d) e) f) g) h) i) j) k)

3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)

One SAQ has to be on AETCOM Module (For Anatomy 1.1, 1.5, For Physiology 1.2, 1.3 & For Biochemistry, 1.4)
 & Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.

- a) b) c) d) e) f) g) h) i)

4. Long Answer Questions (Any Two out of Three) (2x 10= 20)

- a) b) c)

Note: All questions should be structured .Wherever necessary; split up of marks should be specified.

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS <i>(applicable w.e.f. Sept. 2020 & onwards examinations)</i>	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : : II	5. Total Marks : 100
	6. Total Time : 3 Hrs.
	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
	11. Web Syllabus : []
	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries **One mark**.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

1. Multiple Choice Questions (Total 20 MCQ of One mark each) **(4 MCQ Should be clinical application based)** (20x1=20)
 a) b) c) d) e) f) g) h) i) j)
 k) l) m) n) o) p) q) r) s) t)

SECTION "B"

Instructions:

- 1) Use blue/black ball point pen only.
- 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) All questions are compulsory.
- 4) The number to the right indicates full marks.
- 5) Draw diagrams wherever necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)
 a) b) c) d) e) f) g) h) i) j) k)
3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)
 Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.
4. a) b) c) d) e) f) g) h) i) (2x 10=20)
 Long Answer Questions (Any Two out of Three)
 i) b) c)

Note: All questions should be structured .Wherever necessary, split up of marks should be specified.

Internal Assessment

Biochemisry

Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards

S	I-Exam (December)			II-Exam (March)		
	Theory	Practical (Including 05 marks For Journals And Log Book)	Total Marks	Theory	Practical (Including 05 marks For Journals And Log Book)	Total Marks
1	100	50	150	100	50	150

Preliminary Examinations			Remedial internal assesment examination for Non - eligible students		
III-Exam (July)			October		
Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks	Theory	Practical Including 10 Marks for Journal & Log Book	Total Marks
200	100	300	200	100	300

1. There will be 3 internal assessment examinations in the academic year. The structure of Preliminary examinations should be similar to the structure of University examination.
2. There will be only one additional examination for absent students (due to genuine reason) after approval by the Committee Constituted for the same. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
3. First internal assessment examination will be held in December, second internal assessment examination will be held in March and third internal assessment examination will be held in July.
4. Internal assessment marks for theory and practical will be converted to out of 40. Internal assessment marks, after Conversion, should be submitted to university by 7th of August.
5. The student must secure at least 50% marks for total marks (combined in theory and practical / clinical: not less than 40% marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final university examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
6. **Remedial internal assessment examination for Non - eligible students:** Student who were not eligible due to less than 50% combined or less than 40% in any theory or practical, will re appear as repeater student for Prelim exam which will be conducted before Supplementary Exam. His/her internal assessment will be calculated on the basis of this Examination marks only. Students who will not be eligible in this Examination will appear with regular batch as repeater student.
7. The internal assessment marks of the remedial examination alone shall be considered and converted into out of 40.

8. Conversion Formula for calculation of marks in internal assessment examinations

	First IA	Second IA	Third IA (Prelim)	Total	Internal assessment marks: Conversion formula (out of 40)	Eligibility to appear for final University examination (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)	
Theory	100	100	200	400	$\frac{\text{Total marks obtained}}{10}$	16 (minimum)	Total of Theory + Practical <u>Must</u> be 40.
Practical	50	50	100	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)	

9. Conversion formula for calculation of marks in Remedial internal assessment examination

	Remedial Exam (Prelim)	Int. Assess. marks conversion formula (out of 40)	Eligibility to appear for Supplementary Exam. (after conversion out of 40) (40% Separately in Theory and Practical, 50% Combined)	
Theory	200	$\frac{\text{Total marks obtained}}{5}$	16 (minimum)	Total of Theory + Practical <u>Must</u> be 40.
Practical	100	$\frac{\text{Total marks obtained}}{2.5}$	16 (minimum)	

While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	Final rounded marks
15.01 to 15.49	15
15.50 to 15.99	16

First Year MBBS Practical Mark's Structure Internal Assessment Examinations I & II (Applicable for batch admitted in M.B.B.S Course from Academic Year 2019-20 & onwards)

Biochemistry						
Practical					Oral/Viva	Total
Seat No.	Quantitative Experiment	Quantitative Experiment/Urine organic/Urine Report/Quality Control/Interpolation of lab Report /Interpolation of Special Technique	Spots	Journal/Logbook		
	A	B	C	D	E	F
Max. Marks	15	15	5	5	10	50

First Year MBBS Practical Marks Structure (Prelim)

(Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards)

Biochemistry

Seat No	Case Based Quantitative Estimation	Urine Report/ Quantitative estimation	Quality Control	Interpretation of lab Reports & special techniques (Minimum 2 Interpretation)	Spots	Journal & Logbook	Practical Total	Viva Voce/ Oral	Practical/Viva Total Marks
	A	B	C	D	E	F	G	H	I
Max. Marks	25	15	10	20	10	10	90	10	100

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

First Year MBBS Practical Marks Structure (MUHS Exam)

(Applicable w.e.f August 2019 onwards examination for batches admitted from June 2019 onwards)

Biochemistry

Seat No	Case Based Quantitative Estimation	Urine Report/ Quantitative estimation	Quality Control	Interpretation of lab Reports & special techniques (Minimum 2 Interpretation)	Spots	Practical Total	Viva Voce/ Oral	Practical/Viva Total Marks
	A	B	C	D	E	F	G	H
Max. Marks	25	15	10	20	10	80	20	100

(Please Note - The above examination pattern will be applicable to the students admitted from Academic Year 2019-20 and onwards, which is informed to all Medical Colleges vide University letter No MUHS /X-1 /UG /1692 /2020 Date: 28/02/2020)

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS <i>(applicable w.e.f. Sept. 2020& onwards examinations)</i>	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : I	5. Total Marks : 100
6. Total Time : 3 Hrs.	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
11. Web Syllabus : []	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries **One mark**.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

Q1. Multiple Choice Questions (Total 20 MCQ of One mark each) *(4 MCQ Should be clinical application based)* (20x1=20)

- a) b) c) d) e) f) g) h) i) j)
k) l) m) n) o) p) q) r) s) t)

SECTION "B"

- Instructions:**
- 1) Use blue/black ball point pen only.
 - 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) All questions are compulsory.
 - 4) The number to the right indicates full marks.
 - 5) Draw diagrams wherever necessary.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
 - 7) Use a common answerbook for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)

- a) b) c) d) e) f) g) h) i) j) k)

3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)

One SAQ has to be on AETCOM Module *(For Anatomy 1.1, 1.5, For Physiology 1.2.,1.3& For Biochemistry, 1.4) & Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.*

- a) b) c) d) e) f) g) h) i)

4. Long Answer Questions (Any Two out of Three) (2x 10= 20)

- a) b) c)

Note: All questions should be structured .Wherever necessary; split up of marks should be specified.

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
FORMAT / SKELETON OF QUESTION PAPER

1. Course and Year : First MBBS <i>(applicable w.e.f. Sept. 2020 & onwards examinations)</i>	2. Subject Code : Appendix - a
3. Subject (PSP) : Anatomy / Physiology / Biochemistry (TT) :	
4. Paper : : II	5. Total Marks : 100
	6. Total Time : 3 Hrs.
	7. Remu. (PS) : Rs. 300/-
	8. Remu. (PM) : Rs. 350/-
9. Web Pattern : []	10. Web Skeleton : []
	11. Web Syllabus : []
	12. Web Old QP : []

Instructions:

SECTION "A" MCQ

- 1) Fill ● (dark) the appropriate empty circle below the question number once only.
- 2) Use blue/black ball point pen only.
- 3) Each Question carries **One mark**.
- 4) A student will not be allotted any marks if he/she overwrites, strikes out or puts white ink on the circle once filled (darkened)
- 5) Do not write anything on the blank portion of the question paper if written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION "A" MCQ (20 Marks)

1. Multiple Choice Questions (Total 20 MCQ of One mark each) **(4 MCQ Should be clinical application based)** (20x1=20)
- a) b) c) d) e) f) g) h) i) j)
k) l) m) n) o) p) q) r) s) t)

SECTION "B"

- Instructions:**
- 1) Use blue/black ball point pen only.
 - 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) All questions are compulsory.
 - 4) The number to the right indicates full marks.
 - 5) Draw diagrams wherever necessary.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As It is only for the placement sake, the distribution has been done.
 - 7) Use a common answer book for all sections.

SECTION "B" (80 Marks)

2. Brief answer questions (Any Ten out of Eleven) (10x 2= 20)
- a) b) c) d) e) f) g) h) i) j) k)
3. Short Answer Questions (Any Eight out of Nine) (8x5= 40)
- Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.
4. a) b) c) d) e) f) g) h) i) (2x 10= 20)
- Long Answer Questions (Any Two out of Three)
- a) b) c)

Note: All questions should be structured .Wherever necessary, split up of marks should be specified.

