

**B. K. BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS),
KALYAN**

CERTIFICATE COURSE



Syllabus for Certificate Course : Macromolecules

Title	Hrs
Introduction to macromolecules	2 hrs
Carbohydrates- Definition, Classification, Biological Role. Monosaccharide, oligosaccharide and polysaccharide	3 hrs
Proteins- General structures and features of amino acids. Peptides and proteins- Definition and general features and examples with biological role. Primary, secondary, tertiary and quaternary structure of proteins	3 hrs
Nucleic acids- Nitrogenous bases- purines and pyrimidines Pentoses- Ribose, Deoxyribose N- β -glycosidic bond, phosphodiester bonds. Basic structure of RNA and DNA	2 hrs
Lipids - Classification, structure and function, biological role	2 hrs

Practicals

Title	Hrs
Qualitative and quantitative analysis of carbohydrates	3 hrs
Qualitative and quantitative analysis of proteins	3 hrs
Qualitative and quantitative analysis of nucleic acids	3 hrs
Qualitative and quantitative analysis of lipids	3 hrs
Result and interpretation	3 hrs
Graphical representation of results	3 hrs

List of Enrolled Students

Name	Student I d no.	Class and division	Certificate Course Fee receipt number
Vanshita Balasaheb Erande	32230	Fybsc B	4066
Yadav Anchal Rajesh	33094	F.y bsc /B	4067
Sanyukta Kardekar	32295	Fybsc DIV B	4068
Manasi Waghchaure	32654	Fybsc B	4069
Manjiri Anil Mhatre	33100	Fybsc (microbiology) B	4070
Mayur dewanand sonkusare	32758	F. Y. Bsc (B)	4071
Harshada Anurath Gharde	33138	Fy.bsc B	4072
Gayatri Anil Mali	37041	F.Y.B.Sc B	4073
Pranay Bidyanath Mishra	32400	FYBsc B	4074
Zenia D'souza	32174	F. Y. B. Sc - B	4075
Rachana Ramesh Gangawane	32737	Fybsc B	4076
Tuba Khan	33089	Fybsc B	4077
Khan Ishrat Asmatullah	30217	SYBSc	4078
Tanvi Patil	27404	S.Y.Bsc (B)	4079
Ayesha shaikh	30144	SYBSc (B)	4080
Soniya Joginder Chauhan	30314	S.Y.Bsc(B)	4081
Vandana pandey	32575	F.Y.B.Sc. A	4082
Deshmukh Tejas Shivaji	32576	FYBSC B	4083
Sanika Satish Kesarkar	32517	F.Y.B.Sc. , Div-B	4084
Singh Ayush Ranveer	34447	F.Y.B.SC. (B)	4085
Priyanka kisan patil	32883	Fybsc/B	4086
Reshma singh	27859	Sybsc and B	4087
Rutuja Devendra Pagare	37168	Fybsc B division	4088
Gayatri Sathe	33096	Fybsc B div	4089
Akshata Raikar	30317	SY Bsc and B division	4090

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B. K. Birla College Of Arts, Science And Commerce, Kalyan
(Conducted by Kalyan Citizens' Education Society)

