

**Paper wise distribution of topics for Prelim & MUHS Annual Examination**

**Year: First MBBS    Subject:    Anatomy**

| <b>Paper</b> | <b>Section</b>   | <b>Topics</b>   |
|--------------|--|---|
| I            | A  | MCQs on all topics of the paper I   |
|              | B & C  | Superior extremity  |
|              |  | General embryology  |
|              |  | Genetics  |
|              |  | Head , neck , face  |
|              |  | Central nervous system  |
|              |  | One short answer question on AETCOM module 1.1 & 1.5  |
|              |  | Scenario based / application questions can be on any topic of the paper I                         |
|              |  | For long answer question and scenario based / application questions , region will not be repeated |
| II           | A  | MCQs on all topics of the paper II  |
|              | B & C  | General Anatomy   |
|              |  | General histology   |
|              |  | Gross Anatomy of Abdomen and Pelvis   |
|              |  | Gross Anatomy of Inferior extremity   |
|              |  | Thorax  |
|              | Scenario based / application questions can be on any topic of the paper II |   |
|              |  | For long answer question and scenario based / application questions , region will not be repeated |

## Internal Assessment

### Anatomy

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

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

| Sr. No                 | Preliminary Examinations |   | Sr. No         | Remedial internal assessment examination for <b>Non - eligible</b> students |   |
|------------------------|--------------------------|---|----------------|---|---|
|                        | Theory                   | Practical Including 10 Marks for Journal & Log Book |                | Theory  | Practical Including 10 Marks for Journal & Log Book |
| <b>III-Exam (July)</b> |                          |   |                |   |   |
| 1                      | 200                      | 100   | 1              | 200   | 100   |
| Total Marks            |                          | 300   | <b>October</b> |   | 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 7<sup>th</sup> 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)<br>(40% Separately in Theory and Practical, 50% Combined) |
|-----------|----------|-----------|-------------------|-------|---|---|
| Theory    | 100      | 100       | 200               | 400   | $\frac{\text{Total marks obtained}}{10}$                  | 16 (minimum)<br><br>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)<br>(40% Separately in Theory and Practical, 50% Combined) |
|-----------|------------------------|---|--|
| Theory    | 200                    | $\frac{\text{Total marks obtained}}{5}$           | 16 (minimum)<br><br>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 (Prelim)

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

| Anatomy    |           |                          |  |                |                   |   |                  |       |                       |         |                        |       |       |
|------------|-----------|--------------------------|--|----------------|-------------------|---|------------------|-------|-----------------------|---------|------------------------|-------|-------|
| Seat No.   | Soft Part | Practical                |  |                |                   |   |                  |       | Oral/Viva             |         |                        |       | Total |
|            |           | 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 |       |
|            | 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

| <b>Anatomy</b>    |                  |                          |  |                |                   |   |       |                       |           |                        |       |               |              |
|-------------------|------------------|--------------------------|--|----------------|-------------------|---|-------|-----------------------|-----------|------------------------|-------|---------------|--------------|
| Seat No.          | <b>Practical</b> |                          |  |                |                   |   |       | <b>Oral/Viva</b>      |           |                        |       |               | <b>Total</b> |
|                   | 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     |               |              |
| <b>Max. Marks</b> | 30               | 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 : <b>First MBBS</b><br><i>(applicable w.e.f. Sept. 2020 &amp; onwards examinations)</i> | 2. Subject Code : <b>Appendix - a</b> |                               |                                  |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                                    |                                       |                               |                                  |
| 4. Paper : : <b>I</b>  | 5. Total Marks : <b>100</b>           | 6. Total Time : <b>3 Hrs.</b> | 7. Remu. (PS) : <b>Rs. 300/-</b> |
|  |                                       |                               | 8. Remu. (PM) : <b>Rs. 350/-</b> |
| 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 : <b>First MBBS</b><br><i>(applicable w.e.f. Sept. 2020 &amp; onwards examinations)</i> | 2. Subject Code : <b>Appendix - a</b> |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                                    |                                       |
| 4. Paper : <b>II</b>   | 5. Total Marks : <b>100</b>           |
|  | 6. Total Time : <b>3 Hrs.</b>         |
|  | 7. Remu. (PS) : <b>Rs. 300/-</b>      |
|  | 8. Remu. (PM) : <b>Rs. 350/-</b>      |
| 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 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)  
 Minimum 2 SAQs should be Case Based Questions/ Clinically applied Questions.
4.
  - a)   b)   c)   d)   e)   f)   g)   h)   i)
 Long Answer Questions (Any Two out of Three)
  - b)   c)(2x 10= 20)

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

**Paper wise distribution of topics**

**Year: First MBBS Subject: Physiology**

| Paper | Section   | Topics  |
|-------|---|---|
| I     | A   | MCQs on all topics of the paper I   |
|       | B & C   | General Physiology  |
|       |   | Blood   |
|       |   | Respiratory System  |
|       |   | Cardio Vascular System,   |
|       |   | Cardio-respiratory and metabolic adjustment during exercise                                       |
|       |   | Renal system  |
|       |   | Gastro intestinal system  |
|       |   | Life style, aging, Meditation   |
|       | AETCOM module no. 1.2 & 1.3   |   |
|       | Scenario based / application questions can be on any topic of the paper I                         |   |
|       | For long answer question and scenario based / application questions , topics will not be repeated |   |
| II    | A   | MCQs on all topics of the paper II  |
|       | B & C   | Endocrine Physiology  |
|       |   | Reproductive System, Physiology of Infancy  |
|       |   | Special senses  |
|       |   | Central nervous system including brain death<br>Temperature Regulation & applied                  |
|       |   | Nerve muscle physiology   |
|       |   | Scenario based / application questions can be on any topic of the paper II                        |
|       |   | For long answer question and scenario based / application questions , topics will not be repeated |



**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) |   | Total Marks |
|--------|-------------------|--|-----------------|---|-------------|
|        | Theory            | Practical (Including 05 Marks for Journal & Log Book ) | Theory          | Practical Including 05 Marks for Journal & Log Book |             |
| 1      | 100               | 50   | 100             | 50  | 150         |

| Sr. No | Preliminary Examinations                            |             | Sr. No | Remedial internal assessment examination for <b>Non - eligible</b> students |   | Total Marks |
|--------|---|-------------|--------|---|---|-------------|
|        | Practical Including 10 Marks for Journal & Log Book | Total Marks |        | Theory  | Practical Including 10 Marks for Journal & Log Book |             |
| 1      | 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 7<sup>th</sup> 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)<br><br>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)  |
| Practical | 100                    | $\frac{\text{Total marks obtained}}{2.5}$         | 16 (minimum)  |
|           |                        |   | Total of Theory + Practical <u>Must</u> 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 Internal Assessment Examinations I & II (Applicable for batch admitted in M.B.B.S Course from Academic Year 2019-20 & onwards)**

| <b>Physiology</b> |            |   |                     |           |       |
|-------------------|------------|---|---------------------|-----------|-------|
|                   | Hematology | Clinical Examination/Human Physiology expt. / Short exercises | Journal/<br>Logbook | Oral Viva | Total |
|                   | A          | B   | C                   | D         | E     |
| <b>Max. Marks</b> | 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 |      |     |
|-------------|----------------------|------|-------------------------|------------|----------------|----------------------------------|-------------------|-------------------|---------------|------|-----|
|             | C.V.S                | R.S  | C.N.S. & Special Senses |            |                |                                  |                   |                   |               |      |     |
|             | Clinical Examination |      |                         |            |                |                                  |                   |                   |               |      |     |
|             |                      |      | General Exam & Abdomen  | Hematology | Short exercise | Human Physiology Experiment book | Journal & Log     |                   |               |      |     |
|             | 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)

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

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         | 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 : <b>First MBBS</b><br>(applicable w.e.f. Sept. 2020 & onwards examinations) | 2. Subject Code : <b>Appendix - a</b> |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                         |                                       |
| 4. Paper : <b>I</b>   | 5. Total Marks : <b>100</b>           |
|   | 6. Total Time : <b>3 Hrs.</b>         |
|   | 7. Remu. (PS) : <b>Rs. 300/-</b>      |
|   | 8. Remu. (PM) : <b>Rs. 350/-</b>      |
| 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 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 : <b>First MBBS</b><br><i>(applicable w.e.f. Sept. 2020 &amp; onwards examinations)</i> | 2. Subject Code : <b>Appendix - a</b> |                               |                                  |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                                    |                                       |                               |                                  |
| 4. Paper : : <b>II</b>   | 5. Total Marks : <b>100</b>           | 6. Total Time : <b>3 Hrs.</b> | 7. Remu. (PS) : <b>Rs. 300/-</b> |
|  |                                       |                               | 8. Remu. (PM) : <b>Rs. 350/-</b> |
| 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 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)  
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.**



Paper wise distribution of topics  
Year: First MBBS Subject: Biochemistry

| Paper   | Section     | Topics  | Competency nos. BI |
|---|-------------|---|--------------------|
| I   | A           | MCQs on all topics of the paper I   |                    |
|   | B & C       | Basic Biochemistry  | 1.1                |
|   |             | Enzymes   | 2.1-2.7            |
|   |             | Chemistry & metabolism of carbohydrates   | 3.1-3.10           |
|   |             | Chemistry & metabolism of lipids  | 4.1-4.7            |
|   |             | Biological oxidation  | 6.6                |
|   |             | Xenobiotics   | 7.5                |
|   |             | Antioxidants & defence system   | 7.6-7.7            |
|   |             | Nutrition   | 8.1-8.5            |
|   |             | Extracellular matrix  | 9.1-9.3            |
|   |             | Oncology , oncogenesis & immunity   | 10.1-10.5          |
|   |             | Biomedical waste  | 11.1               |
|   |             | Physical characteristics and chemical composition of CSF  | 11.15              |
|   |             | Energy contents of lipids, carbohydrates & proteins in common food items, Advantages of unsaturated fats. Disadvantages of saturated and trans fats in food | 11.23 & 11.24      |
|   | AETCOM- 1.4 |   |                    |
| For long answer question and scenario based / application questions, topics will not be repeated. |             |   |                    |
| II  | A           | MCQs on all topics of the paper II  |                    |
|   | B & C       | Chemistry & metabolism of proteins  | 5.1-5.5            |
|   |             | Integration & starvation  | 6.1                |
|   |             | Nucleic acid metabolism   | 6.2-6.4            |
|   |             | Vitamins  | 6.5                |
|   |             | Water electrolyte balance & acid base balance   | 6.7-6.8            |
|   |             | Mineral metabolism  | 6.9-6.10           |
|   |             | Haemoglobin chemistry and metabolism  | 6.11-6.12          |



|   |  |           |
|---|--|-----------|
|   | Organ function test  | 6.13-6.15 |
|   | Molecular biology  | 7.1-7.3   |
|   | Genetic engineering  | 7.4       |
|   | Urine: Screening of inborn errors.   | 11.5      |
|   | Principle, application and working of following lab equipments/techniques: pH meter, paper chromatography of amino acids, protein electrophoresis, TLC, PAGE, Electrolyte analysis by ISE, ABG analyzer, ELISA, immunodiffusion, auto analyzer, quality control, DNA isolation from blood/tissue | 11.16     |
| For long answer question and scenario based / application questions, topics will not be repeated. |  |           |