Course Content

(Based on Medical Council of India, **Attitude, Ethics & Communication(AETCOM) Competencies** for the Indian Medical Graduate, 2018)

Applicable for batch admitted in M.B.B.S Course from Academic Year 2019-20 & onwards

Attitude, Ethics & Communication(AETCOM)

Year: First MBBS

Module No.	Topics & Subtopics	Assessment
1.1	What does it mean to be a doctor ?	Formative: with Internal Assessment examination as decided by respective dept. Summative: SAQ in Paper I : Human Anatomy
1.2	What does it mean to be a patient?	Formative: with Internal Assessment examination as decided by respective dept. Summative: SAQ in Paper I : Physiology
1.3	Doctor – patient relationship	Formative: with Internal Assessment examination as decided by respective dept. Summative: SAQ in Paper I : Physiology
1.4	The foundation of communication-1	Formative: with Internal Assessment examination as decided by respective dept. Summative: SAQ in Paper I : Biochemistry
1.5	The cadaver as our first teacher	Formative: with Internal Assessment examination as decided by respective dept. Summative: SAQ in Paper I : Human Anatomy

WEBLINK DOCUMENT TO BE UPLOADED –

**METHODS OF THE ASSESSMENT OF LEARNING OUTCOMES AND
GRADUATE ATTRIBUTES:**

FOR II MBBS SUBJECTS:

PATHOLOGY

MICROBIOLOGY

PHARMACOLOGY

FORENSIC MEDICINE AND TOXICOLOGY

Nature of Question Paper

Faculty with : SECOND MBBS
Year

Subject : PATHOLOGY

Paper : I

Total Marks : 40

Time : 2 Hours

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use **blue/black** ball point pen only.
- 3) Each question carries **one / half mark**.
- 4) **Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) **Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: <i>Long answer question only</i> a) b) c)	2 X 6	12

Faculty with Year : **SECOND MBBS**

Subject : **PATHOLOGY**

Paper : **II**

Total Marks : **40**

Time : **2 Hours**

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use **blue/black** ball point pen only.
- 3) Each question carries **one / half mark**.
- 4) **Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) **Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: <i>Long answer question only</i> a) b) c)	2 X 6	12

Direction:- Only short answer questions may be permitted from the portions marked as "Desirable to know"

c. Paper wise distribution of theory topics and number of questions:-

A)

Paper I:- General Pathology inclusive of general neoplasia

Haematology inclusive of transfusion medicine.

Out of 3 LAQs in Section C, 2 questions should be from General Pathology and General Neoplasia and one question should be from Haematology inclusive of transfusion medicine.

B)

Paper II:- Systemic Pathology inclusive of systemic Neoplasia and Clinical Pathology.

Out of 3 LAQs in Section C, 2 questions should be from Systemic Pathology and Systemic Neoplasia and one question should be from Clinical Pathology.

d. Marking scheme

Each paper of 40 marks as shown in the above table.

e. Nature of practicals and duration

Practicals

Marks 26

a. 10 Spots 2 minutes each (4 specimen, 1 instrument, 3 histopathology slides, 1 haematology slide and 1 chart)

Identification - 1/2 mark
Specific short question - 1/2 mark] together 1 mark for each spot

10

b. Urine Examination - Physical and two abnormal constituents

05

c. Histopathology slides : Diagnosis and discussion

03

d. Haematology examination

i) Peripheral blood smear stain and report

03

ii) Hb/TLC/Blood group

05

Total

26

f. Viva : duration and topic distribution

Viva consists of two tables; on each table the student will face 2 examiners for 5 minutes each :

Table - I General and Systemic Pathology - 7 marks

Table - II Clinical Pathology and Haematology - 7 marks
Total 14 marks

Number of Students for Practical Examination should not exceed more than 30 / day

(4 for general Pathology, 4 for Systemic Pathology, 7 for Clinical Pathology including hematology)

g. Plan for internal assessment

The time table for internal assessment will be as follows :

Theory	15
Practical	15

Scheme of internal assessment

From the batches which have joined before June 2001

Examination Head	Semester/term wise distribution	Total No of marks	
Theory	III Semester		
	a). Mid-term test (MCQ) single best response	30	
	b). III Semester examination	80	
	IV Semester		
	a). Mid-term (MCQ) single best response	30	
	b). IV Semester examination	80	
	V Semester		
	a). Prelims examination	80	
	Total theory		300
			(reduced to out of 15)

Practicals	III Semester examination	40
	IV Semester examination	40
	Prelims examination	40

	Total Practical	120
		(reduced to out of 12)

Journal	Year ending	03
	Total internal assessment	30

From the batches joining in June 2001 and later

Examination Head	Semester/term wise distribution	Total No of marks
Theory	III Semester Term ending examination	50
	IV Semester Term ending examination	50
	V Semester a). Prelims examination	80
	Total theory	180 (reduced to out of 15)
Practicals	III Semester examination	40
	IV Semester examination	40
	Prelims examination	40
	Total Practicals	120 (reduced to out of 12)
Journal	Year ending	03
Total internal assessment		30

Vth semester

Prelims examination on the basis of University pattern (Theory, practical and viva) :
Minimum 4 weeks gap between Prelims and University examination.

For the terminal theory examination 28 MCQs (1/2 mark each), 10 SAQs (option of 10 of any 12; 2 marks each) and 2 LAQs (option of 2 of any 3; 8 marks each) will be administered. The total time will be 2 hours 30 mins. This will be followed by practicals (total time 1 ½ hours). To familiarize the students with the `viva` methodology, the marks for the practical may be kept 20 while 20 marks may be given for the viva on theory topics (total 40 marks).

Prelim pattern will be as per the University exam with 2 papers in theory, each of 2 hours duration.

Nature of Question Paper

Faculty with : SECOND MBBS
Year

Subject : MICROBIOLOGY

Paper : I

Total Marks : 40

Time : 2 Hours

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use **blue/black** ball point pen only.
- 3) Each question carries **one / half mark**.
- 4) **Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) **Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: Long answer question only a) b) c)	2 X 6	12

Faculty with Year : SECOND MBBS

Subject : MICROBIOLOGY

Paper : II

Total Marks : 40

Time : 2 Hours

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use blue/black ball point pen only.
- 3) Each question carries one / half mark.
- 4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: <i>Long answer question only</i> a) b) c)	2 X 6	12

A) MICROBIOLOGY PAPER I

- General Microbiology
- Systematic bacteriology including Rickettsia, Chlamydia and Mycoplasma
- Related applied microbiology.

B) MICROBIOLOGY PAPER II

- Parasitology
- Mycology
- Virology
- Immunology
- Related applied Microbiology.

d. Marking scheme

Each paper of 40 marks as shown in the above table.

e. Nature of practicals and duration

Practical examination in MICROBIOLOGY will be of 26 marks and oral (viva) of 14 marks of THREE hours duration.

Q.1: Gram staining	5
Q.2: Zeil – Nelson's staining	5
Q.3: Stool examination for Ova/cyst	6
Q.4: Spot identification (Ten spots)*	10
Total-	26

(*Spots- Microscopic slides, Mounted specimen, Instruments used in laboratory, Serological tests, Inoculated culture medium, Sterile culture medium, Vaccines / serum).

f. Viva (Two tables)

	Marks
A: General & Systemic Microbiology	7
B: Mycology, Parasitology, Virology, Immunology	7

g. Plan for internal assessment

Marks for Internal Assessment:

Theory:	15
Practical:	15

From the batches which have joined before June 2001

Theory examination

Internal assessment for theory shall be calculated on the basis of two term ending examinations (Ist & IInd), two mid term examinations in Ist & IInd term & one preliminary examination at the end of the course (total 5 examinations) till the batch of Nov.2000 admission appears for University examination.

Marks Distribution for theory examination: (Internal assessment)

Examination	MCQ		SAQ		LAQ		Total	Time
	Marks	No.	Marks	No.	Marks	No.		
Ist & IInd midterm	10	20	20	10/12	-	-	30	1 hr
Ist & IInd term	28	56	24	12/14	28	4/5	80	3 hr

MCQ = Multiple choice questions, SAQ = Short answer questions, LAQ = Long answer questions

Preliminary examination (as per the University pattern – 2 papers, 3 h each) 80 marks

Internal assessment marks for theory will be computed to 15 out of total 300 marks.

Practicals (Internal assessment):

Three term ending practicals only.

Marks Distribution of Practicals:

I st term ending examination	40
II nd term ending examination	40
Preliminary Practical examination	40
Total-	120

Internal assessment marks for Practicals have to be computed out of 12 marks at the end of the curriculum and add marks for journals out of 3. Thus, total marks for practical assessment will be 15.

From the batches joining in June 2001 and later

Pattern for computation of ' Internal Assessment ' in the subject of Microbiology. (Applicable to the batch joining in June 2001)

THEORY:

Internal assessment shall be computed on the basis of three term ending examinations (two terminals & one preliminary examination before the university examination).

EXAMINATION	No.of Papers	Pattern	Duration of each paper	Total Marks
1 ST TERMINAL	One -50 Marks	MCQs- 28(14 Marks) SAQs- 10/12 (20 Marks) LAQs- 2/3 (16 Marks)	2 Hours 30 Minutes	50
2 ND TERMINAL	One - 50 marks	MCQs- 28(14 Marks) SAQs- 10/12(20Marks) LAQs- 2/3 (16 Marks)	2 Hours 30 Minutes	50

PRELIMINARY (As per final University pattern)	Two - 40 marks each	Each paper- MCQs- 28(14 Marks) SAQs- 6/7(12Marks) LAQs- 2/3 (14 Marks) (Total- 40 Marks, each paper)	2 Hours each paper	80
TOTAL				180

Final internal assessment in THEORY shall be computed on the basis of actual marks obtained out of 180, reduced to marks out of 15.

PRACTICAL:

Internal assessment in PRACTICALS shall be computed on the basis of three term ending examinations and the marks allotted to practical record book.

EXAMINATION	PATTERN	MARKS	TOTAL
1 ST TERMINAL	Exercise(eg. Gram's Stain)	10	40
	Spotting	10	
	Viva	20	
2 ND	Exercise/Exercises(eg .Gram's & Z.N. Stain)	10	40
	Spotting	10	
	Viva	20	
PRILIMINARY EXAM As per University pattern	Gram's Stain	5	40
	Ziehl-Neelson Stain	5	
	Stool Exam.	5	
	Spotting	10	
	Viva	15	
TOTAL			120

Actual marks obtained out of 120 shall be reduced to out of 12. Add marks obtained out of 3 for Practical Record Book. Total internal assessment marks for Practical shall be out of (12+3) 15.

