

(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

1.3.3

Number of students undertaking project work/field work/internships



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### **1.3 Curriculum Enrichment**

### 1.3.3 Number of students undertaking project work/field work/ internship

Sr. No.	Content	Year
A.	Project work	2023-24
В.	Internship	2023-24
C.	Industrial visit	2023-24



(B. Pharmacy & D. Pharmacy) Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422003 (Maharashtra) India. 

 Image: 0253 - 2221121, 2221122, 2517003, 2510262
 Web : www.pharmacy.kkwagh.edu.in

 Image: principal-bpharmacy@kkwagh.edu.in, disp-bpharmacy@kkwagh.edu.in

 Accredited with NAAC "A" Grade

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## 1.3.3

## **A- PROJECT WORK**



(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

### **1.3 Curriculum Enrichment**

#### 1.3.3 Number of students undertaking project work/field work/ internships

### <mark>A – Project Work</mark>

Sr. No.	Particulars
a.	List of students completed project work
b.	Certificates of project work
c.	Sample project report



(B. Pharmacy & D. Pharmacy)
Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422003 (Maharashtra) India.
10253 - 2221121, 2221122, 2517003, 2510262 Web : www.pharmacy.kkwagh.edu.in
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## 1.3.3

## List of Students



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### Final Yr.B.Pham Subject : Project Work (BP 813PW)

### Project Tittle List 2023-24

Sr. No.	Name of Guide	PRN No.	Name of Students	Title of Research Project
1.	Dr. K. S.	2054503823005	Wagh Akash Ashok	
2.	Salunkhe	2054503823016	Patil Digambar Suresh	
3.		2054503823087	Kale Siddharth Avinash	
4.		2154503823506	Jadhav Prajwal Prakash	Herbal sunscreen from jakfruit
5.	Dr. D. D. Patil	2054503823018	Shaikh Farzeen Shakil	
6.		2054503823057	Derle Rohini Raosaheb	Extraction of anthocyanins and
7.		2054503823085	Sonawane Shweta Sunil	flavonoids using NDES
8.		2054503823093	Mahale Tanaya Santosh	Absent . Not reported to college this semester.
9.		2054503823102	Wani Vishakha Pramod	Extraction of anthocyanins and
10.		2154503823512	Patil Lokesh Ravindra	flavonoids using NDES
11.	Dr.A.P.Bedse	2054503823030	Chavan Krushna Uttam	
12.		2054503823106	Bagul Yogita Dhanraj	
13.		2054503823083	Zaware Shruti Nilesh	Formulation of Semisolid Dosage Form containing Alcoholic
14.		2054503823062	Ambre Rushikesh Shivaji	Extract of Polyscias Fruticosa
15.		2054503823068	Rayate Sakshi Pralhad	
16.		2054503823079	Kamankar Shraddha Nivrutti	
17.		2054503823096	Khandare Tejas Shrikrushna	Development and evaluation of
18.		2054503823058	Chaudhari Rohit Gangadhar	Nanoparticulate DDS



