

KARPAGAM ACADEMY OF HIGHER EDUCATION
DEPARTMENT OF BIOCHEMISTRY
(Scheme of Examination for 2017- 2018 onwards)
B.Sc., BIOCHEMISTRY CURRICULUM

Course code	Name of the course	Hrs / week	Marks			Exam (h)	Credit
			CIA	ESE	Total		
SEMESTER – I							
17LSU 101	Language -I	04	40	60	100	3	4
17ENU101	English	04	40	60	100	3	4
17BCU101	Molecules of Life	04	40	60	100	3	4
17BCU102	Cell biology	04	40	60	100	3	4
17BCU103	Membrane Biology and Bioenergetics	04	40	60	100	3	4
17BCU111	Molecules of Life- Practical	03	40	60	100	3	2
17BCU112	Cell biology - Practical	03	40	60	100	3	2
17BCU113	Membrane Biology and Bioenergetics - Practical	04	40	60	100	3	2
	Semester total	30	320	480	800	-	26
SEMESTER – II							
17LSU 201	Language - II	04	40	60	100	3	4
17BCU201	Proteins	04	40	60	100	3	4
17BCU202	Enzymes	04	40	60	100	3	4
17BCU203	Human Physiology	04	40	60	100	3	4
17BCU211	Proteins - Practical	03	40	60	100	3	2
17BCU212	Enzymes- Practical	03	40	60	100	3	2
17BCU213	Human Physiology - Practical	04	40	60	100	3	2
17AEC 201	Environmental Studies	04	40	60	100	3	4
	Semester total	30	320	480	800	-	26
SEMESTER – III							
17BCU301	Metabolism of Carbohydrates and Lipids	04	40	60	100	3	4
17BCU302	Metabolism of Amino acids and Nucleic acids	04	40	60	100	3	4
17BCU303	Hormone: Biochemistry and Function	04	40	60	100	3	4
17BCU311	Metabolism of Carbohydrates and Lipids - Practical	04	40	60	100	3	2
17BCU312	Metabolism of Amino acids and Nucleic acids- Practical	04	40	60	100	3	2
17BCU313	Hormones: Biochemistry and Function- Practical	04	40	60	100	3	2
17BCU304A	Tools and Techniques in Biochemistry	03	40	60	100	3	3
17BCU304B	Concepts in Genetics						
17BCU314A	Tools and Techniques in Biochemistry - Practical	03	40	60	100	3	1
17BCU314B	Concepts in Genetics - Practical						
	Semester total	30	320	480	800	-	22
SEMESTER – IV							
17BCU401	Gene Organization, Replication and Repair	04	40	60	100	3	4
17BCU402	Gene Expression and Regulation	04	40	60	100	3	4
17BCU403	Immunology	04	40	60	100	3	4
17BCU411	Gene Organisation, Replication and Repair- Practical	04	40	60	100	3	2
17BCU412	Gene Expression and Regulation- Practical	04	40	60	100	3	2
17BCU413	Immunology - Practical	04	40	60	100	3	2
17BCU404A	Bioinformatics	03	40	60	100	3	3
17BCU404B	Protein Purification Techniques						
17BCU414A	Bioinformatics - Practical	03	40	60	100	3	1
17BCU414B	Protein Purification Techniques - Practical						