Department of Microbiology

Certificate Course in Macromolecules

Attendance Sheet

Faculty Name... Dr. M. K. Dhaliwal

Topic... Macromolecules

Date:- 17-1-2020

Sr. No.	Name	Class	Roll No.	Signature
1.	Rutuja D. Pagare	F.Y.B.Sc. (C.B.M.) (CZmicro)	292	<u>Rutuja</u>
2.	Sanika S. Kesarkar	FYBSc	213	<u>Sanika</u>
3.	Manjiri Anil Mhatre	FyBSc (CZmic)	100	<u>Manjiri</u>
4.	Preranka Kisan Patil	FYBSc (CZmic)	68	<u>Preranka</u>
5.	Gayatri Nitin Sathe	FYBSc (CZM)	99	<u>Gayatri</u>
6.	Rachana R. Gangawane	FYBSc (CZM)	49	<u>Rachana</u>
7.	Zenid C. D'Souza	FYBSc (CZM)	01	<u>Zenid</u>
8.	vandana b. pandey	FYBSc (CZmic)	27	<u>vandana</u>
9.	Vanshita B. Erande	FYBSc (CZM)	202	<u>Vanshita</u>
10.	Yadav Anchal Rajesh	FYBSc (CZM)	98	<u>Anchal</u>
11.	Gayatri Anil Mali	FYBSc (CZM)	290	<u>Gayatri</u>
12.	ISHRAT KHAN	SYBSc (CM)	129	<u>ISHRAT</u>
13.	Tanvi Patil	SYBSc (CM)	140	<u>Tanvi</u>
14.	Akshata Raikar	SYBSc (CM)	123	<u>Akshata</u>
15.	Soniya Chauhan	SYBSc (CM)	136	<u>Soniya</u>
16.	Ayesha Shaikh	SYBSc (CM)	134	<u>Ayesha</u>
17.	Tejas Shivaji Deshmukh	FYBSc (CZmic)	215	<u>T.S. Deshmukh</u>
18.	Pranay B. Mishra	FYBSc (CZM)	209	<u>Pranay</u>

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Department of Microbiology

Certificate Course in Macromolecules

Attendance Sheet

Faculty Name.....Dr. M. K. Dhaliwal.....

Topic.....Macromolecules.....

Date:- 18-1-2020

Sr. No.	Name	Class	Roll No.	Signature
1	Barun B Mishra	FYBSC(CM)	209	<u>Barun</u>
2	Tejas. Shivaji. Deshmukh	FYBSC(CM)	215	<u>T.S. Deshmukh</u>
3	Yadav Anchal Rajesh	FYBSC(CM)	98	<u>Anchal</u>
4	Zenia. C. D. Souza	FYBSC(CM)	01	<u>Zenia</u>
5	Rachana. Gangawane	FYBSC(CM)	49	<u>Rachana</u>
6	Vandana B. Pendey	FYBSC(CM)	27	<u>Vandana</u>
7	Vanshita B. Erande	FYBSC(CM)	202	<u>Vanshita</u>
8	Gayatri N. Sathe	FYBSC(CM)	99	<u>Gayatri</u>
9	Akshata. A. Raitkar	SYBSC(CM)	123	<u>Akshata</u>
10	Ayesha. Shaikh	SYBSC(CM)	134	<u>Ayesha</u>
11	Jshrat. Khan	SYBSC(CM)	129	<u>Jshrat</u>
12	Tanvi. Patil	SYBSC(CM)	140	<u>Tanvi</u>
13	Soniya. Chauhan	SYBSC(CM)	136	<u>Soniya</u>
14	Peiyanka. K. Patil	FYBSC(CM)	68	<u>Peiyanka</u>
15	Manjiri. Anil. Mhatre	FYBSC(CM)	100	<u>Manjiri</u>
16	Sanika. Kesarkar	"	213	<u>Sanika</u>
17	Gayatri. A. Mali	"	290	<u>Gayatri</u>

course macromolecules (2 Micro

ata Patwaik and Farheen Shaikh)

Signature

14/9/17 Practicals.

(Qualitative Test)

Mollisch Test

Benedict's Test

Biuret Test

210

G. Amal

213

Sanika

98

Anchal

68

(Rishi)

202

Rande

97

Juba

49

Alpugare

55

~~ANKUS~~

218

Waghchaurse

100

~~CHITRA M~~

99

(C)

01

Zenise

215

T-S. Deshmukh

209

Raj

214

Singh

course macromolecules Cz Micro
Aata Patnaik and Farheen Shaikh)
Signature

14/9/17 Practicals.