Amrutkar         2054503823032         Bapu         Triazolobenzodhazepine           20.         Amesar Mehul         Anagar Mehul         Distinguish their Hypothetical Binding Mode using the X-ray diffraction structure Human Bromodomain containing Protein           21.         Golhar Saurabh         Golhar Saurabh         Distinguish their Hypothetical Binding Mode using the X-ray diffraction structure Human Bromodomain containing Protein           22.         South Sanjay         Baviskar Nilesh         Baviskar Nilesh           23.         Z054503823046         Indaily Parth Sanjay         In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents           26.         Z054503823002         Kahe Akanksha         In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents           27.         Dr. V.G.Bhamare         2054503823002         Kahe Akanksha         Formulation Development and Evaluation of Statin Loaded Emulsomes           30.         2054503823041         Dadaji         Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug           33.         Dr. A. R.Surana         Noard Snachi         Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug           34.         Dr. A. R.Surana         Chavan Shweta         Dister Surana           35.         Dr. A. R.Surana         Chavan Shweta	19.	Dr. R. D.		Chavan Lokesh	In-silico studies of
20.     Amesar Mehul     Analogues to Distinguish their Hypothetical Binding Mode using the X-ray diffraction structure Human Bromodomain containing Protein 205450382307 Eknath     Binding Mode using the X-ray diffraction structure Human Bromodomain containing Protein 2       21.     Distriguish their Hypothetical Binding Mode using the X-ray diffraction structure Human 2     Baviskar Nilesh 205450382304     Baviskar Nilesh 205450382304     Insilico Computational Drug desin of Pyrimidine derivatives as antiviral agents       22.     205450382302     Jadhav Mitesh 205450382303     In silico Computational Drug desin of Pyrimidine derivatives as antiviral agents       23.     Dr.V.G.Bhamare     205450382302     Kathe Aditi Vijay 205450382302     In silico Computational Drug desin of Pyrimidine derivatives as antiviral agents       30.     Dr.V.G.Bhamare     205450382302     Kathe Aknsha 205450382302     Formulation Development and Evaluation of Statin Loaded Enulsomes       30.     Dr.V.G.Bhamare     205450382302     Datataray       31.     Chavan Nikhil     205450382302     Datataray       32.     Chavan Nikhil     Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug       33.     Dr.A.R.Surana     Chavan Shweta 205450382308     Formulation and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug       34.     Dr.A.R.Surana 35.     Chavan Shweta 2154503823501     Formulation and Evaluation of Pomegranate Blue tea       35.<		Amrutkar	2054503823032	Bapu	Triazolobenzodiazepine
21.         2054303823038 Vigay         Diministry function in Pyromoder and the product of the prod	20.		2024202020	Amesar Mehul	Analogues to
21.     2054503823077     Eknath     Baviskar Nilesh     Bromodomain containing Protein 2       22.     Baviskar Nilesh     2054503823043     Sanjay     Baviskar Nilesh     BRD2) for Diverse Biological Activity       23.     2054503823044     Arun     Vaghmode Nilesh     In silico Computational Drug desin of Pyrimidine derivatives as antiviral agents       24.     2054503823029     Avadhur     In silico Computational Drug desin of Pyrimidine derivatives as antiviral agents       26.     Chaudhari     In silico Computational Drug desin of Pyrimidine derivatives as antiviral agents       27.     Dr.V.G.Bhamare     2054503823003     Patti Aditi Pradip       28.     2054503823003     Patti Aditi Pradip       29.     2054503823003     Patti Aditi Pradip       205     2054503823004     Jiendra       30.     205450382302     Dataray       31.     205450382302     Dataray       205     205450382304     Datagin       205450382304     Datagin     Evaluation of Statin Loaded Emulsomes       33.     205450382304     Datagin       205450382304     Datagin     Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti-Hypertensive Drug       33.     205450382301     Khute Gayatri       34.     215450382301     Chavan Shveta Sitaram       35.			2054503823038	Vıjay	Binding Mode using the X-ray
22.         205450382307/Eknath         Bromodomain containing Protein 2         Bromodomain containing Protein 2           23.         3         Baviskar Nilesh 2054503823043         Baviskar Nilesh 2054503823044         Activity           24.         2054503823046         Indaij Parth Sanjay         In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents           26.         2054503823020         Chaudhari 2154503823020         In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents           27.         Dr.V.G.Bhamare         2054503823002         Kathe Adati Vijay           28.         2054503823002         Kathe Akanksha 2054503823002         Formulation Development and Evaluation of Statin Loaded           30.         2054503823019         Zope Gauri Ashok         Evaluation of Statin Loaded           31.         205450382302         Datatray         Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug           33.         2054503823080         Dinvanshwar         Pormulation and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug           34.         2054503823080         Sintara         Formulation and Evaluation of Ethosome Formulation and Evaluation of Ethosome Formulation and Evaluation of Ethosome Formulation and Evaluation of 2154503823080           35.         Dr.A.R.Surana         Chaudhari Madhuri	21.		0054500000077	Golhar Saurabh	diffraction structure Human
22.     Baviskar Nilesh Baviskar Nilesh 2054503823043     20       23.     2054503823043     Sanjay       24.     2054503823044     Arun       25.     Jadhav Mitesh 2054503823039     Jadhav Mitesh Jadhav Mitesh 2054503823039     In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents       26.     2054503823002     Kale Aditi Vijay       27.     Dr.V.G.Bhamare     2054503823002       2054503823004     Jitendra       2054503823004     Jitendra       2054503823004     Jitendra       2054503823019     Zope Gauri Ashok       30.     2054503823020       31.     2054503823021       2054503823022     Datagia       2054503823024     Santoshok       33.     2054503823020       34.     205450382304       35.     Dr.A.R.Surana     Thorat Pranjal       2054503823050     Vinod       35.     Dr.A.R.Surana     Thorat Pranjal       2054503823050     Vinod       36.     2154503823050       37.     Santosha       40.     2154503823051       41.     2154503823051       42.     Mas.D.K.Kadam       43.     Ms.D.K.Kadam       44.     2054503823017			2054503823077	Eknath	Bromodomain containing Protein
23.         2054503823043         Sanjay         Activity           24.         2054503823044         Arun         Activity           25.         2054503823044         Indaij Parth Sanjay         Activity           26.         2054503823039         Avadhut         desin of Pyrimidine derivatives as antiviral agents           27.         Dr. V. G. Bhamar         2054503823002         Kahe Aditi Vijay         Formulation Development and Evaluation of Statin Loaded Emulsion of Statin Loaded Emulsion of Statin Loaded Emulsions           20.         2054503823019         Zope Gauri Ashok         Evaluation of Statin Loaded Emulsions           30.         205450382302         Dadaji         Development and Evaluation of Statin Loaded Emulsions           31.         2054503823021         Dadaji         Development and Evaluation of Statin Loaded Emulsion for Topical Delivery of Anti-           33.         2054503823041         Dadaji         Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti-           34.         054503823050         Vinod         Stataray         Pormulation and Evaluation of Poinci Peringial           35.         Dr.A.R.Surana         2054503823050         Vinod         Portar Pranjal           36.         2154503823050         Vinod         Portar Pranjal         Portaranate Blue tea	22.				2
23.     20530525043 (Saliply Vaghmode Nilesh 2054503823044 Arun     Waghmode Nilesh 2054503823044 Arun       24.     2054503823044 Arun     In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents       26.     Chaudhari 2154503823002 Kathe Aditi Vijay     In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents       27.     Dr.V.G.Bhamare 2054503823002 Kathe Aditi Vijay     Pormulation Development and Evaluation of Statin Loaded Emulsomes       29.     2054503823002 Kathe Aditi Vijay     Pormulation Development and Evaluation of Statin Loaded Emulsomes       30.     2054503823019 Zope Gauri Ashok     Pormulation Development and Evaluation of Statin Loaded Emulsomes       31.     Dr.A.R.Surana     Lohakare Nilam 2054503823042 Santosh     Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug       33.     Dr.A.R.Surana     Thorat Pranjal 205450382308 Sanchilal     Pormulation and Evaluation of Pomegranate Blue tea       34.     215450382308 (Sanchilal     Pormulation and Evaluation of Pomegranate Blue tea       35.     Dr.A.R.Surana     Khute Gayatri 215450382308 (Sanchilal     Pormulation and Evaluation of Pomegranate Blue tea       37.     Khute Gayatri 215450382301 (Kantilal     Pormulation and Evaluation of Pomegranate Blue tea       38.     2154503823518 (Todkar Suraj Kishor     Pormulation and Evaluation of Pomegranate Blue tea       38.     2154503823517 (Bhausaheb     Pharmacogn			2054502822042	Baviskar Nilesh	(BRD2) for Diverse Biological
23.       2054503823044 Arun         24.       2054503823039 Avadhut         25.       Jadhav Mitesh         26.       Chaudhari         27.       Dr.V.G.Bhamare       2054503823002 Kathe Aditi Vijay         28.       2054503823002 Kathe Aditi Vijay         29.       2054503823002 Kathe Aditi Vijay         29.       2054503823004 Jitendra         30.       2054503823004 Jitendra         30.       2054503823004 Jitendra         2054503823019 Zope Gauri Ashok         31.       Mahajan Harshal         2054503823041 Dadaji       Development and Evaluation of Statin Loaded         2054503823041 Dadaji       Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti-         33.       2054503823084 Dnyaneshwar       Development and Evaluation of Portopical Delivery of Anti-         34.       2054503823084 Dnyaneshwar       Development and Evaluation of Portopical Delivery of Anti-         35.       Dr.A.R.Surana       Chavan Shweta       Portoral Pranjal         37.       2154503823050 Vinod       Formulation and Evaluation of Portopical Delivery of Anti-         38.       2154503823050 Kindtal       Portoral Pranjal         39.       Chavan Shweta       Portopical Delivery of Anti-         39.       Chavan S			2054505825045	Sanjay	Activity
24.       2054503823046       Indaij Parth Sanjay         25.       Jadhav Mitesh       In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents         26.       Chaudhari       antiviral agents         27.       Dr.V.G.Bhamare       2054503823002       Kate Aditi Vijay         28.       2054503823002       Kate Akanksha       Formulation Development and Evaluation of Statin Loaded Emulsomes         30.       2054503823019       Zope Gauri Ashok       Formulation of Statin Loaded Emulsomes         30.       2054503823022       Datatray       Development and Evaluation of Statin Loaded Emulsomes         30.       2054503823042       Lohavan Nikhil       Development and Evaluation of Statin Loaded Emulsomes         31.       2054503823042       Santosh       Development and Evaluation of Statin Loaded Emulsomes         33.       Chavan Nikhil       Development and Evaluation of Statin Loaded Emulsomes       Development and Evaluation of Statin Loaded Emulsomes         33.       Chavan Shweta       Shelar Shruti       Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti-Hypertensive Drug         34.       Chavan Shweta       2054503823050       Vinod         35.       Dr.A.R.Surana       Chavan Shweta       Shelar Shruti       Hypertensive Drug         36.       21	23.		2054503823044	A run	
23.     2034303523040     Indaily Parth Saliply       25.     Jadhav Mitesh     In silico Computataional Drug desin of Pyrimidine derivatives as antiviral agents       26.     Chaudhari     antiviral agents       27.     Dr.V.G.Bhamare     2054503823002     Kathe Aditi Vijay       28.     2054503823002     Patil Aditi Pradip       29.     2054503823002     Patil Aditi Pradip       20.     2054503823003     Patil Aditi Pradip       20.     2054503823004     Jitendra       30.     2054503823019     Zope Gauri Ashok       31.     2054503823042     Datataray       2054503823041     Dadaji     Development and Evaluation of Statin Loaded       33.     Chavan Nikhil     Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti-       34.     2054503823040     Shelar Shruti       35.     Dr.A.R.Surana     Thorat Pranjal       36.     2054503823080     Sitaram       37.     2154503823503     Uttam       38.     2154503823503     Formulation and Evaluation of Pomegranate Blue tea       2154503823503     Uttam     Pomegranate Blue tea       39.     Chaudhari Madhuri     2154503823501       39.     Chaudhari Madhuri     2154503823501       41.     2054503823501     Bagul Ko	24		2054502822046	Indaii Danth Canian	
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26.       Chaudhari 2154503823502       antiviral agents         27.       Dr.V.G.Bhamare 28.       2054503823002       Kathe Aditi Vijay 2054503823003       Formulation Development and Evaluation of Statin Loaded Emulsomes         29.       Kale Akanksha 2054503823019       Zope Gauri Ashok       Formulation Development and Evaluation of Statin Loaded Emulsomes         30.       2054503823022       Datatray       Development and Evaluation of Evaluation of Statin Loaded Emulsomes         31.       2054503823022       Datatray       Development and Evaluation of Ethosome Formulation for Topical Delivery of Anti- Hypertensive Drug         33.       0.       Shelar Shruti 2054503823084       Dayaneshwar         34.       Shelar Shruti 2054503823085       Shelar Shruti 2054503823086       Promulation and Evaluation of Topical Delivery of Anti- Hypertensive Drug         35.       Dr.A.R.Surana       Chavan Shweta 2054503823086       Formulation and Evaluation of Pomegranate Blue tea         37.       Chaudhari Madhuri 2154503823508       Chaudhari Madhuri 2154503823508       Formulation and Evaluation of Pomegranate Blue tea         38.       Chaudhari Madhuri 2154503823518       Tokar Suraj Kishor       Formulation and Evaluation of Pomegranate Blue tea         40.       Those Againy       Pharmacognostic and Phytochemical investigation of Leonotis nepetifolia Linn.         41.       More Gayatri 2154503823517 </td <td>25.</td> <td></td> <td>2054503823039</td> <td>Avadhut</td> <td>In silico Computataional Drug desin of Pyrimidine derivatives as</td>	25.		2054503823039	Avadhut	In silico Computataional Drug desin of Pyrimidine derivatives as
27. Dr.V.G.Bhamare2054503823002Kathe Aditi Vijay28.2054503823003Patil Aditi Pradip ViendraFormulation Development and Evaluation of Statin Loaded Emulsomes30.31.2054503823019Zope Gauri AshokFormulation of Statin Loaded Emulsomes31.2054503823019Zope Gauri AshokDevelopment and Evaluation of Statin Loaded Emulsomes32.Chavan Nikhil 2054503823022DatatarayDevelopment and Evaluation of Topical Delivery of Anti- Hypertensive Drug33.Dr.A.R.SuranaThorat Pranjal 2054503823064Development and Evaluation of Pomegranate Blue tea36.Dr.A.R.SuranaThorat Pranjal 2054503823084Formulation and Evaluation of Pomegranate Blue tea37.Chavan Shweta 2154503823508Formulation and Evaluation of Pomegranate Blue tea38.Chavan Shweta 2154503823501Formulation and Evaluation of Pomegranate Blue tea39.Chavan Shweta 2154503823501Bagul Komal 215450382350140.2154503823501Rotkar Suraj Kishor41.More Gayatri 2154503823501Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.43.Ms.D.K.Kadam 2054503823017Borade Apurva BhanudasIn silico ADMET profiling and docking analysis of 3-nitro-4- Chromanone	26.		2154503823502	Chaudhari Dnyaneshwar B.	antiviral agents
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31.       Mahajan Harshal         32.       Chavan Nikhil         33.       Chavan Nikhil         33.       Dottatray         33.       Chavan Nikhil         33.       Dottatray         34.       Dottatray         2054503823041       Dadaji         2054503823042       Santosh         34.       Dottatray         35.       Dr.A.R.Surana       Thorat Pranjal         2054503823084       Dnyaneshwar         36.       Chavan Shweta         2054503823085       Vinod         36.       Chavan Shweta         2054503823086       Sanchilal         77.       Chavan Shweta         2054503823086       Sanchilal         78.       Chavan Shweta         39.       Chaudhari Madhuri         2154503823503       Uttam         40.       2154503823503         2154503823501       Kantilal         41.       2154503823511         2154503823511       Sanjay         Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.         42.       2154503823517         43.       Ms.D.K.Kadam       Borade Apurva         44. <td>30.</td> <td></td> <td>2054503823019</td> <td>Zope Gauri Ashok</td> <td>Linuisonies</td>	30.		2054503823019	Zope Gauri Ashok	Linuisonies
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30.Chavan Shweta 2054503823086Sanchilal37.2054503823086Sanchilal37.2154503823508Sitaram38.2154503823518Todkar Suraj Kishor39.Chaudhari Madhuri 2154503823503Uttam40.Bagul Komal 2154503823501Kantilal41.More Gayatri 2154503823511Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.42.Thube Harshali 2154503823517Borade Apurva Bhausaheb43.Ms.D.K.KadamBorade Apurva 2054503823010In silico ADMET profiling and docking analysis of 3-nitro-4- Chromanone	26		2034303823030	Chavan Shwata	
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39.Chaudhari Madhuri 215450382350340.215450382350340.Bagul Komal 215450382350141.215450382350141.More Gayatri Sanjay42.Thube Harshali 215450382351743.Ms.D.K.Kadam44.205450382301044.Dorade Apurva 205450382301744.Chaudhari Madhuri 2054503823017	38.		2154503823518	Todkar Surai Kishor	Fomegranate Blue tea
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41.More Gayatri SanjayPharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.42.Thube Harshali 2154503823517Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.43.Ms.D.K.KadamBorade Apurva 2054503823010In silico ADMET profiling and docking analysis of 3-nitro-4- Chromanone44.2054503823017Patil Divya Dilip			2154503823501	Kantilal	
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42.Thube Harshali 2154503823517Leonotis nepetifolia Linn.43.Ms.D.K.KadamBorade Apurva 2054503823010In silico ADMET profiling and docking analysis of 3-nitro-4- Chromanone44.2054503823017Patil Divya DilipChromanone			2154503823511	Sanjay	phytochemical investigation of
43.Ms.D.K.KadamBorade Apurva 2054503823010In silico ADMET profiling and docking analysis of 3-nitro-4- Chromanone44.2054503823017Patil Divya DilipChromanone	42.			Thube Harshali	Leonotis nepetifolia Linn.
43.Ms.D.K.KadamBorade ApurvaIn silico ADMET profiling and docking analysis of 3-nitro-4-44.2054503823017Patil Divya DilipChromanone			2154503823517	Bhausaheb	
44. 2054503823017 Patil Divya Dilip Chromanone	43.	Ms.D.K.Kadam	2054503823010	Borade Apurva Bhanudas	In silico ADMET profiling and docking analysis of 3-nitro-4-
	44.		2054503823017	Patil Divya Dilip	Chromanone

