

Indapur Taluka Shikshan prasarak mandals
Arts, Science and Commerce College Indapur dist. Pune
Department of Physics
Certificate Course in Basic Electronic
Syllabus
From Academic Year 2018-19

40L

Course Objective

- To make Students learn concepts of Electronics.
- To provide sufficient fundamental knowledge to pursue advanced topic.

Course outcome: After successful completion of course, student will be able to analyse and design electronic circuit.

Unit 1 : Introduction to passive components	10L
--	------------

Resistors- colour code, classification, series and parallel combination.

Capacitor- Classification, colour code, number code, series and parallel combination.

Inductors- Classification, colour code, series and parallel combination. Circuit based on RLC- construction

2.Introduction to active Components	10L
--	------------

Transistor- terminal identification, classification, circuit based on transistor-construction

3. Electronic Devices	10L
------------------------------	------------

ITSPM'S

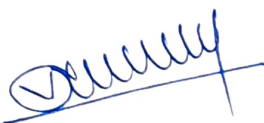
Arts, Science And Commerce College , Indapur

Department Of Physics

Notice for Student

Date-25/08/2018

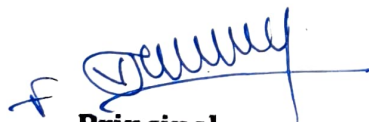
All the Student who registered their names to 'Certificate Course in Basic Electronic' are hereby informed that their Practical's will be started on Saturday , 03/09/2018 in Room No.59 at 1 pm to 5 pm. It is compulsory to attend the Practical's of value added course for getting desired credit .



HOD

Head

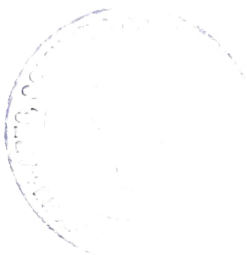
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST. PUNE



ITSPM'S

Arts, Science And Commerce College , Indapur

Department Of Physics

Notice for Student

Date-25/08/2018

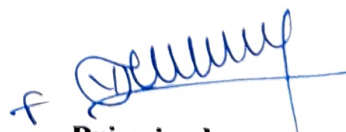
All the Student who registered their names to 'Certificate Course in Basic Electronic' are hereby informed that their lectures will be started on Thursday , 01/09/2018 in Room No. 78 at 1 pm to 2 pm. It is compulsory to attend the lectures of value added course for getting desired credit .



HOD

Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

PRINCIPAL

**ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE**

ITSPM'S

Arts, Science And Commerce College , Indapur

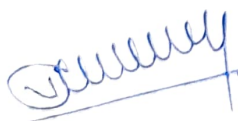
Department Of Physics

Certificate Course in Basic Electronic

2018-2019

Timetable

Time	Thursday	Friday	Saturday
1 pm To 2 pm	Theory	Theory	-
1 pm To 5 Pm	-	-	Practical



HOD

Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST. PUNE

ITSPM'S

Arts, Science And Commerce College, Indapur

Department of Physics

Certificate course in Basic Electronics

List of Registered Students

Academic Year 2018-19

Sr.No.	Roll.No	Student Name	Class
1.	3001	NALE ASHWINI DATTATRAY	F.Y.B.Sc.
2.	3003	BANSUDE SARIKA HANUMANT	F.Y.B.Sc.
3.	3004	MAHADIK VAIBHAV RAJKUMAR	F.Y.B.Sc.
4.	3006	BHARGANDE AKASH VIJAY	F.Y.B.Sc.
5.	3008	JADHAV UJJAWALA MADHUKAR	F.Y.B.Sc.
6.	3009	NANAVARE KOMAL RAJENDRA	F.Y.B.Sc.
7.	3010	JADHAV YOGITA SUKHADEV	F.Y.B.Sc.
8.	3013	SHINDE MADHURI BHAGWAT	F.Y.B.Sc.
9.	3017	GAIKWAD RINKAL BHARAT	F.Y.B.Sc.
10.	3020	SHENDE VARSHA BALASAHEB	F.Y.B.Sc.
11.	3021	SHINDE VAISHANAVI DNYANDEO	F.Y.B.Sc.
12.	3022	KUTE HARSHADA PRALHAD	F.Y.B.Sc.
13.	3023	AWALE PRANIT DILIP	F.Y.B.Sc.
14.	3025	NIMBALKAR INDRESHWAR DURGA	F.Y.B.Sc.
15.	3031	SHIRSAT AKSHAY JAYKUMAR	F.Y.B.Sc.
16.	3032	THORAT SONALI CHANDRAKNAT	F.Y.B.Sc.
17.	3039	SHETE ABHISHEK DILIP	F.Y.B.Sc.
18.	3040	DHUKE SAGAR DADA	F.Y.B.Sc.
19.	3044	NANAWARE SONALI BALKRUSHNA	F.Y.B.Sc.
20.	3048	JADHAV POOJA VITTHAL	F.Y.B.Sc.
21.	3050	KADAM KIRAN KAILAS	F.Y.B.Sc.
22.	3053	TORASKAR RUTUJA UDDHAV	F.Y.B.Sc.
23.	3058	CHAVAN ANUSHKA SHANKAR	F.Y.B.Sc.
24.	3060	TAMBOLI SAIF SHOUKAT	F.Y.B.Sc.
25.	3065	KUBER RADHIKA HANUMANT	F.Y.B.Sc.
26.	3069	SHAIKH NILOFAR NISAR	F.Y.B.Sc.
27.	3074	MULIK RUTUJA MAHADEV	F.Y.B.Sc.
28.	3079	KUTAL ANIKET SOMNATH	F.Y.B.Sc.
29.	3081	MENGADE PRIYANKA GOKUL	F.Y.B.Sc.
30.	3082	BORATE PANKAJ ANKUSH	F.Y.B.Sc.
31.	3092	KALE JAYSHRI BAPURAO	F.Y.B.Sc.
32.	3102	BABARE AKASH TUKARAM	F.Y.B.Sc.
33.	3103	KADAM MONALI SHARAD	F.Y.B.Sc.

34.	3105	BAGAL VARADCHANDRA PANDURANG	F.Y.B.Sc.
35.	3110	BAGWAN SADAF ISMAIL	F.Y.B.Sc.
36.	3118	ANANTKAVLAS SWATI MACHHINDRA	F.Y.B.Sc.
37.	3128	VEER KARUNA NARAYAN	F.Y.B.Sc.
38.	3181	LONDHE SURAJ MARUTI	F.Y.B.Sc.
39.	3182	SARTAPE VRUSHALEE MAHADEV	F.Y.B.Sc.
40.	3183	SHINDE MAYUR PANDURANG	F.Y.B.Sc.
41.	3193	DUCHAL VISHAL NANDU	F.Y.B.Sc.
42.	3199	PAWAR RUTUJA ANKUSH	F.Y.B.Sc.
43.	3200	HULAGE DHAIRYASHIL CHADNDRAKANT	F.Y.B.Sc.
44.	3203	KASABE MAYUR BALU	F.Y.B.Sc.
45.	3204	SHITOLE ROHIT VIJAY	F.Y.B.Sc.
46.	3211	BHOSALE ABHIJEET AJINATH	F.Y.B.Sc.
47.	3212	BINAGE POOJA NAGANATH	F.Y.B.Sc.
48.	3231	KHEDKAR NIKITA RAJENDRA	F.Y.B.Sc.
49.	3232	PATIL TUSHAR LAXMAN	F.Y.B.Sc.
50.	3233	SHINDE SOMANATH MARUTI	F.Y.B.Sc.
51.	3240	PAVANE SAMADHAN ANKUSH	F.Y.B.Sc.
52.	3245	KUMBHAR DATTARAYA LAXMAN	F.Y.B.Sc.
53.	3251	BANKAR SUMIT SHAHAJI	F.Y.B.Sc.
54.	3258	BEDKUTE PRANJALI SUNIL	F.Y.B.Sc.
55.	3261	KALE TEJAS RAJKUMAR	F.Y.B.Sc.
56.	3262	SATAV JYOTI SANJAY	F.Y.B.Sc.


Subject Teacher


H.O.D.
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM'S**Arts, Science And Commerce College, Indapur****Department of Physics****Certificate course in Basic Electronics****Attendance Sheet****Academic Year 2018-19**

Sr.No.	Roll.No	Student Name	01/09	02/09	08/09	09/09	15/09	16/09
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P
6.	3009	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P
7.	3010	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P
8.	3013	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P
9.	3017	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P
10.	3020	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P
11.	3021	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P
12.	3022	KUTE HARSHADA PRALHAD	P	P	P	P	P	P
13.	3023	AWALE PRANIT DILIP	P	P	P	P	P	P
14.	3025	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P
15.	3031	SHIRSAT ARSHAY JAYKUMAR	P	P	P	P	P	P
16.	3032	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P
17.	3039	SHETE ABHISHEK DILIP	P	P	P	P	P	P
18.	3040	DHURKE SAGAR DADA	P	P	P	P	P	P
19.	3044	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P
20.	3048	JADHAV POOJA VITTHAL	P	P	P	P	A	P
21.	3050	KADAM KIRAN RAILAS	P	P	P	P	P	P
22.	3053	TORASKAR KUTUJA UDDHAV	P	P	P	P	P	P
23.	3058	CHAVAN ANUSHEKA SHANKAR	P	P	P	P	P	P
24.	3060	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P

25.	3065	KUBER RADHIKA HANUMANT	P	P	P	P	P	P
26.	3069	SHAIKH NILOFAR NISAR	P	P	P	P	P	P
27.	3074	MULIK RUTUJA MAHADEV	P	P	P	P	P	P
28.	3079	KUTAL ANIKET SOMNATH	P	P	A	P	P	P
29.	3081	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P
30.	3082	BORATE PANKAJ ANKUSH	P	P	P	A	P	P
31.	3092	KALE JAYSHRI BAPURAO	P	P	P	P	P	P
32.	3102	BABARE AKASH TUKARAM	P	A	P	P	P	P
33.	3103	KADAM MONALI SHARAD	P	P	P	P	P	P
34.	3105	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P
35.	3110	BAGWAN SADAF ISMAIL	P	P	P	P	P	P
36.	3118	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P
37.	3128	VEER KARUNA NARAYAN	P	A	P	P	P	P
38.	3181	LONDHE SURAJ MARUTI	P	P	P	P	P	P
39.	3182	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P
40.	3183	SHINDE MAYUR PANDURANG	P	P	P	A	A	P
41.	3193	DUCHAL VISHAL NANDU	P	P	A	P	P	P
42.	3199	PAWAR RUTUJA ANKUSH	P	P	P	P	P	P
43.	3200	HULAGE DHAIRYASHIL CHADNDRAKANT	P	P	P	P	P	P
44.	3203	KASABE MAYUR BALU	P	P	P	P	P	P
45.	3204	SHITOLE ROHIT VIJAY	P	P	P	P	P	P
46.	3211	BHOSALE ABHIJEET AJINATH	P	A	P	P	P	P
47.	3212	BINAGE POOJA NAGANATH	P	A	P	P	A	P
48.	3231	KHEDKAR NIKITA RAJENDRA	P	P	A	P	P	P
49.	3232	PATIL TUSHAR LAXMAN	P	P	P	P	P	P
50.	3233	SHINDE SOMANATH MARUTI	P	P	P	P	A	P
51.	3240	PAVANE SAMADHAN ANKUSH	P	P	P	P	P	P
52.	3245	KUMBHAR DATTARAYA LAXMAN	P	P	P	P	P	P
53.	3251	BANKAR SUMIT SHAHAJI	P	P	A	P	P	P
54.	3258	BEDKUTE PRANJALI SUNIL	P	A	P	P	P	P
55.	3261	KALE TEJAS RAJKUMAR	P	P	P	P	P	P
56.	3262	SATAV JYOTI SANJAY	P	P	P	P	P	P

Subject Teacher

H.O.D.

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

Principal

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM'S**Arts, Science And Commerce College, Indapur****Department of Physics****Certificate course in Basic Electronics****Attendance Sheet****Academic Year 2018-19**

Sr.No.	Roll.No	Student Name	22/09	23/09	29/09	30/09	06/10	07/10
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P
6.	3009	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P
7.	3010	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P
8.	3013	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P
9.	3017	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P
10.	3020	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P
11.	3021	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P
12.	3022	KUTE HARSHADA PRALHAD	P	P	P	P	P	P
13.	3023	AWALE PRANIT DILIP	P	P	P	P	P	P
14.	3025	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P
15.	3031	SHIRSAT AKSHAY JAYKUMAR	P	P	P	P	P	P
16.	3032	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P
17.	3039	SHETE ABHISHEK DILIP	P	P	P	P	P	P
18.	3040	DHUKE SAGAR DADA	P	P	P	P	P	P
19.	3044	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P
20.	3048	JADHAV POOJA VITTHAL	P	P	P	P	A	P
21.	3050	KADAM KIRAN KAILAS	P	P	P	P	P	P
22.	3053	TORASKAR RUTUJA UDDHAV	P	P	P	P	P	P
23.	3058	CHAVAN ANUSHKA SHANKAR	P	P	P	P	P	P
24.	3060	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P

25.	3065	KUBER RADHIKA HANUMANT	P	P	P	P	P	P
26.	3069	SHAIKH NILOFAR NISAR	P	P	P	P	P	P
27.	3074	MULIK RUTUJA MAHADEV	P	P	P	P	P	P
28.	3079	KUTAL ANIKET SOMNATH	P	P	A	P	P	P
29.	3081	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P
30.	3082	BORATE PANKAJ ANKUSH	P	P	P	A	P	P
31.	3092	KALE JAYSHRI BAPURAO	P	P	P	P	P	P
32.	3102	BABARE AKASH TUKARAM	P	A	P	P	P	P
33.	3103	KADAM MONALI SHARAD	P	P	P	P	P	P
34.	3105	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P
35.	3110	BAGWAN SADAF ISMAIL	P	P	P	P	P	P
36.	3118	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P
37.	3128	VEER KARUNA NARAYAN	P	A	P	P	P	P
38.	3181	LONDHE SURAJ MARUTI	P	P	P	P	P	P
39.	3182	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P
40.	3183	SHINDE MAYUR PANDURANG	P	P	P	A	A	P
41.	3193	DUCHAL VISHAL NANDU	P	P	A	P	P	P
42.	3199	PAWAR RUTUJA ANKUSH	P	P	P	P	P	P
43.	3200	HULAGE DHAIRYASHIL CHADNDRAKANT	P	P	P	P	P	P
44.	3203	KASABE MAYUR BALU	P	P	P	P	P	P
45.	3204	SHITOLE ROHIT VIJAY	P	P	P	P	P	P
46.	3211	BHOSALE ABHIJEET AJINATH	P	A	P	P	P	P
47.	3212	BINAGE POOJA NAGANATH	P	A	P	P	A	P
48.	3231	KHEDKAR NIKITA RAJENDRA	P	P	A	P	P	P
49.	3232	PATIL TUSHAR LAXMAN	P	P	P	P	P	P
50.	3233	SHINDE SOMANATH MARUTI	P	P	P	P	A	P
51.	3240	PAVANE SAMADHAN ANKUSH	P	P	P	P	P	P
52.	3245	KUMBHAR DATTARAYA LAXMAN	P	P	P	P	P	P
53.	3251	BANKAR SUMIT SHAHAJI	A	A	P	P	P	P
54.	3258	BEDKUTE PRANJALI SUNIL	P	P	P	A	P	P
55.	3261	KALE TEJAS RAJKUMAR	P	P	P	P	P	P
56.	3262	SATAV JYOTI SANJAY	A	P	P	P	P	P

Subject Teacher

H.O.D

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

Principal
PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Physics
Certificate course in Basic Electronics
Academic Year 2018-19
Practical Attendance

Sr.No.	Roll.No	Student Name	03/09	10/09	14/09	24/09	01/10	08/10	15/10
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P	P
6.	3009	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P	P
7.	3010	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P	P
8.	3013	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P	A
9.	3017	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P	P
10.	3020	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P	P
11.	3021	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P	P
12.	3022	KUTE HARSHADA PRALHAD	P	P	P	P	P	P	P
13.	3023	AWALE PRANIT DILIP	P	P	P	P	P	P	A
14.	3025	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P	P
15.	3031	SHIRSAT AKSHAY JAYKUMAR	P	P	P	P	P	P	P
16.	3032	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P	P
17.	3039	SHETE ABHISHEK DILIP	P	P	P	P	P	P	P
18.	3040	DHUKU SAGAR DADA	P	P	P	P	P	P	P
19.	3044	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P	P
20.	3048	JADHAV POOJA VITTHAL	P	P	P	P	A	P	P
21.	3050	KADAM KIRAN KAILAS	P	P	P	P	P	P	P

22.	3053	TORASKAR RUTUJA UDDHAV	P	P	P	P	P	P	A
23.	3058	CHAVAN ANUSHKA SHANKAR	P	P	P	P	P	P	P
24.	3060	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P	P
25.	3065	KUBER RADHIKA HANUMANT	P	P	P	P	P	P	P
26.	3069	SHAIKH NILOFAR NISAR	P	P	P	P	P	P	P
27.	3074	MULIK RUTUJA MAHADEV	P	P	P	P	P	P	P
28.	3079	KUTAL ANIKET SOMNATH	P	P	A	P	P	P	P
29.	3081	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P	P
30.	3082	BORATE PANKAJ ANKUSH	P	P	P	A	P	P	P
31.	3092	KALE JAYSHRI BAPURAO	P	P	P	P	P	P	A
32.	3102	BABARE AKASH TUKARAM	P	A	P	P	P	P	P
33.	3103	KADAM MONALI SHARAD	P	P	P	P	P	P	P
34.	3105	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P	P
35.	3110	BAGWAN SADAF ISMAIL	P	P	P	P	P	P	P
36.	3118	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P	P
37.	3128	VEER KARUNA NARAYAN	P	A	P	P	P	P	P
38.	3181	LONDHE SURAJ MARUTI	P	P	P	P	P	P	A
39.	3182	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P	P
40.	3183	SHINDE MAYUR PANDURANG	P	P	P	A	A	P	P
41.	3193	DUCHAL VISHAL NANDU	P	P	A	P	P	P	P
42.	3199	PAWAR RUTUJA ANKUSH	P	P	P	P	P	P	P
43.	3200	HULAGE DHAIRYASHIL CHADNDRAKANT	P	P	P	P	P	P	P
44.	3203	KASABE MAYUR BALU	P	P	P	P	P	P	P
45.	3204	SHITOLE ROHIT VIJAY	P	P	P	P	P	P	P
46.	3211	BHOSALE ABHIJEET AJINATH	P	A	P	P	P	P	A

47.	3212	BINAGE POOJA NAGANATH	P	A	P	P	A	P	P
48.	3231	KHEDKAR NIKITA RAJENDRA	P	P	A	P	P	P	P
49.	3232	PATIL TUSHAR LAXMAN	P	P	P	P	P	P	P
50.	3233	SHINDE SOMANATH MARUTI	P	P	P	P	A	P	P
51.	3240	PAVANE SAMADHAN ANKUSH	P	P	P	P	P	P	P
52.	3245	KUMBHAR DATTARAYA LAXMAN	P	A	P	P	P	P	P
53.	3251	BANKAR SUMIT SHAHAJI	P	P	P	P	P	P	A
54.	3258	BEDKUTE PRANJALI SUNIL	P	P	A	P	P	P	P
55.	3261	KALE TEJAS RAJKUMAR	P	P	P	P	P	P	P
56.	3262	SATAV JYOTI SANJAY	P	P	A	P	A	P	P


Subject Teacher


Head
H.O.D.
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413105 DIST. PUNE



Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune

(Affiliated to Savitribai Phule Pune University, Pune)



Organized

Certificate Course on Basic Electronics
(Academic Year 2018-19)

This is to certify that **Dhuke Sagar Dada** a student from F. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on Basic Electronics (4 Credits). This course is organized by Department of Physics, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 01.09.2018 to 15.10.2018

Prof. Akin Kamble
Course Coordinator

Prof. Dr. Shivaji Veer
Head Dept. of Physics

Prof. Dr. Viresh Hokunde
IQAC Coordinator

Prof. Dr. Sanjay Chakane
Principal

Arts, science & Commerce College, Indapur

Value added course (2018-19)

Title - 'Yoga Education'

ITSPM's Arts, Science & Commerce College, Indapur is committed to create an environment where students feel empowered to improve upon their learning behavior for which mere academic inputs is not enough. Going beyond it, they are provided with the training that contributes in their capacity building by motivating them to train their inner self, through emotional management, Self-understanding and positive thinking. Yoga training can help students to strengthen their potentials.

Our Institution conducts a value added course in Yoga programme for students in view with making them conscious of the importance of physical and mental wellbeing.

Course Objective

- Students can acquire knowledge and skills which will help them in developing Physical, Mental, Social and Spiritual health.
- Develop Values that will enhance the personality of the students.
- Develop Emotional Stability.
- The Course enables the future development of the students in order to achieve Occupational Wellness.

- Develop Fitness Conscious Environment in the Campus.

Program Outcomes

At the end of the course, the student will be able to :

- PO1 Focus on goals and move away from negativity.
 - PO2 Explain dimensions of wellness which helps in pursuing their goals.
 - PO3 Demonstrate the practices that can promote wellness.
 - PO4 Plan and follow a daily routine that includes Warm-up, Yogasanas, Pranayam and Meditation.
 - PO5 Demonstrate behaviours aligned to universal Human Values.
- Before commencing with the yoga training, students will undergo pre-test where their knowledge or awareness about yoga is checked. On the basis of the outcomes of the pre-test, the programme is designed or modified to make it more need based for trainee students.
 - The modified version of the Training package is then implemented. Theory lectures & practical demonstration on yoga will be conducted by Art of Living Faculty Mr. Viresh Holkunde in collaboration with our College Gymkhana Department.

- The content of the course include theory as well as practical demonstrations and practice of different types of pranayama and Yogasans.
- A Complete package of 40 hours training programme (Each session 2 hrs.) in a span of 3 months is designed in collaboration with the well-known ART OF LIVING Yoga Experts with the help of Volunteers.
- It includes understanding of the concept of Yoga, theoretical and scientific basis for the Yogasans and Pranayams.
These sessions will be conducted by the trained yoga teachers.
- Students will be awarded with the course completion certificate endorsed by Yoga Trainers & A.S. C. College, Indapur.

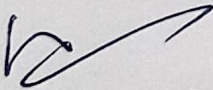
SYLLABUS

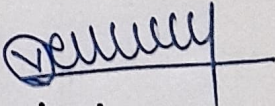
Value added course in 'Yoga Education'

1. Introduction to Yoga.	5 Hrs.
2. Practical demonstration of Pranayama	5 Hrs.
3. Practicing Pranayama	10 Hrs.
4. Practical demonstration of Asanas	5 Hrs.
5. Practicing Asanas	10 Hrs.
6. Meditation	5 Hrs.

Total;

40 Hrs.


Course Teacher


Principal
*** PRINCIPAL**
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM's

Arts, Science And Commerce College , Indapur

STUDENT NOTICE

(Certificate Course in YOGA EDUCATION)

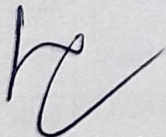
Date- 28/ 08/ 2018

All the Students who have registered their names for 'Certificate Course in YOGA EDUCATION' are hereby informed that, their Yoga Sessions will begin on Thursday, 02 /09 /2018

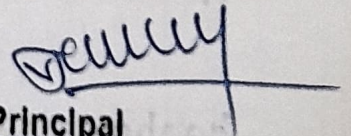
It is compulsory to attend the sessions of value added course for getting desired credit.

Venue: Room No. 66

Time : 5 to 7 pm



Course In-charge



Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Arts, Science & Commerce College, Indapur

Value Added course in YOGA EDUCATION

ATTENDANCE SHEET

Academic Year 2018 - 19

(Each Session – 2 Hrs.)

