CERTIFICATE COURSE



B.K. Birla College (Autonomous) Department of Zoology Credit Based Cource on Instrumental Biology 2022-23 Cource Coordinator- Mrs. Vimal Temkar

Theory

Sr.No	Торіс	No.of lectures	Alloted topics to the faculty member						
1	Introduction to instrumental biology	1	VSN						
2	Good Laborotary practices	1	VYG						
3	Solvents and its properties, Concept of pH, Buffer and application	3	KRO						
4	Basic instruments used in laborotary (Weighing balance, Colorimeter, pH meter)	4	VYG						
5	Types of Chromatographic sepearation, Working principles and application	4	VYG						
6	Thin layer chromatography	2	KRO						
	TOTAL	15							

Practicals

Sr.No	Торіс	No.of hours	Alloted topics to the faculty member						
1	Introduction to safety symbols used in laborotary and Various types of glasswares used in laborotary.(handling, labelling and use, Dilutions of chemicals)	2	КНМ						
2	Preparation of PPM, PPB and % solutions	2	VYG						
3	Use of centrifuge, rotary shaker,magnetic steirer and weiging balance for sample preparation	2	DW						
4	pH meter- use of electrode with various types of buffer solutions	3	VYG						
5	Colorimeter- Study the wavelength of given analyte using colorimeter	2	VYG						
6	Linearity measurement of sample using colorimetric analysis	2	VYG						
7	Thin Layer Chromatography	2	VYG						
	Total	15							

Sr. No.	o. Receipt No. Date		Student ID	Class	Roll No	Student Name	Description	Inst Bio	Receipt Total
1	822	9/14/2022	0	F.Y.B.Sc.		DISHA KISHOR PATIL	Instrumental Biology	300	300
2	823	9/14/2022	0	F.Y.B.Sc.		NAIR ANJALI RAJAN	Instrumental Biology	300	300
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3	824	9/14/2022	0	F.Y.B.Sc.		VIKAS BAKELAL YADAV	Instrumental Biology	300	300
4	825	9/14/2022	0	F.Y.B.Sc.		MISHRA SWECHCHA SHESHNARAYAN	Instrumental Biology	300	300
4	025	5/14/2022	0	T.T.D.SC.			instrumental biology	300	
5	826	9/14/2022	0	F.Y.B.Sc.		NACHAN TANAZA MADEEM	Instrumental Biology	300	300
6	828	9/14/2022	0	F.Y.B.Sc.		BHAGAT ANUPSAGAR VIDHYSAGAR	Instrumental Biology	300	300
7	829	9/14/2022	0	F.Y.B.Sc.		KARAN ARJUN JADHAV	Instrumental Biology	300	300
0	009	0/20/2022	0				Instrumental Dialogy	200	200
8	998	9/29/2022	0	F.Y.B.Sc.		LEMBHE SWARALI HEMANT	Instrumental Biology	300	300
9	999	9/29/2022	0	F.Y.B.Sc.		SARVANAKUMAR RAVI NAIKKAR	Instrumental Biology	300	300
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10	1000	9/29/2022	0	F.Y.B.Sc.		MORE DHANSHRI SANJAY	Instrumental Biology	300	300
11	1001	9/29/2022	0	F.Y.B.Sc.		BANSOD AAYUSHI ASHOK	Instrumental Biology	300	300
12	1002	9/29/2022	0	F.Y.B.Sc.		ARCHARYA DIVYA SURESH	Instrumental Biology	300	300
13	1003	9/29/2022	0	S.Y.B.Sc.		PARTOLE ANKITA BALIRAM	Instrumental Biology	300	300
15	1005	572572022	0	5.1.0.50.			instrumental biology	500	500
14	1004	9/29/2022	0	F.Y.B.Sc.		PATWARDHAN SWARDA MILIND	Instrumental Biology	300	300
15	1005	9/29/2022	0	F.Y.B.Sc.		NAVEERA JAFAR KHAN	Instrumental Biology	300	300
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16	1006	9/29/2022	0	S.Y.B.Sc.		RANJAN RASHMI RAKESH	Instrumental Biology	300	300
17	1007	9/29/2022	0	S.Y.B.Sc.		BAGHEL NISHA JAWAHAR SINGH	Instrumental Biology	300	300
17	1007	9/29/2022	0	3.T.D.3C.		BAGHEL NISHA JAWAHAN SINGH	instrumental biology	500	500
18	1008	9/29/2022	0	S.Y.B.Sc.		SWALIHA SAMIL SHAIKH	Instrumental Biology	300	300
19	1009	9/29/2022	0	S.Y.B.Sc.		YADAV ANISH UDAYRAJ	Instrumental Biology	300	300
20	1113	10/17/2022	0	S.Y.B.Sc.		PAWAR SAMRUDDHI MANOHAR	Instrumental Biology	300	300
24		40/47/2022						202	
21	1114	10/17/2022	0	S.Y.B.Sc.		RUTIKA SANJAY CHOUDHARI	Instrumental Biology	300	300
22	1115	10/17/2022	0	S.Y.B.Sc.		MORE BHUMIKA ULHAS	Instrumental Biology	300	300
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				Grand Total				6600	6600

22	21	20	19	18	17	16	15	14	13	12	11	10					9					Sr.No				
2 MORE BHUMIKA ULHAS	1 RUTIKA SANJAY CHOUDHARI	0 PAWAR SAMRUDDHI MANOHAR	9 YADAV ANISH UDAYRAJ	8 SWALIHA SAMIL SHAIKH	7 BAGHEL NISHA JAWAHAR SINGH	6 RANJAN RASHMI RAKESH	5 NAVEERA JAFAR KHAN	4 PATWARDHAN SWARDA MILIND	3 PARTOLE ANKITA BALIRAM	2 ARCHARYA DIVYA SURESH	1 BANSOD AAYUSHI ASHOK	0 MORE DHANSHRI SANJAY	9 SARVANAKUMAR RAVI NAIKKAR	8 LEMBHE SWARALI HEMANT	7 KARAN ARJUN JADHAV	6 BHAGAT ANUPSAGAR VIDHYSAGAR	5 NACHAN TANAZA MADEEM	4 MISHRA SWECHCHA SHESHNARAYAN	3 VIKAS BAKELAL YADAV	2 NAIR ANJALI RAJAN	1 DISHA KISHOR PATIL	Name	Date			B. K. B
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OF COMPLETION

### MISHRA SWECHCHA SHESHNARAYAN

For completing Certificate Course on 'Instrumental Biology ', organized by Department of Zoology for the Year 2022-23







Dr. Avinash Patil (Principal)





Dr. Avinash Patil (Principal)









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Dr. Avinash Patil (Principal)





# OF COMPLETION

## MORE DHANSHRI SANJAY

For completing Certificate Course on 'Instrumental Biology ', organized by Department of Zoology for the Year 2022-23







Dr. Avinash Patil (Principal)



Dr. Avinash Patil (Principal)









Dr. Avinash Patil (Principal)







# OF COMPLETION

### RANJAN RASHMI RAKESH

For completing Certificate Course on 'Instrumental Biology ', organized by Department of Zoology for the Year 2022-23







Dr. Avinash Patil (Principal)











## OF COMPLETION

## RUTIKA SANJAY CHOUDHARI

For completing Certificate Course on 'Instrumental Biology ', organized by Department of Zoology for the Year 2022-23







Dr. Avinash Patil (Principal)