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45.			Zambare Gauri	
		2054503823020	Ulhas	
46.		2054503823037	Gaikwad Mayuri Kailas	
47.			Binnar Mahesh	
		2054503823035	Samadhan	
48.			Bhalerao Lokesh	
		2054503823037	Ajay	In Silico ADMET Profiling and
49.		2054503823059	Mahajan Roshani Milind	docking analysis of antimalarial activity of sulfonamide-attached
50.		2154503823504	Chavan Shweta	coumarin- [1,2,3]-triazoles.
51	Mr M G Shinda	2134303823304	Chavan Akshav	
51.		2054503823006	Sanjay	
52.		2054503823064	Sakshi Singh	Antiflammatory cream
53.		2054503812097	Gatkal Tejas Sanjay	Tritinaliniatory cream
54.		2054503823048	Pawar Pramod Bhausaheb	
55.		2054503823034	Katware Madhavi Milind	
56.		2054503823024	Patil Janhavi Rajendra	Synthesis of commercial derivatives
57.		2054503823008	Ahire Anjali Madhukar	Synthesis of countainin derivatives
58.		2054503823072	Jadhav Samruddhi Sanjay	
59.	Mrs. K.P. Mahajan	2054503823021	Thakare Harshad Vinayak	
60.		2054503823025	Deore Janhvi Ramrao	
61.		2054503823027	More Kajal Dilip	
62.		2054503823031	Nahire Kunal Sunil	
63.		2054503823040	Bhandarwar Nandini Prakash	
64.			Khurdal Saloni	
		2054503823069	Mangesh	
65.		2054503823070	Deore Saloni Keval	Antidiabetic transderaml patch
66.		2054503823026	Giri Jayendra Nitinkumar	
67.		2054503823036	Shirke Mayur Ratnakar	Formulation & Evaluation of Avaleha for Arthritis
68.		2054503823066	Koshti Sakshi Pankaj	Formulation & Evaluation of
69.		2054503823095	Hadpe Tanmay Abhiman	mosquito repellent cream
70.	Dr. S. B. Aher	2054503823054	Chavan Raj Sanjay	



71.		0154500000505	Harge Pratiksha	
70		2154503823505	Dattatray	Formulation and evaluation of
12.		2154503823514	Pawar Sarika Ramsing	Ag-NP cream for wound healing
73.			Salunkhe Priyanka	activity
		2154503823515	Ganesh	
74.	Dr.S.S.Malode		Jadhav Darshan	
		2054503823013	Ratan	
75.		2054503823015	Avhad Dhiraj Ajay	
76.		2154503823507	Jangid Pooja Nityanand	Formulation and Evaluation of Orodispersible Tablets of Ginger
77.		2154503827510	More Avinash Raju	Containing Herbal Excipients
78.	Mrs.S.S.Raut	2054503823092	Chavan Swanandi Vijay	
79.		2054503823063	Patil Sahil Pankaj	
80.		2054503823065	Jamdade Sakshi Pramod	Formulation Development and
81.		2054503823091	Parate Surbhi Manohar	Evaluation of nanoponges for antifungal drug
82.				Formulation Development and
		2054503823023	Khute Ishwari Shambhu	evaluation of Nanoparticle for antifungal drugs
83.			Sonawane Rasika	5 5
		2054503823055	Somnath	
84.		2054503823078	Kotkar Shraddha Gangaram	
85.		2054503823074	Ajmire Sanskruti Satish	
86.		2154503823509	Kshirsagar Anushri Arvind	
87.			Suryawanshi Siddhi	Haavy matala by Flama
		2054503823088	Dhanraj	photometery
88.		2054503823089	Ghatol Sneha Prakash	
89.		2154503823516	Patil Swaraj Bharat	
90.	Mrs. D. V. Jain	2054503823098	Deore Unnati Dnyaneshwar	
91.			Varpe Vrushali	IIV-Visible spectrophotometric
		2054503823103	Dattatray	method : Triamcinolone
92.		2054503823105	Kothawade Yashashree J.	Acetonide
93.		2054503823073	Bhamare Sanskruti Vasant	
94.	Mrs. S.B.Jadhav	2054503823053	Patil Pratham Ravindra	
95.			Gharate Rupali	Formulation and Evaluation of
		2154503823061	Dnyaneshwar	Herbal Hair Oil



