



Integrated Bachelor and Master Programmes in Biomedical Science
IBMP (Biomedical Science) Semester (I)

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| Paper Code | IS01CBMC56 | Periods per week | 01 |
| Title of the paper | Practical based on UT01CBMC54 & UT01CBMC55 | Exam Duration | 2 Hrs |
| Total Credit of the Paper | 01 | Total Marks | 50 |

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| Course Objectives: (As per Guidelines – I) | <ol style="list-style-type: none">1. To understand the practical aspects of different animal tissue, make the students aware of various blood indices and develop better understanding of human anatomy through models.2. To learn staining techniques, make students understand isolation techniques of bacteria and learn about internal organelles |
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| Unit | Description |
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| 1. | <ul style="list-style-type: none">• Microscopic examination of morphological characteristics of tissues• Enumeration of RBC and WBC• Determination of Hemoglobin, ESR, PCV• Determination of bleeding time and clotting time• Measurement of blood pressure, heart rate and pulse rate• Identification of different types of bones• Understanding of the following models- Digestive system, Heart, brain• Demonstration of ECG |
| 2. | <ul style="list-style-type: none">• Cell wall staining• Capsule staining• Endospore staining• Study of motility by hanging drop preparation• Simple staining• Gram's staining• Streak plate method for isolation of bacteria• Spread plate technique for isolation of bacteria. |

* Units will have the same weightage in the evaluation as suggested in the course outline

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| Teaching-Learning Methodology (As per Guidelines) | Practical sessions will be conducted in a suitably equipped laboratory either individually or in groups depending on the nature of exercise as well as the availability of infrastructure |
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SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))
Syllabus with effect from the Academic Year 2021-2022

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| -II) | |
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| Evaluation Pattern | | |
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| Sr. No. | Details of the Evaluation | Weightage |
| 1. | Internal Written / Practical Examination | 15% |
| 2. | Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance | 15% |
| 3. | University Examination | 70% |
| 4. | Minimum Passing Criteria: | |

| Course Outcomes: Having completed this course, student will be able to (As per Guidelines –III) | |
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| 1. | Practicals are conducted based on theory papers to strengthen the understanding behind concepts. |
| 2. | Students are exposed to instruments. |

| Suggested References: Include reference material from where a student is expected to study the said content in APA style. Reference websites can also be included. (As per Guidelines –IV) | |
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| Sr. No. | Reference |
| 1. | Microbiology Practical (vol I and II) – Rakesh Patel |
| On-line resources available that can be used as reference material (As per Guidelines –V) | |
| Sr. No. | On-line Resources |
| 1. | https://nptel.ac.in/courses/102/103/102103015/ |
| 2. | https://microbiologyinfo.com/category/basic-microbiology/ |