Total Internal Assessment : Theory --- 15

Practical -- 15

Total: 30

Pharmacology and Pharmacotherapeutics

1. Goal

The broad goal of teaching pharmacology to undergraduate students is to inculcate in them a rational and scientific basis of therapeutics.

Nature of Question Paper

Faculty with Year : **SECOND MBBS**

Subject : **PHARMACOLOGY & THERAPEUTICS**

Paper : **I**

Total Marks : **40**

Time : **2 Hours**

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use **blue/black** ball point pen only.
- 3) Each question carries **one / half mark**.
- 4) **Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) **Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: Long answer question only a) b) c)	2 X 6	12

Faculty with Year : SECOND MBBS

Subject : PHARMACOLOGY & THERAPEUTICS

Paper : II

Total Marks : 40

Time : 2 Hours

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use blue/black ball point pen only.
- 3) Each question carries one / half mark.
- 4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: Long answer question only a) b) c)	2 X 6	12

c. Topic distribution

A) **PHARMACOLOGY PAPER I** includes General Pharmacology including drug-drug interactions; Autonomic Nervous System, Cardiovascular System including drugs affecting Coagulation and those acting on the Kidneys; Haematinics; Agents used in Gastro-Intestinal Disorders; Ocular pharmacology; Drug use at extremes of age, in pregnancy & in organ dysfunction; Diagnostic & Chelating agents; Environmental & Occupational Pollutants; Vitamins

B) **PHARMACOLOGY PAPER II** includes Neuro-Psychiatric Pharmacology including Antiinflammatory-Analgesics and Addiction & its management; Pharmacology in Surgery (particularly peri-operative management); Chemotherapy including Cancer Chemotherapy; Endocrinology; Dermatology; Miscellaneous Topics I (Lipid-derived autacoids; Nitric Oxide; Allergy - Histaminics & Antihistaminics including anti-vertigo; Anti Asthmatics; Anti-tussive agents; Immunomodulators; Vaccines & sera; Drugs acting on the uterus)

d. Marking scheme

Each paper of 40 marks as shown in the above table.

e. Nature of practicals and duration

Practical Heads

Marks 26

Prescription writing

5

- Long
- Short

(3)
(2)

Criticism

8

- Prescription & rewriting
- Fixed dose formulation

(4)
(4)

Clinical Pharmacy

(dosage forms, routes of administration, label information and instructions)

i. Spots

8

- a Experimental Pharmacology – Graphs, Models for evaluation, Identification of a drug, Interpretation of data (2)
- b Human Pharmacodynamics - Drug Identification – urine analysis, eye chart, - Subjective / objective effects of a drug (2)
- c Therapeutic problems based on pharmaceutical factors - Outdated tablet, Bioavailability, Dosage form, Ethics and Sources of drug information (2)
- d Recognition of ADRs & interaction of commonly used drugs (2)

For each of the 4 groups (a, b, c & d) 2 spot questions each of 1mark to be asked.

Time distribution:

For prescription and criticism the time given will be ½ hour.

For clinical pharmacy practical viva will be taken on pre-formed preparations and/or marketed formulations. The students may be asked to write labels and instructions to be given to the patients or demonstrate how specific dosage forms are administered and state the precautions to be taken/ explained to the patients while using them. The time for this will be 5 min.

For spots 20 min will be given (2 min per spot).

Thus the total time for the practical examination will be 1 hour.

f. Viva: duration and topic distribution

Viva	14 marks
Duration	10 mins
Four examiners	5 mins with each candidate
Two examiners	for topics of paper I - systems to be distributed
Two examiners	for topics of paper II - systems to be distributed
At each table marks will be given out of 7.	

g. Plan for internal assessment

The time-table for internal assessment will be as follows:

For the batches which have joined before June 2001

I term

1st midterm: After 60 teaching days (MCQs, and SAQs)

1st term ending: After 120 teaching days (Theory and Pharmacy Practicals)

II term

2nd midterm: After 60 days of 2nd term (MCQs and SAQs)

2nd term ending: At the end of 2nd term (Theory and Practicals: Exptal/Clinical Pharmacy)

IIIrd term

Prelims examination on the basis of University pattern -Theory, Practicals and Viva
(*Minimum 4 weeks gap mandatory between Preliminary and University examinations*)

For each mid-term examination 40 MCQs (each worth 1/2 mark) will be administered to the students along with 5 SAQs (each of 2 marks with an option of 5 out of 6). The total time will be 1 hour and the total marks will be 30.

The term ending examination will be of 80 marks and the nature of questions will be as per University exam.

This will be followed by practical (total time 1½ hours).

To familiarize the students with the „viva-vocé“, the marks for the practical may be kept at only 20, while 20 marks be reserved for viva on theory topics (total 40 marks).

For the batches joining in June 2001 and later

I term

1st term ending: After 120 teaching days (Theory and Pharmacy Practicals)

II term

2nd term ending: At the end of the 2nd term (Theory and Practicals: Exptal/Clinical Pharmacy)

IIIrd term

Prelims examination on the basis of University pattern -Theory, Practicals and Viva
(*Minimum 4 weeks gap mandatory between Preliminary and University examinations*)

For the terminal theory examination students will be evaluated by a combination of 28 MCQs (each worth 1/2 mark), 10 SAQs (each of 2 marks with an option of 10 out of 12) and 2 LAQs (option of 2 out of 3 each worth 8 marks). The total time allotted for this 50 marks paper will be 2hours 30minutes.

This will be followed by practicals (total time 1½ hours).

To familiarize the students with the „viva-vocé“, the marks for the practical may be kept at only 20, while 20 marks be reserved for viva on theory topics (total 40 marks).

Nature of Question Paper

Faculty with Year : SECOND MBBS

Subject : FORENSIC MEDICINE & TOXICOLOGY

Paper : --

Total Marks : 40

Time : 2 Hours

Section "A" (8 Marks)

Instructions:-

- 1) Fill (dark) the appropriate empty circle below the question number once only..
- 2) Use **blue/black** ball point pen only.
- 3) Each question carries **one / half mark**.
- 4) **Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "A" : MCQ (8 marks)

Question No.	Question Description	Division of Marks	Total Marks
1.	Total MCQs : 16	16 X ½	08

Section "B" & "C" (32 Marks)

Instructions:-

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) **Answer each section in the respective answerbook only. Answers written in the inappropriate sectional answer books will not be assessed in any case.**
- 5) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Section "B" : BAQ (20 Marks)

Question No.	Question Description	Division of Marks	Total Marks
2.	Brief answer questions (Attempt any five out of six) a) b) c) d) e) f)	5 X 4	20

Section "C" : LAQ (12 Marks)

Question No.	Question Description	Division of Marks	Total Marks
3.	Attempt any two out of three: <i>Long answer question only</i> a) b) c)	2 X 6	12

g. Plan for internal assessment

The time-table for internal assessment will be as follows:

SCHEME OF INTERNAL ASSESSMENT WITH FREQUENCY OF EXAMINATIONS FOR THE BATCHES WHICH HAVE JOINED BEFORE JUNE 2001

Marks for internal assessment „A“ shall be calculated on the basis of two mid terminals & three terminal college examinations conducted. During mid terminal (periodical examination) assessment should be done by MCQs of Single Best Response type.

Marks for internal assessment „B“ shall be calculated on the basis of three terminal college examinations (7 marks) & day-to-day class practical work and Record (3 marks).

Department will maintain a register for periodic evaluation of their students. The internal assessment will be done separately for theory and practical examinations.

A total of 5 (five) examinations will be conducted as under:

FREQUENCY AND MARKING OF EXAMINATION FOR INTERNAL ASSESSMENT

Termwise distribution	Theory/Practical (Total Marks)
I Term	
One Midterm	15 / no practicals
1 st Terminal	40 / 25
II Term	
One Midterm	15 / no practicals
2 nd Terminal	40 / 40
III Term	
One term ending Preliminary	40 / 40

SCHEME OF INTERNAL ASSESSMENT WITH FREQUENCY OF EXAMINATION FOR THE BATCHES JOINING IN JUNE 2001 AND LATER

I term

1st term ending: After 120 teaching days (Theory and Practicals)

II term

2nd term ending: At the end of the 2nd term (Theory and Practicals)

III term

Prelims examination on the basis of University pattern -Theory, Practicals and Viva
(*Minimum 4 weeks gap mandatory between Preliminary and University examinations*)

For the terminal theory examination students will be evaluated by a combination of 28 MCQs (each worth 1/2 mark), 6 SAQs (each of 2 marks with an option of 6 out of 7) and 2 LAQs (option of 2 out of 3 each worth 7 marks). The total time allotted for this 40 marks paper will be 2 hours.

This will be followed by practicals (total time 1½ hours). The marks for the I term practicals will be 25 and for the II term will be 40.

To familiarize the students with the „viva-vocé“, for the I term the marks for the practicals may be kept as 15, while 10 marks be reserved for viva on theory topics (total 25 marks); for the II term the marks for the practicals may be kept as 30, while 10 marks be reserved for viva on theory topics (total 40 marks).

Prelim pattern will be as per the University exam.