96.		2054503823060	Marathe Ruchita Sunil	
97.		2054503823099	Wankhede Vaibhav Rajesh	
98.		2054503823100	Naik Vaibhav Sanjay	
99.		2054503823101	Ingle Vaibhav Ramesh	formulation of semisolid dosage form containing Anti Inflammatory Drug
100		2054503823104	Gurav Yash Hemant	
101	Ms.S.S.Patil.	2054503823029	Korde Kaveri Kiran	
102		2054503823052	Jadhav Prashant Dadaji	
103		2054503823067	Gaikwad Sakshi Bapusaheb	Formulation and evaluation of
104		2054503823080	Gawali Shraddha Ashokrao	polyherbal dye
105		2054503823076	Malve Satyam Vinayak	Formulation and evaluation of
106		2054503823075	Pawar Sarthak Bharat	herbal tooth powder
107		2054503823007	Sonawane Aniket Dilip	
108		2054503823009	Sonawane Ankita Rajendra	
109		2054503823011	Patil Ashwini Ambalal	
110		2054503823014	Patil Dhiraj Ankush	
111		2054503823047	Patel Pragati Dilip	
112		2054503823071	Kajale Samarth Shailendra	
113	Mrs. M.D. Dower	2054503823090	Kadam Srushti Mangesh	
114	wiis. wi.K.FawaF	2054503823012	Asmita Rajesh Wayade	Methanolic extract : Tamarindus
115		2054503823049	Pranav Deepak Bhadane	indica : antiulcer activity





(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

## 1.3.3

## CERTIFICATES

Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn

### **Project Report Submitted to**

Dr.BabasahebAmbedkarTechnologicalUniversity Vidyavihar,Lonere–Raigad 402103(Maharashtra)



BY

Miss. Komal Kantilal Bagul (2154503823501) Miss. Madhuri Uttam Chaudhari (2154503823503) Miss. Harshali Bhausaheb Thube (2154503823517) Miss. Gayatri Sanjay More (2154503823511)

(B.PharmacySemesterVIII)

Under the guidanceof DR. A.R. SURANA (HOD OF PHARMACOGNOSY)

K.K.WaghCollegeof Pharmacy, Nashik







## CERTIFICATE

This is to certify that the work presented in this Project Work Report entitled, Pharmacognostic and phytochemical investigation of Leonotis nepetifolia Linn.

#### BY

Miss. Komal Kantilal Bagul (2154503823501) Miss. Madhuri Uttam Chaudhari (2154503823503) Miss. Harshali Bhausaheb Thube (2154503823517) Miss. Gayatri Sanjay More (2154503823511)

(B.Pharm.Semester-VIII)

is in the partial fulfilment of activity carried out for the degree of Bachelor of Pharmacy at the K.K.Wagh College of Pharmacy,Amrutdham,Nashik affiliated to the Dr. Babasaheb Ambedkar Technological University Lonere – Raigad 402103 (Maharashtra) and as the syllabus requirement by the Pharmacy Council of India, New Delhi, has been carried out under my guidance and supervision and is now ready for the examination.

Guide DR.A.R. SURANA (HOD OF PHARMACOGNOS) K.K.WAGH COLLEGE OF PHARMAC	Y) CY,NASHIK	Principal DR. K.S.SALUNKE DEPARMENT OF PHARMACEUTICAL	
Date: /07/2024 Place: Nashik	a de la	K.K.WAGH COLLEGE OF PHARMACY, NASHIK	
	WAGH	SHIK-3 RMA	

## Formulation and Evaluation of Pomegranate Blue tea Project Report Submitted to

Dr. Babasaheb Ambedkar Technological University Vidhyavihar, Lonere-Raigad 402103 (Maharashtra)



By

Ms. Pranjal Vinod Thorat (PRN:2054503823050) Ms. Gayatri Sitaram Khute (PRN:2154503823508) Mr. Suraj Kishor Todkar (PRN:2154503823518) Ms. Shweta Sanchilal Chavan (PRN:2054503823086) (Final Year B. Pharm. Sem VIII)

Under the guidance of

Dr. Ajaykumar R. Surana

Professor

**Co-Guide** 

**Dr.Poonam Patil** 

(Associate Professor)

Department of Pharmacognosy

K. K. Wagh College of Pharmacy, Nashik







### CERTIFICATE

This is to certify that the work presented in this Practice School Report entitled,

Formulation and Evaluation of Pomegranate Blue tea By Ms. Pranjal Vinod Thorat (PRN:2054503823050) Ms. Gayatri Sitaram Khute (PRN:2154503823508) Mr. Suraj Kishor Todkar (PRN:2154503823518) Ms. Shweta Sanchilal Chavan (PRN:2054503823086) (Final Year B. Pharm. Sem VII)

Is in the partial fulfilment of activity carried out for the degree of Bachelor of Pharmacy at the K. K Wagh College of Pharmacy, Amrutdham, Nashik affiliated to the Dr. Babasaheb Ambedkar Technological University Lonere Raigad 402103 (Maharashtra) and as the syllabus requirement by the Pharmacy Council of India, New Delhi, has been carried out under my guidance and supervision and is now ready for the examination.



Mr. Ajaykumar R. Suran Professor Department of Pharmacognosy

CIPAL ₹IN

Dr. K. S. Salunkhe

K. K. Wagh College of Pharmacy,

Nashik

Date: 04/07/14 Place: Nashik

### FORMULATION AND EVALUATION OF AVALEHA PREPARATION

Project Report Submitted to, Dr. Babasaheb Ambedkar Technological University Vidyavihar, Lonere, Raigad-402103 (Maharashtra)



Submitted by, Mr. Mayur Ratnakar Shirke (2054503823036) Mr. Jayendra Nitinkumar Giri (2054503823026) (Final Year B.Pharmacy, Sem:VIII)

Under the guidance of Ms. S. D. Malode Assistant Professor (Pharmacognosy) K.K. Wagh College of Pharmacy, Nashik









### CERTIFICATE

#### This is to certify that the work presented in this Project Report entitled, "FORMULATION AND EVALUATION OF AVALEHA PREPARATION"

By

Mr. Mayur Ratnakar Shirke (2054503823036)

Mr. Jayendra Nitinkumar Giri (2054503823026)

(B. Pharm. Sem.VIII)

Is in the partial fulfillment of activity carried out for the degree of Bachelor of Pharmacy at the K. K. Wagh College of Pharmacy, Amrutdham, Nashik affiliated to the Dr. Babasaheb Ambedkar Technological University Lonere – Raigad 402103 (Maharashtra) and as the syllabus requirement by the Pharmacy Council of India, New Delhi, has been carried out under my guidance and supervision and is now ready for the examination.

malode

Ms. S. D. Malode Project Guide (Pharmacognosy)



Dr. K.S. Salunkhe

Dr. K.S. Salunkhe Principal and Professor (Pharmaceutical Chemistry)

Date: 04 1071 2024 Place: Nashik



Examiner. External

## FORMULATION AND EVALUATION OF POLYHERBAL EMULGEL

Project Report Submitted to Dr. Babasaheb Ambedkar Technological University Vidhyavihar, Lonere - Raigad 402103 (Maharashtra)



### Submitted By,

Ms. Sakshi Pankaj Koshti Mr. Tanmay Abhiman Hadpe (2054503823066) (2054503823095)

(Final Year B. Pharmacy, Sem: VIII)

Under the guidance of Ms. S. D. Malode Assistant Professor (Department of Pharmacognosy)



### K. K. WAGH COLLEGE OF PHARMACY, NASHIK

[2023-2024]





## CERTIFICATE

This is to certify that the work presented in this Project Report entitled,

### FORMULATION AND EVALUATION OF POLYHERBAL EMULGEL

By,

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melode GUIDE:

**PRINCIPAL:** 

Dr. K. S. Salunkhe

K. K. Wagh College of Pharmacy, Nashik.

Ms. S. D. Malode Assistant Professor Department of Pharmacognosy K. K. Wagh College of Pharmacy, Nashik.