Qualitative Test
Mollisch Test
Benedict's Test
Biuret Test

210

G. Aimal

213

Sanika

98

Anchal

68

(Rati)

202

Rande

97

Isha

49

Alpugare

25

Waghchaurse

G. S. M.

100

(C)

99

01

Zaria

215

T-S. Deshmukh

209

Ray

204

Singh

[illegible]

Certificate Course in Macromolecules

Attendance Sheet

Faculty Name.. Ms. Lata Patnaik & Mrs. Farheen Shaikh

Topic.. Practicals

Date:- 24-01-2020

Sr. No.	Name	Class	Roll No.	Signature
1	Mayer. D. Sonkusare	FyBsc	55	Msonkusare
2	Manjiri. Anil. Mhatre	FyBsc	100	Manjiri
3	Sanika Satish Kesharkar.	Fy bsc	213	Sanika
4	Kandana Pandey	Fy bsc	27	Kandana
5	Peiyanka Patil	FYBSC	68	Patil
6	Glagatti N. Sathre	FYBSC	99	Glagatti
7	Manasi Waghchaure	FyBsc	218	Manasi
8	Vanshita Erande	FYBSC	202	Vanshita
9	Ayesha Shaikh	SYBS	124	Ayesha
10	Reshma Singh	SYBSC	128	Reshma
11	Akshata. Railkar.	SYBsc	123	Akshata
12	Tanvi. Patil	SYBsc.	140	Patil
13	Tejas. S. Deshmukh	FYBSC	215	T-S Deshmukh
14	Banay Mishra	FYBSC	209	Banay
15	Gagatri Anil Mali	FYBSC	290	G. Mali
16	Rachana. R. Gangawane	FYBSC	49	Rachana
17	Zenia. C. D'souza	F.Y.B.Sc.	01	Zenia
18	Tuba Nabeem Khan	FY BSc	97	Tuba
19	Soniya Chauhan	Fy Bsc	136	Soniya
20	Ishrat Khan	Sy Bsc	129	Ishrat

Department of Microbiology

Certificate Course in Macromolecules

Attendance Sheet

Faculty Name... Ms. Lata Pattnaik & Mrs. Fathees Shaikh...

Topic... Proteins.....

Date:- 26-1-2020

Sr. No.	Name	Class	Roll No.	Signature
01	Rachana R. Gangawane	FYBSc	49	<u>Rachana</u>
02	Zenia C. D'Souza	FYBSc	01	<u>Zenia</u>
03	Tuba Naseem Khan	FYBSc	97	<u>Tuba</u>
04	Gayatri Anil Mali	FYBSc	290	<u>G. Anil Mali</u>
05	Manjiri Anil Mhatre	FYBSc	100	<u>Manjiri</u>
06	Sanika Satish Kesarkar	FYBSc	213	<u>Sanika</u>
07	Vandana Pandey	FYBSc	27	<u>Vandana</u>
08	Ranay Mishra	FYBSc	209	<u>Ranay</u>
09	Tejas Shivaji Deshmukh	FYBSc	215	<u>T.S. Deshmukh</u>
10	Prerana Kisan Patil	FYBSc	68	<u>Prerana</u>
11	Manasi S. Waghchaure	FYBSc	218	<u>Manasi</u>
12	Vanshita Pande	FYBSc	202	<u>Vanshita</u>
13	Mayur D. Sonkusare	FYBSc	55	<u>Mayur</u>
14	Gayatri N. Sathre	FYBSc	99	<u>Gayatri</u>
15	Reshma P. Singh	SYBSc	128	<u>Reshma</u>
16	Ayesha Shaikh	SYBSc	134	<u>Ayesha</u>
17	Tanvi Patil	SYBSc	140	<u>Tanvi</u>
18	Soniya Chauhan	SYBSc	136	<u>Soniya</u>
19	ISHRAT KHAN	SYBSc	129	<u>ISHRAT</u>
20	Akshata Raikar	SYBSc	123	<u>Akshata</u>

Patnaik L. Fathima Shaikh
Name

06/02/20

Tejas Shivaji Deshmukh

FYBSC

T.S. Deshmukh

Manjiri. Amil. Mhatre

FYBSC

Mayur. D. Sonkusare.

FYBSC.

Sanika. S. Kesarkar

FYBSC.

Gayatri Nitin Sathe

FYBSC

Peiyanka Kisan Patil

FYBSC

Manasi Sachin Waghchaure

FYBSC

Yadav Anchal Rajesh

FYBSC

Vanshita B. Erande

FYBSC

Soniya J. Chaulan

SYBSC

Tanvi H. Patil

SYBSC

Ayesha Shaikh

SYBSC

Reshma Singh

SYBSC

ISHRAT KHAN

SYBSC

Akshata. Raikar.