**Internal Assessment  
Biochemistry**

**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) | Theory          | Practical (Including 05 marks For Journals And Log Book) |
| 1 | 100               | 50   | 100             | 50   |
|   | Total Marks       |  |                 | Total Marks  |
|   | 100               | 50   | 100             | 50   |
|   | 150               |  | 150             |  |

| Preliminary Examinations |   | Remedial internal assessment examination for<br><b>Non - eligible students</b> |   |
|--------------------------|---|--|---|
| III-Exam (July)          |   | <b>October</b>   |   |
| Theory                   | Practical Including 10 Marks for Journal & Log Book | Theory   | Practical Including 10 Marks for Journal & Log Book |
| 200                      | 100   | 200  | 100   |
| 300                      |   | 300  |   |
|                          |   |  | Total Marks   |
|                          |   |  | 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 7<sup>th</sup> 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 <u>Must be 40.</u>   |

### 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 <u>Must be 40.</u>  |

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)**

| <b>Biochemistry</b> |                                |  |              |                        |                  |              |
|---------------------|--------------------------------|--|--------------|------------------------|------------------|--------------|
| <b>Practical</b>    |                                |  |              |                        |                  |              |
| <b>Seat No.</b>     | <b>Quantitative Experiment</b> | <b>Experiment/Urine organic/Urine Report/Quality Control/Interpolation of lab Report /Interpolation of Special Technique</b> | <b>Spots</b> | <b>Journal/Logbook</b> | <b>Oral/Viva</b> | <b>Total</b> |
|                     |                                |  |              |                        |                  |              |
|                     | A                              | B  | C            | D                      | E                | F            |
| <b>Max. Marks</b>   | 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 : <b>First MBBS</b><br><i>(applicable w.e.f. Sept. 2020&amp; onwards examinations)</i> | 2. Subject Code : <b>Appendix - a</b> |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                                   |                                       |
| 4. Paper : <b>I</b>   | 5. Total Marks : <b>100</b>           |
|   | 6. Total Time : <b>3 Hrs.</b>         |
|   | 7. Remu. (PS) : <b>Rs. 300/-</b>      |
|   | 8. Remu. (PM) : <b>Rs. 350/-</b>      |
| 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 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 : <b>First MBBS</b><br><i>(applicable w.e.f. Sept. 2020&amp; onwards examinations)</i> | 2. Subject Code : <b>Appendix - a</b> |                               |                                  |
| 3. Subject (PSP) : <b>Anatomy / Physiology / Biochemistry</b><br>(TT) :                                   |                                       |                               |                                  |
| 4. Paper : : <b>II</b>  | 5. Total Marks : <b>100</b>           | 6. Total Time : <b>3 Hrs.</b> | 7. Remu. (PS) : <b>Rs. 300/-</b> |
|   |                                       |                               | 8. Remu. (PM) : <b>Rs. 350/-</b> |
| 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 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)  
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.**

## Paper wise distribution of topics for Prelim & MUHS Annual Examination

Year: Second MBBS    Subject: **Pharmacology**

| Paper     | Section  | Topics   |
|-----------|----------|--|
| <b>I</b>  | <b>A</b> | <b>MCQs on all topics of the paper I</b>   |
|           | <b>B</b> | General Pharmacology   |
|           |          | Autonomic Nervous system including skeletal muscle relaxants   |
|           |          | Cardiovascular system  |
|           |          | Haematology  |
|           |          | Gastro intestinal drugs  |
|           |          | Respiratory system   |
|           |          | AETCOM- 2.1, 2.2, 2.3 (section B one SAQ)  |
| <b>II</b> | <b>A</b> | <b>MCQs on all topics of the paper II</b>  |
|           | <b>B</b> | Central Nervous system including general/local anaesthesia   |
|           |          | Endocrine system   |
|           |          | Chemotherapy system  |
|           |          | Autacoids  |
|           |          | MISC. TOPICS : Chelating agents, Vaccines and Antisera, ocular pharmacology, dermatological pharmacology, nutraceuticals, occupational and environmental pharmacology, toxicology) |



| Phase  | Theory   | Practical  |
|--|--|--|
| IA 1   | 100  | 100  |
| IA 2   | 100  | 100  |
| Prelim                                       | 200  | 100  |
| <b>Total</b>                                 | <b>400</b>   | <b>300</b>   |
| <b>Conversion out of</b>                     | <b>40</b>  | <b>40</b>  |
| <b>Conversion formula</b>                    | <b>Total marks in 3 IA theory examinations /10</b> | <b>Total marks in 3 IA Practical examinations /7.5</b> |
| <b>Eligibility criteria after conversion</b> | 16   | 16   |
|  | <b>Combined theory + Practical = 40</b>            |  |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 33.01 to 33.49                  | 33                  |
| 33.50 to 33.99                  | 34                  |

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.

6. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

**7. Remedial measures**

**A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
- ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|   | Theory                                   | Practical                                     |
|---|--|---|
| Remedial examination (pattern as per final examination) | 200                                      | 100   |
| Conversion out of                                       | 40                                       | 40  |
| Conversion formula                                      | Marks in remedial theory examinations /5 | Marks in remedial Practical examinations /2.5 |
| Eligibility criteria after conversion                   | 16                                       | 16  |
|   | Combined theory + Practical = 40         |   |

**B. Remedial measures for absent students:**

If any of the students is absent for any of the 3 IA examinations due to any reasons, following measures shall be taken.

- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
- ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
- iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

**Practical marks Distribution:**

**A. For I<sup>st</sup> and II<sup>nd</sup> IA examinations**

1. **Journal / Logbook - 10 Marks**
2. **Viva – 20 marks**
3. **Clinical Pharmacy (20 marks) –**
  - a. Dosage form- 10 marks,
  - b. ORS preparation/ IV drip setting- 5 marks
  - c. Dose calculation – 5 marks
4. **Clinical Pharmacology (30 marks)-**
  - a. Prescription writing- 10 marks
  - b. Prescription criticism and rewriting / justification of FDC – 10 marks
  - c. ADR identification / ADR reporting- 5 marks
  - d. P- drug list- 5 marks.
5. **Experimental Pharmacology (10 marks) OSPE –**
  - a. Drug administration using maniquin / drug effect using CAL software (or any other)- 10 marks
6. **Communication (10 marks) OSPE-**
  - a. prescription communication / ethics- legal drug storage/ use of device/drug adherence-compliance/ drug dependence/OTC/ interaction with Medical representative- 10 marks

**B. For Preliminary examinations**

1. **Viva – 30 marks**
  - a. Viva I- 15 marks
  - b. Viva II- 15 marks
2. **Clinical Pharmacy (20 marks) –**
  - a. Dosage form- 10 marks,
  - b. ORS preparation/ IV drip setting- 5 marks
  - c. Dose calculation – 5 marks
3. **Clinical Pharmacology (30 marks)-**
  - a. Prescription writing- 10 marks
  - b. Prescription criticism and rewriting / justification of FDC – 10 marks
  - c. ADR identification / ADR reporting- 5 marks
  - d. P- drug list- 5 marks.
4. **Experimental Pharmacology (10 marks) OSPE –**
  - a. Drug administration using maniquin / drug effect using CAL software (or any other)- 10 marks
5. **Communication (10 marks) OSPE-**
  - a. prescription communication / ethics- legal drug storage/ use of device/drug adherence-compliance/ drug dependence/OTC/ interaction with Medical representative- 10 marks

**Paper wise distribution of topics for Prelim & MUHS Annual Examination**  
**Year: Second MBBS**  
**Subject: Pathology**

| Paper | Section | Topics  |
|-------|---------|---|
| I     | A       | <b>Topics of the paper I</b>  |
|       |         | General Pathology:<br>1. Cell injury and adaptation<br>2. Amyloidosis<br>3. Inflammation and repair<br>4. Tuberculosis and leprosy<br>5. Hemodynamic disturbances<br>6. Immunopathology<br>7. Neoplasia<br>8. Infections and infestations<br>9. Basic diagnostic cytology<br>10. Histological techniques, tissue processing<br>11. Genetic and pediatric diseases<br>12. Environmental and nutritional diseases |
|       |         | Hematology<br>1. Introduction to hematology<br>2. Microcytic anemia<br>3. Macrocytic anemia<br>4. Hemolytic anemia<br>5. Aplastic anemia<br>6. Leukocyte disorder<br>7. Lymph node and spleen<br>8. Plasma cell disorders<br>9. Hemorrhagic disorders<br>10. Blood banking and transfusion medicine   |
|       |         | AETCOM 2.4 and 2.8  |
| II    | A       | <b>Topics of the paper II</b>   |
|       |         | Systemic Pathology<br>1. Gastrointestinal tract<br>2. Hepatobiliary system<br>3. Respiratory system<br>4. Cardiovascular system<br>5. Urinary tract<br>6. Male genital tract<br>7. Female genital tract<br>8. Breast<br>9. Endocrine system<br>10. Bone and soft tissue<br>11. Skin<br>12. Central nervous system   |
|       |         | Clinical Pathology<br>1. Urine analysis<br>2. Body fluid analysis<br>3. CSF analysis<br>4. Liver function test<br>5. Renal function test<br>6. Diabetes mellitus<br>7. Thyroid function test  |



**Second MBBS**  
**Internal Assessment**  
**Subject: Pathology**

**Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards**

| Phase       | IA – 1 -Exam (After 3 months , Jan) |  |             | IA – 2 -Exam (After 7 months, May ) |   |             | Prelims (July)               |           |             |
|-------------|-------------------------------------|--|-------------|-------------------------------------|---|-------------|------------------------------|-----------|-------------|
|             | Theory                              | Practical (Including 10 Marks for Journal & Log Book ) | Total Marks | Theory                              | Practical Including 10 Marks for Journal & Log Book | Total Marks | Theory                       | Practical | Total Marks |
| Second MBBS | 100                                 | 50   | 150         | 100                                 | 50  | 150         | Paper 1 -100<br>Paper 2 -100 | 100       | 300         |

Assessment in CBME is ONGOING PRCESS,

No Preparatory leave is permitted.

