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#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057 Phone: 080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797

### Department of Biotechnology

#### Curriculum Plan & Deployment 2021-22

Sl.No.	Subject Name /Code	Beyond Syllabus	Innovative teaching methods / ICT Tools Used	Deployment Strategy and Tool	Cross-cutting issues integrated	PO	PSO
1.	18BT31 /Biostatistics		Google classroom & Google meet	Chalk and Talk method		PO1, 2,3,4,5,6,7	PSO1,2,3
2.	18BT32/ Microbiology	Seminar	Google classroom & Google meet	Chalk and Talk method PPT,Project work,Internship	Environmental Sustainability	PO1,2,3,4,6,7,9,10,11,12	PSO1,2,3
3.	18BT33 /Unit Operations		Google classroom & Google meet	Chalk and Talk method PPT	Environmental Sustainability	PO1,2,3,7,9,10,11	PSO 1,2,3
4.	18BT34/ Introduction to Biomolecules		Google classroom & Google meet	Chalk and Talk method, PPT		PO1,2,5,12	PSO1
5.	18BT35/ Cell Biology and Genetics		Google classroom & Google meet	Chalk and Talk method, PPT	Human values	PO1,2,3,4,8,9,11	PSO1,2,3
6.	18BT36/ Python Programming		Google classroom & Google meet	Chalk and Talk method, PPT		PO1, 2,3,4,5,6,7	PSO1,2
7.	18BTL37/Microbiology Laboratory	Conduction of new experiments which are beyond the syllabus	Google classroom & Google meet	Chalk and Talk method PPT,Project and internship	Environmental Sustainability	PO1,2,3,4,6,7,9,10,11,12	PSO1,2,3





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8.			Google	Chalk and Talk method		PO1,2,3,7,9,10,11	PSO 1,2,3
	18BTL38 /Unit Operations		classroom & Google meet	PPT	Environmental Sustainability	A LAND & WARDS	
9.	Laboratory		Google	Chalk and Talk method	Sustainability	PO 1,2,3,4,11,12	
	18BT41/ Stoichiometry		classroom &			,.,.,.,.,	. Hill States
		and the second	Google meet	РРТ			PSO 1,2
10.		Conducted	Google	Chalk and Talk method		PO1,2,3,10,12	PSO1,2
		Quiz	classroom &				
11	18BT42/ Molecular Biology		Google meet	PPT, You tube videos			
11.	18BT43 /Immunotechnology		Google classroom &	Chalk and Talk method	Human values	PO1,2,3,6,8	PSO1,2,3
	, minuloteenhology		Google meet	PPT, NPTEL videos	fiuman values	101,2,5,0,0	1001,2,5
12.			Google	Chalk and Talk method	Environmental	PO 1,2,7,10,12	PSO1,2,3
	18BT44/ Cell Culture		classroom &		Sustainability	FO 1,2,7,10,12	
1.24	Techniques		Google meet	PPT			
13.			Google	Chalk and Talk method		PO1,2,3,4,11,12	
	18BT45 /Biochemical	2.541-6.65°	classroom &	PPT			PSO 1,2
14.	Thermodynamics	Conducted	Google meet Google	PP1			F30 1,2
14.	18BT46/ Clinical	Quiz	classroom &	Chalk and Talk method, PPT,		PO1,2,5,6,12	PSO1,2
	Biochemistry	Quiz	Google meet	you tube videos			
15.		Conduction	Google	Chalk and Talk method		PO1,2,3,4,6,9,10,11,12	PSO1,2
	18BTL47/ Biochemistry	ofnew	classroom &				
	Laboratory	experiments	Google meet	PPT	A CONTRACTOR OF		1 13.467
		which are beyond the	A BAR A				
		syllabus	2.3825.26				
16.	18BTL48/		Google	Chalk and Talk method			12-30174
	Immunotechnology		classroom &		Human values	PO1,2,3,6,8	PSO1,2,3
	Laboratory		Google meet	PPT			
17.			Google	Chalk & talk, PPT, webinars,	Professional ethics	0010070	DECLOS
5.5	18BT51/ Bio-Business and	and the state of the	classroom &			PO1,2,3,6,8	PSO1,2,3
1. 1. 1	Entrepreneurship		Google meet				- 1. S.





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18.	SUBLIC PART PULLS		Google	Chalk and Talk method		PO 1,2,3,5,6,7	PSO1,2
	18BT52 /Chemical Reaction Engineering	10. The A.	classroom & Google meet	РРТ	Environmental Sustainability		10100
19.	18BT53/Enzyme Technology & Biotransformation		Google classroom & Google meet	Chalk and Talk method, Project and Internship		PO1,2,3,12	PSO 1,2
20.	18BT54/ Genomics & Proteomics		Google classroom & Google meet	Chalk and Talk method You tube PPT	Human Value and Professional ethics	PO1,2,3,4,8,9,11	PSO1,2
21.	18BT55 /Bioanalytical Techniques		Google classroom & Google meet	Chalk and Talk method, NPTEL Videos, PPT		PO1,2,7,12	PSO1,2,3
22.	18BT56 /Genetic Engineering &Applications		Google classroom & Google meet	Chalk and Talk method, NPTEL Videos, PPT	Ethical issue-Human values	PO1,2,3,6,8	PSO1,2,3
23.	18BTL57/ Biokinetics & Enzyme Technology Laboratory		Google classroom & Google meet	Chalk and Talk method, Project and Internship		PO 1,2,3,4,9,10,12	PSO1,2
24.	18BTL58/ Genetic Engineering and Cell Culture Laboratory	Conduction of new experiments which are beyond the syllabus	Google classroom & Google meet	Chalk and Talk method, NPTEL Videos, PPT	Ethical issue-Human values	PO3,6,8	PSO1,2,3
25.	18BT61 /Process Control & Automation Chemical		Google classroom & Google meet	Chalk and Talk method	Environmental Sustainability	PO1,2,3,4,5,6,7,9,10,11,1 2	PSO1,2,3
26.	18BT62 /Bioprocess Equipment Design & CAED		Google classroom & Google meet	Chalk and Talk method PPT	Environmental Sustainability	PO1,2,3,4,5,7,9,10,12	PSO1,2,3
27.	18BT63 /Bioinformatics		Google classroom & Google meet	Chalk and Talk method		PO 1,2,3,10,11,12	PSO 1,2