Sr.No.	Roll.No	Student Name	01/09	02/09	08/09	09/09	15/09	16/09
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P
6.	3011	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P
7.	3012	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P
8.	3014	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P
9.	3015	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P
10.	3016	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P
11.	3017	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P
12.	3018	KUTE HARSHADA PRALHAD	P	P	P	P	P	P
13.	3021	AWALE PRANIT DILIP	P	P	P	P	P	P
14.	3022	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P
15.	3023	SHIRSAT AKSHAY JAYKUMAR	P	P	P	P	P	P
16.	3024	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P
17.	3025	SHETE ABHISHEK DILIP	P	P	P	P	P	P
18.	3027	DHUKHE SAGAR DADA	P	P	P	P	P	P
19.	3028	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P
20.	3029	JADHAV POOJA VITTHAL	P	P	P	P	A	P
21.	3030	KADAM KIRAN KAILAS	P	P	P	P	P	P
22.	3031	TORASKAR RUTUJA UDDHAV	P	P	P	P	P	P

Handwritten signature



23.	3032	CHAVAN ANUSHKA SHANKAR	P	P	P	P	P	P
24.	3033	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P
25.	3035	KUBER RADHIKA HANUMANT	P	P	P	P	P	P
26.	3036	SHAIKH NILOFAR NISAR	P	P	P	P	P	P
27.	3037	MULIK RUTUJA MAHADEV	P	P	P	P	P	P
28.	3038	KUTAL ANIKET SOMNATH	P	P	A	P	P	P
29.	3039	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P
30.	3040	BORATE PANKAJ ANKUSH	P	P	P	A	P	P
31.	3041	KALE JAYSHRI BAPURAO	P	P	P	P	P	P
32.	3042	BABARE AKASH TUKARAM	P	A	P	P	P	P
33.	3043	KADAM MONALI SHARAD	P	P	P	P	P	P
34.	3044	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P
35.	3046	BAGWAN SADAF ISMAIL	P	P	P	P	P	P
36.	3047	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P
37.	3048	VEER KARUNA NARAYAN	P	A	P	P	P	P
38.	3049	LONDHE SURAJ MARUTI	P	P	P	P	P	P
39.	3050	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P

[Signature]

SUBJECT TEACHER

[Signature]

PRINCIPAL
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Value Added course in YOGA EDUCATION

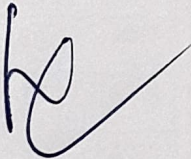
Attendance Sheet

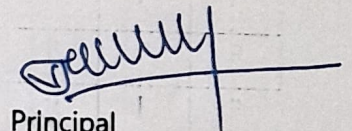
Sr.No.	Roll.No	Student Name	22/09	23/09	29/09	30/09	06/10	07/10
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P
6.	3011	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P
7.	3012	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P
8.	3014	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P
9.	3015	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P
10.	3016	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P
11.	3017	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P
12.	3018	KUTE HARSHADA PRALHAD	P	P	P	P	P	P
13.	3021	AWALE PRANIT DILIP	P	P	P	P	P	P
14.	3022	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P
15.	3023	SHIRSAT AKSHAY JAYKUMAR	P	P	P	P	P	P
16.	3024	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P
17.	3025	SHETE ABHISHEK DILIP	P	P	P	P	P	P
18.	3027	DHUKE SAGAR DADA	P	P	P	P	P	P
19.	3028	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P
20.	3029	JADHAV POOJA VITTHAL	P	P	P	P	A	P
21.	3030	KADAM KIRAN KAILAS	P	P	P	P	P	P
22.	3031	TORASKAR RUTUJA UDDHAV	P	P	P	P	P	P
23.	3032	CHAVAN ANUSHKA SHANKAR	P	P	P	P	P	P
24.	3033	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P
25.	3035	KUBER RADHIKA HANUMANT	P	P	P	P	P	P
26.	3036	SHAIKH NILOFAR NISAR	P	P	P	P	P	P

Handwritten signature



27.	3037	MULIK RUTUJA MAHADEV	P	P	P	P	P	P
28.	3038	KUTAL ANIKET SOMNATH	P	P	A	P	P	P
29.	3039	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P
30.	3040	BORATE PANKAJ ANKUSH	P	P	P	A	P	P
31.	3041	KALE JAYSHRI BAPURAO	P	P	P	P	P	P
32.	3042	BABARE AKASH TUKARAM	P	A	P	P	P	P
33.	3043	KADAM MONALI SHARAD	P	P	P	P	P	P
34.	3044	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P
35.	3046	BAGWAN SADAF ISMAIL	P	P	P	P	P	P
36.	3047	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P
37.	3048	VEER KARUNA NARAYAN	P	A	P	P	P	P
38.	3049	LONDHE SURAJ MARUTI	P	P	P	P	P	P
39.	3050	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P


Subject Teacher


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Value Added course in YOGA EDUCATION

Academic Year 2018-19

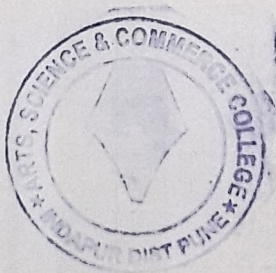
Sr.No.	Roll.No	Student Name	08/10	09/10	10/10	11/10	12/10	13/10	15/10
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P	P
2.	3003	BANSUDE SARIKA HANUMANT	P	P	P	P	P	P	P
3.	3004	MAHADIK VAIBHAV RAJKUMAR	P	A	P	P	P	P	P
4.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P	P
5.	3008	JADHAV UJJAWALA MADHUKAR	P	P	P	P	P	P	P
6.	3011	NANAVARE KOMAL RAJENDRA	P	P	P	P	A	P	P
7.	3012	JADHAV YOGITA SUKHADEV	P	P	P	P	P	P	P
8.	3014	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P	A
9.	3015	GAIKWAD RINKAL BHARAT	P	P	P	P	P	P	P
10.	3016	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P	P
11.	3017	SHINDE VAISHANAVI DNYANDEO	P	A	P	P	P	P	P
12.	3018	KUTE HARSHADA PRALHAD	P	P	P	P	P	P	P
13.	3021	AWALE PRANIT DILIP	P	P	P	P	P	P	A
14.	3022	NIMBALKAR INDRESHWAR DURGA	P	P	P	P	P	P	P
15.	3023	SHIRSAT AKSHAY JAYKUMAR	P	P	P	P	P	P	P
16.	3024	THORAT SONALI CHANDRAKNAT	P	P	A	P	P	P	P
17.	3025	SHETE ABHISHEK DILIP	P	P	P	P	P	P	P
18.	3027	DHUKHE SAGAR DADA	P	P	P	P	P	P	P
19.	3028	NANAWARE SONALI BALKRUSHNA	P	P	P	P	P	P	P
20.	3029	JADHAV POOJA VITTHAL	P	P	P	P	A	P	P
21.	3030	KADAM KIRAN KAILAS	P	P	P	P	P	P	P
22.	3031	TORASKAR RUTUJA UDDHAV	P	P	P	P	P	P	A
23.	3032	CHAVAN ANUSHKA SHANKAR	P	P	P	P	P	P	P



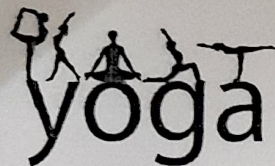
24.	3033	TAMBOLI SAIF SHOUKAT	P	P	A	P	P	P	P
25.	3035	KUBER RADHIKA HANUMANT	P	P	P	P	P	P	P
26.	3036	SHAIKH NILOFAR NISAR	P	P	P	P	P	P	P
27.	3037	MULIK RUTUJA MAHADEV	P	P	P	P	P	P	P
28.	3038	KUTAL ANIKET SOMNATH	P	P	A	P	P	P	P
29.	3039	MENGADE PRIYANKA GOKUL	P	P	P	P	P	P	P
30.	3040	BORATE PANKAJ ANKUSH	P	P	P	A	P	P	P
31.	3041	KALE JAYSHRI BAPURAO	P	P	P	P	P	P	A
32.	3042	BABARE AKASH TUKARAM	P	A	P	P	P	P	P
33.	3043	KADAM MONALI SHARAD	P	P	P	P	P	P	P
34.	3044	BAGAL VARADCHANDRA PANDURANG	P	P	P	P	P	P	P
35.	3046	BAGWAN SADAF ISMAIL	P	P	P	P	P	P	P
36.	3047	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P	P
37.	3048	VEER KARUNA NARAYAN	P	A	P	P	P	P	P
38.	3049	LONDHE SURAJ MARUTI	P	P	P	P	P	P	A
39.	3050	SARTAPE VRUSHALEE MAHADEV	P	P	P	P	P	P	P

he

SUBJECT TEACHER



Devi
f PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



I.T.S.P.M.'s,
Arts, Science and Commerce College, Indapur
(Affiliated to Savitribai Phule Pune University, Pune)



Organized

Value Added Course in YOGA EDUCATION
(Academic Year 2018 – 2019)

This is to certify that *Miss. Shinde Madhuri Bhagawat* from F. Y. B.Sc. Class has actively participated and successfully completed *Value Added Course in YOGA EDUCATION (4 Credits)*.

This course is approved by Savitribai Phule Pune University, Pune & organized by ITSPM's, Arts, Science & Commerce College, Indapur, Dist. Pune from *01/09/2018 to 15/10/2018*.

Prof. Viresh Holkunde
Course Co-ordinator

f

Principal

ITSPM'S

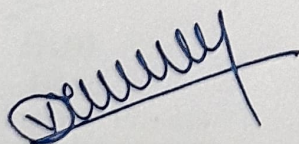
Arts, Science And Commerce College, Indapur

Department Of Physics

Notice for Student

Date-24/02/2019

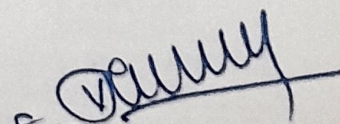
All the Student who registered their names to 'Certificate Course in Electric & Electronic instruments' are hereby informed that their lectures will be started on Thursday , 02/03/2019 in Room No. 78 at 1 pm to 2 pm. It is compulsory to attend the lectures of value added course for getting desired credit .



HOD

Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

PRINCIPAL

**ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE**



ITSPM'S

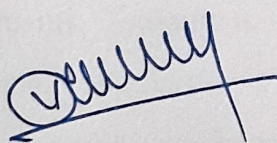
Arts, Science And Commerce College , Indapur

Department Of Physics

Notice for Student

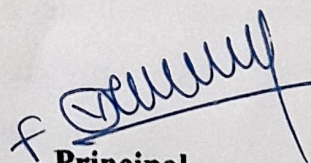
Date-24/02/2019

All the Student who registered their names to 'Certificate Course in Electric & Electronic instruments' are hereby informed that their Practical's will be started on Saturday , 04/03/2019 in Room No.59 at 1 pm to 5 pm. It is compulsory to attend the Practical's of value added course for getting desired credit .



**HOD
Head**

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



**Principal
PRINCIPAL**

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College Indapur Dist. Pune
Department of Physics
Certificate Course in Electric and Electronic Instruments
Syllabus
From Academic Year 2018-19

Objectives of Certificate Course

1. The student should know the Instruments
2. The student should know the applications of instruments

Certificate Course Outcomes

1. Understand the concept of measurements
2. Know the different units
3. Classification of instruments
4. Applications of instruments
5. Use of instruments in day today life

Module 1. Introduction :

10 L

Measurements, fundamental and derived units, standards and their classifications, International standards, Primary standards, Secondary standards, Working standards, Current standards, Voltage standards, Resistance standards, Capacitance standards, Time and frequency standards, Methods of measurements, Direct comparison methods, Indirect comparison methods.

Module 2. Classifications of Instruments :

10 L

Absolute and Secondary Instruments, Analog and Digital Instruments, Mechanical, Electrical and Electronics Instruments,

Module 3. Electrical Instruments:

10 L

Working Principle, Block Diagram, Applications of following instruments. Fan, Transformer, CRO, Refrigerator, Air Conditioner, Signal Generator.

Module 4. Electronic Instruments:

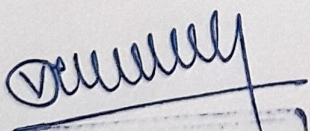
10 L

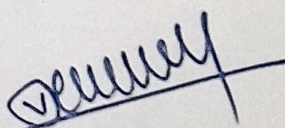
Working Principle, Block Diagram, Applications of following instruments. Radio, Mobile, Digital Watch, Digital Board.

References:

1 Electrical And Electronic Measurements And Instrumentation, R. K Rajput, S Chand

2 Basic Electronics, by Therja, S. Chand


Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune


f **PRINCIPAL**
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S

Arts, Science And Commerce College , Indapur

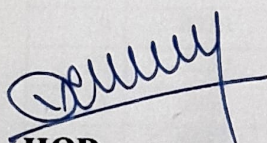
Department Of Physics

Certificate Course in Electric & Electronic Instruments

2018-2019

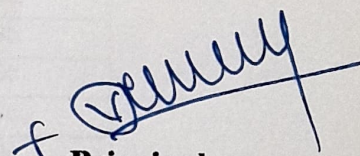
Timetable

Time	Thursday	Friday	Saturday
1 pm To 2 pm	Theory	Theory	-
1 pm To 5 Pm	-	-	Practical



HOD
Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal
PRINCIPAL

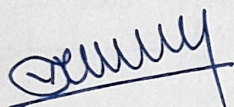
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

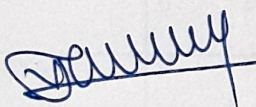


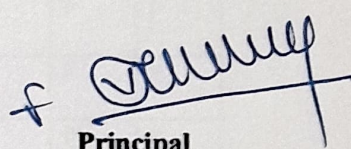
ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Physics
Certificate course in Electric & Electronic Instruments
List of Registered Students
Academic Year 2018-19

Sr.No.	Roll.No.	Student Name	Class
1.	8001	JAGTAP PRATIKSHA JOTIRAM	S.Y.B.Sc.
2.	8002	DEOKAR MAKARAND NILKANTH	S.Y.B.Sc.
3.	8003	SHINDE SONALI TANAJI	S.Y.B.Sc.
4.	8005	GHADAGE SONALI DATTATRAYA	S.Y.B.Sc.
5.	8006	GHADAGE AISHWARYA RAMBHAU	S.Y.B.Sc.
6.	8007	GHODAKE SNEHAL NITIN	S.Y.B.Sc.
7.	8008	BANKAR AARATI NANASO	S.Y.B.Sc.
8.	8010	BHONGALE AKSHAY SHARAD	S.Y.B.Sc.
9.	8012	YADAV KOMAL MANIK	S.Y.B.Sc.
10.	8013	JADHAV HARSHA NARAYAN	S.Y.B.Sc.
11.	8016	KANGUDE GAURI SHATRUGHN	S.Y.B.Sc.
12.	8021	YADAV AKSHAY NIVRUTTI	S.Y.B.Sc.
13.	8022	CHAVAN ABHIJIT DATTATRAY	S.Y.B.Sc.
14.	8023	DEOKAR SAYALI DATTATRAY	S.Y.B.Sc.
15.	8025	MITKAL RANJIT MAHADEV	S.Y.B.Sc.
16.	8026	UFALE DHANASHRI BAPURAV	S.Y.B.Sc.
17.	8027	GHADAGE AJIT KHANDU	S.Y.B.Sc.
18.	8028	PARDESHI KOMAL PRATAP	S.Y.B.Sc.
19.	8029	JADHAV SWAPNALI NARAYAN	S.Y.B.Sc.
20.	8030	GAIKWAD KISHORI SHRIPAD	S.Y.B.Sc.
21.	8031	BAGAL BHAGYASHRI HARIDAS	S.Y.B.Sc.
22.	8032	RAUT DIPALI RAJARAM	S.Y.B.Sc.
23.	8035	PINGALE NISHA SANTOSH	S.Y.B.Sc.
24.	8037	BHAGAT SOMNATH DADASO	S.Y.B.Sc.
25.	8039	REPAL AKSHAY VITTHAL	S.Y.B.Sc.
26.	8041	SABALE SAURABH SHASHIKANT	S.Y.B.Sc.
27.	8043	KHOCHARE SNEHA SHAMARAO	S.Y.B.Sc.
28.	8047	SHINGADE SANDIP ABASAHEB	S.Y.B.Sc.
29.	8050	SHEWALE VARSHA DATTATRAY	S.Y.B.Sc.
30.	8053	MITKAL BHAKTI BHARAT	S.Y.B.Sc.
31.	8054	SHENDE PRATIKSHA ANKUSH	S.Y.B.Sc.
32.	8056	NIKAM DHAIRYAVAN RAJENDRA	S.Y.B.Sc.
33.	8059	SHEJAL PRATIKSHA SHIVAJI	S.Y.B.Sc.

34.	8061	RAUT PRADIP PIRAJI	S.Y.B.Sc.
35.	8063	CHAVAN PRAGATI RAJENDRA	S.Y.B.Sc.
36.	8064	RAVAN POONAM SHARAD	S.Y.B.Sc.
37.	8066	SATHE DIKSHA MASU	S.Y.B.Sc.
38.	8067	MULE ASHWINI UTTAM	S.Y.B.Sc.
39.	8071	RAKHUNDE PRANJALI SURESH	S.Y.B.Sc.
40.	9032	PATIL AMRUTA RAJENDRA	T.Y.B.Sc.
41.	9033	KHABALE MOHINI TUKARAM	T.Y.B.Sc.
42.	9034	SARADE RUTUJA SHRIKANT	T.Y.B.Sc.


Subject Teacher


H.O.D
Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Physics
Certificate course in Electric & Electronic Instruments
Attendance Sheet
Academic Year 2018-19

Sr.No.	Roll.No.	Student Name	02/03	03/03	09/03	10/03	16/03	17/03
1.	8001	JAGTAP PRATIKSHA JOTIRAM	P	P	P	P	P	P
2.	8002	DEOKAR MAKARAND NILKANTH	P	P	P	P	P	P
3.	8003	SHINDE SONALI TANAJI	P	P	P	P	P	P
4.	8005	GHADAGE SONALI DATTATRAYA	P	P	P	P	P	P
5.	8006	GHADAGE AISHWARYA RAMBHAU	P	P	P	P	P	P
6.	8007	GHODAKE SNEHAL NITIN	P	P	A	P	P	P
7.	8008	BANKAR AARATI NANASO	P	P	P	P	P	P
8.	8010	BHONGALE AKSHAY SHARAD	P	P	A	P	P	P
9.	8012	YADAV KOMAL MANIK	P	P	P	P	P	P
10.	8013	JADHAV HARSHA NARAYAN	P	P	A	P	P	P
11.	8016	KANGUDE GAURI SHATRUGHN	P	P	P	A	P	P
12.	8021	YADAV AKSHAY NIVRUTTI	P	P	P	P	P	P
13.	8022	CHAVAN ABHIJIT DATTATRAY	P	P	P	P	P	P
14.	8023	DEOKAR SAYALI DATTATRAY	P	P	P	A	P	P
15.	8025	MITKAL RANJIT MAHADEV	P	P	P	P	P	P
16.	8026	UFALE DHANASHRI BAPURAV	P	P	P	P	A	P
17.	8027	GHADAGE AJIT KHANDU	P	P	P	P	P	P
18.	8028	PARDESHI KOMAL PRATAP	P	P	A	P	P	P
19.	8029	JADHAV SWAPNALI NARAYAN	P	P	P	P	P	P
20.	8030	GAIKWAD KISHORI SHRIPAD	P	P	P	P	P	P
21.	8031	BAGAL BHAGYASHRI HARIDAS	P	P	A	P	P	P
22.	8032	RAUT DIPALI RAJARAM	P	P	P	P	P	P
23.	8035	PINGALE NISHA SANTOSH	P	P	P	A	P	P
24.	8037	BHAGAT SOMNATH DADASO	P	P	P	P	A	P
25.	8039	REPAL AKSHAY VITTHAL	P	A	P	P	P	P
26.	8041	SABALE SAURABH SHASHIKANT	P	P	A	P	A	P
27.	8043	KHOCHARE SNEHA SHAMARAO	P	P	P	P	P	P
28.	8047	SHINGADE SANDIP	P	P	P	P	P	P

		ABASAHEB						
29.	8050	SHEWALE VARSHA DATTATRAY	P	P	P	P	P	P
30.	8053	MITKAL BHAKTI BHARAT	P	P	A	P	P	P
31.	8054	SHENDE PRATIKSHA ANKUSH	P	P	P	P	P	P
32.	8056	NIKAM DHAIRYAVAN RAJENDRA	P	P	P	P	P	P
33.	8059	SHEJAL PRATIKSHA SHIVAJI	P	P	P	A	P	P
34.	8061	RAUT PRADIP PIRAJI	P	P	P	P	P	P
35.	8063	CHAVAN PRAGATI RAJENDRA	P	P	A	P	P	P
36.	8064	RAVAN POONAM SHARAD	P	P	P	P	P	A
37.	8066	SATHE DIKSHA MASU	P	P	P	P	P	P
38.	8067	MULE ASHWINI UTTAM	P	P	P	P	P	P
39.	8071	RAKHUNDE PRANJALI SURESH	P	P	P	P	P	P
40.	8071	PATIL AMRUTA RAJENDRA	P	A	P	P	P	P
41.	9032	KHABALE MOHINI TUKARAM	P	P	P	P	P	P
42.	9033	SARADE RUTUJA SHRIKANT	P	P	P	P	P	P

[Signature]

Subject Teacher

[Signature]

H.O.D

Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

[Signature]

Principal

PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Physics
Certificate course in Electric & Electronic Instruments
Attendance Sheet
Academic Year 2018-19

Sr.No.	Roll.No.	Student Name	24/03	31/03	01/04	06/04	13/04	20/04
1.	8001	JAGTAP PRATIKSHA JOTIRAM	P	P	P	P	P	P
2.	8002	DEOKAR MAKARAND NILKANTH	P	P	P	P	P	P
3.	8003	SHINDE SONALI TANAJI	P	P	P	P	P	P
4.	8005	GHADAGE SONALI DATTATRAYA	P	P	P	P	P	P
5.	8006	GHADAGE AISHWARYA RAMBHAU	P	P	P	P	P	P
6.	8007	GHODAKE SNEHAL NITIN	P	P	A	P	P	P
7.	8008	BANKAR AARATI NANASO	P	P	P	P	P	P
8.	8010	BHONGALE AKSHAY SHARAD	P	P	A	P	P	P
9.	8012	YADAV KOMAL MANIK	P	P	P	P	P	P
10.	8013	JADHAV HARSHA NARAYAN	P	P	A	P	P	P
11.	8016	KANGUDE GAURI SHATRUGHN	P	P	P	A	P	P
12.	8021	YADAV AKSHAY NIVRUTTI	P	P	P	P	P	P
13.	8022	CHAVAN ABHIJIT DATTATRAY	P	P	P	P	P	P
14.	8023	DEOKAR SAYALI DATTATRAY	P	P	P	A	P	P
15.	8025	MITKAL RANJIT MAHADEV	P	P	P	P	P	P
16.	8026	UFALE DHANASHRI BAPURAV	P	P	P	P	A	P
17.	8027	GHADAGE AJIT KHANDU	P	P	P	P	P	P
18.	8028	PARDESHI KOMAL PRATAP	P	P	A	P	P	P
19.	8029	JADHAV SWAPNALI NARAYAN	P	P	P	P	P	P
20.	8030	GAIKWAD KISHORI SHRIPAD	P	P	P	P	P	P
21.	8031	BAGAL BHAGYASHRI HARIDAS	P	P	A	P	P	P
22.	8032	RAUT DIPALI RAJARAM	P	P	P	P	P	P
23.	8035	PINGALE NISHA SANTOSH	P	P	P	A	P	P
24.	8037	BHAGAT SOMNATH DADASO	P	P	P	P	A	P
25.	8039	REPAL AKSHAY VITTHAL	P	A	P	P	P	P
26.	8041	SABALE SAURABH SHASHIKANT	P	P	A	P	A	P
27.	8043	KHOCHARE SNEHA SHAMARAO	P	P	P	P	P	P
28.	8047	SHINGADE SANDIP	P	P	P	P	P	P

		ABASAHEB						
29.	8050	SHEWALE VARSHA DATTATRAY	P	P	P	P	P	P
30.	8053	MITKAL BHAKTI BHARAT	P	P	A	P	P	P
31.	8054	SHENDE PRATIKSHA ANKUSH	P	P	P	P	P	P
32.	8056	NIKAM DHAIRYAVAN RAJENDRA	P	P	P	P	P	P
33.	8059	SHEJAL PRATIKSHA SHIVAJI	P	P	P	A	P	P
34.	8061	RAUT PRADIP PIRAJI	P	P	P	P	P	P
35.	8063	CHAVAN PRAGATI RAJENDRA	P	P	A	P	P	P
36.	8064	RAVAN POONAM SHARAD	P	P	P	P	P	A
37.	8066	SATHE DIKSHA MASU	P	P	P	P	P	P
38.	8067	MULE ASHWINI UTTAM	P	P	P	P	P	P
39.	8071	RAKHUNDE PRANJALI SURESH	P	P	P	P	P	P
40.	8071	PATIL AMRUTA RAJENDRA	P	A	P	P	P	P
41.	9032	KHABALE MOHINI TUKARAM	P	P	P	P	P	P
42.	9033	SARADE RUTUJA SHRIKANT	P	P	P	P	P	P

[Signature]
Subject Teacher

[Signature]
H.O.D
Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

[Signature]
f Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Physics
Certificate course in Electric & Electronic Instruments
Academic Year 2018-19
Practical Attendance

Sr.No.	Roll.No.	Student Name	04/03	11/03	18/03	25/03	08/04	15/04	21/04
1.	8001	JAGTAP PRATIKSHA JOTIRAM	P	P	P	P	P	P	P
2.	8002	DEOKAR MAKARAND NILKANTH	P	P	P	P	P	P	A
3.	8003	SHINDE SONALI TANAJI	P	P	P	P	P	P	P
4.	8005	GHADAGE SONALI DATTATRAYA	P	P	P	P	P	P	P
5.	8006	GHADAGE AISHWARYA RAMBHAU	P	P	P	P	P	P	P
6.	8007	GHODAKE SNEHAL NITIN	P	P	A	P	A	P	P
7.	8008	BANKAR AARATI NANASO	P	P	P	P	P	P	A
8.	8010	BHONGALE AKSHAY SHARAD	P	P	A	P	P	P	P
9.	8012	YADAV KOMAL MANIK	P	P	P	P	P	P	P
10.	8013	JADHAV HARSHA NARAYAN	P	P	A	P	P	P	P
11.	8016	KANGUDE GAURI SHATRUGHN	P	P	P	A	P	P	P
12.	8021	YADAV AKSHAY NIVRUTTI	P	P	P	P	P	P	P
13.	8022	CHAVAN ABHIJIT DATTATRAY	P	P	P	P	P	P	P
14.	8023	DEOKAR SAYALI DATTATRAY	P	P	P	A	P	P	P
15.	8025	MITKAL RANJIT MAHADEV	P	P	P	P	P	P	A
16.	8026	UFALE DHANASHRI BAPURAV	P	P	P	P	A	P	P
17.	8027	GHADAGE AJIT KHANDU	P	P	P	P	P	P	P
18.	8028	PARDESHI KOMAL PRATAP	P	P	A	P	P	P	P
19.	8029	JADHAV SWAPNALI NARAYAN	P	P	P	P	P	P	P
20.	8030	GAIKWAD KISHORI SHRIPAD	P	P	P	P	P	P	A
21.	8031	BAGAL BHAGYASHRI	P	P	A	P	P	P	P