1. There shall be 3 internal assessment examinations in Pathology.
2. The suggested patterns of question paper for first two internal assessment theory examinations can be similar to any of the two papers for final examination. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 40 (theory) + 40 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

| Phase II                                     | Theory   | Practical  |
|--|--|--|
| IA 1   | 100  | 50   |
| IA 2   | 100  | 50   |
| Prelim                                       | 200  | 100  |
| <b>Total</b>                                 | <b>400</b>   | <b>200</b>   |
| <b>Conversion out of</b>                     | <b>40</b>  | <b>40</b>  |
| <b>Conversion formula</b>                    | <b>Total marks in 3 IA theory examinations /10</b> | <b>Total marks in 3 IA Practical examinations /5</b> |
| <b>Eligibility criteria after conversion</b> | <b>16</b>  | <b>16</b>  |
|  | <b>Combined theory + Practical = 40</b>            |  |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 33.01 to 33.49                  | 33                  |
| 33.50 to 33.99                  | 34                  |

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical); not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
6. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

## **7. Remedial measures**

### **A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
- ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|   | Theory                                   | Practical                                     |
|---|--|---|
| Remedial examination (pattern as per final examination) | 200                                      | 100   |
| Conversion out of                                       | 40                                       | 40  |
| Conversion formula                                      | Marks in remedial theory examinations /5 | Marks in remedial Practical examinations /2.5 |
| Eligibility criteria after conversion                   | 16                                       | 16  |
|   | Combined theory + Practical = 40         |   |

**B. Remedial measures for absent students:**

- If any of the students is absent for any of the 3 IA examinations due to any reasons, following measures shall be taken.
- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
  - ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
  - iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

# Second MBBS Practical Mark's Structure

Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards

Subject: Pathology (I.A. 1)

| Seat No.   | Practical |        |                           |             |                      |       | Oral/Viva                        |            |          | Total |
|------------|-----------|--------|---------------------------|-------------|----------------------|-------|----------------------------------|------------|----------|-------|
|            | OSPE      | PS/DLC | CBC report interpretation | Blood group | Histopathology slide | Total | Gross specimen General Pathology | Hematology | Log book |       |
| Max. Marks | 10        | 5      | 5                         | 5           | 5                    | 30    | 7                                | 8          | 5        | 50    |
|            |           |        |                           |             |                      |       |                                  |            |          |       |
|            |           |        |                           |             |                      |       |                                  |            |          |       |
|            |           |        |                           |             |                      |       |                                  |            |          |       |

Subject: Pathology (I.A. 2)

| Seat No.   | Practical |                             |                      |       |                                   |                    | Oral/Viva |       |                  | Total |
|------------|-----------|-----------------------------|----------------------|-------|-----------------------------------|--------------------|-----------|-------|------------------|-------|
|            | OSPE      | Urine report interpretation | Histopathology slide | Total | Gross specimen Systemic Pathology | Clinical pathology | Log book  | Total | Practical & Oral |       |
| Max. Marks | 20        | 5                           | 5                    | 30    | 7                                 | 8                  | 5         | 15    | 5                | 50    |
|            |           |                             |                      |       |                                   |                    |           |       |                  |       |
|            |           |                             |                      |       |                                   |                    |           |       |                  |       |

**Subject: Pathology Prelim Examination**

| Seat No.   | Practical |        |                      |                           |             |                      |         | Oral/Viva |                 |                         | Practical & Oral Total (G + ) |       |
|------------|-----------|--------|----------------------|---------------------------|-------------|----------------------|---------|-----------|-----------------|-------------------------|-------------------------------|-------|
|            | OSPE      | PS/DLC | Urine interpretation | CBC report interpretation | Blood group | Histopathology slide | Logbook | Total     | Gross specimens | Clinical and hematology |                               | Total |
|            |           |        |                      |                           |             |                      |         |           |                 |                         |                               |       |
| 32         | 10        | 10     | 5                    | 8                         | 10          | 10                   | 80      | 10        | 10              | 20                      | 100                           |       |
| Max. Marks |           |        |                      |                           |             |                      |         |           |                 |                         |                               |       |
|            |           |        |                      |                           |             |                      |         |           |                 |                         |                               |       |

**Subject: Pathology M.U.H.S. Final Exam.**

| Seat No.   | Practical |        |                      |                           |             |                      |       | Oral/Viva       |                         |       | Practical & Oral Total (G + J) |
|------------|-----------|--------|----------------------|---------------------------|-------------|----------------------|-------|-----------------|-------------------------|-------|--------------------------------|
|            | OSPE      | PS/DLC | Urine interpretation | CBC report interpretation | Blood group | Histopathology slide | Total | Gross specimens | Clinical and hematology | Total |                                |
|            |           |        |                      |                           |             |                      |       |                 |                         |       |                                |
| A          | B         | C      | D                    | E                         | F           | G                    | H     | I               | J                       | K     |                                |
| 32         | 10        | 10     | 5                    | 5                         | 8           | 70                   | 15    | 15              | 30                      | 100   |                                |
| Max. Marks |           |        |                      |                           |             |                      |       |                 |                         |       |                                |
|            |           |        |                      |                           |             |                      |       |                 |                         |       |                                |

**Paper wise distribution of topics for Prelim & MUHS Annual Examination**  
**Year: Second MBBS Subject: MICROBIOLOGY**

| Paper | Section | Topics   |
|-------|---------|--|
| I     | A       | MCQs on all topics of the paper I                      |
|       |         | General Microbiology and Immunity                      |
|       |         | CVS and Blood  |
|       |         | Gastrointestinal and hepatobiliary system              |
|       |         | AETCOM Module No- 2.5,2.6 and 2.7                      |
| II    | A       | MCQs on all topics of the paper II                     |
|       |         | Musculoskeletal system, skin and soft tissue infection |
|       |         | Central nervous system infections                      |
|       |         | Respiratory tract infections                           |
|       |         | Genitourinary and sexually transmitted infections      |
|       |         | Zoonotic diseases and miscellaneous                    |
|       |         |  |

**Second MBBS Internal  
Assessment Subject:  
Microbiology**

**Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards**

| Phase       | IA – 1 -Exam (After 3 months , Jan) |  | IA – 2 -Exam (After 7 months, May) |        | Prelims (July)                                      |             |                              |           |             |
|-------------|-------------------------------------|--|------------------------------------|--------|---|-------------|------------------------------|-----------|-------------|
|             | Theory                              | Practical (Including 10 Marks for Journal & Log Book ) | Total Marks                        | Theory | Practical Including 10 Marks for Journal & Log Book | Total Marks | Theory                       | Practical | Total Marks |
| Second MBBS | 50                                  | 50   | 100                                | 50     | 50  | 100         | Paper 1 -100<br>Paper 2 -100 | 100       | 300         |

Assessment in CBME is ONGOING PROCESS,

No Preparatory leave is permitted.

1. There shall be 3 internal assessment examinations in Microbiology.
2. The suggested patterns of question paper for first two internal assessment theory examinations is given below. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 40 (theory) + 40 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**



| Phase II                                     | Theory  | Practical  |
|--|---|--|
| IA 1   | 50  | 50   |
| IA 2   | 50  | 50   |
| Prelim                                       | 200   | 100  |
| <b>Total</b>                                 | <b>300</b>  | <b>200</b>   |
| <b>Conversion out of</b>                     | <b>40</b>   | <b>40</b>  |
| <b>Conversion formula</b>                    | <b>Total marks in 3 IA theory examinations /7.5</b> | <b>Total marks in 3 IA Practical examinations /5</b> |
| <b>Eligibility criteria after conversion</b> | <b>16</b>   | <b>16</b>  |
|  | <b>Combined theory + Practical = 40</b>             |  |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 33.01 to 33.49                  | 33                  |
| 33.50 to 33.99                  | 34                  |

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.

6. Internal assessment marks will not be added to marks of the University examinations and will be shown separately in mark list.

**7. Remedial measures**

**A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
  - ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
  - iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria.
- Following conversion formula shall be used for converting the marks.

|  | Theory  | Practical  |
|--|---|--|
| <b>Remedial examination (pattern as per final examination)</b> | <b>200</b>                                      | <b>100</b>   |
| <b>Conversion out of</b>                                       | <b>40</b>                                       | <b>40</b>  |
| <b>Conversion formula</b>                                      | <b>Marks in remedial theory examinations /5</b> | <b>Marks in remedial Practical examinations /2.5</b> |
| <b>Eligibility criteria after conversion</b>                   | <b>16</b>                                       | <b>16</b>  |
|  | <b>Combined theory + Practical = 40</b>         |  |

**B. Remedial measures for absent students:**

- If any of the students is absent for any of the 3 IA examinations due to any reasons, following measures shall be taken.
- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
  - ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
  - iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

## Format for Internal Assessment Theory Paper IA – 1 & IA - 2

| Question No. | Type of Question | No. of Questions      | Max. Marks        |
|--------------|------------------|-----------------------|-------------------|
| 1.           | MCQ              | 10                    | 10 (1 marks each) |
| 2.           | SAQ              | 5 (Any four out of 5) | 28 (7 marks each) |
| 3.           | LAQ              | 1 (Compulsory)        | 12                |
|              |                  | Total                 | 50                |