REVISED INTERNAL ASSESSMENT EXAMINATION SCHEME w.e.f. JUNE 2007 EXAMINATION

YEAR :- Second MBBS

SN	Subject	1 st Term End			2 nd Term End			Preliminary Examination		
		Semester	Theory	Practical	Semester	Theory	Practical	Semester	Theory	Practical
			(A)	(B)		(C)	(D)		(E)	(F)
1.	Pharmacology	III	50	40	IV	50	40	V	80	40
2.	Pathology	III	50	40	IV	50	40	V	80	40
3.	Microbiology	III	50	40	IV	50	40	V	80	40
4.	FMT	III	20	20	IV	20	20	V	40	40

(B) Calculation Method:-

I) Theory Marks to be send to the University out of 15 Except FMT

$$= \frac{(A)+(C)+(E)}{12} = \frac{50+50+80}{12} = \frac{180}{12} = 15$$

II) Practical Marks to be send to the University out of 15 Except FMT

$$= \frac{(B)+(D)+(F)}{8} = \frac{40+40+40}{8} = \frac{120}{8} = 15$$

III) For FMT Theory Marks to be send to the University out of 10

$$= \frac{(A)+(C)+(E)}{8} = \frac{20+20+40}{8} = \frac{80}{8} = 10$$

IV) For FMT Practical Marks to be send to the University out of 10

$$= \frac{(B)+(D)+(F)}{8} = \frac{20+20+40}{8} = \frac{80}{8} = 10$$

WEBLINK DOCUMENT TO BE UPLOADED –

METHODS OF THE ASSESSMENT OF LEARNING OUTCOMES AND
GRADUATE ATTRIBUTES:

FOR III MBBS SUBJECTS:

GENERAL MEDICINE

GENERAL MEDICINE (PSYCHIATRY, DERMATOLOGY, STD)

PAEDIATRICS (NEONATOLOGY)

COMMUNITY MEDICINE

GENERAL SURGERY (ORTHOPAEDICS, RADIOLOGY, DENTISTRY,

ANAESTHESIOLOGY)

OPHTHALMOLOGY

OTORHINOLARYNGOLOGY

OBSTETRICS AND GYNAECOLOGY

MARKS OF INTERNAL ASSESSMENT :-

Theory -20 marks and practical 20 marks. The students must secure at least 50% , marks of the total marks fixed for internal assessment in the subject in order to clear the subject.

I) Theory		
1) 3 rd Semester	50 Marks	
2) 4 th Semester	50 Marks	
3) 6 th Semester	50 Marks	
	<u>Total 150 Marks</u>	Converted it to out of 10 marks
4) Prelim exam. Theory Paper I	-	60 Marks
	Paper II	<u>- 60 Marks</u>
	Total	120 Marks,
		Convert it to out of 10 marks

Total Theory Internal Assessment marks will be 20.

II) Practicals -

1) 1 st Clinical rotation exam. -	3 rd Semester -	50 Marks	
2) 2 nd Clinical rotation exam. -	4 th Semester -	50 Marks	
3) 3 rd Clinical rotation exam. -	6 th Semester -	50 Marks	
	<u>Total</u>	150 Marks	Convert it to out of 10 marks
4) Prelim exam.	-	40 Marks	
		<u>10 Marks for Journals</u>	
	Total	50 Marks	Convert it to out of 10 marks

Total Practical Internal Assessment marks will be 20.

Introduction of " Brain Death and Organ Donation" topic in subjects of Physiology , Preventive & Social Medicine, Psychiatry, Medicine & Surgery

Introduction Of "Bio-Medical Waste" topic in subject of Microbiology & Preventive & Social Medicine

In trod u ctio n of " In tigrat e d Man a ge me n t of Neo n a ta l And Ch ild ho od Illn e ss"

Topic in MBBS Syllabus

BOOKS RECOMMENDED.

1. Text book of Community Medicine, Kulkarni A.P. and Baride J.P.
2. Park's Textbook of Preventive and Social Medicine, Park
3. Principles of Preventive and Social Medicine, K. Mahajan
4. Textbook of Community Medicine, B. Shridhar Rao.
5. Essentials of Community Medicine, Suresh Chandra.
6. Textbook of Biostatistics, B. K. Mahajan
7. Review in Community Medicine, V.R. Sheshu Babu.
8. **Reference Book for Community Medicine: "Principles and practice of Biostatistics", Author: Dr. J.V. Dixit**

FURTHER READINGS.

Epidemiology and Management for health care for all P.V. Sathe and A.P. Sathe.

Essentials of Preventive Medicine O.P. Ghai and Piyush Gupta.

Record Book:

- 1) The case records will have to be entered in a record book separately for General Medicine, for Paediatrics and for PSM.
- 2) In the record book of General Medicine, number of case records for Medicine shall be 12, for Skin & V.D. & Leprosy shall be 3, for Psychiatry shall be 2 and for Chest & TB shall be 3 cases.
- 3) The certificate of satisfactory completion of all Clinical postings will be entered based on similar certificates from all postings in all the above subjects.
- 4) In addition, details of the marks secured in the posting ending examination shall be entered on the second page on which the calculations of the internal assessments shall also be stated. Record book will not carry any marks but its satisfactory completion will be a prerequisite for appearing in examination.

University Examinations in Medicine and Allied Subjects at a Glance

MEDICINE :-

Theory 2 papers of 60 marks each	= 120 marks
Paper I - General Medicine	
Paper II - General Medicine(Including Psychiatry, Dermatology, STD shall contain one question on basic sciences and allied subject.)	
Oral (viva) interpretation of X-Ray, ECG etc.	= 20 marks
Clinical (Bedside)	= 100 marks
Internal Assessment	= 60 marks
(Theory 30 Marks, Practical 30 Marks)	
Grand Total	= 300 marks

PAEDIATRICS :- (Including Neonatology)

Theory – One paper (Shall include one question on basic sciences & allied subjects)	= 40 marks
Oral (Viva)	= 10 marks
Clinical	= 30 marks
Internal Assessment (Theory 10 Marks, Practical 10 Marks)	= 20 marks
Grand Total	= 100 marks

COMMUNITY MEDICINE :-

Theory 2 papers of 60 marks each	= 120 marks
Includes problems showing applied aspects of management at primary level including essential drugs, occupational (agro based) diseases rehabilitation and social aspects of community.	
Oral (Viva)	= 10 marks
Practical /Project evaluation	= 30 marks
Internal Assessment	= 40 marks
(Theory 20 Marks, Practical 20 Marks)	
Grand Total	= 200 marks

Criteria of passing in various subjects at III MBBS Examination

SN	Subject	Theory Paper ./ Oral/ Practical / Internal Assessment		Maximum Marks in each of the subject	Minimum marks required to pass in each part of any subject		Minimum marks required to pass in each subject out of
01)	Community Medicine	a) Theory	Paper - I	60	60	65	100 <hr/> 200
			Paper - II	60			
		b) Oral		10			
		c) Practical		30		15	
		d) Internal Assessment	Theory	20		20	
	Practical	20					
02)	General Medicine	a) Theory	Paper I	60	60	70	150 <hr/> 300
			Paper II	60			
		b) Oral		20			
		c) Practical		100		50	
		d) Internal Assessment	Theory	30		30	
	Practical	30					
03)	Paediatrics	a) Theory	Paper	40	20	25	50 <hr/> 100
		b) Oral		10			
		c) Practical		30		15	
		d) Internal Assessment	Theory	10		10	
	Practical	10					

It is compulsory to obtain 50% marks in theory.

It is mandatory to obtain 50% marks in theory+viva/oral.

(The Frequency & other details of Internal Assessment Examinations shall be as stated in circular dated 15/02/01 table no III & IV. of General

Guidelines for U.G. teaching & training & Internal Assessment. Passing in Internal Assessment is prerequisite for eligibility to clear the subject. For passing in Internal Assessment student should secure minimum 30 out of 60 marks (theory & practical combined)

The Internal Assessment Examination shall consist of one clinical case paired with viva-voce for the periodical tests. However, the preliminary examination shall be carried out in a pattern similar to final University examination.

University (Final) Exam : General Medicine

Paper I (60 Marks) Time 3 hours.	Paper II (60 Marks) Time 3 hours.
<p style="text-align: center;">Section A – Marks 15</p> <p>MCQs – 30 Items each of ½ mark Time 30 minutes (Shall cover whole course syllabus stated in Section B and C of Paper I below)</p>	<p style="text-align: center;">Section A – Marks 15</p> <p>MCQs 30 Items each of ½ mark Maximum time 30 minutes (Shall cover whole course syllabus stated in Section B and C of Paper I below)</p>
<p style="text-align: center;">Section B – (Total Marks 25)</p> <p>Two long questions Each of 8 marks & 3 Short Answer Questions of 3 marks each. (3 out of 5 SAQs by choice. On course contents of - Cardiovascular System, Gastrointestinal System, Hepatobiliary System & Pancreas, Haematology, Haemato-oncology & Genetics)</p>	<p style="text-align: center;">Section B – (Total Marks 25)</p> <p><i>Two long Questions each of 8 marks and 3 short answer questions (out of 5 SAQs) on course contents of Neurology, Psychiatry, Dermatology, Veneroleprology & Collagen Disorders</i></p>
<p style="text-align: center;">Section C – (Total Marks 20)</p> <p>One long Question of 8 marks and 4 (out of six) SAQs of 3 marks each on course contents of Endocrinology, infectious diseases/Tropical Disease, Miscellaneous</p>	<p style="text-align: center;">Section C – (Total Marks 20)</p> <p>One long question of 8 marks and 4 (out of six) SAQs of 3 marks each on course contents on Respiratory Diseases, Tuberculosis & Clinical Nutrition and Nephrology</p>
<p>The Max Time for Section B & C shall be of 2 hrs. + 30 minutes</p>	<p>The Max time for section B and C shall be of 2 hrs. and 30 minutes</p>

MCQ Section A shall be given to the candidates in the beginning of examination. After 30 min. section A will be collected following which B & C shall be given. The time given Section B & C together is two and half hours. This applies to paper I & II.

(one of the short answer questions shall be on basic & allied sciences.)

Final University Exam : Practical Exam :

Shall comprise of total 120 marks . with divisions as below :-

(A) Clinical Bed side :

One Long case - 50 Marks

Two short case - 25 Marks each

Total - 100 Marks

Long Case / The time for case taking for student is 45 min. & for examination is 10 min.

