

## **School of Life Sciences**

## B.Sc. Biotechnology Semester VI Major Assignment

## **Important Instructions to Student:**

- 1. Last date for Assignment Submission **30-May-2020**
- 2. This assignment carries major **weightage of 50 Marks**. Kindly prepare it very carefully and in a very detailed manner. For any help in this regard, kindly contact your faculties.
- 3. Front Page of Assignment should clearly include details like:
  - **a.** Your Name
  - **b.** UID Number
  - c. Subject
  - d. Class
  - e. Semester

In the event of no such information, we may not be able to assign marks for your assignment, for which responsibility lies with students.

- 4. You can write and submit assignment through any of the following options:
  - a. Handwritten Assignment Prepare softcopy of your assignment through suitable apps and send the assignment as one PDF to your respective faculty as mentioned above.
  - b. Typed Assignment Prepare Assignment with following font setting and submit the assignment to your respective faculty as mentioned above.
    - i. Font Type Times New Roman or Arial
    - ii. Headings Font Size 14
    - iii. Text (Except Heading) 12
    - iv. Normal Margin and Line Spacing maximum 1.15
- 5. After this lockdown ends, you all have to submit the physical assignment copies to your respective Faculties. So, keep the assignment carefully for submission.
- 6. While submitting assignment through email, kindly use subject line as Name of the Programe\_Name of Course/Branch\_Semester\_Name o the the Subject. For Example B.Tech.\_Mechanical\_IV\_Theory of Machines



Animal biotechnology-		Mode of Submission : Google form only-		
Prof. Afsana Dholakiya		https://forms.gle/Dz4Fj7Cr5kaUdU1n9		
		<b>Email</b> – afsana.dholakiya@raiuniversity.edu		
		Subject Line: B.Sc. BT VI AB		
1.	What is animal biotechnol	ogy? Explain different types of contaminations in animal cell culture		
	and advantages and disadvantages of animal biotechnology.			
2.	What is cell cloning? Explain different cloning techniques used in animal cell culture.			
3	Explain: Cell viability and Cyto-toxicity assays.			
4	What is culture? Explain differences between batch culture and continuous culture with a clean			
	diagram of bio-reactor.			
5.	What is transgenesis and trans-genetic animal? Explain One physical and one chemical			
	technique of gene insertion.			
Food	and dairy	Mode of Submission : Google form only-		
Biotechnology-		https://forms.gle/ZcaBetDZRu3RLUFUA		
Dr. S	oham Trivedi	Email – N.A.		
		Subject Line: N.A.		
1.	Explain methods, significance of sanitization in food industry			
2.	Elaborate on food preservation.			
3.	Write a note on application of enzymes in food industry.			
4.	Elaborate on the general steps to reduce food contamination.			
5.	Explain in detail about any one topic of your interest related but not limited to subject syllabus.			
Plant Biotechnology-		Mode of Submission: Google classroom only		
Dr. N	Iohan Raj	Google class code: ak3p4nn		
		https://classroom.google.com/u/1/c/Njg1NzYyMDU4Njha		
		Email: - monan.raj@raiuniversity.edu		
1	Subject Line: B.Sc. B1 VIPB   1 Emploin the set with an arthress welling and set to set t			
1.	Explain about anner culture, polien culture, ovule culture, embryo culture?			
2	Describe about the protoplast isolation, culture, manipulation and fusion?			
3.	Elaborate about the DNA based markers – RFLP, AFLP, RAPD, SSR markers.			
4.	Explain in detail about the blotting techniques in plant biotechnology?			
5.	Elaborate in detail about quantitative trait locus?			
Indu	strial Biotechnology –	Mode of Submission: Google classroom		
Dr. Swapnaja mahajan		(Class code:oqx7m33)		
		https://classroom.google.com/w/NTUyODk3MDIzNTBa/tc/MTI1Nj		
		EIMzc5ODY5		
		Subject Line: BSC BT/MICRO VI – Industrial Biotechnology		
1.	Explain metabolites. Write difference between primary and secondary metabolites.			
2.	What is fermentation? Write down the requirements of fermentor.			



3.	Write down advantage and disadvantages of SCP.			
4.	A) Write short note on Enzyme.			
	B) Write short note on application enzyme in industries.			
5.	A) Write objectives of GLP.			
	B) Described components of c-GMP.			
Medical Biotechnology-		Mode of Submission: Email only		
Dr. Sandesh Chibber		Email: sandesh.chibber@raiuniversity.edu		
		Subject Line: B.Sc. BT VI MB		
Create a word/pdf file of given questions in the link and send it by Email				
https://docs.google.com/forms/d/e/1FAIpQLSeReU2ER4XuUsOAFV7RVmgNWvpoaZBJYpLsYja6				
Maqv9KMs3w/viewform?usp=sf_link				
Environment Biotechnology-		Mode of Submission: Google form		
Dr. Soham Trivedi		https://forms.gle/ar7f4kp5EbRka4RK6		
		Email: - N.A.		
		Subject Line: N.A.		
1.	Explain steps for Waste Water Treatment			
2.	Write a note on how biotechnology is strategic for Environmental Management.			
3.	Elaborate on hazardous waste management.			
4.	Explain bioremediation technology.			
5.	Explain in detail about any one topic of your interest related but not limited to subject syllabus.			

NOTE: After completing your assignments, contact your respective faculty member and submit the assignment for assessment.