### Second MBBS Practical Mark's Structure Internal Assessment Examinations

(Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards)

|            |            | Subject : MICROBIOLOGY Practical |                  |      |       |           |                            |                  |      |       |
|------------|------------|----------------------------------|------------------|------|-------|-----------|----------------------------|------------------|------|-------|
|            |            | IA – 1                           |                  |      |       | IA - 2    |                            |                  |      |       |
| Seat No.   | Gram Stain | P.S. for M.P.                    | Journal/Log book | Viva | Total | Z-N stain | Stool - Routine microscopy | Journal/Log book | Viva | Total |
| Max. Marks | 10         | 10                               | 10               | 20   | 50    | 10        | 10                         | 10               | 20   | 50    |
|            |            |                                  |                  |      |       |           |                            |                  |      |       |

# Second MBBS Practical Mark's Structure (Prelim)

Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards

| Subject: MICROBIOLOGY |                    |  |                          |                           |                   |       |           |         |       |       |
|-----------------------|--------------------|--|--------------------------|---------------------------|-------------------|-------|-----------|---------|-------|-------|
| Seat No.              | Gram/ Z-N staining | P.S. for M.P./ Stool –routine microscopy | Use of PPE/ Hand hygiene | Interpretation of reports | Journal/ Log book | Total | Oral/Viva |         |       | Total |
|                       |                    |  |                          |                           |                   |       | Viva-I    | Viva-II | Total |       |
|                       |                    |  |                          |                           |                   |       | Practical |         |       |       |
| Max. Marks            | 15                 | 15                                       | 10                       | 20                        | 10                | 70    | 15        | 15      | 30    | 100   |
|                       |                    |  |                          |                           |                   |       |           |         |       |       |

# Second MBBS Practical Mark's Structure (M.U.H.S Examination)

Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards

| Subject: MICROBIOLOGY |                    |  |                          |                           |                   |       |           |         |       |       |
|-----------------------|--------------------|--|--------------------------|---------------------------|-------------------|-------|-----------|---------|-------|-------|
| Seat No.              | Gram/ Z-N staining | P.S. for M.P./ Stool –routine microscopy | Use of PPE/ Hand hygiene | Interpretation of reports | Journal/ Log book | Total | Oral/Viva |         |       | Total |
|                       |                    |  |                          |                           |                   |       | Viva-I    | Viva-II | Total |       |
|                       | A                  | B  | C                        | D                         | E                 | F     | G         | H       | I     | J     |
| Max. Marks            | 15                 | 15                                       | 10                       | 20                        | 10                | 70    | 15        | 15      | 30    | 100   |



# PHASE III PART I-MBBS Practical Mark's Structure MUHS

| Subject: Forensic Medicine & Toxicology |  |               |  |   |                               |                             |               |   |       |  |                                      |       |       |
|---|--|---------------|--|---|-------------------------------|-----------------------------|---------------|---|-------|--|--------------------------------------|-------|-------|
| Seat No.                                | Practical                                    |               |  |   |                               |                             |               |   |       |  | Oral/ Viva                           |       | Total |
|   | Medical Certificate of Cause of Death (MCCD) | Injury report | Survivor/ Accused of Sexual Assault report | Alcohol Intoxication Drunkenness report | Sickness/ Fitness certificate | Age/ Potency/ Foetus Report | Weapon Report | Spots-<br>• Bone-1<br>• Specimen-1<br>• Poison-2<br>• X-ray/ Photograph/ Instrument/ Document-1 | Total | Forensic Pathology, Clinical Forensic Medicine | Medical Jurisprudence and Toxicology | Total |       |
| A                                       | B  | C             | D  | E                                       | F                             | G                           | H             | I   | J     | K  | L                                    | M     |       |
| 10                                      | 10   | 10            | 10   | 10                                      | 10                            | 5                           | 3 X 5= 15     | 80  | 10    | 10   | 20                                   | 100   |       |

## Suggestions:

1. It is suggested that 2 exercises can be kept as actual case or in simulated environment.
2. In the spots -2 spots can be kept as **OSPE stations.**





# Phase III Part I MBBS Practical Mark's Structure Preliminary Examination

| Subject: Forensic Medicine & Toxicology |  |               |  |   |                               |                             |               |   |       |  |       |                                      |
|---|--|---------------|--|---|-------------------------------|-----------------------------|---------------|---|-------|--|-------|--------------------------------------|
| Seat No.                                | Practical                                    |               |  |   |                               |                             |               | Oral/ Viva  |       |  | Total |                                      |
|   | Medical Certificate of Cause of Death (MCCD) | Injury report | Survivor/ Accused of Sexual Assault report | Alcohol Intoxication Drunkenness report | Sickness/ Fitness certificate | Age/ Potency/ Foetus Report | Weapon Report | Spots-<br>• Bone-1<br>• Specimen-1<br>• Poison-2<br>• X-ray/ Photograph/ Instrument/ Document-1 | Total | Forensic Pathology, Clinical Forensic Medicine |       | Medical Jurisprudence and Toxicology |
| A                                       | B  | C             | D  | E                                       | F                             | G                           | H             | I   | J     | K  | L     | M                                    |
| 10                                      | 10   | 10            | 10   | 10                                      | 10                            | 5                           | 3 X 5= 15     | 80  | 10    | 10   | 20    | 100                                  |
| Max. Marks                              |  |               |  |   |                               |                             |               |   |       |  |       |                                      |

**Suggestions:**

1. It is suggested that 2 exercises can be kept as actual case or in simulated environment.
2. In the spots - 2 spots can be kept as **-OSPE stations.**

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

|  |                             |                               |                           |
|--|-----------------------------|-------------------------------|---------------------------|
| 1. Course and Year : <b>MBBS –PHASE III Part-I</b><br><i>(applicable w.e.f. OCT 2022 &amp; onwards examinations)</i> | 2. Subject Code :           |                               |                           |
| 3. Subject (PSP) : <b>Forensic Medicine &amp; Toxicology</b><br>(TT) :   |                             |                               |                           |
| 4. Paper : --  | 5. Total Marks : <b>100</b> | 6. Total Time : <b>3 Hrs.</b> | 7. Remu. (Rs) : Rs. 300/- |
|  |                             |                               | 8. Remu. (Rs) : Rs. 350/- |
| 9. Web Pattern : [ ]   | 10. Web Skeleton : [ ]      | 11. Web Syllabus : [ ]        | 12. Web Old QP : [ ]      |

**Instructions:**

**SECTION “A” MCQ**

- 1) Put  in the appropriate box below the question number once only.
- 2) Use blue ball point pen only.
- 3) Each question carries **One mark**.
- 4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.

**SECTION “A” MCQ (20 Marks)**

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

**SECTION “B” & “C”**

- 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” ( 40 Marks )**

- 2 Short Answer Questions (Any 6 out of 7) (6x5=30)
- a)   b)   c)   d)   e)   f)   g)

Long Answer Questions (Any 1 out of 2) (1x10=10)

- 3 a)   b)

**SECTION “C” ( 40Marks)**

- 4 Short answer questions (One short note should be from **AETCOM 3.3** and 3.4 is compulsory ) (Any 6 out of 7) (6x5=30)
- a)   b)   c)   d)   e)   f)   g)

5. Long Answer Questions (Any 1 out of 2) (1x10=10)

- a)   b)

**Paper wise distribution of topics for Prelim & MUHS Annual Examination**  
**Year: III-I MBBS Subject: Community Medicine**

| <b>Paper</b> | <b>Section</b> | <b>Topics</b>                           |
|--------------|----------------|---|
| I            | A              | MCQs on all topics of the paper I       |
|              |                | Concept of health and disease           |
|              |                | Epidemiology                            |
|              |                | Screening for disease                   |
|              |                | Communicable diseases & related NHP     |
|              |                | Emerging & Reemerging diseases          |
|              |                | Sociology                               |
|              |                | Environmental health                    |
|              |                | Occupational Health                     |
|              |                | Hospital waste management               |
|              |                | Biostatistics & Vital statistics        |
|              |                | AETCOM Module no. 3.1 & 3.3             |
| II           | A              | MCQs on all topics of the paper II      |
|              |                | Demography & FP & NHP                   |
|              |                | MCH, Geriatrics & related NHP           |
|              |                | Nutrition & related NHP                 |
|              |                | Mental Health                           |
|              |                | Health education & Communication        |
|              |                | Health planning & Management            |
|              |                | Health care delivery system             |
|              |                | Non communicable Diseases & related NHP |
|              |                | International health                    |
|              |                | Disaster Management                     |

**Internal Assessment**  
**Subject: Community Medicine**  
**Applicable w.e.f March 2020 onwards examination for batches admitted from June 2019 onwards**

| Phase      | I-Exam (March) |   |
|------------|----------------|---|
|            | Theory         | Practical (Including 10 Marks for Journal- Nutrition & Log Book ) |
| First MBBS | 50             | 50  |
|            |                | Total Marks   |
|            |                | 100   |

| Phase       | II-Exam      |   | III-Exam     |                                   |
|-------------|--------------|---|--------------|-----------------------------------|
|             | Theory (Jan) | Practical Two weeks after clinical posting (Mid Clinical Posting) | Theory (May) | Practical End of Clinical Posting |
| Second MBBS | 50           | 50  | 50           | 50                                |
|             |              | Total Marks   |              | Total Marks                       |
|             |              | 100   |              | 100                               |

| Phase    | IV-Exam (March) |                                   | V-Exam Preliminary examination-August |             |
|----------|-----------------|-----------------------------------|---------------------------------------|-------------|
|          | Theory          | Practical End of Clinical Posting | Theory                                | Practical   |
| III MBBS | 50              | 50                                | 200                                   | 100         |
|          |                 | Total Marks                       |                                       | Total Marks |
|          |                 | 100                               |                                       | 300         |

1. Assessment in CBME is ONGOING PROCESS,

No Preparatory leave is permitted.

