



**BHAVAN'S VIVEKANANDA COLLEGE  
OF SCIENCE, HUMANITIES & COMMERCE**  
Sainikpuri, Secunderabad – 500094  
(Accredited with 'A' grade by NAAC)  
Autonomous College - Affiliated to Osmania University  
Department of Biochemistry

**PROGRAM NAME: M.Sc. BIOCHEMISTRY (w.e.f 2019-20)**

SEMESTER I								
PAPERS	Code	TITLE	Course Type	Teaching hrs/week	Credits	Internal marks	Final exam marks	Total
<b>Theory</b>								
1	BI101	Chemistry and Metabolism of Proteins, Lipids and Porphyrins	DSC	4	4	30	70	100
2	BI102	Chemistry and Metabolism of Carbohydrates, Vitamins And Nucleic Acids	DSC	4	4	30	70	100
3	BI103	Bio-Analytical Techniques	DSC	4	4	30	70	100
4	BI104	Bioenergetics and Photosynthesis	DSC	4	4	30	70	100
<b>Practicals</b>								
5	BI151P	Amino acid and protein analysis		8	4	--	100	100
6	BI152P	Carbohydrate and lipid analysis		8	4	--	100	100
<b>Total</b>				<b>32</b>	<b>24</b>	<b>120</b>	<b>480</b>	<b>600</b>
SEMESTER II								
PAPERS		TITLE		Teaching hrs/week	Credits	Internal marks	Final exam marks	Total
<b>Theory</b>								
1	BI201	Enzymology	DSC	4	4	30	70	100
2	BI202	Molecular Biology	DSC	4	4	30	70	100
3	BI203	Biochemical Genetics and Model Organisms	DSC	4	4	30	70	100
4	BI204	Biostatistics and Clinical Biochemistry	DSC	4	4	30	70	100
<b>Practicals</b>								
5	BI 251P	Enzymology and Biochemical Preparations		8	4	--	100	100
6	BI 252P	Molecular Biology, Genetics and Clinical Biochemistry		8	4	--	100	100
<b>Total</b>				<b>32</b>	<b>24</b>	<b>120</b>	<b>480</b>	<b>600</b>

*A. Sai Jada*

Head, Dept. of Bio-Chemistry  
Bhavan's Vivekananda College  
Sainikpuri, Secunderabad-500 094

*Chowdhury*  
BHAVAN  
Faculty of Science  
Osmania University,  
SECUNDERABAD-500 007



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**Choice Based Credit System (CBCS Syllabus), with effect from 2020-21.**

**SEMESTER III**

Papers	Code	Title	Course Type	Teaching hrs/week	Credits	Internal marks	Final exam marks	Total
<b>Theory</b>								
1	BI301	Gene Regulation and Genetic Engineering	DSC	4	4	30	70	100
2	BI302	Immunology and Immunotechnology	DSC	4	4	30	70	100
3	BI303 A	Cell Signalling, differentiation and Protein targeting/	DSE	4	4	30	70	100
	BI303 B	Cell Signalling, differentiation and Methods of cell study						
4	BI304	Microbiology	DSE	2	2	15	35	50
	BI305	MOOCS course in allied subjects		2	2		50	50
<b>Practicals</b>								
5	BI351P	Recombinant DNA & Immunotechnology		6	3	--	75	75
6	BI352P	Cell biology & Microbiology		6	3	--	75	75
7	BI353P	Project course work		4	2		50	50
	Total			32	24	105	495	600

*A. Sai Reddy*  
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SEMESTER IV								
Papers	Code	Title	Course Type	Teaching hrs/week	Credits	Internal marks	Final exam marks	Total
<b>Theory</b>								
1	BI401	Physiology and Xenobiotics	DSC	4	4	30	70	100
2	BI402	Bioinformatics	DSC	4	4	30	70	100
3	BI403	Biotechnology	DSE	4	4	30	70	100
4	BI404	Endocrinology and metabolic disorders	DSE	4	4	30	70	100
<b>Practicals</b>								
6	BI451P	Bioinformatics & Endocrinology		8	4	--	100	100
7	BI452P	Project		8	4	--	100	100
	Total			32	24	120	480	600
	<b>Grand Total</b>			<b>128</b>	<b>96</b>	<b>465</b>	<b>1935</b>	<b>2400</b>

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*Chinnaw*  
HEAD  
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