



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

Paper Code	IS02CBMC56	Periods per week	01
Title of the paper	Practical based on IS02CBMC54 & IS02CBMC55	Exam Duration	3 Hrs
Total Credit of the Paper	1	Total Marks	50

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop better understanding of human anatomy through models, assess the functional status of the respiration system of human body and to learn basics of urine examination.</li><li>2. To learn about the various qualitative analysis of carbohydrate, proteins, amino acids and Fat.</li></ol>
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Course Description		
Unit	Description	Weightage*
1.	<ul style="list-style-type: none"><li>• Understanding of model of Respiratory system and alveoli</li><li>• Measurement of pulmonary function test using spirometry</li><li>• Understanding of model of kidney and nephron</li><li>• Physical and microscopic examination of urine sample (Urine analysis)</li><li>• Understanding of model of skin</li><li>• Understanding of model of various endocrine glands: Pituitary gland, thyroid gland, parathyroid, pancreas, adrenal gland</li><li>• Understanding of model of different phases of pregnancy</li></ul>	25%
2.	<ul style="list-style-type: none"><li>• Qualitative analysis of carbohydrates</li><li>• Qualitative analysis of proteins</li><li>• Qualitative analysis of amino acids</li><li>• Qualitative analysis of fat</li><li>• Estimation of protein by Biuret method</li></ul>	25%

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

Teaching-Learning Methodology	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**  
**Vallbah Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))**  
**Syllabus with effect from the Academic Year 2021-2022**

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Evaluation Pattern		
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	
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.	
Sr. No.	Reference
1.	Biochemical methods: S. Sadasivam & A. Manickam
On-line resources available that can be used as reference material (As per Guidelines –V)	
Sr. No.	On-line Resources
1.	<a href="http://cbii-au.vlabs.ac.in/">http://cbii-au.vlabs.ac.in/</a>