		HARIDAS							
22.	8032	RAUT DIPALI RAJARAM	P	P	P	P	P	P	P
23.	8035	PINGALE NISHA SANTOSH	P	P	P	A	P	P	P
24.	8037	BHAGAT SOMNATH DADASO	P	P	P	P	A	P	P
25.	8039	REPAL AKSHAY VITTHAL	P	A	P	P	P	P	P
26.	8041	SABALE SAURABH SHASHIKANT	P	P	A	P	A	P	P
27.	8043	KHOCHARE SNEHA SHAMARAO	P	P	P	P	P	P	P
28.	8047	SHINGADE SANDIP ABASAHEB	P	P	P	P	P	P	P
29.	8050	SHEWALE VARSHA DATTATRAY	P	P	P	P	P	P	A
30.	8053	MITKAL BHAKTI BHARAT	P	P	A	P	P	P	P
31.	8054	SHENDE PRATIKSHA ANKUSH	P	P	P	P	P	P	P
32.	8056	NIKAM DHAIRYAVAN RAJENDRA	P	P	P	P	P	P	P
33.	8059	SHEJAL PRATIKSHA SHIVAJI	P	P	P	A	P	P	A
34.	8061	RAUT PRADIP PIRAJI	P	P	P	P	P	P	P
35.	8063	CHAVAN PRAGATI RAJENDRA	P	P	A	P	P	P	P
36.	8064	RAVAN POONAM SHARAD	P	P	P	P	P	A	P
37.	8066	SATHE DIKSHA MASU	P	P	P	P	P	P	P
38.	8067	MULE ASHWINI UTTAM	P	P	P	P	P	P	P
39.	8071	RAKHUNDE PRANJALI SURESH	P	P	P	P	P	P	A
40.	8071	PATIL AMRUTA RAJENDRA	P	A	P	P	P	P	P
41.	9032	KHABALE MOHINI TUKARAM	P	P	P	P	P	P	P
42.	9033	SARADE RUTUJA SHRIKANT	P	P	P	P	P	P	P

[Signature]

Subject Teacher

[Signature]

H.O.D

Head

Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

[Signature]

Principal
PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandal's,
ARTS, SCIENCE AND COMMERCE COLLEGE,
INDAPUR, DIST. PUNE

(Affiliated to Savitribai Phule Pune University, Pune)



● Organized ●

Certificate Course on Electric & Electronic Instruments
(Academic Year 2018-19)

This is to certify that *Jagtap Pratiksha Jyotiram* a student from S. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on Electric & Electronic Instruments (4 Credits). This course is organized by Department of Physics, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 02.03.2019 to 21.04.2019

Prof. Prof.Dr.Shivaji Veer
Course Coordinator

Prof.Dr.Shivaji Veer
Head Dept. of Physics

Prof. Dr. Viresh Holkunde
IQAC Co-ordinator

Prof. Dr. Sanjay Chakane
Principal

Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College, Indapur

Department of Physics

Notice for Student

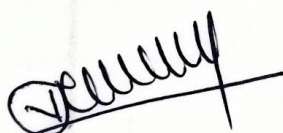
Date-01/01/2019

Dear Students,

Welcome back to Arts, Science and Commerce College, Indapur for the 4th semester of the academic year 2018-19. The classes for the Value-Added Courses (VAC) for 4th semesters will commence from January 16, 2019, onwards. The appropriate timetable for these classes will be uploaded in our college website soon.

Students who have not yet registered for the above said VAC classes are hereby informed to do so on or before January 05, 2019, WITHOUT FAIL.

Kindly note ATTENDANCE RECORDING will commence from the day of opening i.e., January 16, 2019, itself and hence it is mandatory for all students to attend the classes from January 16, 2019, onwards.



HOD

Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapr Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College Indapur Dist. Pune
Department of Physics
Certificate Course in Research Methodology
Syllabus
From Academic Year 2018-19

📖 Objectives

- ✓ To discover answers to questions through the application of scientific procedures.
- ✓ To find out the truth, which is hidden, and which has not been discovered as yet.
- ✓ Exploratory or formulative research studies: To gain familiarity with a phenomenon or to achieve new insights into it.
- ✓ Descriptive research studies: To portray accurately the characteristics of a particular individual, situation or a group.
- ✓ Diagnostic research studies: To determine the frequency with which something occurs or with which it is associated with something else.
- ✓ Hypothesis-testing research studies: To test a hypothesis of a causal relationship between variables.

📖 Program Learning Outcomes of the Research Methodology.

- [1] Recognizing the relevant field of knowledge and comprehending the nature of the topic to be studied.
- [2] Reading through the literature to learn about other people's approaches or solutions to the issue.
- [3] Gathering information in a planned and regulated way in order to make informed conclusions.
- [4] Examining data that is relevant to the issue.

SYLLABUS

Certificate course of Research Methodology (Lectures 40)

Module 1: Basic Introduction of the Research Methodology (Lectures 08)

Meaning of research, objective of research, motivation in research, types of research, research approaches, significance of research, research methods versus scientific methodology, importance of knowing how research is done, research process, criteria of good research.

Module 2: Research Process (Lectures 07)

Research design: meaning of research design, features of good design, important concepts of relating research design, different basic designs.

Module 3: WHAT IS A RESEARCH PROBLEM (Lectures 07)

Method of data collection, types of data analysis; statistics in research, measure of central tendency, measure of dispersion; measure of asymmetry, measure of relationship, simple regression analysis, multiple correlation and regression, partial correlation.

Module 4: Experimental part 1 (Lectures 09)

Preparation of experimental parts, solution preparation, cleaning of the substrate, etc.

Module 5] Experimental part 2 (Lectures 09)

Preparation of samples using different method, sample collection and analysis, Preparation of the report.

Reference Books

1] Research Methodology methods and techniques, By C. R. Kothari, New Age International (P) Limited Publisher, ISBN (13): 978-81-224-2488-1.



Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College Indapur Dist. Pune

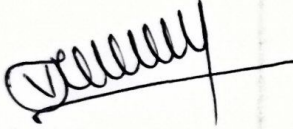
Department of Physics

Certificate Course in Fundamentals of Research

List of Registered Students
From Academic Year 2018-19

Sr.No.	Roll.No.	Name Of Student	Class
1.	8001	Babare Akash Tukaram	S.Y.B.Sc.
2.	8003	Kadam Monali Sharad	S.Y.B.Sc.
3.	8004	Borate Pankaj Ankush	S.Y.B.Sc.
4.	8005	Nanaware Sonali Balkrushna	S.Y.B.Sc.
5.	8007	Kadam Kiran Kailas	S.Y.B.Sc.
6.	8008	Nale Ashwini Dattatray	S.Y.B.Sc.
7.	8010	Kuber Radhika Hanumant	S.Y.B.Sc.
8.	8011	Gaikwad Rinkal Bharat	S.Y.B.Sc.
9.	8012	Shaikh Nilofar Nisar	S.Y.B.Sc.
10.	8013	Awale Pranit Dilip	S.Y.B.Sc.
11.	8014	Nanavare Vaishnavi Jotiram	S.Y.B.Sc.
12.	8017	Shinde Vaishanavi Dnyandeo	S.Y.B.Sc.
13.	8018	Borate Priti Sanjay	S.Y.B.Sc.
14.	8019	Yadav Sneha Shivaji	S.Y.B.Sc.
15.	8020	Jadhav Pooja Vitthal	S.Y.B.Sc.
16.	8025	Thorat Sonali Chandraknat	S.Y.B.Sc.
17.	8026	Bansude Sarika Hanumant	S.Y.B.Sc.
18.	8027	Mengade Priyanka Gokul	S.Y.B.Sc.
19.	8028	Jadhav Ujjawala Madhukar	S.Y.B.Sc.
20.	8029	Shinde Madhuri Bhagwat	S.Y.B.Sc.
21.	8030	Shende Varsha Balasaheb	S.Y.B.Sc.
22.	8033	Jadhav Yogita Sukhadev	S.Y.B.Sc.
23.	8034	Kute Harshada Pralhad	S.Y.B.Sc.
24.	8035	Shete Abhishek Dilip	S.Y.B.Sc.
25.	8036	Shirsat Akshay Jaykumar	S.Y.B.Sc.
26.	8037	Bhargande Akash Vijay	S.Y.B.Sc.
27.	8038	Mahadik Vaibhav Rajkumar	S.Y.B.Sc.
28.	8044	Chavan Anushka Shankar	S.Y.B.Sc.
29.	8052	More Kiran Dattatray	S.Y.B.Sc.
30.	8056	Dhuke Sagar Dada	S.Y.B.Sc.
31.	8057	Toraskar Rutuja Uddhav	S.Y.B.Sc.
32.	8058	Bhoite Aishwarya Rajendra	S.Y.B.Sc.

33.	8059	Nanavare Komal Rajendra	S.Y.B.Sc.
34.	8064	Kale Jayshri Bapurao	S.Y.B.Sc.
35.	8070	Bagwan Sadaf Ismail	S.Y.B.Sc.
36.	8074	Veer Karuna Narayan	S.Y.B.Sc.
37.	9001	Bhanavase Atul Satish	T.Y.B.Sc.
38.	9002	Dake Vishal Madhukar	T.Y.B.Sc.
39.	9003	Pardeshi Dhanashri Kantilal	T.Y.B.Sc.
40.	9004	Dhekale Rutuja Rajendra	T.Y.B.Sc.
41.	9005	Mali Prajakta Kumar	T.Y.B.Sc.
42.	9006	Deokar Sayali Dattatray	T.Y.B.Sc.
43.	9007	Rakhunde Pranjali Suresh	T.Y.B.Sc.
44.	9008	Kangude Gauri Shatrughn	T.Y.B.Sc.
45.	9009	Dhage Shubhangi Nana	T.Y.B.Sc.
46.	9010	Chavan Rajesh Dilip	T.Y.B.Sc.
47.	9011	Sawant Mayuri Maruti	T.Y.B.Sc.
48.	9012	Bhong Khandoo Dattoo	T.Y.B.Sc.

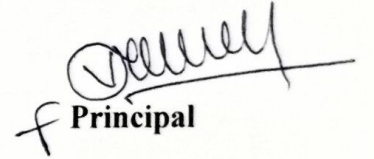


Subject Teacher



H.O.D

Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

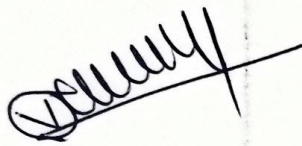
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



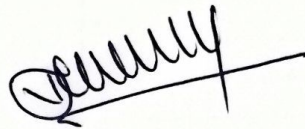
Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College Indapur Dist. Pune
Department of Physics
Certificate Course in Research Methodology
Attendance Sheet
From Academic Year 2018-19

Sr.No.	Roll.No.	Name Of Student	16/01	17/01	23/01	24/01	25/01	27/01
1.	8001	Babare Akash Tukaram	P	P	P	P	P	P
2.	8003	Kadam Monali Sharad	P	P	P	P	P	P
3.	8004	Borate Pankaj Ankush	P	P	P	P	P	P
4.	8005	Nanaware Sonali Balkrushna	P	P	P	P	P	P
5.	8007	Kadam Kiran Kailas	P	P	P	P	P	P
6.	8008	Nale Ashwini Dattatray	P	P	A	P	P	P
7.	8010	Kuber Radhika Hanumant	P	P	P	P	P	P
8.	8011	Gaikwad Rinkal Bharat	P	P	A	P	P	P
9.	8012	Shaikh Nilofar Nisar	P	P	P	P	P	P
10.	8013	Awale Pranit Dilip	P	P	A	P	P	P
11.	8014	Nanavare Vaishnavi Jotiram	P	P	P	A	P	P
12.	8017	Shinde Vaishanavi Dnyandeo	P	P	P	P	P	P
13.	8018	Borate Priti Sanjay	P	P	P	P	P	P
14.	8019	Yadav Sneha Shivaji	P	P	P	A	P	P
15.	8020	Jadhav Pooja Vitthal	P	P	P	P	P	P
16.	8025	Thorat Sonali Chandraknat	P	P	P	P	A	P
17.	8026	Bansude Sarika Hanumant	P	P	P	P	P	P
18.	8027	Mengade Priyanka Gokul	P	P	A	P	P	P
19.	8028	Jadhav Ujjawala Madhukar	P	P	P	P	P	P
20.	8029	Shinde Madhuri Bhagwat	P	P	P	P	P	P
21.	8030	Shende Varsha Balasaheb	P	P	A	P	P	P
22.	8033	Jadhav Yogita Sukhadev	P	P	P	P	P	P
23.	8034	Kute Harshada Pralhad	P	P	P	A	P	P
24.	8035	Shete Abhishek Dilip	P	P	P	P	A	P
25.	8036	Shirsat Akshay Jaykumar	P	A	P	P	P	P
26.	8037	Bhargande Akash Vijay	P	P	A	P	A	P
27.	8038	Mahadik Vaibhav Rajkumar	P	P	P	P	P	P
28.	8044	Chavan Anushka Shankar	P	P	P	P	P	P
29.	8052	More Kiran Dattatray	P	P	P	P	P	P
30.	8056	Dhuke Sagar Dada	P	P	A	P	P	P
31.	8057	Toraskar Rutuja Uddhav	P	P	P	P	P	P
32.	8058	Bhoite Aishwarya Rajendra	P	P	P	P	P	P

36.	8074	Veer Karuna Narayan	P	P	P	P	P	A
37.	9001	Bhanavase Atul Satish	P	P	P	P	P	P
38.	9002	Dake Vishal Madhukar	P	P	P	P	P	P
39.	9003	Pardeshi Dhanashri Kantilal	P	P	P	P	P	P
40.	9004	Dhekale Rutuja Rajendra	P	A	P	P	P	P
41.	9005	Mali Prajakta Kumar	P	P	P	P	P	P
42.	9006	Deokar Sayali Dattatray	P	P	P	P	P	P
43.	9007	Rakhunde Pranjali Suresh	P	P	A	P	P	A
44.	9008	Kangude Gauri Shatrughn	P	P	P	P	P	P
45.	9009	Dhage Shubhangi Nana	P	A	P	P	P	P
46.	9010	Chavan Rajesh Dilip	P	P	P	P	P	P
47.	9011	Sawant Mayuri Maruti	P	P	P	P	P	P
48.	9012	Bhong Khandoo Dattoo	P	P	A	P	P	P



Subject Teacher



H.O.D

Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune



Principal

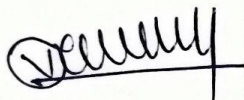
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413109 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College Indapur Dist. Pune
Department of Physics
Certificate Course in Research Methodology
Attendance Sheet
From Academic Year 2019-20

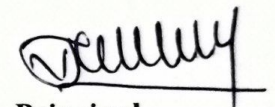
Sr.No.	Roll.No.	Name Of Student	28/01	05/02	06/02	12/02	13/02	19/02
1.	8001	Babare Akash Tukaram	P	P	P	P	P	P
2.	8003	Kadam Monali Sharad	P	P	P	P	P	P
3.	8004	Borate Pankaj Ankush	P	P	P	P	P	P
4.	8005	Nanaware Sonali Balkrushna	P	P	P	P	P	P
5.	8007	Kadam Kiran Kailas	P	P	P	P	P	P
6.	8008	Nale Ashwini Dattatray	P	P	A	P	P	P
7.	8010	Kuber Radhika Hanumant	P	P	P	P	P	P
8.	8011	Gaikwad Rinkal Bharat	P	P	A	P	P	P
9.	8012	Shaikh Nilofar Nisar	P	P	P	P	P	P
10.	8013	Awale Pranit Dilip	P	P	A	P	P	P
11.	8014	Nanavare Vaishnavi Jotiram	P	P	P	A	P	P
12.	8017	Shinde Vaishanavi Dnyandeo	P	P	P	P	P	P
13.	8018	Borate Priti Sanjay	P	P	P	P	P	P
14.	8019	Yadav Sneha Shivaji	P	P	P	A	P	P
15.	8020	Jadhav Pooja Vitthal	P	P	P	P	P	P
16.	8025	Thorat Sonali Chandraknat	P	P	P	P	A	P
17.	8026	Bansude Sarika Hanumant	P	P	P	P	P	P
18.	8027	Mengade Priyanka Gokul	P	P	A	P	P	P
19.	8028	Jadhav Ujjawala Madhukar	P	P	P	P	P	P
20.	8029	Shinde Madhuri Bhagwat	P	P	P	P	P	P
21.	8030	Shende Varsha Balasaheb	P	P	A	P	P	P
22.	8033	Jadhav Yogita Sukhadev	P	P	P	P	P	P
23.	8034	Kute Harshada Pralhad	P	P	P	A	P	P
24.	8035	Shete Abhishek Dilip	P	P	P	P	A	P
25.	8036	Shirsat Akshay Jaykumar	P	A	P	P	P	P
26.	8037	Bhargande Akash Vijay	P	P	A	P	A	P
27.	8038	Mahadik Vaibhav Rajkumar	P	P	P	P	P	P
28.	8044	Chavan Anushka Shankar	P	P	P	P	P	P
29.	8052	More Kiran Dattatray	P	P	P	P	P	P
30.	8056	Dhuke Sagar Dada	P	P	A	P	P	P
31.	8057	Toraskar Rutuja Uddhav	P	P	P	P	P	P
32.	8058	Bhoite Aishwarya Rajendra	P	P	P	P	P	P
33.	8059	Nanavare Komal Rajendra	P	P	P	A	P	P
34.	8064	Kale Jayshri Bapurao	P	P	P	P	P	P
35.	8070	Bagwan Sadaf Ismail	P	P	A	P	P	P

33.	8059	Nanavare Komal Rajendra	P	P	P	A	P	P
34.	8064	Kale Jayshri Bapurao	P	P	P	P	P	P
35.	8070	Bagwan Sadaf Ismail	P	P	A	P	P	P
36.	8074	Veer Karuna Narayan	P	P	P	P	P	A
37.	9001	Bhanavase Atul Satish	P	P	P	P	P	P
38.	9002	Dake Vishal Madhukar	P	P	P	P	P	P
39.	9003	Pardeshi Dhanashri Kantilal	P	P	P	P	P	P
40.	9004	Dhekale Rutuja Rajendra	P	A	P	P	P	P
41.	9005	Mali Prajakta Kumar	P	P	P	P	P	P
42.	9006	Deokar Sayali Dattatray	P	P	P	P	P	P
43.	9007	Rakhunde Pranjali Suresh	P	P	A	P	P	A
44.	9008	Kangude Gauri Shatrughn	P	P	P	P	P	P
45.	9009	Dhage Shubhangi Nana	P	A	P	P	P	P
46.	9010	Chavan Rajesh Dilip	P	P	P	P	P	P
47.	9011	Sawant Mayuri Maruti	P	P	P	P	P	P
48.	9012	Bhong Khandoo Dattoo	P	P	A	P	P	P


Subject Teacher


H.O.D

Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune

(Affiliated to Savitribai Phule Pune University, Pune)

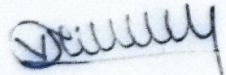


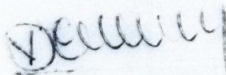
Organized

Certificate Course on Research Methodology

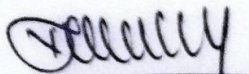
(Academic Year 2018-19)

This is to certify that **Borate Shravani Anil** a student from S.Y. B.Sc. Class has actively participated and successfully completed Certificate Course on **Research Methodology** (4 Credits). The Department of Physics at ITSPM's Arts, Science, and Commerce College in Indapur, District of Pune, is hosting this course from January 16, 2019, to February 19, 2019..


Prof. Dr. Shivaji Veer
Course Coordinator


Prof. (Dr.) Shivaji Veer
Head Dept. of Physics

Prof. (Dr.) Sandip Shinde
IQAC Coordinator
Coordinator, IQAC


Prof. (Dr.) Sanjay Chakane
Principal

Head
Department of Physics
Arts, Science & Commerce
College, Indapur, Dist. Pune

Arts, Science & Commerce College
Indapur Tal Indapur Dist Pune - 413106



Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR, DIST. PUNE

2018-19

**ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR,
DIST- PUNE**

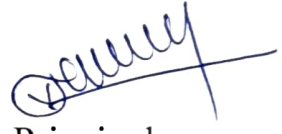
STUDENTS NOTICE

Date: 24/10 /2018

All the students of T.Y.B.Sc. those who have taken admission to the value added course “ **Milk sampling and its analysis**” are hereby informed that,their regular theory and practicals will be conducted from 05 Nov.2018 to 14 Nov,2018. Attendance of all students is compulsory.


Dr. Bhosale R.R.
(Course Incharge)


Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapue, Dist. Pune


Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ARTS, SCIENCE AND COMMERCE COLLEGE, INDAPUR
DEPARTMENT OF CHEMISTRY

Value Added Course: Milk Sampling and Its Analysis
(Course Credit: 04)

Sr.No.	Name of the Topics	Number of Lectures
1	Introduction	02
2	Common Dairy Processes	08
3	Milk proteins, Carbohydrates and Vitamins , Milk Products	10
4	Detection of Preservatives & Adulterants, Physicochemical parameters in Milk Sample (Practicals)	20

Chapter I – Introduction

02

Definition, constituents of milk of different species such as cow, buffalo, goat, etc., Chemical composition of milk of Indian breed and foreign breeds of cow, factor affecting composition of milk, characteristics of milk of different mammals,

Chapter 2- Common Dairy Processes

08

Physicochemical properties of milk, acidity, pH, density, specific gravity, color and flavor of milk, food and nutritive value of milk. Microbiology of milk, growth of microorganism, stages of growth, product of microbial growth, destruction of microorganisms growth. Cream separation- Basic principles, gravity creaming water dilution and centrifugal creaming method, construction of centrifugal separator, factors affecting percentage of fat, speed of machine, temp. of milk, rate of inflow amount of flushing water formation of separator slime Pasteurization of milk, flow sheet diagram, process receiving milk, preheating filtration, clarification, cooling and storage raw milk, standardization, pasteurization, homogenization, packing and storage, uses of milk.

Chapter 3-Milk proteins, Carbohydrates and Vitamins

10

Milk proteins- importance of proteins found in the milk-casein, albumin and globulin, composition, nomenclature, properties and uses. ,Carbohydrates- importance of lactose,

classification, properties, nutritive value of lactose use of lactose. ,Vitamins- importance, definition, properties nutritive value of vitamins, Vit-A, Vit-B, B2, B6, B12, Vit-C (Ascorbic acid) & Vitamin-D. ,Food and nutritive value of milk, milk & public health.

Chapter V- Practicals

20

Detection of Common preservatives and Adulterants in milk , Various modes of Adulteration and their detection such as skimming, addition of separated milk, skim milk, added water, Starch and cane sugar. Determination of physicochemical parameters in milk samples.

Learning Objectives:

The students are expected to study

1. Knowing importance of the subject from the point of rural economy.
2. Knowing the composition of milk, its food & nutritive value
3. Understanding the Microbiology of the milk
4. Understanding various preservation and adulterants, various milk proteins and their role for the human body.
5. Knowing various milk products, their composition, manufacture and uses.

References:

- 1: Qutline of Dairy Technology- Oxfoed University press By- Sukumar De. (Edition-1983)
- 2: Dairy Chemistry and Animal Nutrition- M.M. Rai, Kalyani, Publishers, New Delhi 3rd Edition, 1980
- 3: Fundamentals of Dairy Chemistry- B.H. Webb, A.H. Hohsson, J.A. Alford, CBB Publishers and Distributors.
- 4: Milk and Milk Products- C.H. Eckles, H. Macy, Tata McGraw Hikk Publishing Company Ltd.
- 5: Chemistry and Testing of Dairy Products- H.V. Athertion, J.A. New Lander, CBS, Publishers and Distributors.