SYBSC.

Vaishnavi. Katamaware

SYBSC

Bhumika. B. Barang

SYBSC

Rachana. R. Gangavane

FYBSC

Tuba Naseem Khan

FYBSC

Zenia D'Souza

FYBSC

Pranay Mishra

FYBSC

Gayatri Anil Mali

FYBSC

Report of Certificate Course- Macromolecules in Foods

Department of Microbiology conducted a certificate course on Macromolecules in Foods during 2019-20 to prepare the students for competitive exams. The fee for the course was Rs. 500/-

A total of 25 students had registered for this course. The course was co-ordinated by Dr. M.K. Dhaliwal. The following are the details of the course.

No. of sessions allotted (each session of 3 hrs)	10
No. of sessions completed	10
Total Fee credited	Rs. 12500/-

List of the students enrolled for this course is attached herewith.


Head,
Department of Microbiology

Date: 14th March 2020

To,
The Principal,
B.K. Birla College (Autonomous),
Kalyan.

Subject: Deposition of the fee collected in Certificate course Macromolecules in Foods

Respected Sir,

Dept. of Microbiology conducted certificate course on Macromolecules in Foods during the academic year 2019-20 from September 2019 to March 2020. The fee for the course was Rs. 500/- .Twenty-five students had registered for the course and an amount of Rs. 12500/- was collected as the total fee.

Kindly deposit the said amount.

M. Arundh

Head,
Department of Microbiology

To,
The Principal,
B.K. Birla College (Autonomous),
Kalyan.

Subject: Remuneration bill of Certificate Course Macromolecules in Foods


Respected Sir,

Department of Microbiology conducted certificate course on Macromolecules in Foods during the academic year 2019-20 from September 2019 to February 2020.

Details of the course:

Sr. No.	Name of the Faculty	No. of hours	Remuneration
1.	Dr. M.K. Dhaliwal	15	Rs. 4500/-
2.	Ms. Lata Patnaik	7.5	Rs.1125/-
3.	Ms. Farheen Shaikh	7.5	Rs.1125/-
4.	Non-teaching staff remuneration	-	Rs. 1000/-
5.	Examination		Rs. 1000/-
Total		30	Rs. 8750/-

Encl: Attendance sheets of the course



Head,
Department of Microbiology

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Vanshita Balasaheb Erande

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
MACROMOLECULES IN FOOD CONDUCTED BY DEPARTMENT OF MICROBIOLOGY
DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Yadav Anchal Rajesh

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
MACROMOLECULES IN FOOD CONDUCTED BY DEPARTMENT OF MICROBIOLOGY
DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Sanyukta Kardekar

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
MACROMOLECULES IN FOOD CONDUCTED BY DEPARTMENT OF MICROBIOLOGY
DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Manasi Waghchaure

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Manjiri Anil Mhatre

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Mayur Dewanand Sonkusare

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Harshada Anurath Gharde

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Gayatri Anil Mali

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Pranay Bidyanath Mishra

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Zenia D'souza

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
MACROMOLECULES IN FOOD CONDUCTED BY DEPARTMENT OF MICROBIOLOGY
DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Rachana Ramesh Gangawane

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Tuba Khan

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Khan Ishrat Asmatullah

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Tanvi Patil

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Ayesha Shaikh

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Soniya Joginder Chauhan

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Vandana Pandey

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Deshmukh Tejas Shivaji

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Sanika Satish Kesarkar

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Singh Ayush Ranveer

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Priyanka Kisan Patil

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Reshma Singh

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

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WE ARE PROUDLY PRESENT THIS TO

Rutuja Devendra Pagare

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DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

WE ARE PROUDLY PRESENT THIS TO

Gayatri Sathe

**FOR SUCCESSFULLY COMPLETING CERTIFICATE COURSE IN
MACROMOLECULES IN FOOD CONDUCTED BY DEPARTMENT OF MICROBIOLOGY
DURING THE ACADEMIC YEAR 2019-20**

DR. M. K. Dhaliwal
Course Coordinator

Dr. Avinash Patil
Principal

B.K BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN



CERTIFICATE

of Completion

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