Short Case / The same for each short case is 10 min. & 5 min. respectively

(B) Oral Viva Voce and interpretation of investigation materials (like X-Rays, ECGs, etc. - 20 marks

Viva at Two Tables Each for 10 marks There should be even & balanced distribution of the course contents on these tables, between Internal & External examiners. This should include, specimens, instruments, microscopy & drugs on table no 1 & emergencies, radio-diagnostics, electrodiagnostic & Biochemical Lab. investigations on table no 2 as applicable to the course contents of final M.B.B.S. Exam.

(C) The marks of Internal Assessment shall be sent to the University before the commencement of the Theory Examination.

Note - In the event when I.A. could not be held on the specified time due to technical reasons or otherwise, then it should be held during the vacation.

IIIrd MBBS EXAM. PATTERN
FINAL MBBS EXAMINATION IN **Paediatrics**

Evaluation

Internal assessment: 20 (Theory 10 +Practical 10)

Plan of Internal assessment in Paediatrics (as per university circular on 9th February 2001) Marks of Internal Assessment should be sent to University confidentially before the commencement of Theory examination.

- Passing in internal assessment will be pre-requisite for clearing the subject.
Combined theory and practical of internal assessment will be considered for passing in internal assessment.

Internal assessment in Theory -

- 1 . Examinations during semesters : This will be carried out by conducting two theory examinations at the end of 6th and 8th semesters (50 marks each).
Total of 100 marks to be converted into 5 marks.(A/5)
- 2 . Prelim examination : This shall be carried out during 9th semester.
One theory papers of 40 marks as per university examination.
Total of 40 marks to be converted into 5 marks. (B/5)

Total marks of Internal assessment of Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

- 1 There will be practical examination at the end of each clinical posting of Paediatrics.: 6th and 8th semester. Each examination will be of 50 marks.
Total of 2 examinations – 100 marks , will be converted to 5 marks.(C/5)

2. Prelim examination:

This will be conducted for 40 marks as per university examination pattern and marks will be converted to 5 (D/5).

Total marks of Internal assessment of Practical will be addition of C and D.

Duration

10 Minutes

(Instruments, X-ray, Drugs, Emergency in Paediatrics.)

It is directed to interpretation of investigations

Clinical :One long case :30 marks :30 min. for taking case and 10 minutes for assessment

Oral (viva voce) :10 marks:10 min. duration

1.Dark Room

5 marks

2.Instruments

5 marks

FINAL EXAMINATION :- IN PSM

The distribution of marks at final examination

Theory : two papers of 60 marks each	120 Marks
Oral (Viva)	10 Marks
Practicals	30 Marks
Internal assessment	40 Marks
<input type="checkbox"/> (Theory 20 Marks)	
<input type="checkbox"/> (Practical 20 Marks)	

Total

200 Marks

PATTERN :

THEORY : TWO PAPERS OF 60 MARKS EACH 120 MARKS :-

- Paper I include Concepts in Health & Disease, Sociology / Humanities, Epidemiology, Biostatistics, Communicable and non- communicable diseases, Genetics and Environmental Health.
- Paper II includes Demography & Family Planning, Maternal and child health Nutrition, Occupational Health, Mental Health, Health Education, Health Planning & Management, Health Care Delivery System , National Health Programmes, International Health,
- These are broad divisions. There are some chances of overlapping.

NATURE OF THEORY QUESTION PAPERS :

Final MBBS Examination of subject-PSM

Theory

Paper -I

Paper -II

Section A : **30 MCQs**
MCQs

Section A : **30**

½ Mark each

½ Mark each

Should cover whole course content Of the Paper I stated in Section B & C below (Max time = 30 min)

Should cover whole course content Of the Paper II stated in Section B & C below (Max time = 30 min)

Section B: Total Marks =25
2. LAQs, each of 8 Marks
3. (out of 5) SAQs.
each of 3 marks on

Section B: Total Marks =25
2. LAQs, each of 8 Marks
3. (out of 5) SAQs.
each of 3 marks on

Epidemiology, Bio-statistics & communicable & non communicable diseases

Demography & Family Planning
Maternal and child health,
Nutrition, Occupational health;

Section C: Total Marks =20
One LAQ of 8 marks
& 4 (out of 6) SAQs
each of 3 marks

Section C: Total Marks =20
One LAQ of 8 marks
& 4 (out of 6) SAQs
each of 3 marks

On

Concepts in Health & Disease,
Sociology / Humanities
Genetics & environmental
Health

On

Mental Health, Health Education,
Health Planning & Management
Health care delivery system.
National Health Programmes
International Health

The full time for section B plus section C shall be of 2½ hrs. of Paper I and 2½ hrs for Paper II.

MCQ Section will be given to candidates first. After 30 minutes the Section B & C will be given to the candidates.

PATTERN AT PRACTICAL EXAMINATION

	Marks
Orals (Viva)	10
Practical	30

The distribution of 30 marks of practical shall be -

- | | | | | |
|----|----------------------------|---|--------------|---|
| 1) | Spots | - | 10 Marks | (5 spots of 2 marks each) Time 10 min. |
| 2) | Exercises | - | 10 Marks | (5 marks for Bio-Stat. & 5 marks for Epidemiological exercises) Time 10 min. |
| 3) | Clinical case Presentation | - | 10 Marks | Time 45 min. |
| | | | Total | 30 Marks |

8. Rehabilitation of lost Oral structures.
Implantology.
9. Dentofacial Deformities and Surgical corrections.
10. Biomaterials used in Dentistry.
Emerging technologies in Contemporary Dentistry.
Molecular Dentistry.
Integration with anatomy, surgery,
pathology radiology and Forensic Medicine be done.

CLINICAL POSTING in DENTISTRY - 2 WEEKS

1. L.A. Administration, Techniques for different Blocks.
2. Exodontia
3. Preliminary Management of Maxillofacial Trauma
4. Pathological conditions of Oral cavity.
5. Oral and Maxillofacial Radiography & Imaging
6. Maxillo Facial Prosthodontics

Criteria of passing in various surgical subjects at III MBBS Examination

SN	Subject	Theory Paper / Oral/ Practical / Internal Assessment		Maximum Marks in each of the subject	Minimum marks required to pass in each part of any subject		Minimum marks required to pass in each subject out of
01)	Otorhinolaryngology	a) Theory	Paper - I	40	20	25	50 100
		b) Oral		10			
		c) Practical		30	15		
		d) Internal Assessment	Theory	10	10		
			Practical	10			
02)	General Surgery	a) Theory	Paper I	60	60	70	150 300
			Paper II	60			
		b) Oral		20			
		c) Practical		100	50		
		d) Internal Assessment	Theory	30	30		
Practical	30						
03)	Obstetrics and Gynaecology	a) Theory	Paper1	40	50	100 200	
		b) Oral		20			
		c) Practical		60	30		
		d) Internal Assessment	Theory	20	40		
Practical	20						

04)	Ophthalmology	a) Theory	Paper - I	40	20	25	50 100
		b) Oral		10			
		c) Practical		30		15	
		d) Internal Assessment	Theory	10		10	
	Practical	10					

It is compulsory to obtain 50% marks in theory.

It is mandatory to obtain 50% marks in theory+ viva/oral.

FINAL MBBS EXAMINATION IN SURGERY

Evaluation : Methods – Internal assessment, Theory, Practical and Viva

Internal Assessment (Formative Assessment)

Theory – 30 Practical - 30 Total 60

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Passing in internal assessment is essential for passing ,as Internal assessment is separate head of passing. in examination.
- It will also be considered for grace marks as per existing rules
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.
- Student will be allowed to appear for both theory and practical exam independent of marks obtained in internal assessment but he if fails in that head even after including the grace marks he will be declared “Fail in that Subject”

Internal assessment in Theory -

Examinations during semesters:

This will be carried out by conducting two theory examinations during 6th and 8th semesters (100 marks each).

Total of 200 marks to be converted into 15 marks.(A/15)

Prelim examination :

This shall be carried out during 9th semester. Two theory papers of 60 marks each as per university examination Pattern

Total of 120 marks to be converted into 15 marks. (B/15)

Total marks of Internal assessmentfor Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

There will be practical examination at the end of each clinical posting of General Surgery. (3rd, 5th, 7th and 8th semester) Each examination will be of 50 marks.

Total of 4 examinations - 200 marks.

These marks and marks from Orthopaedics 100, Radiology 50, Dentistry 50 and Casualty 50 will be added. - Total 450 marks will be converted to 15 marks.(C/15)

Prelim examination:

This will be conducted for 120 marks as per university pattern and marks will be converted to 15 (D/15).

Total marks of Internal assessment for Practical will be addition of C and D.

Record BOOK

Case record will have to be entered in a record book.

A combined record book of General surgery, Orthopaedics, Causality, Anaesthesiology, Dentistry and radiology will have to be maintained

Minimum of five histories have to be recorded in each posting

The certificate of satisfactory completion of all clinical posting will be required from Head Of the department of Surgery. This will be base on multiple similar certificates from all postings in all subjects

In addition it will have details of all marks in posting ending exam on second page and calculation of internal assessment

Record book will not carry any marks but it will be prerequisite for Appearing for examination.

Pattern of theory examination including distribution of marks, Questions and Time

Theory

1. There shall be two theory papers - Paper I and II, carrying 60 marks each.
2. Each paper will have three sections, A, B and C. Each paper will be of 3 hours duration.
3. Section A will be MCQ in each paper. Section B and C will have to be written in separate answer sheets. Both will have Long Answer Question (LAQ) and Short Answer Questions (SAQ)
4. The topic covered in each section shall be as follows :-

A. Paper I

- Section A – MCQ : will cover whole syllabus of Paper I
- Section B- General principles of Surgery, Oncology, head, face, neck, Breast, Endocrine Surgery and Trauma
- Section C - Orthopaedic surgery.