Dr. Bhosale R.R.
(Course Incharge)

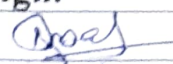
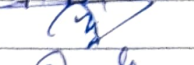
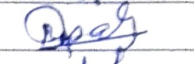
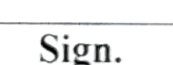
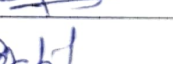



Dr. Bhore J.B.
Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapur, Dist. Pune

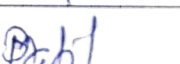

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

Name of Add-On Course : Milk Sampling and Its Analysis

Time Table Value Added Course (Theory) 2018-19

Date	Time	Name of Faculty	Sign.
05/11/2018	2.00 - 3.00	Dr.Bhosale R.R.	
	3.00 - 4.00	Prof. Patil M.P.	
	4.00 - 5.00	Prof. Mane U.L.	
06/11/2018	2.00 - 3.00	Dr.Bhosale R.R.	
	3.00 - 4.00	Prof. Patil M.P.	
	4.00 - 5.00	Prof. Mane U.L.	
07/11/2018	2.00 - 3.00	Dr.Bhosale R.R.	
	3.00 - 4.00	Prof. Patil M.P.	
	4.00 - 5.00	Prof. Mane U.L.	
08/11/2018	2.00 - 3.00	Dr.Bhosale R.R.	
	3.00 - 4.00	Prof. Patil M.P.	
	4.00 - 5.00	Prof. Mane U.L.	
09/11/2018	2.00 - 3.00	Dr.Bhosale R.R.	
	3.00 - 4.00	Prof. Patil M.P.	
	4.00 - 5.00	Prof. Mane U.L.	

(Practicals)

Date	Time	Name of Faculty	Sign.
10/11/2018	2.00 - 6.00	Dr.Bhosale R.R.	
11/11/2018	2.00 - 6.00	Prof. Patil M.P.	
12/11/2018	2.00 - 6.00	Prof. Mane U.L.	
13/11/2018	2.00 - 6.00	Dr.Bhosale R.R.	
14/11/2018	2.00 - 6.00	Prof. Patil M.P.	


Dr. Bhosale R.R.
(Course Incharge)


Dr. Bhore J.B
Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapur, Dist. Pune


Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



LIST OF ADMITTED STUDENTS

Name of Value Added Course : Milk Sampling and Its Analysis

2018-19

			05/11	06/11	07/11	08/11	09/11	10/11	11/11	12/11	13/11	14/11
1	9001	DHANAWADE YOGESH BABURAO	P	P	P	P	A	P	P	P	A	P
2	9002	JADHAV VANITA LAXMAN	P	P	P	P	P	P	P	P	A	P
3	9003	KADAM RESHMA RAMCHANDRA	A	P	P	P	P	A	P	P	P	P
4	9004	DHOTARE SONALI BAPU	P	P	A	P	P	P	P	P	P	P
5	9005	SHENDE DIPALI ATMARAM	P	P	P	P	P	P	P	P	P	P
6	9006	DESHMUKH NEHA NAGANATH	P	P	A	A	P	P	P	P	P	A
7	9007	DHAVLE VINAY GANESH	P	A	P	P	P	P	P	P	P	P
8	9008	JADHAV HARSHVARDHAN DNYANDEO	P	P	P	P	P	A	P	P	P	P
9	9014	BONGANE PUNAM DNYANESHWAR	A	P	P	P	P	P	A	P	A	A
10	9015	SAUNDANE SHRIKRISHNA VITTHAL	A	P	P	P	P	P	P	P	P	P
11	9016	KADAM BHARATI DEVIDAS	P	P	A	P	P	P	P	P	P	P
12	9018	DHAVAL SANJEEVANEE SATYAVAN	P	P	P	P	P	P	P	P	P	P
13	9019	DARGUDE POONAM SURESH	P	P	P	P	P	A	P	P	P	P
14	9020	SHIRSAT POOJA JAYKUMAR	P	P	P	P	P	P	P	P	P	P
15	9026	CHORAMALE SARIKA LAXMAN	P	P	P	P	P	P	P	P	P	P
16	9027	BORATE KAJAL BALASO	P	P	P	P	P	P	P	P	P	P
17	9028	BONGANE BHAGYARATHI SAMBHAJI	P	P	A	P	P	P	A	P	P	P
18	9029	NALAWADE PRAJAKTA TANAJI	P	A	P	A	P	P	P	P	P	P

LIST OF ADMITTED STUDENTS

Name of Value Added Course : Milk Sampling and Its Analysis

Sr.No	Roll Nos	Name of Students	05/11	06/11	07/11	08/11	09/11	10/11	11/11	12/11	13/11	14/11
19	9030	GALANDE AMAR SHAHU	P	P	P	A	A	P	P	P	P	P
20	9031	BOBADE MRUNALI BAPU	P	P	P	P	P	P	P	P	P	P
21	9047	KALEL SUPRIYA SOMNATH	P	P	P	P	P	P	P	P	P	P
22	9048	KUBER ANITA RAMCHANDRA	P	P	P	P	P	P	A	P	P	P
23	9049	RAKHUNDE SAGAR MAHADEO	P	P	P	P	P	P	P	P	P	P
24	9050	GAME SHUBHAM VIJAY	P	P	P	P	P	P	P	P	P	P
25	9051	NALAWADE NIVEDITA SANJAY	P	P	P	P	A	P	P	P	P	P
26	9052	RANSING HRISHIKESH JAYSING	A	P	P	P	P	P	P	P	P	P
27	9053	KOTHMIRE HANUMANT JOTIRAM	A	P	P	P	P	P	P	P	A	P
28	9054	MORE AMOL GOPAL	A	P	P	P	P	P	P	P	P	A
29	9055	CHOPADE POOJA HIRALAL	P	P	P	P	P	P	A	P	P	P
30	9056	WAGHMODE ROHIT SURYAKANT	P	P	P	P	P	P	P	A	P	P
31	9058	PATIL RUSHIKESH PANDIT	P	P	P	P	P	P	P	P	P	P
32	9059	SHINDE PANDURANG BABA	P	P	A	A	P	P	P	P	P	P
33	9071	TAVSE TRUPTI ASHOK	P	P	P	P	P	A	P	P	P	P
34	9073	JAGDALE RUTUJA ANNASO	P	A	P	P	P	P	P	P	P	P
35	9181	TARANGE KESHAV SHIVAJI	A	P	P	P	P	A	P	P	P	P

[illegible]

[illegible]

Sr.No	Roll Nos	Name of Students	05/11	06/11	07/11	08/11	09/11	10/11	11/11	12/11	13/11	
70	9280	VYAWAHARE NIKHIL PRAKASH	A	P	P	P	P	P	A	P	P	P
71	9282	JADHAV GANESH LAXMAN	P	A	P	P	P	P	P	P	P	A
72	9288	JAGTAP SHUBHANGI SANJAY	P	P	A	P	P	A	P	P	P	P
73	9289	NAGARE SUPRIYA TANAJI	P	P	P	A	P	P	P	P	A	P
74	9291	ARKILE SAURABH SHIVAJI	P	P	P	P	A	P	P	P	P	P
75	9293	GAWADE AVINASH HARISHCHANDRA	P	P	A	P	P	A	P	P	P	P
76	9295	KHARAT SAURABH RATAN	P	P	P	P	P	P	A	P	P	P
77	9297	KUDALE NITIN RAJENDRA	P	P	P	P	A	P	P	A	P	P
78	9298	KAMATE ASHWINI SHANKAR	P	P	P	P	P	P	P	P	A	P
79	9299	KAVALE AKASH SHARAD	P	P	P	P	P	P	P	P	P	A

Basu



ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR

Name of Add-On Course : Milk Sampling and Its Analysis

COURSE COMPLETION REPORT

The add-on course “ **Milk Sampling and Its Analysis**” has conducted from 05/11/2018 to 14/11/2018 and been successfully completed. Total 79 students were admitted for course. The students understand about milk, their sampling, major and minor constituents, how to take precautions about storage and handling of milk, Physical properties of different types of milk like Homogenized milk, Pasteurized milk, Standardized milk, Sterilized milk, Condensed milk, flavoured milk etc. And their manufacturing processes. Similarly students also the information about the detection of preservatives and adulterants in milk.

The milk is daily used in each home to home in society, so the course will be most useful for students. After completion of this course , certificates are distributed to all participated students.


Dr. Bhosale R.R.
(Course Incharge)




Dr. Bhore J.B
Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapue, Dist. Pune



Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur, Pune
"Value Added Course Completion Certificate "

Certificate of Appreciation

This is to certify that **Mr./Ms. Jadhav Vanita Laxman** , T.Y.B.Sc, Class of Arts, Science and Commerce College, Indapur has actively participated in Add-On Course " **Milk Sampling and Its Analysis**" organized by Department of Chemistry from 5th Nov.2018 to 14th Nov. 2018.


Dr. Rajendra Bhosale
Course Incharge


Dr. Bhore J.B.
Head.Dept. of Chemistry
Department Of Chemistry
Arts, Science & Commerce
College, Indapur, Dist. Pune


Dr. Sanjay Chakane
Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

SYLLABUS

Certificate course in Industrial Skills

(Lectures 40)

Objectives

1. Develop and demonstrate depth and breadth of knowledge in chromatography
2. To Integrate and impart practical knowledge to the students and evaluate their potential
3. To teach different analytical techniques to the students
4. To enhance employability of the students by nurturing CV writing skill and interview preparation

Module 1: Spectroscopic techniques (Lectures 6)

Spectral analysis using IR, UV, ¹H NMR, ¹³C NMR and GCMS.

Module 2: Chromatographic techniques (Lectures 3):

Different chromatographic techniques include, TLC, Column chromatography, Paper chromatography, HPLC, GC, Ion exchange chromatography etc.

Module 3: Solvent extraction and Volumetric analysis (Lectures 3):

Extraction of samples 1) solid in liquid mixtures and 2) liquid in liquid mixtures

Module 4: Other Techniques (Lectures 3):

To teach Simple distillation, Fractional distillation, Crystallization, Sublimation

Module 5] Practical's (25 L):

1. Identifications of functional groups of the compounds by the TLC technique
2. Functional group conversion on micro scale and their purification
3. Determinations of structures of the synthesized compounds by using UV, IR, NMR techniques.
4. Nanomaterial Synthesis and Characterizations.
5. Purification of Compounds by a) Column chromatography b) Distillation c) Sublimation d) Recrystallization.

References:

1. Instrumental Methods of Chemical Analysis -B.K Sharma
2. Organic spectroscopy -Y.R Sharma

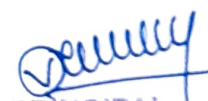
3. A Text book of Pharmaceutical Analysis -Kerrenth A. Connors
4. Vogel's Textbook of Qualitative Chemical Analysis -A.I. Vogel
5. Practical Pharmaceutical Chemistry -A.H. Beckett and J.B. Stenlake
6. Organic Chemistry -I. L. Finar
7. Organic spectroscopy -William Kemp
8. Basic tests for Pharmaceutical substances –WHO (1988)
9. Basic tests for Pharmaceutical substances –WHO (1991)
10. How to practice GMP's –P.P.Sharma4.The Drugs and Cosmetic Act 1940 –Vijay Malik

Program Learning Outcomes of the Certificate course in Industrial Skills

- CO-1: To understand basic chromatographic techniques
- CO-2: To know hands on experience of spectral analysis
- CO-3: To understand solvent extraction and volumetric analysis techniques
- CO-4: To learn other techniques like distillation, sublimation and crystallization of solids
- CO-5 To understand basic reactions of functional group interconversion




Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapue, Dist. Pune


PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST. PUNE



**ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR,
DIST- PUNE**

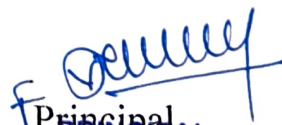
STUDENTS NOTICE

Date: 01/01/2019

All the students of M.Sc Chemistry those who have taken admission to the value added course “ **Industrial Skill**” are hereby informed that,their regular theory and practicals will be conducted from 07 Jan 2019 to 18 Jan 2019. Attendance of all students is compulsory.


Dr. Shinde M.P
(Course Incharge)


Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapure, Dist. Pune


Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Name of Add-On Course : Industrial Skill

Time Table Value Added Course (Theory)2018-19

Date	Time	Name of Faculty	Sign.
07/1/2019	2.00 - 3.00	<u>Prof.Kharat S.D</u>	
	3.00 - 4.00	<u>Prof.Sathe P.V</u>	
	4.00 - 5.00	<u>Prof.Zagade Y.V.</u>	
08/1/2019	2.00 - 3.00	<u>Prof.Kharat S.D</u>	
	3.00 - 4.00	<u>Prof.Sathe P.V</u>	
	4.00 - 5.00	<u>Prof.Zagade Y.V.</u>	
09/1/2019	2.00 - 3.00	<u>Prof.Kharat S.D</u>	
	3.00 - 4.00	<u>Prof.Sathe P.V</u>	
	4.00 - 5.00	<u>Prof.Zagade Y.V.</u>	
10/1/2019	2.00 - 3.00	<u>Prof.Kharat S.D</u>	
	3.00 - 4.00	<u>Prof.Sathe P.V</u>	
	4.00 - 5.00	<u>Prof.Zagade Y.V.</u>	
11/1/2019	2.00 - 3.00	<u>Prof.Kharat S.D</u>	
	3.00 - 4.00	<u>Prof.Sathe P.V</u>	
	4.00 - 5.00	<u>Prof.Zagade Y.V.</u>	

(Practicals)

Date	Time	Name of Faculty	Sign.
12/1/2019	2.00 - 6.00	<u>Prof.Kharat S.D</u>	
15/1/2019	2.00 - 6.00	<u>Prof.Sathe P.V</u>	
16/1/2019	2.00 - 6.00	<u>Prof.Zagade Y.V.</u>	
17/1/2019	2.00 - 6.00	<u>Prof.Kharat S.D</u>	
18/1/2019	2.00 - 6.00	<u>Prof.Sathe P.V</u>	

Dr. Shinde M.P.
 (Course Incharge)

Dr. Bhore J.B
 HOD

Head
 Department Of Chemistry
 Arts, Science & Commerce
 College, Indapur, Dist. Pune

Principal
PRINCIPAL
 ARTS, SCIENCE AND
 COMMERCE COLLEGE
 INDAPUR-413106 DIST-PUNE

LIST OF ADMITTED STUDENTS

Name of Value Added Course : Industrial Skill(2018-19)

Sr.No	Roll No.	Name of Students
1	2801	BANKAR TEJASWINI MOHAN
2	2802	DESHMUKH PRIYANKA KISAN
3	2803	DEVKAR SAGAR BABAN
4	2804	GADADE MANSI NITIN
5	2805	GIRAME RUSHIKESH MILIND
6	2806	JADHAV PRIYANKA RAMCHANDRA
7	2807	KHARADE PRAVIN JAGANNATH
8	2808	MANE TRUPTI VILAS
9	2809	NIKAM DHIRAJ TANAJI
10	2810	NIMBALKAR RAVIRAJ RAMCHANDRA
11	2811	NIMBALKAR SHUBHAM TUKARAM
12	2812	PATHAN SHAHRUKH FARUKHKHAN
13	2813	RAUT SUMIT VITTHAL
14	2814	SHIRKE SHUBHAM VIJAY
15	2815	SONAWANE ANIKET SUMANT
16	2816	BHONG ANJALI NARAYAN
17	2817	CHAVARE SONALI HANUMANT
18	2818	KARE RUPALI BAJRANG
19	2819	MISAL PRASHANT BABASO
20	2820	PADULE SONALI RAMESH
21	2821	PALAVE DIPALI TANAJI
22	2822	PHALKE ATUL ANIL
23	2823	RAWAL NAMRATA SHANKAR
24	2824	SHIRALKAR ONKAR VITTHAL
25	2825	SHIRSAT SHITAL DILIP
26	2301	SHINDE SNEHALBAPU
27	2302	KAMBALE SNEHAL PRAMOD
28	2303	GAWADE SAVITA DNYANDEO
29	2304	GORE AKASH DNYANDEO
30	2305	SAWANT DIPAK RAJENDRA
31	2306	MASKE DNYANESHWAR GAUTTAM
32	2307	MORE ANITA MOHAN

Sr.No	Roll No.	Name of Students
33	2201	SHEWALE AKASH DATTATRAY
34	2202	VYAVHARE VINAYAK CHANDRAKANT
35	2203	KACHARE MAHESH DATTATRAY
36	2204	NARUTE AKASH VISHWANATH
37	2205	SUTAR VARSHA KANTILAL
38	2206	PATIL AJIT DILIP
39	2207	KHADAKE RADHIKA SHANKAR
40	2208	CHOPADE PRANALI VILAS
41	2209	THORAT SARIKA SATYAWAN
42	2210	PETKAR SONALI RAJENDRA
43	2211	MAHADIK PALLAVI DAGADU
44	2212	SHINDE MAYURI RAMDAS
45	2213	SOLAWANE SANTOSH GHAHININATH
46	2214	KADAM VISHAL ABHIMANYU
47	2215	BANDE SANGRAM BHAUSAHEB
48	2216	ANARASE PALLAVI NAVNATH
49	2217	ANAPAT PRIYANKA MACHINDRA
50	2218	BARTAKKE YASH ANKUSH
51	2219	GORE PANKAJ DATTATRAY
52	2220	WAGHMODE RUPALI SHRIMANT
53	2221	MUNGUSKAR SONALI TANAJI
54	2222	NIMBALKAR ROHIT GULAB
55	2223	GUND JYOTI SANTOSH
56	2224	SHENDAGE PRATIKSHA SUSHILKUMAR
57	2701	KAWALE BHAGYASHREE DNYANOBA
58	2702	SATPUTE NAVNATH VITTHAL
59	2703	NALAWADE PRAJKTA SUBHASH
60	2704	KUMBHAR GITANJALI NANA
61	2705	BHANWASE SURAJ DHANAJI
62	2706	WAGHMORE SUJATA ASHOK
63	2707	GALANDE POOJA RAJENDRA
64	2708	BHISE AKASH BALASAHEB
65	2709	KADAM ANAND SHANKARARAO
66	2308	KADAM MANJUSHA MARUTI
67	2309	PANDHARE PRATIK PUNDLIK
68	2310	TARANGE BALASAHEB SURESH
69	2311	SHAIKH SADIK JAMIR
70	2312	MISAL GANESH SHIVAJI

71	2313	SHINDE AKSHAY DATTATRAY
72	2314	VEER SHUBHAM RAJKUMAR
73	2315	DHOTARE SONABA BALKRUSHAN
74	2316	JAGTAP MANJUSHREE MADHUKAR
75	2317	KANGUDE MADHURI ROHIDAS
76	2318	VYAVHARE SHITAL RAJENDRA
77	2319	NIMBALKAR RUSHIKESH PANDURANG

LIST OF ADMITTED STUDENTS

Name of Value Added Course : Industrial skill

Sr.No	Roll Nos	Name of Students	07/1	08/1	09/1	10/1	11/1	12/1	15/1	16/1	17/1	18/1
36	2204	NARUTE AKASH VISHWANATH	P	A	A	P	P	P	P	P	P	P
37	2205	SUTAR VARSHA KANTILAL	A	P	P	A	P	P	A	A	P	P
38	2206	PATIL AJIT DILIP	P	P	P	A	P	P	A	P	P	P
39	2207	KHADAKE RADHIKA SHANKAR	P	P	A	A	P	P	P	P	P	P
40	2208	CHOPADE PRANALI VILAS	P	P	A	P	P	P	A	P	P	A
41	2209	THORAT SARIKA SATYAWAN	P	P	P	P	A	A	P	A	P	P
42	2210	PETKAR SONALI RAJENDRA	P	A	P	P	P	P	A	P	P	P
43	2211	MAHADIK PALLAVI DAGADU	P	P	P	P	P	P	A	P	A	P
44	2212	SHINDE MAYURI RAMDAS	A	P	P	P	P	A	P	P	P	P
45	2213	SOLAWANE SANTOSH GHAHININATH	P	A	P	P	A	P	P	P	P	P
46	2214	KADAM VISHAL ABHIMANYU	P	A	P	P	P	A	P	P	P	P
47	2215	BANDE SANGRAM BHAUSAHEB	A	P	A	A	P	A	P	A	P	P
48	2216	ANARASE PALLAVI NAVNATH	P	P	P	A	P	P	P	P	A	P
49	2217	ANAPAT PRIYANKA MACHINDRA	P	P	A	A	P	P	P	P	P	P
50	2218	BARTAKKE YASH ANKUSH	P	P	P	P	A	P	P	P	P	P
51	2219	GORE PANKAJ DATTATRAY	P	A	A	P	P	P	P	P	P	A
52	2220	WAGHMODE RUPALI SHRIMANT	P	A	P	P	P	P	A	P	P	A

Name of Value Added Course : Industrial skill

[illegible]

LIST OF ADMITTED STUDENTS

Name of Value Added Course : Industrial Skill(2018-19)

1	2801	BANKAR TEJASWINI MOHAN	07/1	08/1	09/1	10/1	11/1	12/1	15/1	16/1	17/1	18/1
2	2802	DESHMUKH PRIYANKA KISAN	P	P	P	P	P	P	P	P	P	P
3	2803	DEVKAR SAGAR BABAN	P	P	P	P	P	P	A	A	P	P
4	2804	GADADE MANSI NITIN	P	P	P	P	P	A	P	P	P	P
5	2805	GIRAME RUSHIKESH MILIND	P	P	P	P	P	P	P	P	P	P
6	2806	JADHAV PRIYANKA RAMCHANDRA	P	P	A	A	P	P	P	P	P	P
7	2807	KHARADE PRAVIN JAGANNATH	P	P	P	P	P	P	P	P	P	P
8	2808	MANE TRUPTI VILAS	P	P	A	P	P	P	P	P	P	P
9	2809	NIKAM DHIRAJ TANAJI	P	A	P	P	P	P	P	P	A	P
10	2810	NIMBALKAR RAVIRAJ RAMCHANDRA	P	P	P	P	A	P	P	P	P	P
11	2811	NIMBALKAR SHUBHAM TUKARAM	P	P	P	P	P	P	P	P	A	P
12	2812	PATHAN SHAHRUKH FARUKHKHAN	P	P	P	P	P	P	P	P	P	P
13	2813	RAUT SUMIT VITTHAL	P	P	A	P	P	A	P	P	P	P
14	2814	SHIRKE SHUBHAM VIJAY	A	P	A	P	P	P	P	P	P	P
15	2815	SONAWANE ANIKET SUMANT	P	A	P	P	P	P	A	A	P	A
16	2816	BHONG ANJALI NARAYAN	P	P	P	P	A	A	A	P	P	A
17	2817	CHAVARE SONALI HANUMANT	P	P	P	P	A	P	P	P	P	P
18	2818	KARE RUPALI BAJRANG	A	P	P	A	P	P	P	P	P	P

[illegible]

[illegible]



**Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur, Pune**



"Value Added Course Completion Certificate"

Certificate of Appreciation

This is to certify that **Mr./Ms.** _____, **M.Sc Chemistry, Class of Arts, Science and Commerce College, Indapur** has actively participated in **Add-On Course "Industrial Skills"** organized by Department of Chemistry from **7th Jan 2019 to 18th Jan 2019.**


Dr. Mahadev Shinde
Course Incharge


Dr. Bhore J.B.
Head, Dept. of Chemistry
Department of Chemistry
Arts, Science & Commerce
College, Indapur, Dist. Pune


Dr. Sanjay Chakane
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-411015 DIST. PUNE

ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR

Name of Add-On Course: Industrial Skills

COURSE COMPLETION REPORT

The add-on course "Industrial Skill" has conducted from 7th Jan 2019 to 18th Jan 2019 and been successfully completed. Total 77 students were admitted for course. Students understand basic chromatographic techniques to know hands on experience of spectral analysis. To understand solvent extraction and volumetric analysis techniques. To learn other techniques like distillation, sublimation and crystallization of solids. To understand basic reactions of functional group interconversion. The industrial skill is most important in society, so the course will be most useful for students. After completion of this course, certificates are distributed to all participated students.



Dr. Shinde M.P
(Course Incharge)



Dr. Bhore J.B
Head
Department Of Chemistry
Arts, Science & Commerce
College, Indapue, Dist. Pune

Indapur Taluka Shikshan Prasarak Mandals
Arts, Science and Commerce College, Indapur Dist. Pune
Department of Zoology
Certificate Course in Bird Diversity
Syllabus
From Academic Year 2018-19

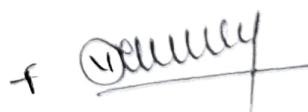
- 1) Name Of the Teacher – Asst.Prof. Sonam Pushparaj Jamdade
- 2) No. of the Period required-30 hours
- 3) Number of Theory periods-12
- 4) Number of practical Period -18
- 5) Brief syllabus of the subject-

- *Definition of diversity,habit and habitats of birds.
- *External morphology of bird.
- *Identification keys of Birds.
- *Identification of Birds.
- *How to observe birds,Equipment used to observe the bird.
- *Nesting of Birds.
- *Photography techniques used.

Outcome of Course-Indapur tashil has been enriched with wetland area at Bhigwan as diksal and at the bank of Ujani reservoir. The migration birds visit Indapur areas. These birds can be so that we can understand avian diversity




Dr. J. P. Sarvade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106



HEAD
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST. PUNE



ITSPM'S
Arts, Science and Commerce College, Indapur
Department Of Zoology

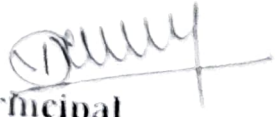
Notice

Date-25/08/2018

All the Student who registered their names to 'Certificate Course in Bird Diversity' are hereby informed that their lectures will be started on Thursday, 01/09/2018 in Room No. 78 at 1 pm to 2 pm. It is compulsory to attend the lectures of value added course for getting desired credit.


HOD
Dr. S. V. ...
...
...
...
...
...
...
...
...
...