Date: 04 07 2024

Place: Nashik

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(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

## 1.3.3

## **Sample Report**

## Formulation and Evaluation of Pomegranate Blue tea Project Report Submitted to

Dr. Babasaheb Ambedkar Technological University Vidhyavihar, Lonere-Raigad 402103 (Maharashtra)



#### By

Ms. Pranjal Vinod Thorat (PRN:2054503823050) Ms. Gayatri Sitaram Khute (PRN:2154503823508) Mr. Suraj Kishor Todkar (PRN:2154503823518) Ms. Shweta Sanchilal Chavan (PRN:2054503823086) (Final Year B. Pharm. Sem VIII)

Under the guidance of

Dr. Ajaykumar R. Surana

Professor

**Co-Guide** 

#### **Dr.Poonam Patil**

(Associate Professor)

**Department of Pharmacognosy** 

K. K. Wagh College of Pharmacy, Nashik



VASHIK-





### CERTIFICATE

This is to certify that the work presented in this Practice School Report entitled,

Formulation and Evaluation of Pomegranate Blue tea By Ms. Pranjal Vinod Thorat (PRN:2054503823050)

Ms. Gayatri Sitaram Khute (PRN:2154503823508) Mr. Suraj Kishor Todkar (PRN:2154503823518) Ms. Shweta Sanchilal Chavan (PRN:2054503823086) (Final Year B. Pharm. Sem VII)

Is in the partial fulfilment of activity carried out for the degree of Bachelor of Pharmacy at the K. K Wagh College of Pharmacy, Amrutdham, Nashik affiliated to the Dr. Babasaheb Ambedkar Technological University Lonere Raigad 402103 (Maharashtra) and as the syllabus requirement by the Pharmacy Council of India, New Delhi, has been carried out under my guidance and supervision and is now ready for the examination.



Mr. Ajaykumar R. Suran Professor Department of Pharmacognosy

RINCIPAL

Salunkhe Dr.

K. K. Wagh College of Pharmacy,

Nashik

Date: 04/07/34 Place: Nashik

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Place: Nashik Date: 04/07/34



Ms. Pranjal Vinod Thorat
 Ms. Gayatri Sitaram Khute
 Mr. Suraj Kishor Todkar /
 Ms. Shweta Sanchilal Chavan

(Final Year B. Pharmacy, Sem: VII)



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## List of Abbreviations

Abbreviations	Definitions
BHA	Butylated hydroxytoluene
TBHQ	TBHQ Tertiary-butyl hydroquinone
VSMC	vascular smooth muscle cells
ROS	Reactive oxygen species
РКС	protein kinase C pathway
DPPH	2, 2-diphenyl-1-picryl-hydrazyl
DNSA	Dinitrosalicylic acid (DNSA) method.



### **1.INTRODUCTION**

Since antioxidants have so many advantages, including anti-aging and antiinflammatory properties, they have emerged as molecules of scientific interest. It is still in use in a lot of places today. Antioxidants are added to a variety of meals in food technology to improve the food and solve issues. As a result, research into the antioxidant properties of whole foods and their constituent parts is likewise moving forward quickly. In the encapsulation experiments, antioxidants have also been substituted for stabilising and preserving food ingredients. Naturally, food preservation is just as vital as food production. Edible films and coatings are the newest methods of food preservation packaging.

Antioxidants can be added to edible films and coatings to enhance their protective properties. In contrast to this, research on plants and animals has looked into how metabolic processes affect antioxidant activity in vivo. Antioxidant enzymes have a significant function in these investigations. Numerous findings about the prevention of illnesses have been discovered through studies on antioxidants conducted in vitro or in vivo. As a result, the use of antioxidants in pharmacology, cosmetics, and medicine has expanded their significance. Through the integration of antioxidant scientific research with technology applications, we aimed to present a contemporary view of antioxidants' widespread use. We have done this specifically for the food and health area in an effort to further personalise the issue, and we have attempted to highlight the significance of antioxidants in this way [1].

### Antioxidants:

Antioxidants are groups of compounds that neutralize free radicals and reactive oxygen species (ROS) in the cell, Antioxidant activity in food and beverages has become one of the most interesting features in the science community. These antioxidants provide protection against damage caused by free radicals played important roles in the development of many chronic disease including cardiovascular diseases, aging, heart disease, anaemia, cancer, inflammation [2].

Compounds	Usage in foods	Impact on health
Phenolic compounds, pectin	Citrus peels is used in a wide range of food industrial process as gelling agent, including the manufacturing	This compound help prevents cancer, cardiovascular, coronary heart disease, oxidative damage

### Table 1: Antioxidant and there uses [3]

parted by these parts, stag play partstarted to each distance (b) the part	of jam, jellies and as thickener, texturizer, emulsifier and stabilizer in dairy products. Citrus lemon is used in the development of functional foods	gastrointestinal diseases and diabetes
Carotenoids	Carotenoids are the phytonutrients that impart a distinctive yellow, orange, and red colour to various fruits and vegetables	It has a potent antioxidant capacity and offers an array of health benefits such as lowering the risk of heart diseases and certain types of cancers.
Flavone compounds	The biological activity of green tea also promotes a protective effect by antioxidant mechanisms in biological and food systems, preventing the oxidative damage by acting over either precursors or reactive species	he bioactivity exerted by these compounds has been associated with reduced risk of severe illnesses such as cancer, cardiovascular and neurodegenerative diseases

Table 2: Classification of antioxidants based on their origin [4]

protection of filmers	Natural	Synthetic
Primary enzymes	Glutathione peroxidase	BHA (Butylated hydroxytoluene), BHT (Butylated hydroxyanisole),
Secondary enzymes –	Glutathione reductase	Trolox, TBHQ (Tertiary-butyl hydroquinone
Others –	Lactoferin,ceruplasmin	

Antioxidants and diabetes: The auto-oxidation of glucose to produce free radicals is facilitated by hyperglycemia. Both macro- and microvascular dysfunction are brought on by the production of free radicals that exceeds the body's natural antioxidant defences' capacity to scavenge for them. Antioxidants that are effective in lowering diabetes problems include  $\alpha$ -lipoic acid, vitamin C, and N-acetylcysteine [5]. This suggests that dietary supplementation or intake of natural antioxidants may be advantageous. Antioxidants are, however, proving to be crucial tools in the study of diabetic pathologies linked to oxidative stress, and although replacement style therapy has clear potential benefits, the safety and effectiveness of antioxidant supplementation in any future treatment remains to be determined [6].

Diabetes is a chronic metabolic disease whose incidence is rising quickly. This pandemic can be prevented and treated with innovative approaches, which emphasises the value of ongoing research. Type 2 diabetes (T2DM) is believed to be primarily

caused by obesity and physical inactivity, but new research indicates that oxidative stress may also play a role in the disease's pathophysiology by enhancing insulin resistance or compromising insulin production [7].

Although the management of diabetes has predominantly centred on the regulation of blood sugar levels, the increasing prevalence of this condition is primarily linked to its vascular consequences. This is demonstrated by a 4-fold rise in peripheral vascular disease incidence, a 10-fold increase in coronary artery disease incidence, and a 3- to 4-fold increase in mortality, with vascular disease accounting for up to 75% of deaths in diabetics [7].

The pathogenesis of diabetes and cardiovascular disease may involve oxidative stress. As a result, there has been extensive research on the possibility that antioxidants may help lower the risk of several illnesses, including cardiovascular disease, although the findings are still unclear. Understanding the physiological status of antioxidant concentrations in individuals at high risk of developing diabetes and cardiovascular disease, such as those with the metabolic syndrome, is important if antioxidants have a protective function in the pathophysiology of these disorders [7].