1. There shall be 5 internal assessment examinations in Community Medicine.
2. The suggested patterns of question paper for first three internal assessment theory examinations is given below. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 40 (theory) + 40 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

| Phase                                 | Theory                                      | Practical                                       |
|---------------------------------------|---|---|
| Phase I                               | 50  | 50  |
| Phase II                              | 100   | 100   |
| Phase III Part I                      | 250   | 150   |
| Total                                 | 400   | 300   |
| Conversion out of                     | 40  | 40  |
| Conversion formula                    | Total marks in 4 IA theory examinations /10 | Total marks in 4 IA Practical examinations /7.5 |
| Eligibility criteria after conversion | 16  | 16  |
| Combined theory + Practical = 40      |   |   |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 33.01 to 33.49                  | 33                  |
| 33.50 to 33.99                  | 34                  |

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
6. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

## 7. Remedial measures

### A. Remedial measures for non-eligible students

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
- ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|   | Theory                                   | Practical                                     |
|---|--|---|
| Remedial examination (pattern as per final examination) | 200                                      | 100   |
| Conversion out of                                       | 40                                       | 40  |
| Conversion formula                                      | Marks in remedial theory examinations /5 | Marks in remedial Practical examinations /2.5 |
| Eligibility criteria after conversion                   | 16                                       | 16  |
|   | Combined theory + Practical = 40         |   |

### **B. Remedial measures for absent students:**

If any of the students is absent for any of the 5 IA examinations due to any reasons, following measures shall be taken.

- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
- ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
- iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.



# 1<sup>st</sup> /2<sup>nd</sup> /3<sup>rd</sup> MBBS Practical Mark's Structure

## Internal Assessment Examinations

(Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards)

| Seat No.   | Subject :Community Medicine Practical – 1 <sup>st</sup> Internal assessment - |          |                                     |           |                 |
|------------|---|----------|-------------------------------------|-----------|-----------------|
|            | Spotters marks  | Log book | Skill assessment utrition exercises | Viva Voce | Practical Total |
| Max. Marks | 10 marks  | 10-marks | 10 marks                            | 20 marks  | 50 marks        |
|            |   |          |                                     |           |                 |

| Seat No.   | Subject :Community Medicine Practical – 2 <sup>nd</sup> Internal assessment |          |           |                 |
|------------|---|----------|-----------|-----------------|
|            | Spotters  | Log book | Viva Voce | Practical Total |
| Max. Marks | 20 marks  | 10-marks | 20 marks  | 50 marks        |
|            |   |          |           |                 |

| Seat No.   | Subject :Community Medicine Practical – 3 <sup>rd</sup> Internal assessment |          |                              |           |                 |
|------------|---|----------|------------------------------|-----------|-----------------|
|            | Spotters marks  | Log book | Clinico-epidemiological case | Viva Voce | Practical Total |
| Max. Marks | 10 marks  | 10 marks | 20 marks                     | 10 marks  | 50 marks        |
|            |   |          |                              |           |                 |

| Seat No.   | Subject :Community Medicine Practical – 4 <sup>th</sup> Internal assessment |          |                              |           |                 |
|------------|---|----------|------------------------------|-----------|-----------------|
|            | Spotters marks  | Log book | Clinico-epidemiological case | Viva Voce | Practical Total |
| Max. Marks | 10 marks  | 10 marks | 20 marks                     | 10 marks  | 50 marks        |
|            |   |          |                              |           |                 |

### Method of Clinico epidemiological Case evaluation

| Sr.no. | Head   | Marks allotted |
|--------|--|----------------|
| 01     | Identifying and socio demographic information<br>(with house landmark, facilities for health care )                        | 05             |
| 02     | Present and past illness history<br>(with risk factors , exposures )<br>Environmental , behavioural and family information | 05             |
| 03     | Demonstration of relevant clinical signs/skills  | 05             |
| 05     | Management plan and relevant control measures at individual, family and community level                                    | 05             |
|        | <b>Total</b>   | <b>20</b>      |

# III-I MBBS Practical Mark's Structure (Prelim exam)

Applicable w.e.f October 2021 onwards examination for batches admitted from June 2019 onwards

| Subject: Community Medicine |          |                |                             |                                 |            |       |
|-----------------------------|----------|----------------|-----------------------------|---------------------------------|------------|-------|
| Seat No.                    | Spotters | Statistical Ex | Practical                   |                                 | Oral/Viva  | Total |
|                             |          |                | Clinicoepidemiological case | Skill assessment ( 10 skills) * | Viva/ voce |       |
| Max. Marks                  | 20       | 20             | 20                          | 20                              | 20         | 100   |
|                             |          |                |                             |                                 |            |       |
|                             |          |                |                             |                                 |            |       |

- As per MCI competency based document

## Method of Clinico epidemiological Case evaluation

| Sr.no. | Head  | Marks allotted |
|--------|---|----------------|
|        | Identifying and socio demographic information (with house landmark, facilities for health care )                        | 05             |
|        | Present and past illness history (with risk factors , exposures )<br>Environmental , behavioural and family information | 05             |
|        | Demonstration of relevant clinical signs/skills   | 05             |
|        | Management plan and relevant control measures at individual, family and community level                                 | 05             |
|        | Total   | 20             |

# III-I MBBS Practical Mark's Structure (University exam)

Applicable w.e.f October 2022 onwards examination for batches admitted from June 2019 onwards

| Subject: Community Medicine |          |                |                             |                                 |           |       |
|-----------------------------|----------|----------------|-----------------------------|---------------------------------|-----------|-------|
| Practical                   |          |                |                             |                                 |           |       |
| Seat No.                    | Spotters | Statistical Ex | Clinicoepidemiological case | Skill assessment ( 10 skills) * | Oral/Viva | Total |
| Max. Marks                  | 20       | 20             | 20                          | 20                              | 20        | 100   |
|                             |          |                |                             |                                 |           |       |
|                             |          |                |                             |                                 |           |       |
|                             |          |                |                             |                                 |           |       |

**Format for Internal Assessment Theory Paper**  
**IA – 1, IA – 2, IA – 3 & IA - 4**

| Question No. | Type of Question | No. of Questions      | Max. Marks        |
|--------------|------------------|-----------------------|-------------------|
| 1.           | MCQ              | 10                    | 10 (1 marks each) |
| 2.           | SAQ              | 5 (Any four out of 5) | 28 (7 marks each) |
| 3.           | LAQ              | 1 (Compulsory)        | 12                |
|              |                  | Total                 | 50                |

# MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

## FORMAT / SKELETON OF QUESTION PAPER-1

|   |                                  |
|---|----------------------------------|
| 1. Course and Year : <b>III-I- MBBS</b><br><i>(applicable w.e.f. October 2022 &amp; onwards examinations)</i> | 2. Subject Code :                |
| 3. Subject (PSP) : <b>Community Medicine</b><br>(TT) :  |                                  |
| 4. Paper : <b>I</b>   | 5. Total Marks : <b>100</b>      |
| 6. Total Time : <b>3 Hrs.</b>   | 7. Remu. (Rs) : <b>Rs. 300/-</b> |
|   | 8. Remu. (Rs) : <b>Rs. 350/-</b> |
| 9. Web Pattern : [ ]  | 10. Web Skeleton : [ ]           |
| 11. Web Syllabus : [ ]  | 12. Web Old QP : [ ]             |

|  |   |
|--|---|
| <b>Instructions:</b>   | <b>SECTION "A" MCQ</b>  |
|  | <ol style="list-style-type: none"> <li>1) Put <input type="checkbox"/> in the appropriate box below the question number once only.</li> <li>2) Use blue ball point pen only.</li> <li>3) Each question carries <b>One mark</b>.</li> <li>4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked.</li> </ol> |
|  | <b>SECTION "A" MCQ (20 Marks)</b>   |
| 1. Multiple Choice Questions (Total 20 MCQ of One mark each) | (20 x1 = 20)  |
| a) b) c) d) e) f) g) h) i) j)                                |   |
| k) l) m) n) o) p) q) r) s) t)                                |   |

|                                     |   |
|-------------------------------------|---|
|                                     | <b>SECTION "B"</b>  |
| <b>Instructions:</b>                | <ol style="list-style-type: none"> <li>1) Use <b>blue/black</b> ball point pen only.</li> <li>2) <b>Do not</b> write anything on the <b>blank portion of the question paper</b>. If written anything, such type of act will be considered as an attempt to resort to unfair means.</li> <li>3) <b>All</b> questions are <b>compulsory</b>.</li> <li>4) The number to the <b>right</b> indicates <b>full</b> marks.</li> <li>5) Draw diagrams <b>wherever</b> necessary.</li> <li>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.</li> <li>7) Use a common answerbook for all sections.</li> </ol> |
|                                     | <b>SECTION "B"</b>  |
| 2. Short Answer Questions           | (7x1=07)  |
| a)                                  |   |
| 3. Short Answer Questions           | (7x3=21)  |
| a) b) c) d)                         |   |
| 4. Structured Long Answer Questions | (12x1=12)   |
| a)                                  |   |
| 5. Short Answer Questions           | (7x4=28)  |
| a) b) c) d) e)                      |   |
| 6. Structured Long Answer Questions | (12x1=12)   |
| a)                                  |   |

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

|  |                                  |
|--|----------------------------------|
| 1. Course and Year : <b>III-I- MBBS</b><br><i>(applicable w.e.f. October 2022&amp; onwards examinations)</i> | 2. Subject Code :                |
| 3. Subject (PSP) : <b>Community Medicine</b><br>(TT) :   |                                  |
| 4. Paper : : <b>II</b>   | 5. Total Marks : <b>100</b>      |
| 6. Total Time : <b>3 Hrs.</b>  | 7. Remu. (Rs) : <b>Rs. 300/-</b> |
|  | 8. Remu. (Rs) : <b>Rs. 350/-</b> |
| 9. Web Pattern : [ ]   | 10. Web Skeleton : [ ]           |
| 11. Web Syllabus : [ ]   | 12. Web Old QP : [ ]             |

|  |   |              |
|--|---|--------------|
| <b>Instructions:</b>   | <b>SECTION "A" MCQ</b>  |              |
|  | 1) <input type="checkbox"/> in the appropriate box below the question number once only.                       |              |
|  | 2) Use blue ball point pen only.  |              |
|  | 3) Each question carries <b>One mark</b> .  |              |
|  | 4) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked. |              |
|  | <b>SECTION "A" MCQ (20 Marks)</b>   |              |
| 1. Multiple Choice Questions (Total 20 MCQ of One mark each) |   | (20 x1 = 20) |
| a) b) c) d) e) f) g) h) i) j)                                |   |              |
| k) l) m) n) o) p) q) r) s) t)                                |   |              |

|   |   |           |
|---|---|-----------|
| <b>Instructions:</b>                              | <b>SECTION "B"</b>  |           |
|   | 1) Use <b>blue/black</b> ball point pen only.   |           |
|   | 2) <b>Do not</b> write anything on the <b>blank portion of the question paper</b> . If written anything, such type of act will be considered as an attempt to resort to unfair means.   |           |
|   | 3) <b>All questions are compulsory</b> .  |           |
|   | 4) The number to the <b>right</b> indicates <b>full marks</b> .   |           |
|   | 5) Draw diagrams <b>wherever</b> 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.  |           |
|   | <b>SECTION "B"</b>  |           |
| 2. Short Answer Questions (Answer Any 4 out of 5) |   | (7x4=28)  |
| a) b) c) d) e)                                    |   |           |
| 3. Structured Long Answer Questions (Compulsory)  |   | (12x1=12) |
| a)  |   |           |
| 4. Short Answer Questions (Answer Any 4 out of 5) |   | (7x4=28)  |
| a) b) c) d) e)                                    |   |           |
| 5. Structured Long Answer Questions (Compulsory)  |   | (12x1=12) |
| a)  |   |           |