Principal
PRINCIPAL
ARTS, SCIENCE & AIR
COMMERCE COLLEGE
INDAPUR-418106 DIST. PUNE

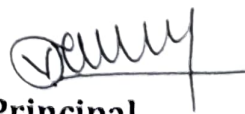
ITSPM'S
Arts, Science and Commerce College, Indapur
Department Of Zoology
Certificate Course in Bird Diversity
2018-2019

Timetable

Time	Thursday	Friday	Saturday
1 pm To 2 pm	Theory	Theory	-
1 pm To 5 Pm	-	-	Practical


HOD
Dr. J. P. Sarwade
M.Sc., Ph.D., FZCI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413100




f Principal
Principal
Arts, Science and
Commerce College,
Indapur, Dist. Pune - 413100

ITSPM'S
Arts, Science and Commerce College , Indapur

Department Of Zoology

Notice

Date-25/08/2018

All the Student who registered their names to 'Certificate Course in Bird Diversity' are hereby informed that their Practical's will be started on Saturday, 03/09/2018 in Room No.78 at 1 pm to 5 pm. It is compulsory to attend the Practical's of value added course for getting desired credit.


HOD
Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
**ARTS, SCIENCE AND
COMMERCE COLLEGE**
INDAPUR-413106 DIST. PUNE



ITSPM'S

Arts, Science and Commerce College , Indapur

Department Of Zoology

Notice

Date-25/08/2018

All the Student who registered their names to 'Certificate Course in Bird Diversity' are hereby informed that their lectures will be started on Thursday, 01/09/2018 in Room No. 78 at 1 pm to 2 pm. It is compulsory to attend the lectures of value added course for getting desired credit.



HOD

Dr. J. K. Chivade

M.Sc., Ph.D., FZSI

HOD

Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 410106



Principal

PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR, DIST. PUNE - 410106



ITSPM'S

Arts, Science And Commerce College, Indapur

Department of Zoology

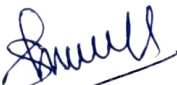
Certificate course in Bird Diversity

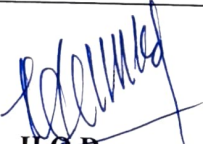
List of Registered Students

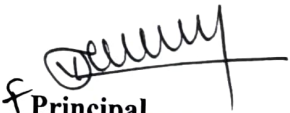
Academic Year 2018-19

Sr.No.	Roll.No	Student Name	Class
1.	8004	MHETRE KOMAL BAPU	S.Y.B.Sc.
2.	8007	SHINDE ADITYA GANPAT	S.Y.B.Sc.
3.	8008	VADAPURE PRIYA BABASAHEB	S.Y.B.Sc.
4.	8013	PADULE GAURI CHANGDEV	S.Y.B.Sc.
5.	8014	NALAWADE OMKAR DHANANJAY	S.Y.B.Sc.
6.	8016	BANSODE ROHIT PRAKASH	S.Y.B.Sc.
7.	8019	KARANDE LAHU BALASAHEB	S.Y.B.Sc.
8.	8020	PHADATARE SAGAR HANUMANT	S.Y.B.Sc.
9.	8021	KASAR SAKSHI VAMAN	S.Y.B.Sc.
10.	8022	BORATE VAISHNAVI SURESH	S.Y.B.Sc.
11.	8023	ADLING GAURI SUBHASH	S.Y.B.Sc.
12.	8025	SONAWANE JAGRUTI RAJENDRA	S.Y.B.Sc.
13.	8026	SHENDAGE VAISHNAVI HARIDAS	S.Y.B.Sc.
14.	8027	JAGTAP SUPRIYA BALASAHEB	S.Y.B.Sc.
15.	8028	CHAVAN ROHINI NAVANATH	S.Y.B.Sc.
16.	8029	NAIKUDE SWAPNALI NAVANATH	S.Y.B.Sc.
17.	8031	JADHAV AISHWARYA HARIDAS	S.Y.B.Sc.
18.	8032	SAPKAL MAYURI DILIP	S.Y.B.Sc.
19.	8033	BHOSALE SNEHAL BAPURAO	S.Y.B.Sc.
20.	8034	SAYYAD SULTANA HASAN	S.Y.B.Sc.
21.	8035	RAKHUNDE SWAPNALI RAMCHANDRA	S.Y.B.Sc.
22.	8036	PALANGE VAISHNAVI ANIL	S.Y.B.Sc.
23.	8037	MORE SAMADHAN DATTU	S.Y.B.Sc.
24.	8038	PATHAN FAUJIYA ARIS	S.Y.B.Sc.
25.	8039	DHANAWADE MINAKSHI RAMCHANDRA	S.Y.B.Sc.
26.	8040	JAGTAP SHRADDHA SUNIL	S.Y.B.Sc.
27.	8041	PAWAR RUTUJA RAMDAS	S.Y.B.Sc.
28.	8042	SALGAR SMITA MARUTI	S.Y.B.Sc.
29.	8043	KHADE SHUBHAM SUNIL	S.Y.B.Sc.
30.	8044	RAUT GIRIJA HANUMANT	S.Y.B.Sc.
31.	8045	CHAVHAN MADHURI SANJAY	S.Y.B.Sc.

32.	8046	CHINCHKAR PRIYANKA ANIL	S.Y.B.Sc.
33.	8047	MISAL PRANAYA ANIL	S.Y.B.Sc.
34.	8048	KUTE RUPALI JAGDISH	S.Y.B.Sc.
35.	8049	ZALKE PUJA SUNIL	S.Y.B.Sc.
36.	8050	PAWAR SUJATA DNYANDEV	S.Y.B.Sc.
37.	8051	SHINDE AVINASH HARIDAS	S.Y.B.Sc.
38.	8052	INGAVALE ARATI VITTHAL	S.Y.B.Sc.
39.	8056	MAKHARE NIKITA NITIN	S.Y.B.Sc.
40.	8057	MENGADE GAURI GANESH	S.Y.B.Sc.
41.	8060	NAVALE POOJA RAJANDRA	S.Y.B.Sc.
42.	8061	MAGAR VAISHNAVI HARIDAS	S.Y.B.Sc.
43.	8062	MOHITE NIKITA DADARAM	S.Y.B.Sc.
44.	8063	KALE RUTUJA KAKASO	S.Y.B.Sc.
45.	8064	SADEKAR POONAM SANTOSH	S.Y.B.Sc.
46.	8065	KALEL TUSHAR SUDAM	S.Y.B.Sc.
47.	8066	KHARADE VIVEK BALASAHEB	S.Y.B.Sc.
48.	8067	WAGHMODE PRIYANKA TANAJI	S.Y.B.Sc.
49.	8069	DOKE BHARTI ANIL	S.Y.B.Sc.
50.	8070	RAUT PRAJAKTA HANUMANT	S.Y.B.Sc.
51.	8071	GARAD MADHURI CHARANDEV	S.Y.B.Sc.
52.	8074	NANAWARE SAKSHI PANDIT	S.Y.B.Sc.
53.	8075	NANAWARE DNYANESHWARI DIPAK	S.Y.B.Sc.
54.	8076	BHONG JAGRUTI PANDURANG	S.Y.B.Sc.
55.	8077	JEWALE RANJANA SUBHASH	S.Y.B.Sc.
56.	8078	LAVAND NIKITA NARAYAN	S.Y.B.Sc.


Subject Teacher


H.O.D.
Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Science & Commerce College,
Indapur, Dist. Pune - 413106

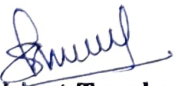

Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S**Arts, Science and Commerce College, Indapur****Department of Zoology****Certificate course in Bird Diversity****Attendance Sheet****Academic Year 2018-19**

Sr.No.	Roll.No	Student Name	01/09	02/09	08/09	09/09	15/09	16/09
1.	8004	MHETRE KOMAL BAPU	P	P	P	P	P	P
2.	8007	SHINDE ADITYA GANPAT	P	P	P	P	P	P
3.	8008	VADAPURE PRIYA BABASAHEB	P	A	P	P	P	P
4.	8013	PADULE GAURI CHANGDEV	P	P	P	P	P	P
5.	8014	NALAWADE OMKAR DHANANJAY	P	P	P	P	P	P
6.	8016	BANSODE ROHIT PRAKASH	P	P	P	P	A	P
7.	8019	KARANDE LAHU BALASAHEB	P	P	P	P	P	P
8.	8020	PHADATARE SAGAR HANUMANT	P	P	P	P	P	P
9.	8021	KASAR SAKSHI VAMAN	P	P	P	P	P	P
10.	8022	BORATE VAISHNAVI SURESH	P	P	P	P	P	P
11.	8023	ADLING GAURI SUBHASH	P	A	P	P	P	P
12.	8025	SONAWANE JAGRUTI RAJENDRA	P	P	P	P	P	P
13.	8026	SHENDAGE VAISHNAVI HARIDAS	P	P	P	P	P	P
14.	8027	JAGTAP SUPRIYA BALASAHEB	P	P	P	P	P	P
15.	8028	CHAVAN ROHINI NAVANATH	P	P	P	P	P	P
16.	8029	NAIKUDE SWAPNALI NAVANATH	P	P	A	P	P	P
17.	8031	JADHAV AISHWARYA HARIDAS	P	P	P	P	P	P
18.	8032	SAPKAL MAYURI DILIP	P	P	P	P	P	P
19.	8033	BHOSALE SNEHAL BAPURAO	P	P	P	P	P	P
20.	8034	SAYYAD SULTANA HASAN	P	P	P	P	A	P
21.	8035	RAKHUNDE SWAPNALI RAMCHANDRA	P	P	P	P	P	P
22.	8036	PALANGE VAISHNAVI ANIL	P	P	P	P	P	P
23.	8037	MORE SAMADHAN DATTU	P	P	P	P	P	P
24.	8038	PATHAN FAUJIYA ARIS	P	P	A	P	P	P
25.	8039	DHANAWADE MINAKSHI RAMCHANDRA	P	P	P	P	P	P
26.	8040	JAGTAP SHRADDHA SUNIL	P	P	P	P	P	P
27.	8041	PAWAR RUTUJA RAMDAS	P	P	P	P	P	P
28.	8042	SALGAR SMITA MARUTI	P	P	A	P	P	P

29.	8043	KHADE SHUBHAM SUNIL	P	P	P	P	P	P
30.	8044	RAUT GIRIJA HANUMANT	P	P	P	A	P	P
31.	8045	CHAVHAN MADHURI SANJAY	P	P	P	P	P	P
32.	8046	CHINCHKAR PRIYANKA ANIL	P	A	P	P	P	P
33.	8047	MISAL PRANAYA ANIL	P	P	P	P	P	P
34.	8048	KUTE RUPALI JAGDISH	P	P	P	P	P	P
35.	8049	ZALKE PUJA SUNIL	P	P	P	P	P	P
36.	8050	PAWAR SUJATA DNYANDEV	P	P	P	P	P	P
37.	8051	SHINDE AVINASH HARIDAS	P	A	P	P	P	P
38.	8052	INGVALE ARATI VITTHAL	P	P	P	P	P	P
39.	8056	MAKHARE NIKITA NITIN	P	P	P	P	P	P
40.	8057	MENGADE GAURI GANESH	P	P	P	A	A	P
41.	8060	NAVALE POOJA RAJANDRA	P	P	A	P	P	P
42.	8061	MAGAR VAISHNAVI HARIDAS	P	P	P	P	P	P
43.	8062	MOHITE NIKITA DADARAM	P	P	P	P	P	P
44.	8063	KALE RUTUJA KAKASO	P	P	P	P	P	P
45.	8064	SADEKAR POONAM SANTOSH	P	P	P	P	P	P
46.	8065	KALEL TUSHAR SUDAM	P	A	P	P	P	P
47.	8066	KHARADE VIVEK BALASAHEB	P	A	P	P	A	P
48.	8067	WAGHMODE PRIYANKA TANAJI	P	P	A	P	P	P
49.	8069	DOKE BHARTI ANIL	P	P	P	P	P	P
50.	8070	RAUT PRAJAKTA HANUMANT	P	P	P	P	A	P
51.	8071	GARAD MADHURI CHARANDEV	P	P	P	P	P	P
52.	8074	NANAWARE SAKSHI PANDIT	P	P	P	P	P	P
53.	8075	NANAWARE DNYANESHWARI DIPAK	P	P	A	P	P	P
54.	8076	BHONG JAGRUTI PANDURANG	P	A	P	P	P	P
55.	8077	JEWALE RANJANA SUBHASH	P	P	P	P	P	P
56.	8078	LAVAND NIKITA NARAYAN	P	P	P	P	P	P


Subject Teacher


H.O.D.

Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

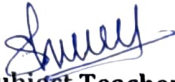


ITSPM'S**Arts, Science and Commerce College, Indapur****Department of Zoology****Certificate course in Bird Diversity****Attendance Sheet****Academic Year 2018-19**

Sr.No.	Roll.No	Student Name	22/09	23/09	29/09	30/09	06/10	07/10
1.	8004	MHETRE KOMAL BAPU	P	P	P	P	P	P
2.	8007	SHINDE ADITYA GANPAT	P	P	P	P	P	P
3.	8008	VADAPURE PRIYA BABASAHEB	P	A	P	P	P	P
4.	8013	PADULE GAURI CHANGDEV	P	P	P	P	P	P
5.	8014	NALAWADE OMKAR DHANANJAY	P	P	P	P	P	P
6.	8016	BANSODE ROHIT PRAKASH	P	P	P	P	A	P
7.	8019	KARANDE LAHU BALASAHEB	P	P	P	P	P	P
8.	8020	PHADATARE SAGAR HANUMANT	P	P	P	P	P	P
9.	8021	KASAR SAKSHI VAMAN	P	P	P	P	P	P
10.	8022	BORATE VAISHNAVI SURESH	P	P	P	P	P	P
11.	8023	ADLING GAURI SUBHASH	P	A	P	P	P	P
12.	8025	SONAWANE JAGRUTI RAJENDRA	P	P	P	P	P	P
13.	8026	SHENDAGE VAISHNAVI HARIDAS	P	P	P	P	P	P
14.	8027	JAGTAP SUPRIYA BALASAHEB	P	P	P	P	P	P
15.	8028	CHAVAN ROHINI NAVANATH	P	P	P	P	P	P
16.	8029	NAIKUDE SWAPNALI NAVANATH	P	P	A	P	P	P
17.	8031	JADHAV AISHWARYA HARIDAS	P	P	P	P	P	P
18.	8032	SAPKAL MAYURI DILIP	P	P	P	P	P	P
19.	8033	BHOSALE SNEHAL BAPURAO	P	P	P	P	P	P
20.	8034	SAYYAD SULTANA HASAN	P	P	P	P	A	P
21.	8035	RAKHUNDE SWAPNALI RAMCHANDRA	P	P	P	P	P	P
22.	8036	PALANGE VAISHNAVI ANIL	P	P	P	P	P	P

23.	8037	MORE SAMADHAN DATTU	P	P	P	P	P	P
24.	8038	PATHAN FAUJIYA ARIS	P	P	A	P	P	P
25.	8039	DHANAWADE MINAKSHI RAMCHANDRA	P	P	P	P	P	P
26.	8040	JAGTAP SHRADDHA SUNIL	P	P	P	P	P	P
27.	8041	PAWAR RUTUJA RAMDAS	P	P	P	P	P	P
28.	8042	SALGAR SMITA MARUTI	P	P	A	P	P	P
29.	8043	KHADE SHUBHAM SUNIL	P	P	P	P	P	P
30.	8044	RAUT GIRIJA HANUMANT	P	P	P	A	P	P
31.	8045	CHAVHAN MADHURI SANJAY	P	P	P	P	P	P
32.	8046	CHINCHKAR PRIYANKA ANIL	P	A	P	P	P	P
33.	8047	MISAL PRANAYA ANIL	P	P	P	P	P	P
34.	8048	KUTE RUPALI JAGDISH	P	P	P	P	P	P
35.	8049	ZALKE PUJA SUNIL	P	P	P	P	P	P
36.	8050	PAWAR SUJATA DNYANDEV	P	P	P	P	P	P
37.	8051	SHINDE AVINASH HARIDAS	P	A	P	P	P	P
38.	8052	INGAVALE ARATI VITTHAL	P	P	P	P	P	P
39.	8056	MAKHARE NIKITA NITIN	P	P	P	P	P	P
40.	8057	MENGADE GAURI GANESH	P	P	P	A	A	P
41.	8060	NAVALE POOJA RAJANDRA	P	P	A	P	P	P
42.	8061	MAGAR VAISHNAVI HARIDAS	P	P	P	P	P	P
43.	8062	MOHITE NIKITA DADARAM	P	P	P	P	P	P
44.	8063	KALE RUTUJA KAKASO	P	P	P	P	P	P
45.	8064	SADEKAR POONAM SANTOSH	P	P	P	P	P	P
46.	8065	KALEL TUSHAR SUDAM	P	A	P	P	P	P
47.	8066	KHARADE VIVEK BALASAHEB	P	A	P	P	A	P
48.	8067	WAGHMODE PRIYANKA TANAJI	P	P	A	P	P	P
49.	8069	DOKE BHARTI ANIL	P	P	P	P	P	P
50.	8070	RAUT PRAJAKTA HANUMANT	P	P	P	P	A	P
51.	8071	GARAD MADHURI CHARANDEV	P	P	P	P	P	P
52.	8074	NANAWARE SAKSHI PANDIT	P	P	P	P	P	P
53.	8075	NANAWARE DNYANESHWARI DIPAK	A	A	P	P	P	P
54.	8076	BHONG JAGRUTI PANDURANG	P	P	P	A	P	P

55.	8077	JEWALE RANJANA SUBHASH	P	P	P	P	P	P
56.	8078	LAVAND NIKITA NARAYAN	A	P	P	P	P	P


Subject Teacher


H.O.D.


Principal

Dr. J. P. Sarwade
M.Sc., Ph.D., F.Z.S.
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

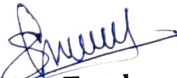


ITSPM'S
Arts, Science and Commerce College, Indapur
Department of Zoology
Certificate course in Bird Diversity
Academic Year 2018-19
Practical Attendance

Sr.No.	Roll.No	Student Name	03/09	10/09	14/09	24/09	01/10	08/10	15/10
1.	8004	MHETRE KOMAL BAPU	P	P	P	P	P	P	P
2.	8007	SHINDE ADITYA GANPAT	P	P	P	P	P	P	P
3.	8008	VADAPURE PRIYA BABASAHEB	P	A	P	P	P	P	P
4.	8013	PADULE GAURI CHANGDEV	P	P	P	P	P	P	P
5.	8014	NALAWADE OMKAR DHANANJAY	P	P	P	P	P	P	P
6.	8016	BANSODE ROHIT PRAKASH	P	P	P	P	A	P	P
7.	8019	KARANDE LAHU BALASAHEB	P	P	P	P	P	P	P
8.	8020	PHADATARE SAGAR HANUMANT	P	P	P	P	P	P	A
9.	8021	KASAR SAKSHI VAMAN	P	P	P	P	P	P	P
10.	8022	BORATE VAISHNAVI SURESH	P	P	P	P	P	P	P
11.	8023	ADLING GAURI SUBHASH	P	A	P	P	P	P	P
12.	8025	SONAWANE JAGRUTI RAJENDRA	P	P	P	P	P	P	P
13.	8026	SHENDAGE VAISHNAVI HARIDAS	P	P	P	P	P	P	A
14.	8027	JAGTAP SUPRIYA BALASAHEB	P	P	P	P	P	P	P
15.	8028	CHAVAN ROHINI NAVANATH	P	P	P	P	P	P	P
16.	8029	NAIKUDE SWAPNALI NAVANATH	P	P	A	P	P	P	P
17.	8031	JADHAV AISHWARYA HARIDAS	P	P	P	P	P	P	P
18.	8032	SAPKAL MAYURI DILIP	P	P	P	P	P	P	P
19.	8033	BHOSALE SNEHAL	P	P	P	P	P	P	P

		BAPURAO							
20.	8034	SAYYAD SULTANA HASAN	P	P	P	P	A	P	P
21.	8035	RAKHUNDE SWAPNALI RAMCHANDRA	P	P	P	P	P	P	P
22.	8036	PALANGE VAISHNAVI ANIL	P	P	P	P	P	P	A
23.	8037	MORE SAMADHAN DATTU	P	P	P	P	P	P	P
24.	8038	PATHAN FAUJIYA ARIS	P	P	A	P	P	P	P
25.	8039	DHANAWADE MINAKSHI RAMCHANDRA	P	P	P	P	P	P	P
26.	8040	JAGTAP SHRADDHA SUNIL	P	P	P	P	P	P	P
27.	8041	PAWAR RUTUJA RAMDAS	P	P	P	P	P	P	P
28.	8042	SALGAR SMITA MARUTI	P	P	A	P	P	P	P
29.	8043	KHADE SHUBHAM SUNIL	P	P	P	P	P	P	P
30.	8044	RAUT GIRIJA HANUMANT	P	P	P	A	P	P	P
31.	8045	CHAVHAN MADHURI SANJAY	P	P	P	P	P	P	A
32.	8046	CHINCHKAR PRIYANKA ANIL	P	A	P	P	P	P	P
33.	8047	MISAL PRANAYA ANIL	P	P	P	P	P	P	P
34.	8048	KUTE RUPALI JAGDISH	P	P	P	P	P	P	P
35.	8049	ZALKE PUJA SUNIL	P	P	P	P	P	P	P
36.	8050	PAWAR SUJATA DNYANDEV	P	P	P	P	P	P	P
37.	8051	SHINDE AVINASH HARIDAS	P	A	P	P	P	P	P
38.	8052	INGVALE ARATI VITTHAL	P	P	P	P	P	P	A
39.	8056	MAKHARE NIKITA NITIN	P	P	P	P	P	P	P
40.	8057	MENGADE GAURI GANESH	P	P	P	A	A	P	P
41.	8060	NAVALE POOJA RAJANDRA	P	P	A	P	P	P	P
42.	8061	MAGAR VAISHNAVI HARIDAS	P	P	P	P	P	P	P
43.	8062	MOHITE NIKITA DADARAM	P	P	P	P	P	P	P
44.	8063	KALE RUTUJA KAKASO	P	P	P	P	P	P	P
45.	8064	SADEKAR	P	P	P	P	P	P	P

		POONAM SANTOSH							
46.	8065	KALEL TUSHAR SUDAM	P	A	P	P	P	P	A
47.	8066	KHARADE VIVEK BALASAHEB	P	A	P	P	A	P	P
48.	8067	WAGHMODE PRIYANKA TANAJI	P	P	A	P	P	P	P
49.	8069	DOKE BHARTI ANIL	P	P	P	P	P	P	P
50.	8070	RAUT PRAJAKTA HANUMANT	P	P	P	P	A	P	P
51.	8071	GARAD MADHURI CHARANDEV	P	P	P	P	P	P	P
52.	8074	NANAWARE SAKSHI PANDIT	P	A	P	P	P	P	P
53.	8075	NANAWARE DNYANESHWARI DIPAK	P	P	P	P	P	P	A
54.	8076	BHONG JAGRUTI PANDURANG	P	P	A	P	P	P	P
55.	8077	JEWALE RANJANA SUBHASH	P	P	P	P	P	P	P
56.	8078	LAVAND NIKITA NARAYAN	P	P	A	P	A	P	P


Subject Teacher


H.O.D.
Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune

(Affiliated to Savitribai Phule Pune University, Pune)



Organized

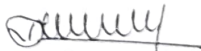
Certificate Course on Bird Diversity
(Academic Year 2018-19)

This is to certify that ***Sapkal Mayuri Dilip*** a student from S. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on Bird Diversity (4 Credits). This course is organized by Department of Zoology, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 01.09.2018 to 15.10.2018


Asst.Prof. Sonam Jamdade
Course Coordinator

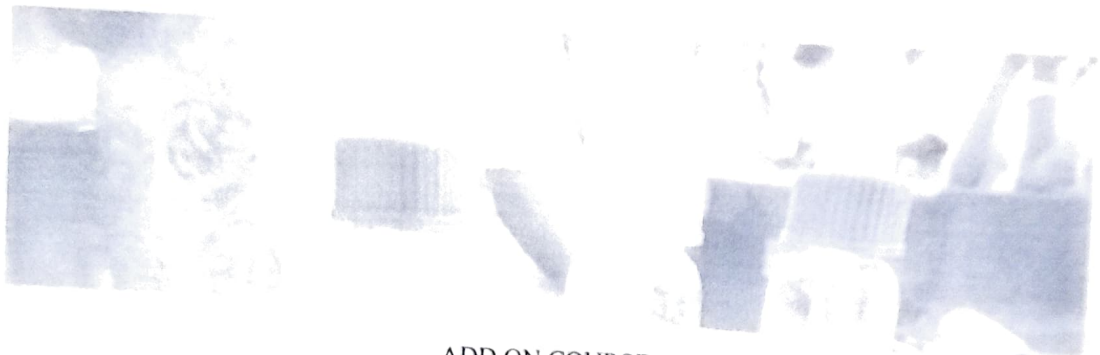

Prof. Dr. Jiwani Sarwade
Head Dept. of Zoology


Prof. Dr. Viresh Hokunde
IQAC Coordinator


Prof. Dr. Sanjay Chakane
Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR - 413106 DIST. PUNE

Head
Department of Zoology,
Arts & Commerce College,
Indapur, Dist. Pune - 413106

INDAPUR TALUKA SHIKSHAN PRASARAK MANDAL'S
ARTS, SCIENCE AND COMMERCE COLLEGE,
INDAPUR, DIST - PUNE.