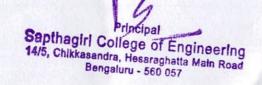
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28.	18BT643/ Human		Google	Chalk and Talk method		PO 1,2,3,10,11,12	PSO 1,2
	Physiology	A MARINE AND	classroom &	State - A Market - A Market - A			
		Sec. Some	Google meet	PPT			
29.	18BT653/		Google	Chalk and Talk method			Decia
	Nanobiotechnology	12012	classroom &	DDT		PO1,2,3,6,12	PSO1,2,3
30.			Google meet	PPT Chalk and Talk method		PO1,2,3,4,5,7,11	PSO1,2
30.	18BTL66 /Process Control		Google classroom &	Chaik and Taik method	Environmental	F01,2,3,4,3,7,11	1301,2
	& Automation Laboratory		Google meet	PPT	Sustainability		1. Proto Parties
31.		Conduction	Google	Chalk and Talk method		PO 1,2,3,10,11,12	PSO 1,2
	18BTL67/ Bioinformatics	ofnew	classroom &				
	Laboratory	experiments	Google meet	PPT,Project			
		which are				a Martin and and	
		beyond the	Lucion State				
32.		syllabus	Google		Environmental		
52.	18BTMP68 /Mini-project	Sector George	classroom &		Sustainability	012245678010	PSO1,2,3
			Google meet	PPT		PO1,2,3,4,5,6,7,8,9,10	
	a service of the second second second	Bitter States	5		Human Value and	Suistan Contract	
1.11					Professional ethics	n sold the second	
33.	18BT71 Bioprocess		Google	Chalk and Talk method, NPTEL		PO1,3,4,6, 9,10	PSO1,2,3
	Engineering	1.57	classroom	Videos, PPT			
34.	18BT72 Clinical &		Google			PO1,3,6	
	Pharmaceutical		classroom	Chalk and Talk method, NPTEL			DECI 2
	Biotechnology			Videos, PPT			PSO1,2,
35.	18T732 Bioreactor Design		Google	Chalk and Talk method You tube			PSO1
	Concepts	1	classroom	PPT, Project and Intership		PO1	A AN A ANA A
36.	18BT742 Agricultural		Google	Chalk and Talk method		101	
50.	Biotechnology		classroom	Chark and Tark method			1000
1				PPT			a second
		Survey and	1.14.15.24		1248 (1. 1997) H	PO 1,2,3,4,9,10,12	PSO1,2
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37.	18BT752 Forensic science	Group Discussion and case studies	Google classroom	Chalk and Talk method PPT	Human Value and Professional ethics	PO1,2,4,6,8,10	PSO1,2
38.	18BTL76 Bioprocess Engineering Laboratory	Conduction of new experiments which are beyond the syllabus	Google classroom	Chalk and Talk method ,Project and Intership		PO1,2,3,4,9,10,11,12	PSO1,2
39.	18BTP77 Project phase 1			PPT	"Environmental Sustainability Human Value and Professional ethics"	PO1,2,3,4,5,6,7,8,9,10	PSO1,2,3
40.	18BT71 Internship			PPT	"Environmental Sustainability Human Value and Professional ethics"	PO1,2,3,4,5,6,7,8,9,10	PSO1,2,3
41.	18BT81 Regulatory affairs in Biotechnology		Google classroom	Chalk and Talk method PPT		PO 1,2,3,10,12	PSO1,2
42.	18BT821 Environmental biotechnology		Google classroom	Chalk and Talk method PPT	Environmental Sustainability	PO1,2,3,4,7,9,11	PSO1,2
43.	18BT822 Industrial Microbiology		Google classroom	Chalk and Talk method PPT	Environmental Sustainability	PO1,2,3,4,7,9,11	PSO1,2
44.	18BTP83 Project Phase 2			РРТ	"Environmental Sustainability Human Value and	PO1,2,3,4,5,6,7,8,9,10	PSO1,2,3

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		Sala Di		Professional ethics"		
45.	18BTS84Technical Seminar		 РРТ	"Environmental Sustainability Human Value and Professional ethics"	PO1,2,3,4,5,6,7,8,9,10	PSO1,2,3
46.	18BTI85 Internship		 PPT	"Environmental Sustainability Human Value and Professional ethics"	PO1,2,3,4,5,6,7,8,9,10	PSO1,2,3

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