#### **Diabetes and the Endothelium**

Endothelial cells act as an interface between circulating blood and vascular smooth muscle cells (VSMC) by lining the interior lumen of the vasculature. Not only do these dynamic structures play a pivotal role in the angiogenesis process, but they can also actively control baseline vascular tone and vascular reactivity in both healthy and pathological settings [8].

The endothelium regulates equilibrium the between vasodilatation and vasoconstriction; a disturbance in this balance results in endothelial dysfunction and damages the arterial wall. Factors produced from endothelial cells are also important mediators of the development and inflammation of VSMCs. Diabetic micro- and macro vascular disease may develop as a result of endothelial dysfunction, which is the loss of function or control of endothelium function in a baseline condition or following activation. Diabetes-related metabolic abnormalities, such as hyperlipidaemia, hyperinsulinemia, and hyperglycaemia, work as "triggers" that ultimately lead to endothelial dysfunction by influencing several "mediator" molecules. Numerous lines of evidence indicate that endothelial dysfunction is significantly influenced by "oxidative stress." which is brought on by these metabolic alterations NASHIK



Figure 1: Endothelium dysfunction

Diabetes-related macro and microvascular problems can lead to a variety of consequences; these deficiencies are a major factor in the tissue-damaging effects of persistent hyperglycemia. Endothelial cells are more susceptible to the harmful consequences of hyperglycemia because they, along with renal mesangial and Schwann cells, are not as good at limiting glucose transfer as other cells are. Reactive oxygen species (ROS) are produced in diabetes from both non-mitochondrial and mitochondrial sources. ROS speed up four key biochemical pathways that lead to oxidative tissue damage brought on by hyperglycaemia. These four routes are increased flux in the hexosamine pathway, increased flux in the polyol pathway, increased flux in the advanced glycation end-product (AGE), and increased flux in the protein kinase C (PKC) pathway [10,11].

**Natural use of antioxidants:** Nowadays, World Health Organization assessed that about 80% of the world's populations still use the old-style medicines for their remediation. There has been an increase in the consumption of herbal medicinal products world-wide. Today, almost one-third of the top-marketing pharmaceuticals are natural products or their derivatives. The increasing request for herbal remedial products crosswise the world has led to the big scale making of these products. Natural products are existing in several dosage forms such as powders, solutions, capsules, tablets, ointments, creams and recently formulated in nanoparticulate forms [12].

### 2.LITERATURE REVIEW:

Diabetes mellitus is also associated with an increased risk for developing premature atherosclerosis due to independent risk factors such as hypertriglyceridemia and hypertension. Phytochemicals isolated from plant sources are used for the prevention and treatment of cancer, heart disease, diabetes mellitus and high blood pressure. Plants are reputed in the indigenous systems of medicine for the treatment of various diseases. The available literature shows that there are more than 800 plant species showing hypoglycemic activity and *Clitoria ternatea* is one of them [13,14].

*Clitoria ternatea* commonly known as Butterfly pea belonging to the family Fabaceae and subfamily Papilionaceae is a perennial leguminous twiner. *Clitoria ternatea* is commonly also called Clitoria, blue-pea. The mostly frequently reported species is *Clitoria ternatea*. The plant originated from tropical Asia and later was distributed widely in South and Central America, East and West Indies, China and India, where it has become naturalized [15]. *Clitoria ternatea* was found to contain tannins, phlobatannin, carbohydrates, saponins, triterpenoids, phenols, flavonoids , flavonol glycosides, proteins, alkaloids, antharaquinone , anthocyanins, cardiac glycosides, steroids, and volatile oils, according to the results of a preliminary phytochemical screening. Antioxidant, hypolipidemic, anticancer, anti-inflammatory, analgesic, antipyretic, antidiabetic, central nervous system, antimicrobial, gastro-intestinal antiparasitic, insecticidal, and many more pharmacological actions were demonstrated by the plant. The chemical components and pharmacological effects of *Clitoria ternatea* will be highlighted in this review [16].

The pomegranate (*Punica granatum L*.) is a shrub that belongs to the Lythraceae family. It is between 5 and 10 m tall and is characterized by deciduous fruiting leaves. The pomegranate is used to prevent cancer, cardiovascular disease, diabetes, dental conditions, and erectile dysfunction, as well as against ultra violet radiation. Pomegranate peel (PoP), which accounts for around 30%–40% of the fruit component, is a byproduct of the fruit juice manufacturing industry. PoP is a rich source of polyphenols including phenolic acids, tannins, and flavonoids, especially anthocyanin. These peels offer several functional and nutraceutical qualities owing to their bioactive ingredients, including lowering blood pressure, reducing oxidative stress, lowering cholesterol levels, and restoring heart health [17]. The study of the proximate composition revealed that the seed powder samples had a higher protein and fat coment

than the peel powder samples. When compared to samples of pomegranate seed powder, pomegranate peel powder had a pH that was substantially higher (P<0.05). The water holding capacity (WHC) of the pomegranate peel and seed powder samples differed significantly (P<0.05). The values of oil holding capacity (OHC) showed statistical similarities (P>0.05). Pomegranate peel powder samples had considerably greater (P<0.05) emulsifying capacity (EC) and emulsion stability (ES) values than pomegranate seed powder samples [18].

Stevia rebaudiana, approximately 300 times sweeter than saccharose, diterpene glycosides are low-calorie sweeteners produced by the ancient perennial shrub Bertoni in South America. In addition to their medicinal qualities, stevia extracts are rich in steviol glycosides, which are molecules that sweeten food and are believed to have antifungal, antibacterial, and antioxidant effects [19]. The quality of stevia leaves varies greatly depending on a variety of environmental elements, such as sunlight, soil conditions, irrigation techniques, farming practices, air purity, sanitation, processing, and storage. The leaf leaves the tongue feeling pleasantly sweet and refreshing for hours. The substance has sweet ingredients that are encircled by bitter ingredients in its veins [20].

#### **Reported activities-**

#### 1.Clitoria ternatea

#### Antidiabetic activity

Chu et al. report that C. ternatea flower water extract inhibits the alpha-amylase enzyme's activity in vitro. The pancreatic amylase enzyme's activity was decreased by ternatea flower extract at 1% and 2% (w/v) when starch from potatoes, cassava, rice, com, wheat, and glutinous rice flour was utilized as a substrate. According to a study, administering an ethanolic extract of C. ternatea to individuals with experimentally induced diabetes resulted in a significant reduction in serum sugar levels by blocking the activities of galactosidase and glucosidase.

According to Rajamanickam et al., non-polar bioactive components of the C. ternatea flower contributed to the hypoglycemic activity of the chloroform extract, which was more effective than the ethyl acetate and methanol extracts. The mechanism of increased insulin secretion demonstrated this. According to a study, the most effective diuretic activity was found in the methanol leaf extract of C. ternatea, with a

maximum dose of 450 mg/kg. Aqueous extract and chloroform extract were followed in a dose-dependent manner.

### Anti-microbial activity

Mahmad et al. report that while the aqueous extract lacked any antimicrobial activity, the ethanol extract stopped the growth of a number of bacteria and fungi. A study revealed that, with inhibition zones of 11 and 10 mm, respectively, anthocyanin in the ethanolic extracts from the blue flowers of C. ternatea exhibited the best antibacterial activity against *Bacillus subtilis* both in vivo and in vitro. When tested in vitro against Trichoderma sp., ethanolic callus extract exhibited broad antifungal activity (ZOI: 12 mm), while ethanolic extract demonstrated antifungal activity (ZOI: 10 mm) against *Fusarium sp.* 

### **Antimicrobial Properties**

- ✓ Chen et al. examined the pomegranate peel's antibacterial efficacy (in vitro) against the plant pathogen *Ralstonia solanacearum*. Different concentrations of pomegranate peel polyphenols (0, 5, 10, and 15 mg/mL) were introduced to bacterial cells. Punicalagin, ellagic acid, epicatechin, gallic acid, and chlorogenic acid were all found in the pomegranate peel, according to HPLC research. The bacterial cultures that had polyphenols added to them displayed a more gradual growth curve in comparison to the control.
- ✓ Bassiri-Jahromi et al. used Wistar rats to examine the antifungal activity of PPE against oral candidiasis and contrast it with nystatin (in vivo). The treatment included the administration of nystatin (10000 U/kg/day BW) and PPE (125, 250, and 500 mg/kg/day BW) at varying doses. This suggests that PPE contains bioactive substances with antifungal properties against *Candida albicans*.