ADD ON COURSE

BLOOD GROUP ANALYSIS

REPORT

Submitted by-

Prof. Ranjit Mohan More

Dept. of Zoology, Arts, Science and Commerce College, Indapur

OCTOBER - 2018

Syllabus

BLOOD GROUPING DETECTION & BLOOD SUGAR ANALYSIS/ URINE ANALYSIS

- 1] NAME OF THE TEACHER-Prof. More R.M
- 2] NAME OF THE ASSISTING TEACGER-Prof.Sonam Jamdade
- 3] NO. OF PERIODS REQUIRED-30
- 4] NO. OF THEORY PERIODS-12
- 5] NO. OF PRACTICAL PERIODS-18
- 6]Brief syllabus of the subject-

This course is helpful to candidate to check out its own others people blood group & blood sugar level. This Programmer also help to candidate to know blood group and awareness about donating & accepting of blood.

7] Outcome of Course-

Co1- To Know technique blood group Detection.

Co2-To Know about blood sugar level & a glycemc condition in flu man.

Co3- To Know About diabetic & Normal, Urine.



Introduction

The add on course entitled “**Blood group analysis**” was successfully completed on 16th October 2018. During this training programme 65 trainee are trained to be analysis of blood. The course will taken in three batch and which is carried 14th days near about 35 hrs.

Results

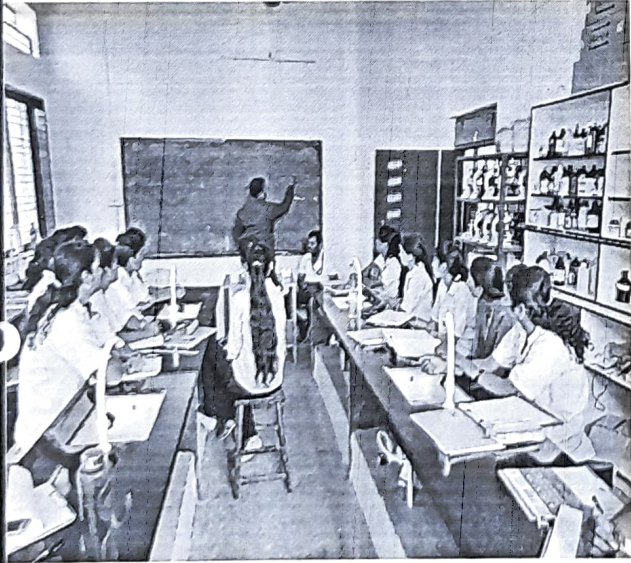
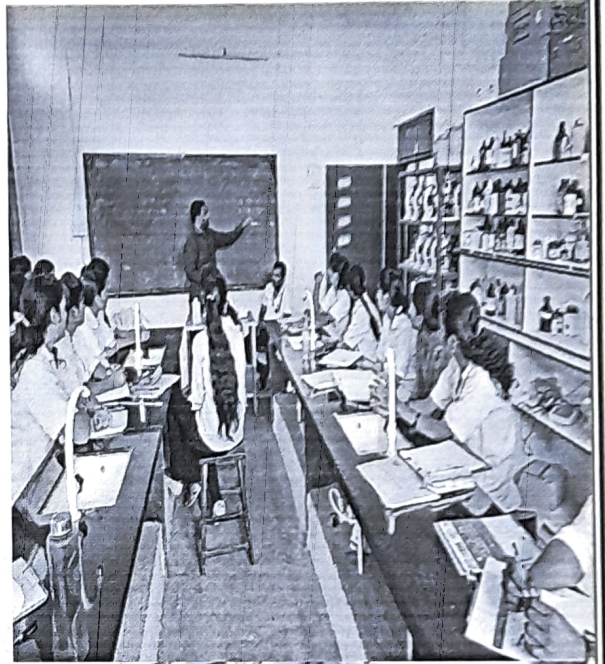
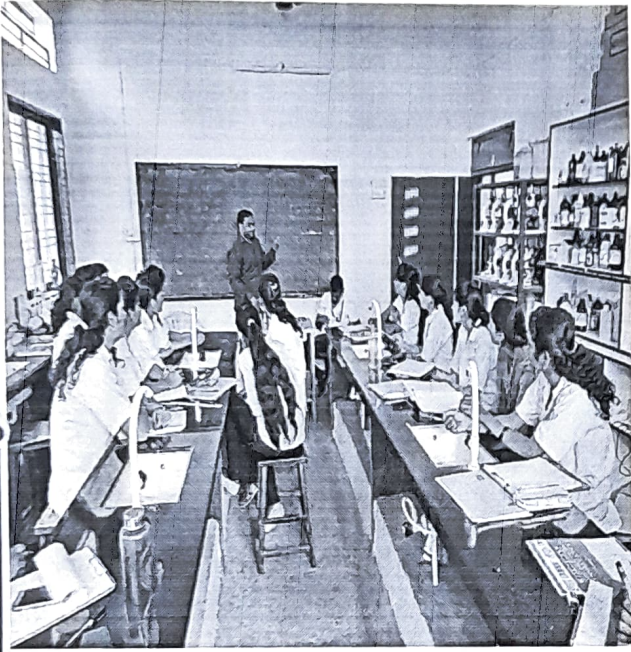
During this add on course each candidate are participated and check its own blood group they are as follow-

Sr no.	Name of the student	Blood Group
1.	KALASAIT SHIVANI SUNIL	O +VE
2.	MAKHARE REVATI BALU	O +VE
3.	JADHAV ANISHA SATISH	O +VE
4.	PATIL PRIYA BALASAHEB	O +VE
5.	GHADAGE SWATI YUVRAJ	B +VE
6.	KALE PRIYANKA SHARAD	B +VE
7.	RAUT KAJAL SHIVAJI	A +VE
8.	KOKARE TEJSHRI VASUDEO	A+VE
9.	YERALKAR RAVINA CHANGDEO	A +VE
10.	ATAR RIYAJ NISAR	A +VE
11.	PAWAR PRATHAMESH RAVINDRA	A +VE
12.	NALE SUJATA BHARAT	A +VE
13.	JAGTAP AARTI SOMNATH	A +VE
14.	KADAM PRITAM BRAMHADEO	A +VE
15.	MORE PRATIKSHA NARSIGH	AB -VE
16.	KALE RUTUJA HARISHCHANDRA	B +VE
17.	MANE AKSHAY MADHUKAR	B +VE
18.	MANE SANDHYA DATTATRY	B +VE
19.	KHATRIYA SUVARNA SURESH	AB +VE
20.	SHELAR KAJAL BALASO	A+VE
21.	KALE SHITAL BALU	B+VE
22.	JAGTAP PUJA VILAS	A+VE
23.	JAGTAP SUPRIYA NAVNATH	A+VE
24.	VEER SONAL RAJENDRA	A+VE
25.	RAUT RAVINDRA BHARAT	A+VE
26.	KALE GITANJALI MAHADEV	A+VE
27.	WAGHMODE PRASHANT MAHADEV	A+VE
28.	GODASE SUVARNA RAJARAM	B+VE
29.	DEOKATE RESHMA LUGAJI	B+VE
30.	HAKE AKSHAY BHIMRAO	B+VE
31.	JADHAV VIKAS SUBHASH	B+VE
32.	DEOKAR ANKITA BALASAHEB	B+VE
33.	JADHAV PRITI PRADEEP	B+VE

34.	BHOSALE PRATIKSHA BHAGWAN	B+VE
35.	KHARE SUSHMA JANARDHAM	B+VE
36.	PANHALKAR SWAPNARANI RAGHUNATH	B+VE
37.	NARUTE PALLVI DATTU	B+VE
38.	BHANVASE KOMAL BHARAT	B+VE
39.	KADAM PRATIK VIJAY	AB+VE
40.	BANDAR DEVIDAS BHAGWAT	AB+VE
41.	PARBAT SHIVGANGA BALASAHEB	AB+VE
42.	TAMBOLI ALFIYA RAHIM	AB+VE
43.	GAIKWAD PRANITA SANJAY	O+VE
44.	CHAVAN ARTI POPAT	O+VE
45.	GAIKWAD DIKSHA BALASAHEB	O+VE
46.	KULKARNI APARNA BALASAHEB	O+VE
47.	ATAR LAJINA KHALIL	O+VE
48.	GANAVANE NAVNATH UDDHAV	O+VE
49.	JADHAV RAHUL MAHADEV	O+VE
50.	KAMBLE ARCHNA SHIVAJI	O+VE
51.	KHARADE TANAJI PANDURANG	O+VE
52.	BHANGE PRIYANKA PRABHAKAR	O+VE
53.	DONGARE BHGYASRI VAMAN	O+VE
54.	JAGTAP PRIYANKA RAJENDRA	B+VE
55.	TARANGE SONALI RUPCHAND	O+VE
56.	GAIKWAD KOMAL SHIVAJI	O+VE
57.	BHAPKAR SHIVANI SANJAY	O+VE
58.	TAMBOLI SHAHISTA MUSTAK	O+VE
59.	HOLE VIKAS VITTHAL	O+VE
60.	MADANE AKSHAY SANJAY	O+VE
61.	WAGHMODE SURESH RAMCHANDRA	O+VE
62.	KUMBHAR GOKUL DATTU	A+VE
63.	RODAGE RUPALI ROHIDAS	A+VE
64.	GAME SHUBHAM VIJAY	O+VE
65.	PATIL RUSHIKESH PANDIT	O+VE
66.	SONAVANE GANESH	AB+VE
67.	MANE AJAY MAHADEV	A+VE
68.	KUTE HARSHDA PRSLHAD	AB+VE
69.	VYAWAHARE PRATAP BHARAT	O+VE
70.	YADAV KOMAL MANIK	O+VE
71.	KSHIRSAGAR BHAIKVNATH RAJENDRA	A+VE
72.	BHOSALE AKSHAY ANKUSH	B+VE
73.	DESHMUKH AUDUMBER SAMADHAN	A+VE

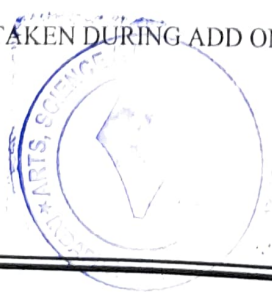


Photos of Add on course





PHOTOS TAKEN DURING ADD ON COURSE



ITSPM'S

Arts, Science and Commerce College, Indapur

Department Of Zoology

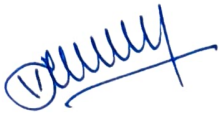
Notice

Date-25/10/2018

All the Student who registered their names to 'Certificate Course in Bird Diversity' are hereby informed that their lectures will be started on Thursday, 01/10/2018 in Room No. 78 at 1 pm to 2 pm. It is compulsory to attend the lectures of value added course for getting desired credit.


HOD

Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S

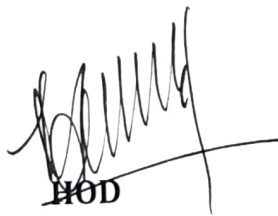
Arts, Science and Commerce College , Indapur

Department Of Zoology

Notice

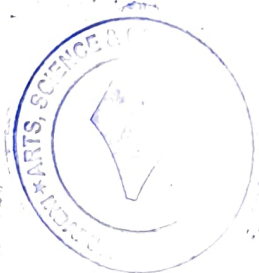
Date-25/10/2018

All the Student who registered their names to 'Certificate Course in Bird Diversity' are hereby informed that their Practical's will be started on Saturday, 03/11/2018 in Room No.78 at 1 pm to 5 pm. It is compulsory to attend the Practical's of value added course for getting desired credit.


HOD

Dr. J. P. Sawade
M.Sc., Ph.D., FZCI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S

Arts, Science And Commerce College , Indapur

Department Of ZOOLOGY

Certificate Course in BLOOD GROUP ANALYSIS

2018-2019

Timetable

Time	Thursday	Friday	Saturday
1 pm To 2 pm	Theory	Theory	-
1 pm To 5 Pm	-	-	Practical


HOD

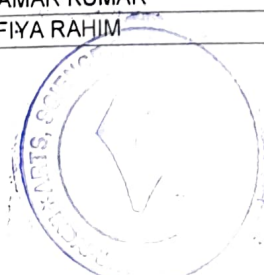
Dr. J. P. Sarvade
M.Sc., Ph.D., FZS
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Zoology
Certificate course in Blood group analysis
Registered Student List
Academic Year 2018-19

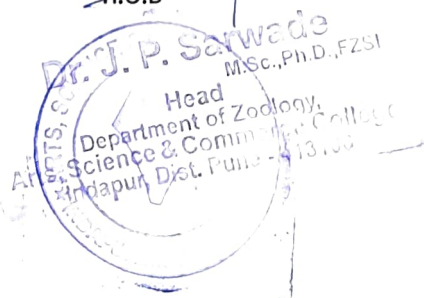
Sr.No	Roll No.	Name of Student	Class
1	8063	CHAVAN PRAGATI RAJENDRA	S,Y.Bsc
2	8064	RAVAN POONAM SHARAD	S,Y.Bsc
3	8068	JAGTAP GOURI CHANDRAKANT	S,Y.Bsc
4	8069	BHAPKAR SHIVANI SANJAY	S,Y.Bsc
5	8070	KALE GITANJALI MAHADEO	S,Y.Bsc
6	8074	BHANWASE KOMAL BHARAT	S,Y.Bsc
7	8075	BHONGALE MADHURI DASHARATH	S,Y.Bsc
8	8076	ROPALE VARSHA HANUMANT	S,Y.Bsc
9	8077	KAZI SIFA SALLAUDDIN	S,Y.Bsc
10	8078	TEKALE RESHMA DATTATRAY	S,Y.Bsc
11	8081	JADHAV PRITI PRADEEP	S,Y.Bsc
12	8082	PARBAT SHIVGANGA BALASAHEB	S,Y.Bsc
13	8088	BONGANE SUPRIYA CHANDRAKANT	S,Y.Bsc
14	8089	RAUT ASHOK SANJAY	S,Y.Bsc
15	8090	TONPE PRIYANKA SHRIMANT	S,Y.Bsc
16	8093	BHANGE PRIYANKA PRABHAKAR	S,Y.Bsc
17	8094	KULKARNI GAYATRI SUHAS	S,Y.Bsc
18	8096	MANE KOMAL TUKARAM	S,Y.Bsc
19	8097	KOLI SHRADDHA BABURAO	S,Y.Bsc
20	8098	KADAM SANDIP MOHAN	S,Y.Bsc
21	8100	DHAKTODE TRUPTI ASHOK	S,Y.Bsc
22	8182	HOGLE AKASH RAMCHANDRA	S,Y.Bsc
23	8183	RODAGE RUPALI ROHIDAS	S,Y.Bsc
24	8187	SHINGADE ARATI SANTOSH	S,Y.Bsc
25	8189	BIBE AMRUTA RAJENDRA	S,Y.Bsc
26	8190	JAGTAP SAGAR ARJUN	S,Y.Bsc
27	8191	BHOSALE PRAGATI JALINDAR	S,Y.Bsc
28	8196	PANHALKAR SWAPNARANI RAGHUNATH	S,Y.Bsc
29	8197	GAIKWAD KOMAL SHIVAJI	S,Y.Bsc
30	8198	BHONG MUKTABAI DASHARATH	S,Y.Bsc
31	8199	GARAD KOMAL SUDHIR	S,Y.Bsc
32	8201	JAGTAP SUPRIYA NAVNATH	S,Y.Bsc
33	8203	ANAPAT RANJEET GORAKH	S,Y.Bsc
34	8205	BHOSALE AKSHAY ANKUSH	S,Y.Bsc
35	8206	NACHAN PRAJWAL SANTOSH	S,Y.Bsc
36	8208	SOLANKAR SURAJ BALASO	S,Y.Bsc
37	8209	RAUT KAJAL SHIVAJI	S,Y.Bsc
38	8211	SHINDE VIVEK MOHAN	S,Y.Bsc
39	8212	HIVARE POOJA ANAND	S,Y.Bsc
40	8216	MORE SAURABH VAJJINATH	S,Y.Bsc
41	8217	MISAL CHAITANYA KALYAN	S,Y.Bsc
42	8218	WAGHMODE DIPALI SOPAN	S,Y.Bsc
43	8220	KARANDE TEJAL MININATH	S,Y.Bsc
44	8224	BHONG AKSHAY ARJUN	S,Y.Bsc
45	8227	BHANWASE AMAR KUMAR	S,Y.Bsc
46	8228	TAMBOLI ALFIYA RAHIM	S,Y.Bsc



47	8231	DAGADE ADITYA SHAHAJI	S.Y.Bsc
48	8233	PONDKULE AKSHAY BALU	S.Y.Bsc
49	8234	KHADE KUNAL GORAKH	S.Y.Bsc
50	8235	WAGHMODE PRASHANT MAHADEV	S.Y.Bsc
51	8236	CHORAMALE RATNAPRABHA TULSHIRAM	S.Y.Bsc
52	8237	KOPNAVAR HANUMANT RAJENDRA	S.Y.Bsc
53	8238	GODASE SAPANA RAJENDRA	S.Y.Bsc
54	3063	BHALE AKSHAY MANIK	F.Y.Bsc
55	3066	SHETE OMKAR DEEPAK	F.Y.Bsc
56	3067	KULKARNI APARNA BALASAHEB	F.Y.Bsc
57	3070	JADKAR PRARTIKSHA ANKUSH	F.Y.Bsc
58	3071	BOHITE SIDDESH ASHOK	F.Y.Bsc
59	3072	BORATE PRITI SANJAY	F.Y.Bsc
60	3073	ATAR LAJINA KHALIL	F.Y.Bsc
61	3075	MORE KIRAN DATTATRAY	F.Y.Bsc
62	3076	BORATE OMKAR DIGAMBAR	F.Y.Bsc
63	3077	KATE POONAM DATTATRAYA	F.Y.Bsc
64	3078	PADULE PRITAM LALASO	F.Y.Bsc
65	3080	DURUGKAR NISHA BAHUBALI	F.Y.Bsc
66	3083	GHOOGARE AMRUTA SANJAY	F.Y.Bsc
67	3084	NIKAM POOJA SATISH	F.Y.Bsc
68	3085	YERALKAR VANITA LAXMAN	F.Y.Bsc
69	3086	RAKHUNDE SUPRIYA VINAYAK	F.Y.Bsc
70	3087	KALE POOJA JALINDAR	F.Y.Bsc
71	3088	NIMBALKAR UJWAL DHANANJAY	F.Y.Bsc
72	3090	KUTAL SHWETA AJINATH	F.Y.Bsc
73	3091	KUTAL KAJAL KALYAN	F.Y.Bsc
74	3093	BHONG SONALI RAJARAM	F.Y.Bsc
75	3094	SARADE MADHURI UTTARESHWAR	F.Y.Bsc
76	3095	VYAWAHARE POOJA ANIL	F.Y.Bsc
77	3096	AWATE KOMAL ANKUSH	F.Y.Bsc
78	3098	NANAVARE VAISHNAVI JOTIRAM	F.Y.Bsc
79	3099	BHUJBAL PRASHANT SANTOSH	F.Y.Bsc
80	3100	YADAV SNEHA SHIVAJI	F.Y.Bsc
81	3101	PHADTARE VRUSHALI NANDKUMAR	F.Y.Bsc
82	3104	RAKHUNDE SWAPNALI RAMCHANDRA	F.Y.Bsc
83	3106	KADAM PRATIK VIJAY	F.Y.Bsc
84	3107	JADHAV RAHUL MAHADEO	F.Y.Bsc
85	3108	SHENDE APURVA LALASO	F.Y.Bsc
86	3109	KOLI KOMAL VISHNU	F.Y.Bsc
87	3111	MOMIN ALISHA SADIK	F.Y.Bsc
88	3112	BAGAL SUPRIYA RAMAKANT	F.Y.Bsc
89	3113	JAGTAP SAURABH RAMDAS	F.Y.Bsc
90	3114	GALANDE AMAR SHRIKRUSHNA	F.Y.Bsc


Co-ordinator


H.O.D.


Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur Dist. Pune-413106


Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM'S
Arts, Science And Commerce College, Indapur
Department of Zoology
Certificate course in Blood group analysis
Attendance Sheet
Academic Year 2018-19

Sr.No	Roll No.	Name of Student	24/10/19	25/10/19	26/10/19	27/10/19	28/10/19
1	8063	CHAVAN PRAGATI RAJENDRA	P	P	P	P	P
2	8064	RAVAN POONAM SHARAD	P	P	P	P	P
3	8068	JAGTAP GOURI CHANDRAKANT	P	P	P	P	P
4	8069	BHAPKAR SHIVANI SANJAY	P	P	P	P	P
5	8070	KALE GITANJALI MAHADEO	P	P	P	P	P
6	8074	BHANWASE KOMAL BHARAT	P	P	P	P	P
7	8075	BHONGALE MADHURI DASHARATH	P	P	P	P	P
8	8076	ROPALE VARSHA HANUMANT	P	P	P	P	P
9	8077	KAZI SIFA SALLAUDDIN	A	A	A	A	A
10	8078	TEKALE RESHMA DATTATRAY	A	A	A	A	A
11	8081	JADHAV PRITI PRADEEP	A	A	A	A	A
12	8082	PARBAT SHIVGANGA BALASAHEB	P	P	P	P	P
13	8088	BONGANE SUPRIYA CHANDRAKANT	P	P	P	P	P
14	8089	RAUT ASHOK SANJAY	P	P	P	P	P
15	8090	TONPE PRIYANKA SHRIMANT	P	P	P	P	P
16	8093	BHANGE PRIYANKA PRABHAKAR	P	P	P	P	A
17	8094	KULKARNI GAYATRI SUHAS	P	P	P	P	A
18	8096	MANE KOMAL TUKARAM	P	A	A	A	A
19	8097	KOLI SHRADDHA BABURAO	P	P	P	P	P
20	8098	KADAM SANDIP MOHAN	P	P	P	P	P
21	8100	DHAKTODE TRUPTI ASHOK	P	P	P	P	P
22	8182	HOGLE AKASH RAMCHANDRA	P	P	P	P	P
23	8183	RODAGE RUPALI ROHIDAS	P	P	P	P	P
24	8187	SHINGADE ARATI SANTOSH	P	P	P	P	P
25	8189	BIBE AMRUTA RAJENDRA	P	P	P	P	P
26	8190	JAGTAP SAGAR ARJUN	P	P	P	P	P
27	8191	BHOSALE PRAGATI JALINDAR	P	P	P	P	P
28	8196	PANHALKAR SWAPNARANI RAGHUNATH	A	A	A	A	A
29	8197	GAIKWAD KOMAL SHIVAJI	P	P	P	P	P
30	8198	BHONG MUKTABAI DASHARATH	P	P	P	P	P
31	8199	GARAD KOMAL SUDHIR	P	P	P	P	P
32	8201	JAGTAP SUPRIYA NAVNATH	P	P	P	P	P
33	8203	ANAPAT RANJEET GORAKH	P	P	P	P	P
34	8205	BHOSALE AKSHAY ANKUSH	P	P	P	P	P
35	8206	NACHAN PRAJWAL SANTOSH	P	P	P	P	P
36	8208	SOLANKAR SURAJ BALASO	P	P	P	P	P
37	8209	RAUT KAJAL SHIVAJI	P	P	P	P	P
38	8211	SHINDE VIVEK MOHAN	P	P	P	P	P
39	8212	HIVARE POOJA ANAND	P	P	P	P	P



40	8216	MORE SAURABH VAJJINATH	P	P	P	P	P
41	8217	MISAL CHAITANYA KALYAN	A	A	A	A	A
42	8218	WAGHMODE DIPALI SOPAN	P	P	P	P	P
43	8220	KARANDE TEJAL MININATH	P	P	P	P	P
44	8224	BHONG AKSHAY ARJUN	P	P	P	P	P
45	8227	BHANWASE AMAR KUMAR	P	P	P	P	P
46	8228	TAMBOLI ALFIYA RAHIM	P	P	P	P	P
47	8231	DAGADE ADITYA SHAHAJI	P	P	P	P	P
48	8233	PONDKULE AKSHAY BALU	A	A	A	A	A
49	8234	KHADE KUNAL GORAKH	A	A	A	A	A
50	8235	WAGHMODE PRASHANT MAHADEV	P	P	P	P	P
51	8236	CHORAMALE RATNAPRABHA TULSHIRAM	P	P	P	P	P
52	8237	KOPNAVAR HANUMANT RAJENDRA	P	P	P	P	P
53	8238	GODASE SAPANA RAJENDRA	P	P	P	P	P
54	3063	BHALE AKSHAY MANIK	P	P	P	P	P
55	3066	SHEDE OMKAR DEEPAK	P	P	P	P	P
56	3067	KULKARNI APARNA BALASAHEB	P	P	P	P	P
57	3070	JADKAR PRARTIKSHA ANKUSH	P	P	P	P	P
58	3071	BHOITE SIDDESH ASHOK	P	P	P	P	P
59	3072	BORATE PRITI SANJAY	P	P	P	P	P
60	3073	ATAR LAJINA KHALIL	P	P	P	P	P
61	3075	MORE KIRAN DATTATRAY	P	P	P	P	P
62	3076	BORATE OMKAR DIGAMBAR	P	P	P	P	P
63	3077	KATE POONAM DATTATRAYA	A	A	A	A	A
64	3078	PADULE PRITAM LALASO	P	P	P	P	P
65	3080	DURUGKAR NISHA BAHUBALI	P	A	A	A	A
66	3083	GHOARE AMRUTA SANJAY	P	P	P	A	A
67	3084	NIKAM POOJA SATISH	P	P	P	P	P
68	3085	YERALKAR VANITA LAXMAN	P	P	P	P	P
69	3086	RAKHUNDE SUPRIYA VINAYAK	P	P	P	P	P
70	3087	KALE POOJA JALINDAR	P	P	P	P	P
71	3088	NIMBALKAR UJWAL DHANANJAY	P	P	P	A	A
72	3090	KUTAL SHWETA AJINATH	P	P	P	A	A
73	3091	KUTAL KAJAL KALYAN	A	A	A	P	P
74	3093	BHONG SONALI RAJARAM	P	P	P	P	P
75	3094	SARADE MADHURI UTTARESHWAR	P	P	P	P	P
76	3095	VYAWAHARE POOJA ANIL	A	A	A	P	P
77	3096	AWATE KOMAL ANKUSH	A	A	P	P	P
78	3098	NANAVARE VAISHNAVI JOTIRAM	P	P	P	P	P
79	3099	BHUJBAL PRASHANT SANTOSH	P	P	P	P	P
80	3100	YADAV SNEHA SHIVAJI	P	P	P	P	P
81	3101	PHADTARE VRUSHALI NANDKUMAR	A	A	A	A	A

Co-ordinator

H.O.D

Principal

Principal
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

Head
Department of Zoology
Arts, Science & Commerce College
Indapur, Dist. Pune - 413106

Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune
(Affiliated to Savitribai Phule Pune University, Pune)



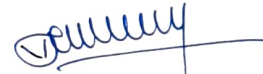
Organized

Certificate Course On Blood Group Analysis
(Academic Year 2018-2019)

This is to certify that Nale Sujata Bhart a student from F. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on BLOOD GROUP ANALYSIS (4 Credits). This course is organized by Department of Zoology, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 01.10.2018 to 16.10.2018


Prof. Ranjit More
Course Coordinator


Prof. Dr. Sarwade J.P.
Head Dept. of Zoology


Prof. Dr. Shivaji Veer
IQAC Coordinator


Prof. Dr. Arjun Sarwade
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR, 413106 DIST. PUNE

Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106

**Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur**

Department Of Botany

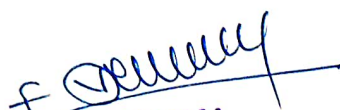
Certificate Course on Plant Propagation Techniques

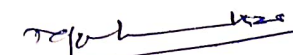
Academic Year (2018-2019)

Student Notice

All the Students of **S.Y.B.Sc.** are hereby noticed that our department started **certificate course on Plant Propagation Techniques** for academic year **2018 -19**. This course is open for all **S.Y.B.Sc.** students.