**Paper wise distribution of topics for Internal assessment**  
**Year: Second MBBS**  
**Subject: GENERAL MEDICINE**

| <b>Internal Assessment</b>     | <b>Section</b>  | <b>Topics</b>                    |
|--------------------------------|---|----------------------------------|
| <b>I</b><br><b>(50 marks)</b>  | <b>Section A</b><br>MCQs on all topics<br>(15x1=15 marks) | Fever & Febrile Syndromes        |
|                                | <b>Section B</b><br>SAQ on all topics<br>(4x5=20)         | HIV                              |
|                                | <b>Section C</b><br>LAQ on all topics<br>(15x1=15 marks)  | Diarrhoeal Diseases              |
|                                |   | Envenomation                     |
| <b>II</b><br><b>(50 marks)</b> | <b>Section A</b><br>MCQs on all topics<br>(15x1=15 marks) | Pneumonia                        |
|                                | <b>Section B</b><br>SAQ on all topics<br>(4x5=20)         | Miscellaneous Infections         |
|                                | <b>Section C</b><br>LAQ on all topics<br>(15x1=15 marks)  | Poisoning                        |
|                                |   | Nutrition & Vitamin Deficiencies |



**Year: III-I MBBS Subject: GENERAL MEDICINE**

| <b>Internal Assessment</b>        | <b>Section</b>                     | <b>Topics</b>                          |
|-----------------------------------|------------------------------------|--|
| I<br>(50 marks)                   | <b>Section A</b>                   | Hypertension                           |
|                                   | MCQs on all topics (15x1=15 marks) | Heart failure                          |
|                                   |                                    |  |
|                                   | <b>Section B</b>                   |  |
|                                   | SAQ on all topics (4x5=20)         | Acute MI/IHD                           |
|                                   |                                    |  |
|                                   | <b>Section C</b>                   | The role of physician in the community |
| LAQ on all topics (15x1=15 marks) |                                    |  |
|                                   | AET-COM                            |  |

Paper wise distribution of topics for Prelim & MUHS Annual Examination

Subject: General Medicine

| Paper                           | Section  | Topics  |
|---------------------------------|--|---|
| <b>I</b><br><b>(100 marks)</b>  | <b>Section A</b><br>MCQs on all topics of the paper I (20x1=20)    | Fever & Febrile Syndromes   |
|                                 |  | HIV   |
|                                 |  | Diarrhoeal Diseases   |
|                                 |  | Pneumonia   |
|                                 | <b>Section B</b><br>SAQ on all topics of the paper I<br>(7x5=35)   | Envenomation  |
|                                 |  | Miscellaneous Infections  |
|                                 |  | Poisoning   |
|                                 |  | Nutrition & Vitamin Deficiencies  |
|                                 |  | Anaemia   |
|                                 | <b>Section C</b><br>LAQ on all topics of the paper I<br>(3x15=45)  | Obesity   |
|                                 |  | Hypertension  |
|                                 |  | Heart failure   |
|                                 |  | Acute MI/IHD  |
|                                 |  | The role of physician in the community  |
|                                 |  | AET-COM   |
| <b>II</b><br><b>(100 marks)</b> | <b>Section A</b><br>MCQs on all topics of the paper II (20x1=20)   | GI Bleed  |
|                                 |  | Liver Diseases  |
|                                 |  | Mineral Fluid Electrolyte and acid base disorder  |
|                                 |  | Acute kidney injury and chronic renal failure   |
|                                 | <b>Section B</b><br>SAQ on all topics of the paper II<br>(7x5=35)  | Headache  |
|                                 |  | Cerebrovascular accident  |
|                                 |  | Movement disorder   |
|                                 |  | Diabetes  |
|                                 |  | Thyroid Dysfunction   |
|                                 | <b>Section C</b><br>LAQ on all topics of the paper II<br>(3x15=45) | Rheumatological Problems  |
|                                 |  | Common Malignancies   |
|                                 |  | Geriatrics  |
|                                 |  | Psychiatry, Dermatology & Leprosy (DVL) and Respiratory Medicine including Tuberculosis |
|                                 |  | AET – COM   |

## Internal Assessment

### Subject – Ophthalmology

**Applicable w.e.f batches admitted from 2019 and onwards**

| Phase       |        |   |
|-------------|--------|---|
|             | Theory | Practical   |
| Second MBBS | -      | EOP Practical Examination may be conducted. However, these marks shall not be added to the Internal Assessment. |

| <b>3<sup>rd</sup> Year (III MBBS, PART I)</b> |                |           |             |                         |           |             |
|---|----------------|-----------|-------------|-------------------------|-----------|-------------|
| Phase   | I-Exam (March) |           |             | II-Exam Prelim (August) |           |             |
|   | Theory         | Practical | Total Marks | Theory                  | Practical | Total Marks |
| III/I MBBS                                    | 50             | 50        | 100         | 100                     | 100       | 200         |

Assessment in CBME is ONGOING PRCESS,

No Preparatory leave is permitted.

1. There shall be 2 internal assessment examinations in Ophthalmology including Prelim.
2. The suggested pattern of question paper for internal assessment internal examinations, except prelim examination is attached at the end. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 25 (theory) + 25 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

|  | <b>Theory</b>                                     | <b>Practical</b>                                     |
|--|---|--|
| <b>Phase II</b>                              | -   | -  |
| <b>Phase III/I</b>                           | <b>150</b>  | <b>150</b>   |
| <b>Total</b>                                 | <b>150</b>  | <b>150</b>   |
| <b>Conversion out of</b>                     | <b>25</b>   | <b>25</b>  |
| <b>Conversion formula</b>                    | <b>Total marks in 2 IA theory examinations /6</b> | <b>Total marks in 2 IA Practical examinations /6</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>   | <b>10</b>  |
|  | <b>Combined theory + Practical = 25</b>           |  |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 13.01 to 13.49                  | 13                  |
| 13.50 to 13.99                  | 14                  |

2. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
3. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.
4. Remedial measures

#### **A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically. Extra classes for such students may be arranged.
- ii) If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. The marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|  | <b>Theory</b>                                   | <b>Practical</b>                                   |
|--|---|--|
| <b>Remedial examination</b>                  | <b>100</b>                                      | <b>100</b>   |
| <b>Conversion out of</b>                     | <b>25</b>                                       | <b>25</b>  |
| <b>Conversion formula</b>                    | <b>Marks in remedial theory examinations /4</b> | <b>Marks in remedial Practical examinations /4</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>                                       | <b>10</b>  |
|  | <b>Combined theory + Practical = 25</b>         |  |

**B. Remedial measures for absent students:**

If any of the students is absent for any of the 2 IA examinations due to any reasons, following measures shall be taken.

- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.

- ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
- iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

# Format for Practical Examinations

## Ophthalmology

### Internal Assessment Practical

| Seat No.  | Long case including communication skills | OSCE (2 stations of 5 marks each) | Viva including Dark room instruments, Operative instruments | Log book and Journal viva | Practical Total |
|-----------|--|-----------------------------------|---|---------------------------|-----------------|
| Max Marks | 20                                       | 10                                | 10  | 10                        | 50              |
|           |  |                                   |   |                           |                 |

# OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills., history taking of a particular symptom.

### Prelims and MUHS Final Practical

| Seat No.   | Long case including communication skills | OSCE (4 stations) | Log book and Journal viva | Dark room instruments | Operative instruments | Practical & Oral |
|------------|--|-------------------|---------------------------|-----------------------|-----------------------|------------------|
| Max. Marks | 50                                       | 20                | 10                        | 10                    | 10                    | 100              |
|            |  |                   |                           |                       |                       |                  |

\*Communication skills to be assessed by Kalamazoo Consensus, clinical signs to be assessed by either GLOBAL Rating Scale or OSCE, Psychomotor Skills to be assessed by OSCE with checklist. If the skills are small, 2 or 3 skills may be combined.

# Internal Assessment

## Obst. & Gynaec.

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

| Phase       | IA – 1 -Exam        |                  |                | IA – 2 -Exam    |           |                |
|-------------|---------------------|------------------|----------------|-----------------|-----------|----------------|
|             | Theory<br>(January) | Practical<br>EOP | Total<br>Marks | Theory<br>(May) | Practical | Total<br>Marks |
| Second MBBS | 50                  | 50               | 100            | 50              | 50        | 100            |

| Phase             | IA – 3 Exam         |                  |                | IA – 4 - Exam     |           |                |
|-------------------|---------------------|------------------|----------------|-------------------|-----------|----------------|
|                   | Theory<br>(January) | Practical<br>EOP | Total<br>Marks | Theory<br>(April) | Practical | Total<br>Marks |
| Third MBBS Part I | 50                  | 50               | 100            | 50                | 50        | 100            |

| Phase             | IA – 5 - Exam   |  |                | Prelim Examination      |           |                |
|-------------------|-----------------|--|----------------|-------------------------|-----------|----------------|
|                   | Theory<br>(May) | Practical<br>EOP (after 8<br>weeks<br>posting) | Total<br>Marks | Theory<br>(November)    | Practical | Total<br>Marks |
| Third MBBS Part I | 100             | 100  | 200            | 100 x 2<br>papers = 200 | 200       | 400            |