B. Paper II

- Section A – MCQ : will cover whole syllabus of Paper II
- Section B- Gastrointestinal Tract including colon rectum and anal canal
 - Liver, pancreas and biliary tract, Spleen. Paediatric Surgery
- Section C - Urology, Cardio thoracic surgery and Plastic surgery
Dental surgery, Radiology and Radiotherapy, Anaesthesiology.

Paper I - 3 hrs - 60 marks

Section . A - MCQ - 30 x ½ marks each – 15 marks

- 30 minutes
- Separate paper
- Single based response
- MCQ will cover whole syllabus of Paper I

Section . B - General Surgery 25 Marks

- 2 LAQS – 8 marks x 2 = 16 marks
- 3/5 SAQS – 3 marks = 9 marks

Topics - General principles of Surgery, Oncology, head, face, neck, Breast, Endocrine Surgery and Trauma..

NB : Shall contain one question on basic Sciences and allied subjects

Sec. C –Orthopaedics Surgery : 20 marks

- Topic; All topics in Orthopaedics
- Orthopaedics examiner will set this part of paper and to be evaluated by Orthopaedics examiner.
 - 1 LAQS (Long answer questions) – 8 marks
 - 4/6 SAQS(Short answer questions) x 3 marks each = 12 marks

Time Sec. B & C – Two and half hours.

Section B and C to be written in separate answer sheets.

MCQ section A will be given to candidates at the beginning of the examination. After 30 minutes Section A will be collected. Section B and C paper will then be handed over to candidates.

PAPER II - Time 3 hrs - 60 marks

Section . A - MCQ - 30 x ½ marks – 15 marks

- 30 minutes
- Separate paper
- Single based response
- MCQ will cover whole syllabus of Paper II

Section . B – Marks: 25 marks

Topics :Gastrointestinal Tract including colon rectum and anal canal
Liver, pancreas and Biliary tract, Spleen, Paediatric surgery.

- 2 LAQS – 8 marks x 2 = 16 marks
- One question clinical Problem solving.
- 3/5 SAQS – 3 marks = 9 marks

NB : Shall contain one question on basic Sciences and allied subjects

Section . C – Marks: 20 marks

Topics: Urology, Cardio thoracic surgery and plastic surgery
Dental surgery, Radiology and Radiotherapy, Anaesthesiology.

- 1 LAQS – 8 marks
- 4/6 SAQS x 3 marks each = 12 marks

Time Sec. B & C – Two and half hours.

Section B and C to be written in separate answer sheets.

MCQ section A will be given to candidates at the beginning of the examination. After 30 minutes Section A will be collected. Section B and C paper will then be handed over to candidates.

PRACTICAL EXAMINATION - 120 marks

Clinical examination

- Clinical cases
 - Long case I – Gen, Surgery. – 50 marks
 - Short case I - Orthopaedics – 25 marks
 - Short case II – Gen. Surgery -- 25 marks

Time for Long cases- 30 minutes for taking history and clinical examination.

10 minutes for viva

Time for 2 short cases - 20 minutes for taking history and clinical examination.

10 minutes for viva.

Viva examination - Duration and topic distribution (Total 20 marks)

- Tables – Viva will be directed towards **interpretation of investigation**

At two tables, each for ten marks. Time- 10 minutes at each table

- Instruments + Operations, – 10 marks
- Surgical Pathology, Imaging sciences and Orthopaedics – 10 marks

Marks of VIVA will be added to Theory marks

It is compulsory to obtain 50% marks in theory.

It is mandatory to obtain 50% marks in theory+viva/oral.

OPHTHALMOLOGY

These guidelines are based on MCI recommendations.

Teaching has to be done keeping in mind the goals and objectives to be achieved by medical student

(i) GOAL

The broad goal of the teaching of students in ophthalmology is to provide such knowledge and skills to the student that shall enable him/her to practice as a clinical and as a primary eye care physician and also to function effectively as a community health leader to assist in the implementation of National Programme for the prevention of blindness and rehabilitation of the visually impaired.

(II) OBJECTIVES

(a) KNOWLEDGE

At the end of the course, student shall have the knowledge of

1. Common problems affecting the eye,
2. Principles of management of major ophthalmic emergencies,
3. main systemic diseases affecting the eye;
4. Effects of local and systemic diseases on patient's vision and the necessary action required to minimize the sequelae of such diseases;
5. Adverse drug reactions with special reference to ophthalmic manifestations;
- 6, Magnitude of blindness in India and its main causes;
7. National programme for control of blindness and its implementation at various levels.
8. Eye care education for prevention of eye problems
9. Role of primary health center in organization of eye camps;
10. organization of primary health care and the functioning of the ophthalmic assistant;
11. Integration of the national programme for control of blindness with the other national health Programmes.
12. Eye bank organization

SKILLS

At the end of the course, the student shall be able to:

FINAL MBBS EXAMINATION IN OPHTHALMOLOGY

Evaluation

Internal assessment: 20 (Theory 10 +Practical 10)

Plan of Internal assessment in Ophthalmology

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Passing in internal assessment is essential for passing, as Internal assessment is separate head of passing. in examination.
- It will also be considered for grace marks as per existing rules
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.
- Student will be allowed to appear for both theory and practical exam independent of marks obtained in internal assessment but he if fails in that head even after including the grace marks he will be declared "Fail in that Subject"

Internal assessment in Theory -

1. Examinations during semesters : This will be carried out by conducting two theory examinations during 4th and 6th semesters (50 marks each).

Total of 100 marks to be converted into 5 marks.(A/5)

2. Prelim examination : This shall be carried out during 9th semester. One theory papers of 40 marks as per university examination. Total of 40 marks to be converted into 5 marks. (B/5)

Total marks of Internal assessment- Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

1. There will be practical examination at the end of each clinical posting of Ophthalmology.,4th and 6th semester. Each examination will be of 50 marks. Total of 2 examinations – 100 marks , will be converted to 5 marks.(C/5)

2. Prelim examination:

This will be conducted for 40 marks as per university pattern and marks will be converted to 5 (D/5).

Total marks of Internal of-of Practical will be addition of C and D.

Evaluation Methods - Theory, Practical and Viva

Pattern of theory examination including distribution of marks, questions and time

Pattern of theory examination including distribution of marks

1. There shall be one theory papers , carrying 40 marks
2. The paper will have two sections, A and B
3. The paper will be of 2.5 hours duration.
4. Section A will be MCQ in each paper. Section B will have to be written in separate answer sheets.

THEORY : 40 marks Duration Two and half hours (2.5) hours

MCQ section A will be given to candidates at the beginning of the examination.

After 30 minutes Section A will be collected. Section B of paper will then be handed over to candidates.

Section A :30 min. duration

Twenty eight single MCQs- 1/2 mark each : 14 marks

- ! Separate paper
- ! Single based response
- ! MCQ will cover whole syllabus

Section B : 2 hours duration

! Two long questions (LAQ) of 7 marks each : 14 marks

(will contain some preclinical/paraclinical aspects)

! Three /five (SAQ) short notes -4 marks each : 12 marks

PRACTICAL : 40 marks

Clinical : One long case :30 marks :30 min. for taking case and 10 minutes for assessment

! Oral (viva voce) :10 marks:10 min. duration

1. Dark Room 5 marks
2. Instruments 5 marks

Marks of VIVA will be added to Theory marks

It is compulsory to obtain 50% marks in theory.

It is mandatory to obtain 50% marks in theory+viva/oral.

EAR

• Anatomy /physiology		2
• Methods/methods of examination	1	
• Cong.diseases/ ext.ear /middle ear		1
• Acute/chronic supp. otitis media Aetiology, clinical features and its Management/complications	6	
• Serous/adhesive otitis media	1	
• Mastoid/middle ear surgery		1
• Otosclerosis/tumours of ear	2	
• Facial paralysis/Meniere's disease		2
• Tinnitus /ototoxicity	2	
• Deafness/hearing aids/rehabilitation Audiometry	2	

FINAL MBBS EXAMINATION IN OTORHINOLARYNGOLOGY

Evaluation

Internal assessment: 20 (Theory 10 +Practical 10)

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Passing in internal assessment is essential for passing, as Internal assessment is separate head of passing. in examination.
- It will also be considered for grace marks as per existing rules
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.
- Student will be allowed to appear for both theory and practical exam independent of marks obtained in internal assessment but he if fails in that head even after including the grace marks he will be declared **“Fail** in that Subject

Internal assessment in Theory -

- 1 **Examinations during semesters:** This will be carried out by conducting two theory examinations during 4th and 6th semesters (50 marks each). Total of 100 marks to be converted into 5 marks.(A/5)
- 2 **Prelim examination :** This shall be carried out during 7th semester. One theory papers of 40 marks as per university examination. Total of 40 marks to be converted into 5 marks. (B/5)
- 3 **Total marks of Internal assessment-** Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

There will be practical examination at the end of each clinical posting of ENT, 4th and 6th semester) Each examination will be of 50 marks.

Total of 2 examinations – 100 marks , will be converted to 5 marks.(C/5)

Prelim examination:

This will be conducted for 40 marks as per university pattern and marks will be converted to 5 (D/5).

Total marks of Internal assessment-of Practical will be addition of C and D.

Methods - Theory, Practical and Viva

Pattern of theory examination including distribution of marks, questions and time

1. There shall be one theory paper , carrying 40 marks
2. The paper will have two sections, A and B
3. The paper will be of 2.5 hours duration.
4. Section A will be MCQ in each paper. Section B will have to be written in separate answer sheets.
5. MCQ section A will be given to candidates at the beginning of the examination. After 30 minutes Section A will be collected. Section B of paper will then be handed over to candidates.