#### **Wound Healing Potential**

Karim et al. investigated the effects of Saudi PPE on full-thickness skin wounds created experimentally in diabetic rats, with a focus on histology, biochemistry, and clinical outcomes (in vivo). Rats given PPE from Saudi Arabia exhibited a discernible rise in VEGF expression and EGF content. The treated group's fibroblast formation rate, epithelialization, and granulation were significantly higher, according to histological findings. Pomegranate peel contains secondary metabolites including phenolic acids and flavonoids that actively aid in the healing of wounds.

#### **Anti-inflammatory Properties**

Du et al. Pomegranate peel polyphenols (PPE) have been shown to have strong antiinflammatory properties. They have been shown to reduce proinflammatory cytokines, modify MAPK signaling, inhibit COX-2 and iNOS production, and evaluate the antiinflammatory effects of PPE at different concentrations (1, 10, and 100  $\mu$ g/mL) in RAW264.7 macrophages (in vitro). They have also been shown to investigate the relationship between specific components, such as punicalagin (1, 10, and 50  $\mu$ M) and ellagic acid (1, 10, and 50  $\mu$ M), and systemic inflammation (in vitro).

### 2.Punica granatum

- ✓ In Unani and Ayurvedic medicine, P. granatum flowers were already given for the treatment of diabetes, according to the review article published in 2008 by Li et al. Some writers looked at the protective effects of pomegranate flower extracts on the enzymatic and non-enzymatic antioxidant status, pancreatic lipid peroxidation, and serum lipid profile in streptozotocin-induced diabetic rats (Bagri et al., 2009b).
- ✓ The authors proposed that pomegranate could be used as a dietary supplement in the treatment and prevention of chronic diseases characterized by atherogenic lipoprotein profile, aggravated antioxidant status, and impaired glucose metabolism. This was demonstrated by the administration of aqueous pomegranate flower extracts, which reversed these parameters (Bagri et al., 2009b).

### 3.Stevia rebaudiana

- ✓ Cacciola et al., 2011The sweet stevia glycosides that have been analyzed using liquid chromatography in conjunction with UV, MS, and ELS detection share a common aglycone backbone known as steviol.
- ✓ Ghanta et al., 2007 One of the stevia glycosides, stevioside, is almost 300 times sweeter than saccharose and may be especially helpful for people with diabetes mellitus, heart disease, obesity, and dental cavities.
- Chatsudthipong & Muanprasat, 2009 According to several studies, stevioside and related compounds like rebaudioside A, steviol, and isosteviol may have medicinal benefits in addition to their sweet taste. These compounds have been shown to have anti-hyperglycemic, anti-hypertensive, anti-inflammatory, anti-tumor, antidiarrheal, diuretic, and immunomodulatory properties.
- ✓ Goyal et al., 2010 Due to its better functional and sensory qualities over many other high-potency sweeteners, stevia leaves are predicted to play a significant role in the future growth of the natural food sector.

## **3.PLANT PROFILE:**

### 3.1.Clitoria ternatea

Synonym- Butterfly pea, Aparajita, Shankhpushpi

Biological source- It is fresh and dried flowers of Clitoria ternatea belonging to Family Fabaceae



Figure 2 Clitoria ternatea

Scientific classification Kingdom: Plantae Class: Magnoliopsida Subclass: Rosidae **Order:** Fables Family: Fabaceae Genus: Clitoria Species: ternatea Part used: Flower petals 3.2. Punica granatum Synonym-Pomegranate Biological source- Pomegranate peel is obtained from process of Punica granatum L. belonging to family Lythraceae



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# Formulation and Evaluation of Pomegranate Blue Tea

Scientific classification
Kingdom: Plantae
Class: Magnoliopsida
Subclass: Rosidae
Order: Myrtales
Family: Lythraceae
Genus: Punica
Species: granatum
Part used: Peel
3.3. Stevia rebaudiana
Synonym: Candyleaf, Sweetleaf, Sugarleaf
Biological source: It is fresh leaves of Stevia rebaudiana belonging to Family
Asteraceae



Figure 4. Stevia rebaudiana

Scientific classification
 Kingdom: Plantae
 Class: Magnoliopsida
 Subclass: Asteridae
 Order: Asterales
 Family: Asteraceae
 Genus: Stevia
 Species: rebaudiana
 Part Used: Leaf powder


# 3.4. Cinnamomum zeylanicum

Synonym:Cinnamon

**Biological source**-It is dried inner bark of coppiced shoots of *Cinnamomum zeylanicum* belonging to family Lauraceae



Figure 5. Cinnamomum zeylanicum

Scientific classification
Kingdom: Plantae
Class: Magnoliopsida
Order: Laurales
Family: Lauraceae
Genus: Cinnamomum
Species: zeylanicum
Part used: Bark powder



4.AIM: The aim of the present study was to formulate and evaluate blue tea con

# **OBJECTIVES:**

- To formulate Herbal blue tea.
- To evaluate pomegranate blue tea.
- To perform antioxidant and antidiabetic activity of Herbal blue tea.

# **5.RATIONALE:**

The rationale for conducting research on the formulation and evaluation of pomegranate Blue tea acting as Antidiabetic and Antioxidant is multifaceted:

- People Preference and Compliance.
- Therapeutic potential of Herbal ingredients.
- Market Demand and Commercial Viability.



## 6.PLAN OF WORK:

The research work was carried out in the following systematic scheme

- Literature review/survey
- Material and method
- Collection and identification of plant material
- Authentication of plant material
- Formulation of blue tea
- Evaluation of Blue Tea
  - 1. Physical evaluation:
    - Determination of moisture content / LOD at 105º C
    - Determination of pH
    - Determination of bulk density
    - Determination of extractive value
    - Determination of Ash value
  - 2. Phytochemical Evaluation
    - Qualitative evaluation: By Chemical test
    - Determination of Total phenolic content
  - 3. Pharmacological Evaluation
    - Antioxidant activity by DPPH Scavenging assay
    - Antidiabetic assay by Amylase Inhibitory Assay



### 7. MATERIAL AND METHOD:

### 7.1 Collection and identification of plant material:

The Herbal ingredient required for formulation of pomegranate blue tea were collected locally from Nashik, identified by Dr. A. R. Surana HOD of Pharmacognosy department of K.K. Wagh college of Pharmacy, Nashik. And authenticated by Dr. Bhaskarwar A.G. HOD of Dravyaguna department from A.S.S Ayurved Mahavidyalaya.It was dried naturally (sunlight).

### 7.2 Authentication of Plant material

आयुर्वेद सेवा रांघ संग d Seva Sangh Sanchalit AYURVED MAHAVIDYALAYA, NASH आयुर्वेद महाविद्यालय, नाशिक (Govt. of Maharashtra Aided) (110 **(111**) दी, नागिक 100FFYeshwadi, Panchavati, Neshik-422 003 P62978, 7878634 ax No.: (0253) 2517170 E + PO : N - 74 76 760 Website : www.avurvedcollege.ir E-mail - asscollegensk@gmail.com Outward No. 702 :2115/2024 TO. Mr. Suraj Todkar Miss. Shweta Chavan Miss. Gaiytri Khute Miss.Pranjal Thorat Final year students K.K.Wagh college of Pharmacy Amrutdham , Panchavati , Nashik Sub: - Authentication of the given plant material for research work

Ref: - Your letter no. KKWCOP/513/1/2024 Dated 13/05/2024 As per your request for authentication of material, The Dept of Dravyaguna A.S.S. Ayurved Mahavidyalaya, Nashik has examined, indentified and authenticated the given plant material /specimen is flower of Clitoria ternatea.

> Dr. Bhaskarwar A G MD (Avu) HOD Professorunyon Manarayataya Name Dept of Dravyaguna Ayurved Mahavidyalaya Nashik (M) 9371557762 <u>E-mail-archanadisha@gmail.com</u>

### Figure 6.Authentication certificate

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### 7.3 Formulation of blue tea:

- Ingredients
  - Dry flower of Clitoria ternatea

- Pomegranate peel powder
- Stevia
- Preparation of blue tea:
- Collect all the crude drugs and converted into dry powder form by using mortar and pestle
- Weighing all the drugs into the beaker by sufficient quantity.
- Take another beaker with sufficient amount of water and boil gently up to the 100°C.
- Then transfer the powder mixture into boiling water and mix vigorously & allow to mix the solution.
- Filter the solution and transfer to the container.