	Semester total	30	320	480	800	-	22
SEMESTER – V							
17BCU501A	Clinical Biochemistry	03	40	60	100	3	3
17BCU501B	Biochemical Correlation of Diseases						
17BCU502A	Basic Microbiology	04	40	60	100	3	4
17BCU502B	Nutritional Biochemistry						
17BCU503A	Plant Biochemistry	04	40	60	100	3	4
17BCU503B	Advanced Cell Biology						
17BCU504A	Molecular basis of non- infectious human diseases	04	40	60	100	3	4
17BCU504B	Molecular basis of infectious diseases						
17BCU511A	Clinical Biochemistry- Practical	03	40	60	100	3	1
17BCU511B	Biochemical Correlation of Diseases- Practical						
17BCU512A	Basic Microbiology- Practical	04	40	60	100	3	2
17BCU512B	Nutritional Biochemistry- Practical						
17BCU513A	Plant Biochemistry-- Practical	04	40	60	100	3	2
17BCU513B	Advanced Cell Biology- Practical						
17BCU514A	Molecular basis of non- infectious human diseases - Practical	04	40	60	100	3	2
17BCU514B	Molecular basis of infectious diseases - Practical						
	Semester total	30	320	480	800	-	22
SEMESTER – VI							
17BCU601A	Genetic Engineering and Biotechnology	03	40	60	100	3	3
17BCU601B	Research Methodology						
17BCU602A	Biostatistics	04	40	60	100	3	4
17BCU602B	Fundamentals of nanotechnology						
17BCU603A	Drug Biochemistry	04	40	60	100	3	4
17BCU603B	Food Preservation Technology						
17BCU611A	Genetic Engineering and Biotechnology- Practical	03	40	60	100	3	1
17BCU611B	Research Methodology - Practical						
17BCU612A	Biostatistics- Practical	04	40	60	100	3	2
17BCU612B	Fundamentals of nanotechnology- Practical						
17BCU613A	Drug Biochemistry- Practical	04	40	60	100	3	2
17BCU613B	Food Preservation Technology- Practical						
17BCU691	Project	08	40	60	100	-	6
ECA / NCC / NSS / Sports / General interest etc							Good
	Semester total	30	280	420	700		22
	G. Total		1880	2820	4700	-	140

Code: 17BCU101

17	-Academic Year
BC	-Biochemistry
U	- Bachelor's Degree
First Digit	- Semester number (1, 2, 3 and)
Second digit	- Theory (0); Practical (1); Project (9)
Last digit	- Paper number in the concerned semester (1, 2...)

SKILL ENHANCEMENT COURSE

Semester	Subject Code	Skill Enhancement Course
III	17BCU304A	Tools and Techniques in Biochemistry
	17BCU304B	Concepts in Genetics
	17BCU314A	Tools and Techniques in Biochemistry - Practical
	17BCU314B	Concepts in Genetics - Practical
IV	17BCU404A	Bioinformatics
	17BCU404B	Protein Purification Techniques
	17BCU414A	Bioinformatics- Practical
	17BCU414B	Protein Purification Techniques- Practical
V	17BCU501A	Clinical Biochemistry
	17BCU501B	Biochemical Correlations and Diseases
	17BCU511A	Clinical Biochemistry- Practical
	17BCU511B	Biochemical Correlations and Diseases- Practical
VI	17BCU601A	Genetic Engineering and Biotechnology
	17BCU601B	Research Methodology
	17BCU611A	Genetic Engineering and Biotechnology- Practical
	17BCU611B	Research Methodology - Practical

DISCIPLINE SPECIFIC ELECTIVE

Semester	Subject Code	Discipline Specific Elective
V	17BCU502A	Basic Microbiology
	17BCU502B	Nutritional Biochemistry
	17BCU512A	Basic Microbiology- Practical
	17BCU512B	Nutritional Biochemistry- Practical
V	17BCU503A	Plant Biochemistry
	17BCU503B	Advanced Cell Biology
	17BCU513A	Plant Biochemistry- Practical
	17BCU513B	Advanced Cell Biology- Practical
V	17BCU504A	Molecular basis of non-infectious human diseases
	17BCU504B	Molecular basis of infectious diseases
	17BCU514A	Molecular basis of non-infectious human diseases- Practical
	17BCU514B	Molecular basis of infectious diseases- Practical
VI	17BCU602A	Biostatistics
	17BCU602B	Fundamentals of nanotechnology
	17BCU612A	Biostatistics- Practical
	17BCU612B	Fundamentals of nanotechnology- Practical
VI	17BCU603A	Drug Biochemistry
	17BCU603B	Food Preservation Technology
	17BCU613A	Drug Biochemistry- Practical
	17BCU613B	Food Preservation Technology- Practical
VI	17BCU691	Project

Continuous Internal Assessment Marks

S.No	Category	Marks
1	Assignment	5
2	Attendance	5
3	Seminar	5
4	CIA I	8
5	CIA II	8
6	CIA III	9
Total Marks		40

End Semester Examinations

1	Part A 20 X 1 = 20 Online Examination	20
2	Part B 5 X 2 = 10	10
3	Part C 5 X 6 = 30 Either A or B type	30
	Total	60