Above course will be started from **04/02/2019** upto **18/02/2019**. Interested students fill registration form and submit to department before **01/02/2019**. Contact to department for more details.


PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE


(Prof. Mahadik B.B)

Department of Botany
Arts, Science & Commerce
College, Indapur



Art's, Science & Commerce College, Indapur

Department Of Botany

Syllabus

Plant Propagation Techniques (40 Lectures)

Objectives-

1. Enable the students to identify vegetative plant parts like root, Stem, leaves or modified parts used for Propagation.
2. Provide hands on training for plant propagation method like Cutting, Grafting, Budding & Layering.
3. To give information about commercial importance of propagation methods used for horticultural crops.
4. To give laboratory experience, being able to perform plant propagation methods on a plant.
5. To learn the prospect & scope of Plant Propagation techniques in small scale industry.
6. Help the students to learn a means of self-employment and income generation.

Credit I

Unit –1: Basic concepts of propagation

(3 Lectures)

1. Propagation: Definition, need and potentialities for plant multiplication; 2. Propagation facilities: Mist chamber, humidifiers, greenhouses, glasshouses, cold frames, hot beds, poly-houses, 3. Identification and propagation by division and separation: Bulbs, pseudo bulbs, corms, tubers and rhizomes; runners, stolon, suckers and offsets.

Unit –3: Propagation by cuttings

(4 Lectures)

1. Cuttings: Definition, different methods of cuttings; root and leaf cuttings. 2. Stem cuttings: Definition of stem tip and section cuttings; plant propagation by herbaceous, soft wood, semi hard wood, hard wood and coniferous stem cuttings. 3. Factors influencing rooting of cuttings; Use of plant growth regulators in rooting of cuttings.

Unit –4: Propagation by layering

(4 Lectures)

1. Layering: Definition, principle and factors influencing layering. 2. Plant propagation by layering: Ground layering – tip layering, simple layering, trench layering, mound (stool) layering and compound (serpentine layering). 3. Air layering technique – application in woody trees.

Unit –5: Propagation by grafting and budding

(5 Lectures)

1. Grafting: Definition, principle, types, graft incompatibility, collection of scion wood stick, scion-stock relationship, and their influences, bud wood certification; micro grafting. 2. Propagation by veneer, whip, cleft, side and bark grafting techniques. 3. Budding: Definition; techniques of 'T', inverted 'T', patch and chip budding.

Credit II

Practicals

24lectures

Unit 1: Demonstration of Tools and Equipment's used for plant propagation .

Unit 2: To study the natural vegetative methods of plant propagation.

Unit 3: To study the artificial vegetative methods of plant propagation – Types Of Cutting

Unit 4: To study the artificial vegetative methods of plant propagation – Types Of Grafting

Unit 5: To study the artificial vegetative methods of plant propagation – Types Of Budding

Unit 6: To study the artificial vegetative methods of plant propagation –Types of Layering

Unit 7: To study the potting and repotting of ornamental plant.

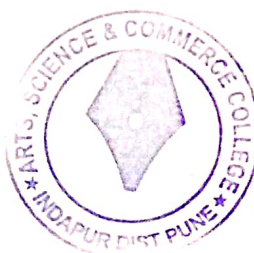


Budget of Course- Total Cost – 2,82,000/-

Financial Details :

	Consumables			Equipments	
1.	Earthen pots	20,000	1.	Spades (5)	5,000
2.	Soil	1,000	2.	Forks (5)	2,000
3.	Planting materials	20,000	3.	Secateurs (25)	10,000
4.	Watering	5,000	4.	Knives (50)	10,000
5.	Cococoir	500	5.	Khurpi (10)	3,500
6.	Polybags	2,000	6.	Gardening handtool Set	20,000
7.	Furniture	5,000	7.	Water Cans (5)	4,000
8.	Polythene Tape	5,000	6.	Water Pipes	1,000
9.	Moss	10,000		Chemicals	
10.	Seedlings	5,000	7.	Auxins	2,000
11.	Manures and fertilizers	10,000	8.	Gibberellin	20,000
12.	Cocopeat	5,000	9.	Cytokinin	25,000
Total		89,000/-	Total		1,93,000/-

Fee Per Student- 1000



Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur
Department Of Botany
Certificate Course on Plant Propagation Techniques
Academic Year (2018-2019)

Time Table

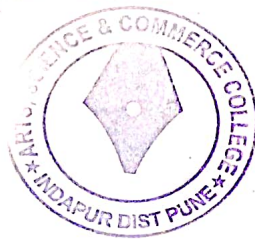
Sr. No.	Time	Date													
		4/2/19	5/2/19	6/2/19	7/2/19	8/2/19	9/2/19	11/2/19	12/2/19	13/2/19	13/2/19	14/2/19	15/2/19	16/2/19	18/2/19
1	12.30 – 1.30	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory KPS	Theory MBB	Theory MBB	Theory MBB	Theory MBB	Theory MBB
2	1.30 - 2.30	Theory MBB	Theory MBB												
3	2.30- 4.30									Practical KPS	Practical KPS	Practical KPS	Practical MBB	Practical MBB	Practical MBB



Indapur Taluka Shikshan Prasarak Mandal's
Art's Science And Commerce College Indapur
Department Of Botany
Certificate Course on Plant Propagation Techniques
Students List
Academic Year (2018-2019)

SR. NO.	ROLL NO.	STUDENT NAME	SIGN
1	8012	YADAV KOMAL MANIK	<i>Yadav</i>
2	8020	GHADGE ASHWINI PANDURANG	<i>GA</i>
3	8034	VEER SONAL RAJENDRA	<i>VRS</i>
4	8036	HINGANE RUTUJA VIJAY	<i>Hingane</i>
5	8038	LAWAND RUTURAJ JAYAVANT	<i>LR</i>
6	8042	KODLINGE AKSHAY HARIDAS	<i>KAW</i>
7	8045	BHAGWAT VIKRAM MAHADEV	<i>BVM</i>
8	8049	SUTAR PRATIKSHA SOMNATH	<i>SP</i>
9	8051	SALUNKE MAYUR ANIL	<i>SM</i>
10	8052	PATIL POOJA ASHOK	<i>PP</i>
11	8057	BANSODE MONALI BALU	<i>BMB</i>
12	8059	SHEJAL PRATIKSHA SHIVAJI	<i>SP</i>
13	8060	SHINDE SUPRIYA BABASO	<i>SS</i>
14	8062	TARANGE SONALI RUPCHAND	<i>TR</i>
15	8066	SATHE DIKSHA MASU	<i>SD</i>
16	8067	MULE ASHWINI UTTAM	<i>MA</i>
17	8074	BHANWASE KOMAL BHARAT	<i>KB</i>
18	8075	BHONGALE MADHURI DASHARATH	<i>BM</i>
19	8076	ROPALE VARSHA HANUMANT	<i>RV</i>
20	8078	TEKALE RESHMA DATTATRAY	<i>TR</i>
21	8079	MARKAD VISHAKHA MOHAN	<i>MM</i>
22	8080	KADALE POOJA BALASAHEB	<i>KPB</i>
23	8081	JADHAV PRITI PRADEEP	<i>JP</i>
24	8082	PARBAT SHIVGANGA BALASAHEB	<i>PS</i>

25	8083	JADHAV SHWETA ASHOK	<u>JS-A</u>
26	8088	BONGANE SUPRIYA CHANDRAKANT	<u>SBP</u>
27	8093	BHANGE PRIYANKA PRABHAKAR	<u>BPB</u>
28	8097	KOLI SHRADDHA BABURAO	<u>KB</u>
29	8100	DHAKTODE TRUPTI ASHOK	<u>DTA</u>
30	8181	PATHAK MANALI RAMCHANDRA	<u>PMR</u>
31	8183	RODAGE RUPALI ROHIDAS	<u>ROR</u>
32	8185	PATIL PUJA KHANDERAU	<u>PKH</u>
33	8188	GAWADE RUTUJA SANTOSH	<u>GRS</u>
34	8196	PANHALKAR SWAPNARANI RAGHUNATH	<u>PSR</u>
35	8197	GAIKWAD KOMAL SHIVAJI	<u>GKS</u>
36	8201	JAGTAP SUPRIYA NAVNATH	<u>JSN</u>
37	8208	SOLANKAR SURAJ BALASO	<u>SSB</u>
38	8211	SHINDE VIVEK MOHAN	<u>SM</u>
39	8216	MORE SAURABH VAIJINATH	<u>MSV</u>
40	8224	BHONG AKSHAY ARJUN	<u>BAA</u>



Indapur Taluka Shikshan Prasarak Mandal's
Art's, Science and Commerce College, Indapur
Department of Botany
Certificate Course on Plant Propagation Techniques
Academic Year (2018-2019)
Attendance

Sr. No	Roll No.	Name of Student	4/2	5/2	6/2	7/2	8/2	9/2	11/2	12/2	13/2	14/2	15/2	16/2	18/2
			Theory								Practical				
1	8012	YADAV KOMAL MANIK	P	P	A	P	P	P	A	P	P	A	P	P	P
2	8020	GHADGE ASHWINI PANDURANG	P	P	P	A	A	A	P	P	P	P	P	P	P
3	8034	VEER SONAL RAJENDRA	P	P	P	P	A	P	P	P	P	P	P	P	P
4	8036	HINGANE RUTUJA VIJAY	P	P	P	P	A	P	A	P	P	P	P	P	P
5	8038	LAWAND RUTURAJ JAYAVANT	P	P	P	P	P	P	P	P	A	P	P	P	P
6	8042	KODLINGE AKSHAY HARIDAS	P	P	P	P	A	P	P	P	P	P	P	P	P
7	8045	BHAGWAT VIKRAM MAHADEV	P	P	P	P	A	P	A	P	P	P	P	P	P
8	8049	SUTAR PRATIKSHA SOMNATH	P	P	A	P	P	P	A	P	P	A	P	P	P
9	8051	SALUNKE MAYUR ANIL	P	P	P	A	A	A	P	P	P	P	P	P	P
10	8052	PATIL POOJA ASHOK	P	P	P	P	A	P	P	P	P	P	P	P	P
11	8057	BANSODE MONALI BALU	P	P	P	P	A	P	A	P	P	P	P	P	P
12	8059	SHEJAL PRATIKSHA SHIVAJI	P	P	P	P	P	P	P	P	A	P	P	P	P
13	8060	SHINDE SUPRIYA BABASO	P	P	A	P	P	P	A	P	P	A	P	P	P
14	8062	TARANGE SONALI RUPCHAND	P	P	P	A	A	A	P	P	P	P	P	P	P
15	8066	SATHE DIKSHA MASU	P	P	P	P	A	P	P	P	P	P	P	P	P
16	8067	MULE ASHWINI UTTAM	P	A	P	P	A	P	A	P	P	P	P	P	P
17	8074	BHANWASE KOMAL BHARAT	P	P	P	P	P	P	P	P	A	P	P	P	P
18	8075	BHONGALE MADHURI DASHARATH	P	P	A	P	P	P	A	P	P	A	P	P	P
19	8076	ROPAL VARSHA HANUMANT	P	P	P	A	A	A	P	P	P	P	P	P	P
20	8078	TEKALE RESHMA DATTATRAY	P	P	P	P	A	P	P	P	P	P	P	P	P
21	8079	MARKAD VISHAKHA MOHAN	P	A	P	P	A	P	A	P	P	P	P	P	P
22	8080	KADALE POOJA BALASAHEB	P	P	P	P	P	P	P	P	A	P	P	P	P
23	8081	JADHAV PRITI PRADEEP	P	P	A	P	P	P	A	P	P	A	P	P	P
24	8082	PARBAT SHIVGANGA BALASAHEB	P	P	P	A	A	A	P	P	P	P	P	P	P
25	8083	JADHAV SHWETA ASHOK	P	P	P	P	A	P	P	P	P	P	P	P	P
26	8088	BONGANE SUPRIYA CHANDRAKANT	P	A	P	P	A	P	A	P	P	P	P	P	P
27	8093	BHANGE PRIYANKA PRABHAKAR	P	P	P	P	P	P	P	P	A	P	P	P	P
28	8097	KOLI SHRADDHA BABURAO	P	P	A	P	P	P	A	P	P	A	P	P	P
29	8100	DHAKTODE TRUPTI ASHOK	P	P	P	A	A	A	P	P	P	P	P	P	P
30	8181	PATHAK MANALI RAMCHANDRA	P	P	P	P	A	P	P	P	P	P	P	P	P
31	8183	RODAGE RUPALI ROHIDAS	P	A	P	P	A	P	A	P	P	P	P	P	P
32	8185	PATIL PUJA KHANDERAO	P	P	P	P	P	P	P	P	A	P	P	P	P
33	8188	GAWADE RUTUJA SANTOSH	P	P	A	P	P	P	A	P	P	A	P	P	P
34	8196	PANHALKAR SWAPNARANI RAGHUNATH	P	P	P	A	A	A	P	P	P	P	P	P	P
35	8197	GAIKWAD KOMAL SHIVAJI	P	P	P	P	A	P	P	P	P	P	P	P	P

36	8201	JAGTAP SUPRIYA NAVNATH	P	A	P	P	A	P	A	P	P	P	P	P	P
37	8208	SOLANKAR SURAJ BALASO	P	P	P	P	P	P	P	P	A	P	P	P	P
38	8211	SHINDE VIVEK MOHAN	P	P	A	P	P	P	A	P	P	A	P	P	P
39	8216	MORE SAURABH VAJJINATH	P	P	P	A	A	A	P	P	P	P	P	P	P
40	8224	BHONG AKSHAY ARJUN	P	P	P	P	A	P	P	P	P	P	P	P	P



Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur
Department Of Botany
Certificate Course on Plant Propagation Techniques
Academic Year (2018-2019)
Students Feedback Form

1. Are you satisfied with course outcomes?

.....
..... Yes

2. How would you rate the quality of teaching?

.....
..... Good

3. Does your teachers completed the syllabus and clarified your queries?

.....
..... Yes

4. Does your teachers use ICT tools for effective learning?

.....
..... Yes

5. Overall impact of course.....

.....
..... Good

6. Suggestions if any.....

.....
..... No



Name of the Student.. Yadav.. Komal.. Manik

Class.. S.Y.B.Sc.

Roll No.. 8012

Sign : [Signature]

Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur
Department Of Botany
Certificate Course on Plant Propagation Techniques
Academic Year (2018-2019)
Students Feedback Form

1. Are you satisfied with course outcomes?

.....
..... *yes*

2. How would you rate the quality of teaching?

.....
..... *good*

3. Does your teachers completed the syllabus and clarified your queries?

.....
..... *yes*

4. Does your teachers use ICT tools for effective learning?

.....
..... *yes*

5. Overall impact of course.....

.....
..... *good*

6. Suggestions if any.....

.....
..... *no*



Name of the Student. *Ghadge. Ashwini. Pandurang*

Class.. *S.Y.B.Sc*

Roll No... *8020*

Sign :. *GAP*

Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune
(Affiliated to Savitribai Phule Pune University, Pune)



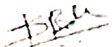
Organized

Certificate Course on Plant Propagation Techniques
(Academic Year 2018-2019)

This is to certify that *Yadav Komal Manik* a student from S. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on Plant Propagation Techniques. This course is approved by Savitribai Phule Pune University, Pune and organized by Department of Botany, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 04.02.2019 to 18.02.2019


Prof. Dr. Bibhishan Mahadik
Head Dept. of Botany


Prof. Dr. Bibhishan Mahadik
Head Dept. of Botany


Prof. Dr. Sandip Shinde
IQAC Co-ordinator


Prof. Dr. Sanjay Chakane
Principal



Indapur Taluka Shikshan Prasarak Mandal's,
Arts, Science and Commerce College,
Indapur, Dist. Pune
(Affiliated to Savitribai Phule Pune University, Pune)



Organized

Certificate Course on Plant Propagation Techniques
(Academic Year 2018-2019)

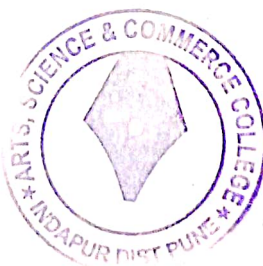
This is to certify that *Ghadge Ashwini Pandurang* a student from S. Y. B.Sc. Class has actively participated and successfully completed Certificate Course on Plant Propagation Techniques. This course is approved by Savitribai Phule Pune University, Pune and organized by Department of Botany, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 04.02.2019 to 18.02.2019


Prof. Dr. Bibhishan Mahadik
Head Dept. of Botany


Prof. Dr. Bibhishan Mahadik
Head Dept. of Botany


Prof. Dr. Sandip Shinde
IQAC Co-ordinator


Prof. Dr. Sanjay Chakane
Principal



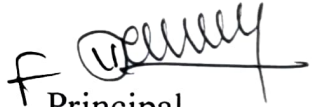
**ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR,
DIST- PUNE**

STUDENTS NOTICE 2018-19

Date: 03 /01/2019

All the students of F.Y.B.Sc and T.Y.B.Sc. those who have taken admission to the add-on course **“Wine Production From Pomegranate By Yeast (*Saccharomyces cerevisiae*)”** are hereby informed that , their regular theory and practicals will be conducted from 05\01\2019 to 18\01\19 Attendance of all students is compulsory.


(Course Incharge)


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ARTS, SCIENCE AND COMMERCE COLLEGE, INDAPUR

DEPARTMENT OF MICROBIOLOGY

**Add-On Course: Wine Production From Pomegranate By Yeast
(*Saccharomyces cerevisiae*)**

(Course Credit: 02) 2018-19

Sr.No.	Name of the Topics	Number of Lectures
1	Introduction	04
2	Wine Fermentation Processes	08
3	Nutritional value of pomegranate And Importance Of wine	08
4	Detection Method For Wine Production (Practical)	20

Chapter I – Introduction

04

Pomegranate *Punica granatum* L. is one of the Punicaceae Family. There Are different varieties of cultivars of pomegranate are available like Ganesh, Bhagwa, Ruby, Arakta and Mridula. Etc.

Chapter II-Wine Fermentation Processes

08

Anaerobic fermentation process. Material and Requirement of wine production . flow charts of wine production processes. Wine sensory aspects. Discussion about wine. Technique for wine making.

Chapter III-Nutritional value of pomegranate and importance of wine

08

Vitamin ,Electrolytes, Minerals,Protien,Carbohydrate, in pomegranate. Chemical Constituent and Therapeutic use of pomegranate Juice. Quality parameters of juice. Role of yeast in wine, Yeast nutrients ,Potassium Metabisulfite . Ativation process of yeast .Benifits of yeast addition.

Chapter- IV- Detection Method For Wine Production

20

1)Checking of Brix

2)checking of PH

3) Checking quality of wine

4)Checking parameter of juice



- 5) Checking parameter of wine
- 6) Colorimetric analysis
- 7) Statistical analysis (ANOVA TEST)
- 8) Checking of Temperature
- 9) Test for percentage of alcohol
- 10) Refractive index

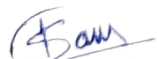
Learning Objectives:

The students are expected to study

1. Knowing importance of the subject from the point of rural economy.
2. Knowing the composition of wine & nutritive value.
3. Understanding the Microbiology of the wine.
4. Understanding fermentation processes and various nutrients-role for the human body.
5. Knowing various composition, manufacture and uses wine .

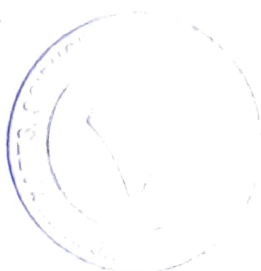
References:

- [1] Charushila V. Dhamne , Varsha A. Nikam , Kalyni H. Pagar , Sarita U. Mahajani, Sharddha S. Kulkarni, Sinhgde college of engineering , department of Biotechnology ,pune.
- [2] Pazhani Saranraj , Pannerselvam Sivasakthivelan Murugadoss Naveen , Fermentation of fruit Wine and its Quality analysis , Department of Microbiology , sacred Heart college, Tirupattur, Tamil Nadu ,India. Department Agricultural Microbiology ,Annamalai university, Annamalai Nagar , Tamil Nadu , India .
- [3] Sevda S. B and Rodrigues L, Department of Food Engineering And Fermentation technology ,University Institute of Chemical technology ,Matunga, The making of Pomegranate wine using yeast immobilised on sodium alginate.
- [4] Aakriti Guleria , Abhilashi Institute of Life Science ,Deptment of Microbiology, Manali-175008, Himachal Pradesh ,India.