**Internal Assessment Practical Examinations  
II MBBS**

**Internal Assessment - 1**

**OBGY**

| <b>Subject: OBGY Practical (IA – 1)</b> |           |        |      |                          |                    |
|---|-----------|--------|------|--------------------------|--------------------|
| Spotting                                | OSCE<br>1 | OSCE 2 | Viva | Journal<br>& log<br>book | Practical<br>Total |
| 10                                      | 10        | 10     | 10   | 10                       | 50                 |
|   |           |        |      |                          |                    |

# OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills.

| <b>Subject: OBGY Practical (IA – 2)</b> |             |               |           |        |                    |
|---|-------------|---------------|-----------|--------|--------------------|
| <b>Long Case</b>                        |             |               |           |        |                    |
| History                                 | Examination | Investigation | Treatment | AETCOM | Practical<br>Total |
| 10                                      | 10          | 10            | 10        | 10     | 50                 |
|   |             |               |           |        |                    |

| <b>Subject: OBGY Practical (IA – 3)</b> |           |        |      |                          |                    |
|---|-----------|--------|------|--------------------------|--------------------|
| Spotting                                | OSCE<br>1 | OSCE 2 | Viva | Journal<br>& log<br>book | Practical<br>Total |
| 10                                      | 10        | 10     | 10   | 10                       | 50                 |
|   |           |        |      |                          |                    |

# OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills.

| <b>Subject: OBGY Practical (IA – 4)</b> |             |               |           |        |                 |
|---|-------------|---------------|-----------|--------|-----------------|
| <b>Long Case</b>                        |             |               |           |        |                 |
| History                                 | Examination | Investigation | Treatment | AETCOM | Practical Total |
| 10                                      | 10          | 10            | 10        | 10     | 50              |
|   |             |               |           |        |                 |

| <b>Subject: OBGY Practical (IA –5)</b> |                  |                 |                    |                 |
|--|------------------|-----------------|--------------------|-----------------|
| Long Case (Obstetrics)                 | Gynaecology Case | Family Planning | Journal & log book | Practical Total |
| 50                                     | 20               | 20              | 10                 | 100             |
|  |                  |                 |                    |                 |

| <b>Subject: OBGY Practical (Prelim)</b> |                  |                      |                      |                       |                   |                         |                    |                 |
|---|------------------|----------------------|----------------------|-----------------------|-------------------|-------------------------|--------------------|-----------------|
| ANC Case                                | Gynaecology Case | PNC / Post – Op Case | Family Planning Viva | Obstetrics Table Viva | Gynaec Table Viva | Spotting (2 x 10 spots) | Journal & log book | Practical Total |
| 50                                      | 25               | 20                   | 25                   | 20                    | 20                | 20                      | 20                 | 200             |
|   |                  |                      |                      |                       |                   |                         |                    |                 |

| <b>Subject: OBGY Practical (MUHS Final)</b> |   |   |                      |                       |                   |                         |                 |
|---|---|---|----------------------|-----------------------|-------------------|-------------------------|-----------------|
| ANC Case                                    | Gynaecology Case (Diagnosis and discussion) | PNC / Post – Op Case (Diagnosis and discussion) | Family Planning Viva | Obstetrics Table Viva | Gynaec Table Viva | Spotting (4 x 10 spots) | Practical Total |
| 50 *  | 25  | 20  | 25                   | 20                    | 20                | 40                      | 200             |
|   |   |   |                      |                       |                   |                         |                 |

\* 10 marks each for history, examination, AETCOM, investigation & treatment.

Assessment in CBME is ONGOING PROCESS,

No Preparatory leave is permitted.

1. There shall be 6 internal assessment examinations in OBGY.
2. The suggested pattern of question paper for internal assessment, except prelim examination is attached at the end. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 50 (theory) +50 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

|  | <b>Theory</b>                                      | <b>Practical</b>                                      |
|--|--|---|
| <b>Phase II</b>                              | <b>100</b>   | <b>100</b>  |
| <b>Phase III/I</b>                           | <b>100</b>   | <b>100</b>  |
| <b>Phase III/II</b>                          | <b>300</b>   | <b>300</b>  |
| <b>Total</b>                                 | <b>500</b>   | <b>500</b>  |
| <b>Conversion out of</b>                     | <b>50</b>  | <b>50</b>   |
| <b>Conversion formula</b>                    | <b>Total marks in 6 IA theory examinations /10</b> | <b>Total marks in 6 IA Practical examinations /10</b> |
| <b>Eligibility criteria after conversion</b> | <b>20</b>  | <b>20</b>   |
|  | <b>Combined theory + Practical = 50</b>            |   |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 33.01 to 33.49                  | 33                  |
| 33.50 to 33.99                  | 34                  |

5. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
6. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

7. **Remedial measures**

**A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically.
- ii) Extra classes for such students may be arranged. If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. Only the marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|  | <b>Theory</b>                                   | <b>Practical</b>                                   |
|--|---|--|
| <b>Remedial examination (as per final examination pattern)</b> | <b>200</b>                                      | <b>200</b>   |
| <b>Conversion out of</b>                                       | <b>50</b>                                       | <b>50</b>  |
| <b>Conversion formula</b>                                      | <b>Marks in remedial theory examinations /4</b> | <b>Marks in remedial Practical examinations /4</b> |
| <b>Eligibility criteria after conversion</b>                   | <b>20</b>                                       | <b>20</b>  |
|  | <b>Combined theory + Practical = 50</b>         |  |

**B. Remedial measures for absent students:**

- i. If any of the students is absent for any of the 6 IA examinations due to any reasons, following measures shall be taken.
- ii. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
- iii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
- iv. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

**Format for Internal Assessment  
Theory Examination  
IA – 1, IA – 2, IA – 3 & IA - 4**

| Question No. | Type of Question | No. of Questions (no. To be solved) | Max. Marks                                   |
|--------------|------------------|-------------------------------------|--|
| 1.           | MCQ              | 10                                  | 10 (1 marks each)                            |
| 2.           | SAQ              | 6 (Any 5 out of 6)                  | 25 (5 marks for each question x 5 questions) |
| 3.           | LAQ              | 1 (Compulsory)                      | 15   |
|              |                  | Total                               | 50   |

**Format for Internal Assessment  
Theory Examination IA - 5**

| Question No. | Section | Type of Question | No. of Questions       | Max. Marks                               |
|--------------|---------|------------------|------------------------|--|
| 1.           | A       | MCQ              | 20                     | 20 (1 marks each)                        |
| 2.           | B       | LAQ              | 4 (Any 3 out of 4)     | 45 (15 marks for each question x 3 LAQ ) |
| 3.           | C       | SAQ              | 7 (Any 6 out of 7)     | 30 (5 marks for each question x 6 SAQ)   |
| 4.           | C       | SAQ              | 1 question from AETCOM | 5  |
|              |         |                  | Total                  | 100                                      |

## Internal Assessment

### Subject – Otorhinolaryngology

**Applicable w.e.f batches admitted from 2019 and onwards**

| Phase       |        |   |
|-------------|--------|---|
|             | Theory | Practical   |
| Second MBBS | -      | EOP Practical Examination may be conducted. However, these marks shall not be added to the Internal Assessment. |

| <b>3<sup>rd</sup> Year (III MBBS, PART I)</b> |                       |           |             |                                |           |             |
|---|-----------------------|-----------|-------------|--------------------------------|-----------|-------------|
| Phase   | <b>I-Exam (March)</b> |           |             | <b>II-Exam Prelim (August)</b> |           |             |
|   | Theory                | Practical | Total Marks | Theory                         | Practical | Total Marks |
| III/I MBBS                                    | 50                    | 50        | 100         | 100                            | 100       | 200         |

Assessment in CBME is ONGOING PRCESS,

No Preparatory leave is permitted.

1. There shall be 2 internal assessment examinations in Otorhinolaryngology including Prelim.
2. The suggested pattern of question paper for internal assessment internal examinations, except prelim examination is attached at the end. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 25 (theory) + 25 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

|  | <b>Theory</b>                                     | <b>Practical</b>                                     |
|--|---|--|
| <b>Phase II</b>                              | -   | -  |
| <b>Phase III/I</b>                           | <b>150</b>  | <b>150</b>   |
| <b>Total</b>                                 | <b>150</b>  | <b>150</b>   |
| <b>Conversion out of</b>                     | <b>25</b>   | <b>25</b>  |
| <b>Conversion formula</b>                    | <b>Total marks in 2 IA theory examinations /6</b> | <b>Total marks in 2 IA Practical examinations /6</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>   | <b>10</b>  |
|  | <b>Combined theory + Practical = 25</b>           |  |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 13.01 to 13.49                  | 13                  |
| 13.50 to 13.99                  | 14                  |

2. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
3. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.
4. Remedial measures

**A. Remedial measures for non-eligible students**



- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically. Extra classes for such students may be arranged.
- ii) If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. The marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|  | <b>Theory</b>                                   | <b>Practical</b>                                   |
|--|---|--|
| <b>Remedial examination</b>                  | <b>100</b>                                      | <b>100</b>   |
| <b>Conversion out of</b>                     | <b>25</b>                                       | <b>25</b>  |
| <b>Conversion formula</b>                    | <b>Marks in remedial theory examinations /4</b> | <b>Marks in remedial Practical examinations /4</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>                                       | <b>10</b>  |
|  | <b>Combined theory + Practical = 25</b>         |  |

**B. Remedial measures for absent students:**

If any of the students is absent for any of the 2 IA examinations due to any reasons, following measures shall be taken.

- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.

- ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
- iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.