THEORY: 40 marks Duration: Two and half hours (2.5) hours

Section A :30 min. duration

1. Twenty eight MCQs- 1/2 mark each: 14 marks
2. Separate paper Single based response
3. MCQ will cover whole syllabus

Section B : 2 hours duration

1. Two long questions (LAQ) of 7 marks each : 14 marks
(will contain some preclinical / paraclinical aspects)
2. Three /five (SAQ)short notes - 4 marks each : 12 marks

PRACTICAL : 40 marks

Clinical

1. One long case :20 marks :30 min. For examination and 10minutes for assessment
2. One short case :10 marks :15 min.for examination and 5 minutes for assessment

Oral (viva voce): 10 marks: 10 min. duration

(Instruments, x-rays, specimens, audiograms)

- Marks of VIVA will be added to Theory marks
- It is compulsory to obtain 50% marks in theory.
- It is mandatory to obtain 50% marks in theory+viva/oral. _____

SCHEME FOR EXAMINATION FOR FINAL MBBS

EXAMINATION IN OBSTETRICS AND GYNAECOLOGY

Methods – Internal assessment, Theory, Practical and Viva

- **Internal assessment: 40 (Theory 20 +Practical 20)**

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Passing in internal assessment is essential for passing ,as Internal assessment is separate head of passing. in examination.
- It will also be considered for grace marks as per existing rules
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.
- Student will be allowed to appear for both theory and practical exam independent of marks obtained in internal assessment but he if fails in that head even after including the grace marks he will be declared “Fail in that Subject”

Internal assessment in Theory -

Examinations during semesters : This will be carried out by conducting two theory examinations during 6th and 8th semesters (100 marks each). Total of 200 marks to be converted into 10 marks.(A/10)

Prelim examination : This shall be carried out during 9th semester. Two theory papers of 40 marks each as per university examination. Total of 80 marks to be converted into 10 marks. (B/10)

Total marks of Internal assessment- Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

There will be practical examination at the end of each clinical posting of OBGY. Each examination will be of 50 marks. Total of all exams marks will be converted to 10 marks.(C/10)

Prelim examination:

This will be conducted for 60 marks as per university pattern and marks will be converted to 10 (D/10). Total marks of Internal assessment- Practical will be addition of C and D.

Evaluation Methods - Theory, Practical and Viva

Pattern of theory examination including distribution of marks, questions and time

Pattern of theory examination including distribution of marks

1. There shall be two theory papers - Paper I and II, carrying 40 marks each.
2. Each paper will have three sections, A , B and C. Each paper will be of 2.5 hours duration.
3. Section A will be MCQ in each paper. Section B will have SAQ and Section C LAQ answer sheet.
4. MCQ section A will be given to candidates at the beginning of the examination.
5. After 30 minutes Section A will be collected. Section B & C of paper will then be handed over to candidates

PAPER I

Topics - Obstetrics including social obstetrics and newborn care

Section A :30 min. duration

- || Twenty eight MCQs- /2 mark each : 14 marks
- o Single based response

- || MCQ will cover whole syllabus of Paper I

Section B & C : 2 hours duration

Section B - Three /five (SAQ)short notes -4 marks each 12 marks

o Section C - Two long questions (LAQ) of 7 marks each 14 marks

(will contain some preclinical/Para clinical aspects)

PAPER II :

Topics :Gynaecology, Family Welfare and Demography -

Section A :30 min. duration

- |Separate paper
- |Twenty eight MCQs- 1/2 mark each 14 marks
- |Single based response
- | MCQ will cover whole syllabus of Paper II

Section B & C : 2 hours duration

Section B - Three /five (SAQ)short notes -4 marks each 12marks

Section C - Two long questions (LAQ) of 7 marks each 14 marks
(will contain some preclinical/Para clinical aspects)

Scheme Of Practical & Oral Examination For Obstecrics & Gynaecology

PRACTICAL : Total – 60 Marks

1) LONG CASE : 40 Marks

- A) History 10 Marks
- B) Clinical Exam 10 Marks
- C) Investigations & diagnosis 10 Marks
- D) Management 10 Marks

2) SHORT CASE : 10 Marks

- A) Presentation 05 Marks
- B) Discussion 05 Marks

3) FAMILY PLANNING 10 Marks

Total : 60 Marks

4) ORAL / VIVA 20 Marks

- A) Obstetric Viva 10 Marks
- B) Gynaecology Viva 10 Marks

TOTAL MARKS FOR PRACTICAL & ORAL (60+20) = 80 Marks

Marks of VIVA will be added to Theory marks

It is mandatory to obtain 50% marks in theory+viva/oral.

REVISED INTERNAL ASSESSMENT EXAMINATION SCHEME w.e.f. JUNE 2007 EXAMINATION

YEAR: - Third (I) MBBS

SN.	Subject	1 st Term End			2 nd Term End			Preliminary Examination		
		Semester	Theory	Practical	Semester	Theory	Practical	Semester	Theory	Practical
			(A)	(B)		(C)	(D)		(E)	(F)
1.	PSM	IV	60	20	VI	60	20	VII	120	40
2.	ophthalmology	VI	40	40	-	-	-	VII	40	40
3.	ENT	VI	40	40	-	-	-	VII	40	40

(B) Calculation Method:-

- I) For PSM Theory Marks to be send to the University out of 20 = $\frac{(A)+(C)+(E)}{12} = \frac{60+60+120}{12} = \frac{240}{12} = 20$
- II) For PSM Practical Marks to be send to the University out of 20 = $\frac{(B)+(D)+(F)}{4} = \frac{20+20+40}{4} = \frac{80}{4} = 20$
- III) For Ophthalm & ENT Theory Marks to be send to the University out of 10 = $\frac{(A)+(C)+(E)}{8} = \frac{40+0+40}{8} = \frac{80}{8} = 10$
- IV) For Ophthalm & ENT Practical Marks to be send to the University out of 10 = $\frac{(B)+(D)+(F)}{8} = \frac{40+0+40}{8} = \frac{80}{8} = 10$

REVISED INTERNAL ASSESSMENT EXAMINATION SCHEME w.e.f. JUNE 2007 EXAMINATION

YEAR: - Third (II) MBBS

SN.	Subject	1 st Term End			2 nd Term End			Preliminary Examination		
		Semester	Theory	Practical	Semester	Theory	Practical	Semester	Theory	Practical
			(A)	(B)		(C)	(D)		(E)	(F)
1.	Medicine	VI	60	60	VIII	60	60	IX	120	120
2.	Surgery	VI	60	60	VIII	60	60	IX	120	120
3.	Obstetrics/Gynecology	VI	40	40	VIII	40	40	IX	80	80
4.	Pediatrics	VI	20	20	VIII	20	20	IX	40	40

(B) Calculation Method:-

- | | | |
|--|---|--|
| I) For Medicine & Surgery Theory Marks to be send to the University out of 30 | = | $\frac{(A)+(C)+(E)}{8} = \frac{60+60+120}{8} = \frac{240}{8} = 30$ |
| II) For Medicine & Surgery Practical Marks to be send to the University out of 30 | = | $\frac{(B)+(D)+(F)}{8} = \frac{60+60+120}{8} = \frac{240}{8} = 30$ |
| III) For Obstetrics/Gynecology Theory Marks to e send to the University out of 20 | = | $\frac{(A)+(C)+(E)}{8} = \frac{40+40+80}{8} = \frac{160}{8} = 20$ |
| IV) For Obstetrics/Gynecology Practical Marks to be send to the University out of 20 | = | $\frac{(B)+(D)+(F)}{8} = \frac{40+40+80}{8} = \frac{160}{8} = 20$ |
| V) For Pediatrics Theory Marks to be send to the University out of 10 | = | $\frac{(A)+(C)+(E)}{8} = \frac{20+20+40}{8} = \frac{80}{8} = 10$ |
| VI) For Pediatrics Practical Marks to be send to the University out of 10 | = | $\frac{(B)+(D)+(F)}{8} = \frac{20+20+40}{8} = \frac{80}{8} = 10$ |

Note:- For Surgery and Orthopedics Scheme will be as follows, however these marks should be combined and send to the University out of 30.

SN.	Subject	1 st Term End			2 nd Term End			Preliminary Examination		
		Semester	Theory	Practical	Semester	Theory	Practical	Semester	Theory	Practical
			(A)	(B)		(C)	(D)		(E)	(F)
1.	Surgery	VI	48	48	VIII	48	48	IX	96	96
2.	Orthopedics	VI	12	12	VIII	12	12	IX	24	24

SECTION C :

INTERNSHIP PROGRAMME

Internship discipline related and curriculum in family welfare shall be according to norms laid down by Medical Council of India

SECTION D :

CURRICULAI FOR THE FAMILY WELFARE :

It shall be as per M.C.I. and is included in respective subjects.

METHODS OF THE ASSESSMENT OF LEARNING OUTCOMES AND GRADUATE ATTRIBUTES (UG/PG)

2. METHODS OF ASSESSMENT OF LEARNING OUTCOMES AND POSTGRADUATE ATTRIBUTES

Attendance, Progress and Conduct

A candidate pursuing degree course works in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course

Each year is taken as a unit for the purpose of calculating attendance. It is mandatory for every student to attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons. Every Candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. This includes assignments, assessment of full time responsibilities and participation in all facets of educational process. Leaves of any kind are not counted as part of academic term without prejudice to minimum 80% attendance of training period every year. Leave benefits are as per university rules.

A post graduate student pursuing degree course in broad specialties, MD, MS required to present one poster presentation, read one paper in national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him/her to be eligible to appear at the university degree examinations. (MCI, PG 2000, 13.9)

Any student who fails to complete the course in the manner stated above is not permitted to appear for the University Examinations.