Course Incharge


Principal

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR

Name of Add-On Course: Wine Production From

Pomegranate By Yeast (*Saccharomyces cerevisiae*)

Time Table (Theory) 2018-19

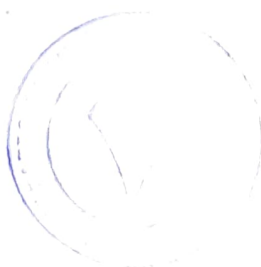
Date	Time	Name of Faculty
05.01.19	10am-12am	Kadam S.
	1pm-3pm	
07.01.19	10am-12am	Bhoite S.
	1pm-3pm	
08.01.19	10am-12am	Ladkat M.
	1pm-3pm	
09.01.19	10am-12am	More R.
	1pm-3pm	
10.01.19	10am-12am	Kadam S.
	1pm-3pm	

Time Table (Practical) 2018-19

Date	Time	Name of Faculty
11.01.19	10am-12am	Kadam S.
	1pm-3pm	
12.01.19	10am-12am	Ladkat M.
	1pm-3pm	
16.01.19	10am-12am	More R.
	1pm-3pm	
17.01.19	10am-12am	Bhoite S.
	1pm-3pm	
18.01.19	10am-12am	More R.
	1pm-3pm	


(Course Incharge)


Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



LIST OF ADMITTED STUDENTS 2018-19

Name of Course: Wine Production From Pomegranate By Yeast (<i>Saccharomyces cerevisiae</i>)			05/01/19	07/01/19	08/01/19	09/01/19	10/01/19	11/01/19	12/01/19	16/01/19	17/01/19	18/01/19	19/01/19
Sr.No	Roll No	Name of Students											
1	3015	BANSUDE MONALI SHANKAR	P	P	P	P	P	P	P	P	P	P	P
2	3018	PAEKAR PRIYANKA KASHINATH	P	P	P	A	P	P	P	P	P	P	P
3	3024	CHINTAMAN MOHINI MADHAV	P	A	P	P	A	P	P	A	P	P	P
4	3028	SHELAR AMAR VIJAYKUMAR	P	P	A	P	P	A	P	P	P	P	A
5	3043	GAIKWAD RAMRAJE JITENDRA	P	P	P	P	P	P	P	P	P	P	P
6	3045	SHINDE SUDARSHAN BABASAHEB	A	P	P	P	A	P	A	P	P	P	P
7	3070	JADKAR PRARTIKSHA ANKUSH	P	P	P	A	P	P	P	P	A	A	P
8	3071	BHOITE SIDDESH ASHOK	P	A	P	P	P	P	P	P	P	P	P
9	3076	BORATE OMKAR DIGAMBAR	P	P	A	P	P	A	P	P	P	P	A
10	3083	GHOARE AMRUTA SANJAY	A	P	P	P	A	P	A	P	P	P	P
11	3095	VYAWAHARE POOJA ANIL	P	P	A	P	P	P	P	P	P	A	A
12	3099	BHUJBAL PRASHANT SANTOSH	P	P	P	P	P	P	P	P	P	P	P
13	3101	PHADTARE VRUSHALI NANDKUMAR	P	A	P	A	P	P	P	A	P	P	P
14	3106	KADAM PRATIK VIJAY	P	P	P	P	P	A	P	P	P	P	P
15	3113	JAGTAP SAURABH RAMDAS	A	P	A	P	P	P	A	P	P	P	P
16	3115	PHALPHALE SURAJ TANAJI	P	P	P	P	A	P	P	P	P	P	P
17	3122	DESHMUKH RUSHIKESH SAMADHAN	P	P	P	P	P	P	P	P	P	A	P
18	3130	JADHAV PRIYANKA SANJAY	P	P	P	P	P	P	P	P	P	P	P
19	3132	SHINDE ROHIT MUKUND	P	P	P	A	P	A	P	A	P	P	P
20	3133	JADHAV SNEHAL LAHU	P	P	A	P	P	P	P	P	P	P	P
21	3135	PETKAR RUTUJA VAMAN	P	A	P	P	A	P	A	A	P	A	P
22	3136	CHAVAN NILESH SUNIL	P	P	P	P	P	P	P	P	P	P	A
23	3185	DEOKAR KOMAL SHANKAR	A	P	P	P	P	P	P	P	P	P	P
24	3186	GAIKWAD VAIBHAVI VISHNU	P	P	P	P	P	P	P	A	P	P	P
25	3187	PATIL MANISH SANTOSH	P	P	A	A	P	P	P	P	P	P	P
26	3191	KHARADE TANAJI PANDURANG	P	P	P	P	A	P	P	P	P	P	P
27	3192	SURYAWANSHI PRATIKSHA HANUMANT	P	P	P	P	P	P	A	P	P	P	P
28	3194	TARANGE YOGESH HANUMANT	P	A	P	P	P	P	P	P	P	A	P
29	3196	TARANGE ASHVINI SHIVAJI	P	P	P	P	P	P	P	P	P	P	P
30	3201	KAVITAKE ABHIJEET AJINATH	A	P	P	P	P	P	P	P	P	P	P
31	3205	KUDALE RANJIT SANTOSH	P	A	A	P	A	P	P	P	P	P	P
32	3206	SHINGADE DIPTI MARUTI	P	P	P	A	P	P	P	A	P	P	P
33	3208	HAGARE SHITAL LAXMINARAYAN	P	P	P	P	P	P	P	P	A	P	P
34	3210	SHARMA SHIVANI VISHNUKUMAR	P	P	P	P	P	P	P	P	P	A	P
35	3214	SHINGADE PRIYANKA VILAS	P	P	A	P	P	P	P	P	P	P	P
36	3216	WAGHMODE SAMADHAN NIVRUTTI	P	P	P	P	A	P	P	P	P	P	P
37	3217	AUTADE KISHOR SIDDHESHVAR	P	A	P	P	P	P	P	A	P	P	P

38	3218	SOLANKAR DAYANAND PANDURANG	P	A	P	P	P	P	P	P	P	P	P	P
39	3219	THOMBARE SAURABH LAXMAN	P	P	P	P	P	A	P	P	P	P	P	P
40	3220	JAGTAP AADITI SATISH	A	P	P	P	P	P	P	P	A	P	P	A
41	3225	GAWADE SHAILA DNYANDEO	P	P	P	A	P	P	P	P	P	P	P	P
42	3226	WAYAL NIKHIL RAJENDRA	P	A	P	P	P	P	P	A	P	P	P	P
43	3227	KAMBLE ARCHANA SHIVAJI	P	P	P	P	P	P	P	P	P	P	P	P
44	3229	SHINDE VIKAS SANJAY	A	P	P	A	P	P	P	P	P	P	P	P
45	3230	DEVKATE RESHMA LUGAJI	P	P	A	P	P	A	P	P	A	P	P	A
46	3234	DHAINJE SAYALI DNYANDEV	P	P	P	P	P	P	P	P	P	P	P	P
47	3236	PONDKULE AMRUTA BALU	P	A	P	P	P	P	P	P	P	P	P	P
48	3238	GHOOGARE SAGAR DNYANESHWAR	A	P	P	P	P	P	P	A	P	P	P	P
49	3239	ROMAN VAIBHAV ARVIND	P	P	P	P	P	P	P	P	P	P	P	P
50	3241	CHAVAN ANAND RAMCHANDRA	P	P	P	P	P	P	P	P	P	P	P	P
51	3242	KAMBLE RAJENDRA NAGNATH	P	P	P	P	P	A	P	P	P	P	P	P
52	3244	BANDGAR SHRADDHA BALU	P	P	A	P	P	A	P	P	P	P	P	P
53	3248	KUMBHAR KRUSHNA POPAT	P	P	P	P	P	P	P	P	P	P	P	P
54	3253	BEDKUTE VISHAL SHRIMANT	P	A	P	P	P	P	P	A	P	P	P	P
55	3255	KHATAKE SANKET DILIP	A	P	P	P	P	P	P	P	P	P	P	P
56	3257	THORAT KAJAL BRAMHADEV	P	P	P	A	P	P	P	P	P	P	P	A
57	3260	DHOBABLE ROHIT VISHNU	P	P	P	P	P	A	P	P	P	P	P	P
58	3263	PAWAR ANKITA RAMCHANDRA	P	P	A	P	P	A	P	P	P	P	P	P
59	3269	BABAR KALYANI KAILAS	P	P	P	P	P	P	P	A	P	P	P	P
60	3270	RAUT AKSHAY UMESH	A	P	P	P	P	P	P	P	P	P	P	P
61	3273	BARAVKAR ABOLI BANDU	P	A	P	P	P	P	P	P	P	P	P	A
62	3274	KISAVE KISHOR CHANDRAKANT	P	P	P	P	A	P	P	P	P	P	P	P
63	3277	SALUNKE SANJYOTI SURESH	P	P	P	P	P	P	P	P	P	P	P	P
64	3278	HAGARE RAVIRAJ SURESH	P	P	P	P	P	A	P	P	A	P	P	P
65	3279	SHEETE SUHAS SUNIL	P	P	P	P	P	P	P	P	P	P	P	P
66	3280	THORAT ASHWINI SUDHAKAR	P	A	P	P	P	P	P	P	P	P	P	P
67	3281	JAGTAP SURAJ PANDURANG	P	P	A	P	P	P	P	P	P	P	P	P
68	3282	JADHAV VIKAS SUBHASH	P	P	P	A	P	P	P	P	P	P	P	P
69	3288	REDEKAR VIRAJ RAJENDRA	A	P	P	P	P	A	P	A	P	P	P	P
70	3293	REDEKAR SHIVANI MOHAN	P	P	P	P	P	P	A	P	P	P	P	P
71	3294	PETKAR ONKAR SHANKAR	P	P	P	P	P	P	P	P	P	P	P	P
72	3295	PAWAR VIJAY GORAKH	P	P	P	P	P	P	P	P	P	P	P	P
73	3298	BHAGAT SURAJ VINAYAK	P	P	P	P	P	P	P	P	P	P	P	P
74	3299	KHARAT SHUBHANGI RAMCHANDRA	P	P	A	P	P	P	P	P	P	P	P	P
75	3300	GAIKWAD RUPALI SANTOSH	A	P	P	P	P	P	P	P	P	P	P	P
76	3301	BHALE RAVIRAJ RAJIV	P	A	P	P	P	A	P	P	A	P	P	A
77	3304	GADE ANITA VITTHAL	P	P	P	P	P	A	P	P	P	P	P	A

78	3306	GANGAVANE NAVNATH UDDHAV	A	P	P	P	P	P	P	A	P	P	P
79	3307	AWARE SHUBHAM ADHIKRAO	P	P	P	P	A	P	P	P	P	P	P
80	3308	PAWAR PRATHMESH RAVINDRA	P	A	P	P	P	A	P	P	P	A	P
81	3309	BONDRE KUMODINI MAHADEV	P	P	P	P	P	A	P	A	P	P	P
82	3310	MATE PRATIKSHA DEEPCHAND	A	P	P	P	P	P	P	P	P	P	A
83	3311	RAUT SAKSHI SUNIL	P	P	A	P	P	P	P	P	A	P	P
84	3312	DHAPATE PRAJWAL DEEPAK	P	P	P	P	A	P	P	A	P	P	P
85	3315	NAGARE NISARGA SUDHAKAR	P	A	P	P	P	P	P	P	P	A	A
86	3319	JAGTAP TUSHAR VASANT	P	P	P	P	P	P	P	P	P	P	P
87	3321	GHOLAP ANNASAHEB DNYANESHWAR	P	P	P	P	P	A	P	P	P	P	P
88	3327	KALE MAYURI HANUMANT	A	P	P	P	P	P	P	A	P	P	A
89	3329	SHINDE GORAKH MACHINDRA	P	P	A	P	P	P	P	P	A	P	P
90	3330	KAYGUDE BHAGYASHRI DATTATRAYA	P	A	P	P	P	P	P	P	P	A	P
91	3332	HAKE AKSHAY BHIMRAO	P	P	P	P	A	P	P	P	P	P	P
92	3337	KACHARE SWAPNIL VYANKETESH	A	P	P	P	P	A	P	P	P	P	P
93	3361	SARKALE VAIBHAV SHIVAJI	A	P	A	P	P	P	P	A	P	P	A
94	3363	BANDGAR DEVIDAS BHAGWAT	P	P	P	P	P	P	P	P	A	P	P
95	3364	DHAPATE SONALI SANTOSH	P	A	P	P	P	P	P	P	P	P	P
96	3365	TAMBOLI NAZIYA RAHIM	P	P	P	P	P	P	P	P	P	A	P
97	3367	DHAPATE PRANITA PRABHAKAR	P	P	A	P	P	P	A	P	P	P	P
98	9086	ARADE SAMADHAN DEVIDAS	A	P	P	P	A	P	P	A	P	P	A
99	9182	MISAL RUPALI RAMCHANDRA	P	A	P	P	P	P	P	P	A	P	P
100	9192	TAMBOLI SHAMSHAD TAYYAB	P	P	P	P	P	P	P	P	P	P	P
101	9195	ROHI PALLAVI SHAHAJI	P	P	P	P	P	P	P	P	P	A	P
102	9198	MAHADIK GITANJALI SANJAY	P	P	A	P	P	P	P	A	P	P	P
103	9199	NANAWARE AKSHATA ABHIMAN	A	P	P	P	P	P	P	P	P	P	A
104	9200	RAKHUNDE HARSHADA BALASAHEB	P	P	P	P	A	P	P	A	P	P	P
105	9201	BHOSALE POOJA GANESH	P	A	P	P	P	P	P	P	P	A	P
106	9202	DEVKAR AISHWARYA SAMBHAJI	P	P	P	P	P	P	P	A	P	P	A
107	9203	SALUNKE AMRUTA NANASHEB	P	P	A	P	P	P	P	P	P	P	A
108	9211	BHOSALE PUJA SURYAKANT	A	P	P	P	P	P	P	P	P	P	P
109	9212	RAUT SANDHYA HARIDAS	P	P	P	P	P	P	P	P	A	P	P
110	9213	GHADGE RUCHITA SAMBHAJI	P	A	P	P	P	P	P	P	P	A	P
111	9235	OHOL PRASHANT VASANT	P	P	P	P	P	A	P	P	P	P	A
112	9243	BHOSALE SUPRIYA SURESH	P	P	P	P	P	P	P	A	P	P	P
113	9247	CHANDANE TUSHAR SOMNATH	A	P	P	P	P	P	P	P	P	P	P
114	9248	SATAV DIPAK SANJAY	P	P	P	P	P	P	P	P	A	P	P
115	9250	BAGADE JYOTI GOVIND	P	P	P	P	P	P	P	P	P	P	P
116	9252	SHIRSAT SNEHAL SHARAD	P	A	P	P	P	A	P	P	P	P	P
117	9254	KAMBALE ARTI RAMESH	P	P	P	P	P	P	P	P	P	P	P



ARTS, SCIENCE AND COMMERCE COLLEGE INDAPUR

**Name of Add-On Course : Wine Production From
Pomegranate By Yeast (*Saccharomyces cerevisiae*)**

COURSE COMPLETION REPORT 2018-19

The add-on course “**Wine Production From Pomegranate By Yeast (*Saccharomyces cerevisiae*)** has conducted from 05.01.2019 to 18.01.2019 and been successfully completed on 18\01\2019 Total 117 students were admitted for course. The students understand about fermentation process of wine, material and requirement of wine production . how to take precautions about storage and handling of wine , Physical properties and different types of wine etc. And their manufacturing processes. Similarly students also the information about the fermentation processes of wine. so the course will be most useful for students. After completion of this course , certificates are distributed to all participated students.


Prof. Sagar Kadam
(Course Incharge)





**Indapur Taluka Shikshan Prasarak Mandal's
Arts, Science and Commerce College, Indapur, Pune**

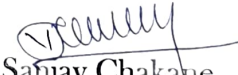
"Add-On Course Completion Certificate -2019"

Certificate of Appreciation

This is to certify that Mr./Ms. Bansude Monali Shankar . Arts,
Science and Commerce College, Indapur has actively participated in Add-On Course “: **Wine
Production From Pomegranate By Yeast (*Saccharomyces cerevisiae*)** organized by Department
of Microbiology on 18 January 2019.


Prof. Sagar Kadam
Course Incharge




Dr. Sanjay Chakane
Principal

ITSPM's
Arts, Science and Commerce College, Indapur

Department of Statistics

Value added course

2018-19

Course Title: R-Programming

2- Credit

Course Objectives

1. Acquire knowledge in essential programming skills in R
2. Visualize a given data, perform descriptive analysis and carry out a project using R Programming.

Course Outcomes

After successful completion of the course, a student will be able to perform the following using R Programming

CO1: Demonstrate basic programming skills in R

CO2: Describe and illustrate the data

CO3: Design and carryout a project with statistical analysis using R Programming and present the report.

SYLLABUS

UNIT – I

Introduction to R: – Overview, Environment Setup, Basic Syntax, Data types.

R Basics: – Variables, Operators, Decision Making, Loops, Functions, Strings, Vectors, Lists, Matrices, Arrays, Factors, Data Frames, Packages.

UNIT – II

Data visualisation: – Pie Charts, Bar Charts, Area Charts, Bubble Charts, Surface charts, , Waterfall charts, Box Plots, Violin plots, Histograms, Line Graphs, Scatter plots, Matrix plots.

Statistical Analysis in R: – Descriptive statistics: measures of central tendency, measures of dispersion, partition values, moments, skewness and kurtosis, Regression.


HEAD

Department Of Statistics
Arts, Science & Commerce College
Indapur(Pune)




PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM's
Arts, Science And Commerce College, Indapur
Department of Statistics
Notice for Student

Date-02/02/2019

All the Student who registered their names to 'Value added Course in R Programming' are hereby informed that their lectures and practicals will be started on Monday, 05/02/2019 to Saturday 16/02/2019 in Room No. 66 at 12 pm to 1 pm. It is compulsory to attain the lectures of value added course for getting desired credit.


HOD
Department Of Statistics
Arts, Science & Commerce College
Indapur(Pune)




Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM's
Arts, Science And Commerce College , Indapur
Department Of Statistics
Value added Course in R-Programming
2018-19
Timetable

Time	Friday	Saturday
12 Pm To 1 Pm	Theory	-
2 Pm To 3 Pm	-	Practical


HOD
Department Of Statistics
Arts, Science & Commerce College
Indapur(Pune)




Principal
PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM's
Arts, Science And Commerce College, Indapur
Department of Statistics
Value added Course in R-Programming

List of Registered Students
Academic Year 2018-19

Sr.No.	Roll.No.	Student Name	Class
1.	3001	NALE ASHWINI DATTATRAY	F.Y.B.Sc.
2.	3004	MAHADIK VAIBHAV RAJKUMAR	F.Y.B.Sc.
3.	3006	BHARGANDE AKASH VIJAY	F.Y.B.Sc.
4.	3013	SHINDE MADHURI BHAGWAT	F.Y.B.Sc.
5.	3020	SHEHDE VARSHA BALASAHEB	F.Y.B.Sc.
6.	3023	AWALE PRANIT DILIP	F.Y.B.Sc.
7.	3025	NIMBALKAR INDRESHWAR DURGA	F.Y.B.Sc.
8.	3040	DHUKHE SAGAR DADA	F.Y.B.Sc.
9.	3048	JADHAV POOJA VITTHAL	F.Y.B.Sc.
10.	3050	KADAM KIRAN KAILAS	F.Y.B.Sc.
11.	3060	TAMBOLI SAIF SHOUKAT	F.Y.B.Sc.
12.	3065	KUBER RADHIKA HANUMANT	F.Y.B.Sc.
13.	3082	BORATE PANKAJ ANKUSH	F.Y.B.Sc.
14.	3092	KALE JAYSHRI BAPURAO	F.Y.B.Sc.
15.	3102	BABARE AKASH TUKARAM	F.Y.B.Sc.
16.	3103	KADAM MONALI SHARAD	F.Y.B.Sc.
17.	3118	ANANTKAVLAS SWATI MACHHINDRA	F.Y.B.Sc.
18.	3181	LONDHE SURAJ MARUTI	F.Y.B.Sc.
19.	3182	SARTAPE VRUSHALEE MAHADEV	F.Y.B.Sc.
20.	3183	SHINDE MAYUR PANDURANG	F.Y.B.Sc.
21.	3199	PAWAR RUTUJA ANKUSH	F.Y.B.Sc.
22.	8001	JAGTAP PRATIKSHA JOTIRAM	S.Y.B.Sc.
23.	8003	SHINDE SONALI TANAJI	S.Y.B.Sc.
24.	8006	GHADAGE AISHWARYA RAMBHAU	S.Y.B.Sc.
25.	8007	GHODAKE SNEHAL NITIN	S.Y.B.Sc.
26.	8013	JADHAV HARSHA NARAYAN	S.Y.B.Sc.
27.	8021	YADAV AKSHAY NIVRUTTI	S.Y.B.Sc.
28.	8022	CHAVAN ABHIJIT DATTATRAY	S.Y.B.Sc.
29.	8025	MITKAL RANJIT MAHADEV	S.Y.B.Sc.
30.	8027	GHADAGE AJIT KHANDU	S.Y.B.Sc.
31.	8031	BAGAL BHAGYASHRI HARIDAS	S.Y.B.Sc.
32.	8032	RAUT DIPALI RAJARAM	S.Y.B.Sc.
33.	8037	BHAGAT SOMNATH DADASO	S.Y.B.Sc.
34.	8043	KHOCHARE SNEHA SHAMARAO	S.Y.B.Sc.
35.	8072	HOLE VIKAS VITTHAL	S.Y.B.Sc.

36.	8087	BORATE PRATIKSHA DIPAK	S.Y.B.Sc.
37.	8186	BANDE ONKAR MACHHINDRA	S.Y.B.Sc.
38.	8192	CHAVAN RAJESH DILIP	S.Y.B.Sc.
39.	8195	PARDESHI DHANASHRI KANTILAL	S.Y.B.Sc.
40.	8202	JAMDAR RAHUL LAXMANSING	S.Y.B.Sc.
41.	8219	KOLAPE PRIYANKA SURESH	S.Y.B.Sc.
42.	8221	KOLAPE POOJA NAGNATH	S.Y.B.Sc.

H.O.D

HEAD

Department Of Statistics
Arts, Science & Commerce College
Indapur(Pune)



Principal

PRINCIPAL

ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

ITSPM's
Arts, Science And Commerce College, Indapur
Department of Statistics
Value added Course in R-Programming

Attendance Sheet

Academic Year 2018-19

Sr.No.	Roll.No.	Student Name	01/03	04/03	10/03	13/03	17/03	26/03
1.	3001	NALE ASHWINI DATTATRAY	P	P	P	P	P	P
2.	3004	MAHADIK VAIBHAV RAJKUMAR	P	P	P	P	P	P
3.	3006	BHARGANDE AKASH VIJAY	P	P	P	P	P	P
4.	3013	SHINDE MADHURI BHAGWAT	P	P	P	P	P	P
5.	3020	SHENDE VARSHA BALASAHEB	P	P	P	P	P	P
6.	3023	AWALE PRANIT DILIP	P	P	A	P	P	P
7.	3025	NIMBALKAR INDRESHWAR DURGHA	P	P	P	P	P	P
8.	3040	DHUKHE SAGAR DADA	P	P	A	P	P	P
9.	3048	JADHAV POOJA VITTHAL	P	P	P	P	P	P
10.	3050	KADAM KIRAN KAILAS	P	P	A	P	P	P
11.	3060	TAMBOLI SAIF SHOUKAT	P	P	P	A	P	P
12.	3065	KUBER RADHIKA HANUMANT	P	P	P	P	P	P
13.	3082	BORATE PANKAJ ANKUSH	P	P	P	P	P	P
14.	3092	KALE JAYSHRI BAPURAO	P	P	P	A	P	P
15.	3102	BABARE AKASH TUKARAM	P	P	P	P	P	P
16.	3103	KADAM MONALI SHARAD	P	P	P	P	A	P
17.	3118	ANANTKAVLAS SWATI MACHHINDRA	P	P	P	P	P	P
18.	3181	LONDHE SURAJ MARUTI	P	P	A	P	P	P
19.	3182	SARTAPE VRUSHALEE MAHADEV.	P	P	P	P	P	P
20.	3183	SHINDE MAYUR PANDURANG	P	P	P	P	P	P
21.	3199	PAWAR RUTUJA ANKUSH	P	P	P	P	P	P
22.	8001	JAGTAP PRATIKSHA JOTIRAM	P	P	P	P	P	P
23.	8003	SHINDE SONALI TANAJI	P	P	P	P	P	P
24.	8006	GHADAGE AISHWARYA RAMBHAU	P	P	A	P	P	P
25.	8007	GHODAKE SNEHAL NITIN	P	P	P	P	P	P
26.	8013	JADHAV HARSHA NARAYAN	P	P	A	P	P	P
27.	8021	YADAV AKSHAY NIVRUTTI	P	P	P	P	P	P
28.	8022	CHAVAN ABHIJIT DATTATRAY	P	P	A	P	P	P
29.	8025	MITKAL RANJIT MAHADEV	P	P	P	P	P	P
30.	8027	GHADAGE AJIT KHANDU	P	P	P	P	P	P
31.	8031	BAGAL BHAGYASHRI HARIDAS	P	P	P	P	P	P
32.	8032	RAUT DIPALI RAJARAM	P	P	A	P	P	P
33.	8037	BHAGAT SOMNATH DADASO	P	P	P	P	P	P
34.	8043	KHOCHARE SNEHA SHAMARAO	P	P	A	P	P	P

35.	8072	HOLE VIKAS VITTHAL	P	P	P	P	P	P
36.	8087	BORATE PRATIKSHA DIPAK	P	P	A	P	P	P
37.	8186	BANDE ONKAR MACHHINDRA	P	P	P	A	P	P
38.	8192	CHAVAN RAJESH DILIP	P	P	P	P	P	P
39.	8195	PARDESHI DHANASHRI KANTILAL	P	P	P	P	P	P
40.	8202	JAMDAR RAHUL LAXMANSING	P	P	P	A	P	P
41.	8219	KOLAPE PRIYANKA SURESH	P	P	P	P	P	P
42.	8221	KOLAPE POOJA NAGNATH	P	P	P	P	A	P

H.O.D

HEAD

Department Of Statistics
Arts, Science & Commerce College
Indapur(Pune)



Principal

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE



Indapur Taluka Shikshan Prasarak Mandal's,

ARTS, SCIENCE AND COMMERCE COLLEGE, INDAPUR, DIST. PUNE

(Affiliated to Savitribai Phule Pune University, Pune)



Organized

**Value added course in R-Programming
(Academic Year 2018-19)**

This is to certify that *Gurav Puja Maruti* a student from F.Y. B.Sc. Class has actively participated and successfully completed value added course in R-Programming (2 Credits). This course is organized by Department of Statistics, ITSPM's, Arts, Science and Commerce College, Indapur, Dist. Pune from 05.02.2019 to 16.02.2019

Prof. Prasad Kamble
Course Co-ordinator

Prof. Dr. Shivaji Veer
IQAC Co-ordinator

Prof. Dr. Sanjay Chakane
Principal