## Format for Practical Examinations

### Otorhinolaryngology

#### Internal Assessment Practical

| Seat No.          | Table viva |          |          |                              |                                    |          |          | Practical Total |
|-------------------|------------|----------|----------|------------------------------|------------------------------------|----------|----------|-----------------|
|                   | Case       | OSCE 1   | OSCE 2   | Surgical Pathology Radiology | Instruments and Surgical Procedure | Journal  | Log Book |                 |
| <b>Max. Marks</b> | <b>20</b>  | <b>5</b> | <b>5</b> | <b>5</b>                     | <b>5</b>                           | <b>5</b> | <b>5</b> | <b>50</b>       |
|                   |            |          |          |                              |                                    |          |          |                 |

OSCE stations checklists to be prepared so as to give more weightage to crucial steps, if skills are small two or more skills may be included in same station

# OSCE stations to include any of these – Clinical skills (case/audiology), Certifiable skills, AETCOM skills

#### Prelims Practical

| Subject: Otorhinolaryngology Practical |            |                             |                             |                                |                           |                              |                                    |                    |                 |
|--|------------|-----------------------------|-----------------------------|--------------------------------|---------------------------|------------------------------|------------------------------------|--------------------|-----------------|
| Seat No.                               | Table Viva |                             |                             |                                |                           |                              |                                    |                    | Practical Total |
|  | Case       | OSCE 1<br>(Clinical skills) | OSCE 2<br>(Clinical skills) | OSCE 3<br>(Certifiable skills) | OSCE 4<br>(AETCOM skills) | Surgical Pathology Radiology | Instruments and Surgical Procedure | Journal & log book |                 |
| <b>Max. Marks</b>                      | <b>30</b>  | <b>10</b>                   | <b>10</b>                   | <b>10</b>                      | <b>10</b>                 | <b>10</b>                    | <b>10</b>                          | <b>10</b>          | <b>100</b>      |
|  |            |                             |                             |                                |                           |                              |                                    |                    |                 |

## MUHS Final Practical

| Subject: Otorhinolaryngology Practical |           |                             |                             |                                |                           |                                 |                                       |                 |
|--|-----------|-----------------------------|-----------------------------|--------------------------------|---------------------------|---------------------------------|---------------------------------------|-----------------|
| Seat No.                               |           |                             |                             |                                |                           | Table Viva                      |                                       | Practical Total |
|  | Case      | OSCE 1<br>(Clinical skills) | OSCE 2<br>(Clinical skills) | OSCE 3<br>(Certificate skills) | OSCE 4<br>(AETCOM skills) | Surgical Pathology<br>Radiology | Instruments and<br>Surgical Procedure |                 |
| <b>Max. Marks</b>                      | <b>30</b> | <b>10</b>                   | <b>10</b>                   | <b>10</b>                      | <b>10</b>                 | <b>15</b>                       | <b>15</b>                             | <b>100</b>      |
|  |           |                             |                             |                                |                           |                                 |                                       |                 |

## Internal Assessment

### Subject – Pediatrics

**Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards**

| Phase       |        |   |
|-------------|--------|---|
|             | Theory | Practical   |
| Second MBBS | -      | EOP Practical Examination may be conducted. However, these marks shall not be added to the Internal Assessment. |

| <b>3<sup>rd</sup> Year (III MBBS, PART I)</b> |                  |           |             |                 |           |             |
|---|------------------|-----------|-------------|-----------------|-----------|-------------|
| Phase   | I-Exam (January) |           |             | II-Exam (April) |           |             |
|   | Theory           | Practical | Total Marks | Theory          | Practical | Total Marks |
| III/I MBBS                                    | 50               | 50        | 100         | 50              | 50        | 100         |

| <b>4<sup>th</sup> Year (III MBBS, PART II)</b>                                      |                |           |             |  |           |             |
|---|----------------|-----------|-------------|--|-----------|-------------|
| <b>Clinical posting- 4 weeks</b>  |                |           |             |  |           |             |
| <b>Theory- lectures- 20, tutorials- 35, self-directed learning-10. Total 65 hrs</b> |                |           |             |  |           |             |
| Phase   | III-Exam (May) |           |             | IV-Exam (Preliminary examination) (November) |           |             |
|   | Theory         | Practical | Total Marks | Theory                                       | Practical | Total Marks |
| III/II MBBS   | 50             | 50        | 100         | 100  | 100       | 200         |

Assessment in CBME is ONGOING PRCESS,

No Preparatory leave is permitted.

1. There shall be 4 internal assessment examinations in Pediatrics including Prelim.
2. The suggested pattern of question paper for internal assessment examinations, except prelim examination is attached at the end. Pattern of the prelims examinations should be similar to the University examinations.
3. Internal assessment marks for theory and practical will be converted to out of 25 (theory) + 25 (practical). Internal assessment marks, after conversion, should be submitted to university within the stipulated time as per directives from the University. **Conversion Formula for calculation of marks in internal assessment examinations.**

|  | <b>Theory</b>                                      | <b>Practical</b>                                      |
|--|--|---|
| <b>Phase II</b>                              | -  | -   |
| <b>Phase III/I</b>                           | <b>100</b>   | <b>100</b>  |
| <b>Phase III/II</b>                          | <b>150</b>   | <b>150</b>  |
| <b>Total</b>                                 | <b>250</b>   | <b>250</b>  |
| <b>Conversion out of</b>                     | <b>25</b>  | <b>25</b>   |
| <b>Conversion formula</b>                    | <b>Total marks in 4 IA theory examinations /10</b> | <b>Total marks in 4 IA Practical examinations /10</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>  | <b>10</b>   |
|  | <b>Combined theory + Practical = 25</b>            |   |

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

| Total Internal Assessment Marks | Final rounded marks |
|---------------------------------|---------------------|
| 13.01 to 13.49                  | 13                  |
| 13.50 to 13.99                  | 14                  |

2. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject.
3. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.
4. Remedial measures

**A. Remedial measures for non-eligible students**

- i) At the end of each internal assessment examination, students securing less than 50% marks shall be identified. Such students should be counseled at the earliest and periodically. Extra classes for such students may be arranged.
- ii) If majority of the students found to be weak in a particular area then extra classes must be scheduled for all such students. Even after these measures, if a student is failed to secure 50% marks combined in theory and practical (40% separately in theory and practical) after prelim examination, the student shall not be eligible for final examination.
- iii) Non eligible candidates are offered to reappear for repeat internal assessment examination/s, which must be conducted 2 months before next University examination. The pattern for this repeat internal assessment examination shall be similar to the final University examination. The marks in this examination shall be considered for deciding the eligibility criteria. Following conversion formula shall be used for converting the marks.

|  | <b>Theory</b>                                   | <b>Practical</b>                                   |
|--|---|--|
| <b>Remedial examination</b>                  | <b>100</b>                                      | <b>100</b>   |
| <b>Conversion out of</b>                     | <b>25</b>                                       | <b>25</b>  |
| <b>Conversion formula</b>                    | <b>Marks in remedial theory examinations /4</b> | <b>Marks in remedial Practical examinations /4</b> |
| <b>Eligibility criteria after conversion</b> | <b>10</b>                                       | <b>10</b>  |
|  | <b>Combined theory + Practical = 25</b>         |  |

**B. Remedial measures for absent students:**

- If any of the students is absent for any of the 4 IA examinations due to any reasons, following measures shall be taken.
- i. The student is asked to apply to the academic committee of the college for reexamination, through HOD, to ascertain the genuineness of the reason for absentee.
  - ii. If permitted by academic committee, an additional examination for such students is to be conducted after prelims examination. Marks for such additional examination shall be equal to the missed examination.
  - iii. Even if a student has missed more than one IA examination, he/she can appear for only one additional IA examination. In such scenario, eligibility should be determined by marks obtained in internal assessment examinations for which the candidate has appeared, without changing the denominator.



## Internal Assessment Practical Examinations

### Pediatrics

#### Internal Assessment Practical – I, II and III

| Subject: Pediatrics Practical (IA – I, II and III) |        |        |                    |                       |
|--|--------|--------|--------------------|-----------------------|
| Case   | OSCE 1 | OSCE 2 | Journal & log book | Practical Total marks |
| 20   | 10     | 10     | 10                 | 50                    |
|  |        |        |                    |                       |

# OSCE Stations to include Signs of General examinations, Local examinations, Psychomotor skills and Communication skills., history taking of a particular symptom; nutrition history, developmental history, immunization history.

#### Prelim Practical

| Subject: Pediatrics Practical (Prelims)                |  |                                      |      |                    |                       |
|--|--|--------------------------------------|------|--------------------|-----------------------|
| Long Case<br>(Including clinical skills demonstration) | Short Case<br>(Including communication skills) | OSCE<br>(4 stations x 10 marks each) | Viva | Journal & log book | Practical Total marks |
| 25   | 15   | 40                                   | 10   | 10                 | 100                   |
|  |  |                                      |      |                    |                       |

OSCE 1 – Clinical Skills , OSCE 2 – Anthropometry assessment, OSCE 3 – Certifiable procedural skills , OSCE 4 – AETCOM related skills

#### MUHS Final Practical

| Subject: Pediatrics Practical (Prelims)                |  |                                      |      |                       |
|--|--|--------------------------------------|------|-----------------------|
| Long Case<br>(Including clinical skills demonstration) | Short Case<br>(Including communication skills) | OSCE<br>(4 stations x 10 marks each) | Viva | Practical Total marks |
| 30   | 20   | 40                                   | 10   | 100                   |
|  |  |                                      |      |                       |

OSCE 1 – Clinical Skills , OSCE 2 – Anthropometry assessment, OSCE 3 – Certifiable procedural skills , OSCE 4 – AETCOM related skills

Paper wise distribution of topics for Prelim & MUHS Annual Examination

Year: III-II MBBS Subject: General Surgery and allied

| Paper | Section | Topics  |
|-------|---------|---|
| I     | A       | MCQs on all topics of paper I of Surgery  |
|       | B       | Metabolic response to injury, Shock, Blood and blood components, Burns, Wound healing and wound care, Surgical infections, Surgical Audit and Research, Nutrition and fluid therapy, Transplantation, Biohazard disposal, Trauma, Skin and subcutaneous tissue, Developmental anomalies of face, mouth and jaws, Oropharyngeal cancer, Disorders of salivary glands, Endocrine General Surgery: Thyroid and parathyroid, Adrenal glands, Breast, Vascular diseases, Ethics & AETCOM ( module 4.3,4.5,4.6) |
|       | C       | Abdomen- including Hernia, Peritoneum, GIT tract including esophagus, stomach, small intestine, colon rectum and anal canal, Liver , Spleen, Pancreas, Biliary tract , Minimally invasive Surgery, Pediatric surgery  |
| II    | A       | MCQs on all topics of the paper II including orthopaedics, anaesthesia, radiology , radiotherapy and dentistry .  |
|       | B       | Cardio-thoracic - Chest - Heart and Lungs ,Urinary System- Kidney ureter and urinary bladder , Penis, Testis and scrotum, Plastic surgery, Oncology, Investigation of surgical patient, Pre, intra and post- operative management Radiology, Radiotherapy, Anesthesia and pain management , Dentistry   |
|       | C       | Orthopedics ,   |