Monitoring Progress of Studies

The learning process of students is monitored through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring is done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment done by using checklists that assess various aspects.

The learning outcomes to be assessed include:

- || Personal Attitudes,
- || Acquisition of Knowledge,
- || Clinical and operative skills, skills of performing necessary tests/experiments
- || Teaching skills.
- || Documentation skills

Personal Attitudes:

The essential items are:

- Caring attitude, empathy
- Initiative in work and accepting responsibilities
- Organizational ability
- Potential to cope with stressful situations and undertake graded responsibility
- Trustworthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The Methods used mainly consist of observation. Any appropriate methods can be used to assess these. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers. However every attempt should be made to minimize subjectivity.

Acquisition of Knowledge:

Lectures:

Lectures/theory classes are necessary to be conducted. It is preferable to have one class per week if possible. They may, be employed for teaching certain topics. Lectures may be didactic or integrated.

The following selected common topics for post graduate students of all specialties to be covered are suggested here. These topics can be addressed in general with appropriate teaching-learning methods centrally or at

departmental level.

- || History of medicine with special reference to ancient Indian medicine
- || Basics of health economics and health insurance
- || Medical sociology, Doctor –Patient relationship, role of family in disease
- || Professionalism & Medical code of Conduct and Medical Ethics
- || Research Methods, Bio-statistics
- || Use of library, literature search, use of various software and databases.
- || Responsible conduct of research
- || How to write an article, publication ethics and Plagiarism
- || Journal review and evidence based medicine
- || Use of computers & Appropriate use of AV aids
- || Rational drug therapy
- || National Health and Disease Control Programmes
- || Roles of specialist in system based practice
- || Communication skills.
- || Bio medical waste management
- || Patient safety, medical errors and health hazards
- || Patient's rights for health information and patient charter.

These topics are preferably in the first few weeks of the 1st year commonly for all new postgraduates and later in 2nd year or 3rd year as required during their progression of the programme. The specialty wise topics can be planned and conducted at departmental level.

a) Integrated teaching:

These are recommended to be taken by multidisciplinary teams for selected topics, e.g. Jaundice, Diabetes mellitus, thyroid diseases etc. They should be planned well in advance and conducted.

Journal Review Meeting (Journal club):

The ability to do literature search, in depth study, presentation skills, use of audio – visual aids, understanding and applying evidence based medicine are to be focused and assessed. The assessment is made by faculty members and peers attending the meeting using a checklist

Seminars / symposia:

The topics are assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio – visual aids are to be assessed using a checklist.

Clinico-Pathological conferences:

This is a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit:

Periodic morbidity and mortality meetings are held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

Clinical Skills:

Day to Day Work: Skills in outpatient and ward work is assessed periodically. The assessment includes the candidates' sincerity and punctuality, analytical ability and communication skills.

Clinical Meetings:

Candidates are periodically presenting cases to his peers and faculty members. This is assessed using a check list.

Group discussions:

Group discussions are one of the means to train and assess the student's ability to analyse the given problem or situation, apply the knowledge and make appropriate decisions. This method can be adopted to train and assess the competency of students in analyzing and applying knowledge.

Death review meetings/Mortality meetings:

Death review meetings are important method for reflective learning. A well conducted morbidity and mortality meetings bring about significant reduction in complications, improve patient care and hospital services. They also address system related issues. Monthly meetings should be conducted

with active participation of faculty and students. Combined death review meetings may be required wherever necessary.

Clinical and Procedural Skills:

The candidates are given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book.

Teaching Skills:

Candidates are encouraged to teach undergraduate medical students and paramedical students, if any. This performance is based on assessment by the faculty members of the department and from feedback from the undergraduate students.

Attitude and Communication skills:

Candidates are trained in proper communication skills towards interaction and communication with patients, attendees and society in general. There is appropriate training in obtaining proper written informed consent, discussion and documentation of the proceedings. Structured trainings are given in various areas like consent, briefing regarding progress and breaking bad news are essential in developing competencies.

Variety of teaching -

Learning methods like Role play, video based training, standardized patient scenarios, and reflective learning and assisting the team leader in all these areas improves the skills. Assessment done using OSCE simulated scenarios and narratives or any appropriate means. Training to work as team member, lead the team whenever situation demands. Mock drills to train and assess the readiness are very helpful.

Work diary / Log Book:

Every candidate shall maintain a Work Diary/Log Book and record his/her participation in the training programs conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, conducted by the candidate. A well written and validated Log Book reflects the competencies attained by the learner and points to the gap

which needs address. This Log Book shall be scrutinized by concerned teachers periodically and certified, by the Head of Department and Head of the Institution, and presented during University Practical / Clinical examination.

ASSESSMENT:

Assessment is comprehensive & objective. It addresses the stated competencies of the course. The assessment is throughout duration of the course.

FORMATIVE ASSESSMENT, i.e., assessment during the training includes:

Formative assessment is continual and assesses medical knowledge, patient care, procedural & academic skills, interpersonal skills, professionalism, self-directed learning and ability to practice in the system.

General Principles

Internal Assessment is frequent, covers all domains of learning and used to provide feedback to improve learning; it also covers professionalism and communication skills. The Internal Assessment conducted in theory and clinical examination.

Quarterly assessment during the Postgraduate training course should be based on following educational activities:

1. Journal based/recent advances learning
2. Patient based/Laboratory or Skill based learning
3. Self-directed learning and teaching
4. Departmental and interdepartmental learning activity
5. External and outreach Activities/CMEs

Records:

Records and marks obtained in tests will be maintained by the Head of the Departments and will be made available to the University or MCI.

Procedure for defaulter:

The defaulting candidate is counseled by the guide and head of the

department. In extreme cases of default it is recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Dissertation:

Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The result of such a work is submitted in the form of a dissertation.

The dissertation aims to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis and comparison of results and drawing conclusions.

Every candidate submits dissertation to the Registrar (Academic) of the University in the prescribed Proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University. The synopsis is sent through the proper channel.

Such synopsis is reviewed and the dissertation topic registered by the University. No change in the dissertation topic or guide can be done without prior approval of the University.

The dissertation is written under the following headings:

1. Introduction
2. Aims or Objectives of study
3. Review of Literature
4. Material and Methods
5. Results
6. Discussion
7. Conclusion
8. Summary
9. References
10. Tables
11. Annexure

The dissertation is certified by the guide, head of the department and head of the Institution.

Adequate number of copies as per norms and a soft copy of dissertation thus prepared are submitted to the Controller of Examinations six months before final examination on or before the dates notified by the University.

The dissertation is evaluated by examiners appointed by the university. Acceptance of dissertation work is an essential precondition for a candidate to appear in the University examination.

Guide:

The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per Medical Council of India Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998 and its amendments thereof.

A Co-guide may be included provided the work requires substantial contribution from a sister department or from another medical institution recognized for teaching/training by this University / Medical Council of India. The co-guide is a recognized post graduate teacher of the University.

Change of guide:

In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the University.

Schedule of Examination:

The examinations for M.D. /M.S courses are scheduled at the end of three academic years. The university conducts two examinations in a year at an interval of six months between the two examinations. Not more than two examinations are conducted in an academic year.

Scheme of Examination

M.D. /M.S. Degree

M.D./M.S. Degree examinations in any subjects is consist of dissertation, written papers (Theory), Practical/Clinical and Viva Voce.

Dissertation:

Every candidate must carry-out work and submit a Dissertation as indicated above. Acceptance of dissertation is a precondition for the candidate to appear for the final examination.

Written Examination (Theory):

Written examinations are consists of **four** question papers, each of **three** hours duration. Each paper carries 100 marks.

Practical / Clinical Examination:

In case of practical examination, it is aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, aim is to examine clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate is given at least one long case and two short cases minimum. However additional assessment methods can be adopted which will test the necessary competencies reasonably well.

The total marks for Practical / Clinical examination- 300.

Viva Voce:

Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills.

The total marks shall be 100:

- || 80 Marks, for examination of all components of syllabus
- || 20 Marks for Pedagogy

Examiners:

There are at least four examiners in each subject. Out of them two are external examiners and two are internal examiners. The qualification and teaching experience for appointment as an examiner is as laid down by the Medical Council of India.

Criteria for pass & distinction:

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical/clinical and (3) viva voce examination. The candidate should pass independently in practical/clinical examination and Viva Voce: vide MCI p.g. 2000 Reg. no 14(4) (Ciii). Minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers for degree examinations. Obtaining of 50% marks in Practical examination shall be mandatory for passing the examination as a whole in the said degree examination as the case may be.[amendment of MCI PG Regulations clause 14 dated 5.4.2018].

A candidate securing less than 50% of marks as described above is declared failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

Additional annexure to be included in all curricula
 Postgraduate Students Appraisal Form Pre/Para/Clinical
 Disciplines

Name of Department/Unit :

Name of the PG Student :

Period of Training : FROM..... TO.....

Sr. No	PARTICULARS	No Satisfactory	Satisfactory	More Than Satisfactory	Remarks
		1 2 3	4 5 6	7 8 9	
1	Journal based/recent advances learning				
2	Patient based /Laboratory or Skill based learning				
3	Self directed learning and teaching				
4	Departmental and interdepartmental learning activity				
5	External and Outreach Activities/CMEs				
6	Thesis/Research work				
7	Log Book Maintenance				

Publications

Yes/No

Remarks*

.....

.....

.....

*Remarks: Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF GUIDE

SIGNATURE OF HOD

SIGNATURE OF UNIT CHIEF


Co-Ordinator, IQAC
J.J.M.S.R. Medical College, Latur




Dean
J.J.M.S.R. Medical College,
& Y.C.R. HOSPITAL,
LATUR - 413 531.