

### UNIVERSITY OF CALICUT

### **Abstract**

BSc in Biotechnology-CUCBCSS UG 2014-Scheme and Syllabus- Approved-Implemented w.e.f 2014 Admissions-Orders issued.

## G & A - IV - J

U.O.No. 7203/2014/Admn

Dated, Calicut University.P.O, 24.07.2014

Read:-1. U.O. No. 3797/2013/CU, dated 07.09.2013 (CBCSS UG Modified Regulations) (File.ref.no. 13752/GA IV J SO/2013/CU).

- 2. U.O. No. 5180/2014/Admn, dated 29.05.2014 (CBCSS UG Revised Regulations) (File.ref.no. 13752/GA IV J SO/2013/CU).
- 3. Item no. 1 of the minutes of the meeting of the Board of Studies in blotechnology held on 26.05.2014.
- 4.ltem no. 14 of the minutes of the meeting of the Faculty of Science held on 27.06.2014.
- 5.Orders of the Vice Chancellor on 14.07.2014, in the file no, 18602/GA IV /J1/2013/CU.

# **ORDER**

The Modified Regulations of Choice Based Credit Semester System for UG Curriculum w.e.f 2014was implemented under the University of Calicut vide paper read as

(1). The Revised CUCBCSS UG Regulations has been implemented w.e.f 2014 admission, for all UG programme under CUCBCSS in the University, vide paper read as (2).

The Board of Studies in Biotechnology finalized the syllabus of B Sc. Biotechnology for implementation w.e.f the Academic Year 2014-2015. vide paper read as (3).

The Faculty of Science has also approved the minutes of the Board vide paper read as (4).

The Hon'ble Vice Chancellor, considering the exigency, exercising the powers of the Academic Council has approved the items regarding syllabus implementation in the minutes of the concerned Boards of Studies mentioned in the minutes of the Faculty of Science, subject to ratification by the Academic Council, vide paper read as (5).

Sanction has, therefore, been accorded for implementing the Scheme and Syllabus of BSc. in Biotechnology under CUCBCSS UG 2014, in the University, w.e.f 2014 Admissions.

Orders are issued accordingly.

(The syllabus is available in the website: universityofcalicut.info)

Muhammed S

Deputy Registrar

To

- 1. All Affiliated Colleges/SDE/Dept.s/Institutions under University of Calicut.
- 2. The Controller of Examinations, University of Calicut.
- 3. The Director SDE, University of Calicut.

Forwarded / By Order

Section Officer

# RESTRUCTURED COURSE CURRICULUM (Syllabus)

For

B.Sc. BIOTECHNOLOGY UNIVERSITY OF CALICUT Academic year 2014 –'15 onwards

# B.Sc. Biotechnology COURSE STRUCTURE UNDER CCSS

			Instruc.	Cre	Exa	Marks		
	Course Tit	Course Lifle   Hrs/W		dit	m Hrs	Int.	Ext.	Total Credit
I semester				•	•	•		
	Common Course		4	4				
	Common Course		5	3				
	Common Course		5	4				
BT1B 01	Core Course I	Cell biology	3	3	3hrs	20%	80%	20 credits
BTIC 01	1 <sup>st</sup> Complimentary course –1	Chemistry	2	3				
BTIC 02(P)	1 <sup>st</sup> Complimentary course Practicals -1	Chemistry Practical	2					
BTIC 03	2 <sup>nd</sup> Complimentary course-1	Environmental Biotechnology	2	3				
BTIC 04(P)	2 <sup>nd</sup> Complimentary course Practicals – 1	Environmental Biotechnology	2					
			25	20				
II semester								
	Common course		4	4				
	Common Course		5	3	1			
	Common Course		5	4	3 hrs	20%	80%	20 credits
BT2B 02	Core course II	General Microbiology	4	3				
BT2C 05	1 <sup>st</sup> Complimentary Course II	Chemistry	2	3				
BT2C 06(P)	1 <sup>st</sup> Complimentary Practical	Chemistry practical	2	*				
BT2CO7	2 <sup>nd</sup> Complimentary Course II	Environmental Biotechnology	2	3				
BT2CO8(P)	2 <sup>nd</sup> Complimentary Course Practicals II	Environmental Biotechnology	2	*				
			25	20				
III semester								
	Common Course		5	4				
	Common Course		5	4	1			
BT3BO3	Core Course	Biochemistry	3	3	1			
BT3BO4(P)	Core Course Practical III	Biochemistry	2	3	1			
BT3C 09	1 <sup>st</sup> Complimentary course III	Chemistry	3	3	1			
BT3C10(P)	1 <sup>st</sup> Complimentary Practical	Chemistry	2	*	1			
BT3C11	2 <sup>nd</sup> Complimentary Course III	Environmental Biotechnology	3	3	3	0.5		20
BT3C12(P)	2 <sup>nd</sup> Complimentary Practical	Environmental Biotechnology	2	*	hrs	20%	80%	credits
					-			

IV semester								
	Common Course		5	4			80%	21 credits
	Common Course		5	4	3 hrs	20%		
BT4BO5	Core Course	Genetics	3	4				
BT4C13	1 <sup>st</sup> Complimentary Course IV	Chemistry	3	3				
BT4C14 (P)	1 <sup>st</sup> Complimentary Practical IV	Chemistry practical	2	*				
BT4 C15	2 <sup>nd</sup> Complimentary Course IV	Environmental Biotechnology	3	3				
BT4 C16 (P)	2 <sup>nd</sup> Complimentary Practical IV	Environmental Biotechnology practical	2	*				
BT4 B06 (P)	Core Practical IV	Practicals in Genetics	2	3**				
			25	21				
V semester	-			-		1		
BT5B 07	Core Course V	Molecular Biology	4	3	- 3 hrs	20%	80%	21 credits
BT5BO8	Core Course VI	Immunology and Immuno-technology	4	3				
BT5B09	Core Course VII	Bioprocess Technology	4	3				
BT5B 10(P)	Core Course Practical V	Practicals in Molecular Biology	4	4**				
BT5 B 11(P)	Core Course Practical VI	Immunology and Immuno-technology practical	4	4**				
BT5D 01	Open Course-1 (From other department)	Introduction to Biotechnology	3	2				
BT5B12	Core Course Practical VII	Practical's in Bioprocess technology	4	2				
DTCD40			25	21				
VI semester	Project work							
vi semester								
BT6B13	Core course VIII	Plant Biotechnology	4	3	3 Hrs	20%	80%	18 credits
BT6B14	Core Course IX	Animal Biotechnology	3	3				
BT6B15	Core Course X	Recombinant DNA Technology and bioinformatics	3	3				
BT6B16(P)	Core Course VIII Practical	Plant Biotechnology Practical	4	3**				
BT6 B17	Elective Course – (from same subject/ department)	Medical Biotechnology	3	2				
BT6 B18	Project	Combined Project of 5 students in each group	4	4				
			25	10				
				18				