In this study, some recipes were carried tested with different combinations of ingredients, but after initial screening some of the formulations were not considered satisfactory either in terms of colour, appearance, or taste. Hence the formulations considered with the best characteristics were produced for the following evaluation and their formulations are present in the Table

#### Table 3. Formulation of Pomegranate blue tea

Ingredients	Formulation 1	Formulation 2	Formulation 3
Clitoria ternatea	1.1 gm	1.1 gm	l gm
Pomegrante peel	0.2 gm	0.3 gm	0.4 gm
Stevia	0.1 gm	0.1gm	0.1 gm
Cinamom	0.1 gm	-	-



Figure 7. Ingredients of Pomegranate Blue tea

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# **8.EXPERIMENTAL WORK**

# 8.1 Macroscopic evaluation [21]:

Organoleptic evaluation refers to evaluation of the plant material by colour, odour, taste, Appearance, solubility. The organoleptic character of the sample were determine based on textual method.

### **8.2 Physical Evaluation**

### • Determination of Loss on drying [22,23]:

5 gm of sample was taken in the oven at 105°C, then cooled. The loss of weight is recorded as percentage loss on drying and calculated by the given formula.

### % Loss on drying = <u>Original sample weight - Dry sample after drying</u> × 100 Original sample weight

#### • Determination of pH [24]:

About 1gm of sample was taken in 25ml beaker. To this 5ml of freshly boiled and cooled water (at 27°C) was added. Stir well, pH of solution was determined by using pH meter.

#### • Determination of Bulk Density [25]:

About 10 gm. of sample was weighed and placed it in dried graduated measuring cylinder and volume as V1 ml. Cylinder containing sample was placed in bulk density apparatus and operated for 50 tapping. The volume occupied by the powder was recorded as V2 ml and calculated by given formula.

### Bulk density = <u>Weight of dry powder (gm)</u> Volume of dry powder (cm<sup>3</sup>)

### Determination of extractive value [26]:

Weigh accurately about 2.4 g of coarsely powdered drug into a 250 ml conical flask with stopper. Add 100 ml of chloroform water. Shake the flask frequently during first 6 hr. Keep it aside without disturbing for 18 hr. and then filter. Pipette out 25 ml of the filtrate and evaporate to dryness in a weighed shallow flat-bottomed dish on a water bath. Then dry the residue at 105°C to a constant weight.

Calculate the percentage of water-soluble extractive.

% of Water soluble Extractive = Weight of residue/Weight of the drug x 100.

### Determination of Ash value [27]:

Total ash content :

Weigh accurately about 2 gm of the powdered drug in silica crucible. Incinerate the powdered drug by increasing the heat gradually until the sample was free from carbon and cool it keep it in a desiccator. Weigh the ash and calculate the percentage of total ash in contrast to the air dried sample.

Acid-insoluble ash:

Boil the total ash obtained as the above procedure for 5 minutes and mix 25 ml of dilute hydrochloric acid. Filter and collect the insoluble matter on a ashless filter paper, after that wash the filter paper with hot water, ignite in tared crucible, cool and keep in desiccator. Weigh the obtained residue and calculate acid-insoluble ash of the crude drug (blue tea) with reference to the air dried drug.

Water soluble ash:

Boil the total ash obtained as the above procedure for 5 minutes and mix 25 ml of distilled water. Filter and collect the insoluble matter on an ashless filter paper, after that wash the filter paper with hot water, ignite in tared crucible, cool and keep in desiccator. Weigh the obtained residue and calculate acid-insoluble ash of the crude drug (blue tea) with reference to the air dried drug.



Figure 8.Ash value

### 8.3 Phytochemical Evaluation [28]:

### Qualitative evaluation :By Chemical test

- Detection of Alkaloid
- Dragendroff's test:

Sample was dissolved in dilute hydrochloric acid and treated with dragendroff's reagent (potassium bismuth iodide solution). Presence of alkaloids is indicated by formation of red precipitate.

Mayer's test:

Sample was dissolved in dilute hydrochloric acid and treated with Mayer's reagent (potassium mercuric iodide solution). Presence of alkaloids is indicated by formation of yellow cream precipitate.

- Detection of Flavonoids
- Lead acetate test:

Sample was treated with lead acetate solution. Presence of flavonoids is shown by formation of a yellow-coloured precipitate.

Alkaline reagent test:

Sample was treated with sodium hydroxide solution. The presence of flavonoids is shown by development of a bright yellow colour that fades to colourlessness when dilute acid is added.

### Detection of Carbohydrates

• Fehling's test:

Sample was dissolved in 5ml of distilled water and dissolved sample was hydrolysed with dilute HCL and neutralised with alkali finally heated with

Fehling's A and B solution. Development of red precipitate indicates the presence of carbohydrates.

#### Molisch test

Sample was dissolved in 5ml of distilled water in test tube. Dissolved sample was treated with few drops of alcoholic a-naphthol solution and 2ml of concentrated sulphuric acid was added deliberately along the sides of the test tube. The presence of carbohydrates is indicated by development of a violet ring at the junction.

#### Detection of Tannins

Formulation is treated 1% Ferric chloride solution which gives Bluish black or green colour



Figure 9. Qualitative evaluation by Chemical test

### • Estimation of Total Phenol Content:

Phenols are the aromatic compounds with hydroxyl groups are widespread in plant kingdom. They occur in all parts of the plants. Phenols are said to offer resistances to disease and pest in plants. Grains containing high amount of polyphones are resistant to bird attack. Phenols include an array of compounds like tannins and flavonoids etc. Total soluble phenolics in the extract can be determined with Folin-Ciocalteau reagent according to the method of Slinkard and Singleton.

Principle: Phenols react with phosphomolybdic acid in Folin-Ciocalteau reagent in alkaline medium and produce blue colour complex (molybdenum blue).

Reagents: 80% ethanol, Folin-Ciocalteau reagent, Na2CO3 (20%), Standard (100mg Gallic acid in 100ml of distilled water)

**Procedure**: Total soluble phenolics in the crude soy lecithin were determined with Folin Ciocalteau reagent according to the method of Slinkard and Singleton (Slinkard, et al., 1977) using Gallic acid as a standard phenol compound. The crude soy lecithin (10mg/10mL) was dissolved in water, from that it was diluted to get 100µg/ml concentration. 0.1mL from above solution was transfers in 10ml volumetric flask 1mL of Folin-Ciocalteau reagent was added and the content of the flask mixed thoroughly. 3 min later 3mL of 20% sodium carbonate was added and volume was made up with distilled water, the mixture was allowed to stand for 2 hours with intermittent shaking. The absorbance of blue colour that developed was read at 760 nm. The concentration of total phenols was expressed as %w/w of dry crude soy lecithin.

The concentration of total phenol compound in the crude soy lecithin was determined as mg of Gallic acid equivalent using an equation obtained from the standard Gallic acid graph. (Singleton, et al., 1965)

Standard Curve (Gallic acid): Gallic acid (10mg) was dissolved in 10mL of distilled water; pipette out to get 50, 100, 150, 250 and 500  $\mu$ l/ml concentration. 1mL of Folin-Ciocalteau reagent was added and the content of the flask mixed thoroughly. 3 min later 3mL of 20% sodium carbonate was added and volume was made up with distilled water, the mixture was allowed to stand for 2 hours with intermittent shaking. The absorbance of blue colour that developed was read at 760 nm.



Figure 10. Total Phenolic Content

#### **8.4 Phamacological Evaluation:**

#### Antioxidant test

### In-vitro Evaluation of Free Radical Scavenging Activity (Antioxidant)

The effective antioxidants from natural sources are the only alternatives to synthetic antioxidants in counteracting the free radicals mediated diseases. The present investigation was carried out to evaluate the Herbal tea for its antioxidant activity in various in vitro models. It was observed that free radicals were scavenged by the test compounds. DPPH Free Radical Scavenging Activity Free Radicals: Electrons in an atom occupy spaces known as orbital. Each orbital can hold maximum of two electrons spinning in opposite directions, as is the case with most biological molecules, which can be termed as non-radicals. On the contrary a free radical contains one or more unpaired electrons in their orbital. Radicals can react with other molecules in several ways. Thus, when two radicals meet, they can combine their unpaired electrons (denoted by o) and join to form a covalent bond.  $Ao+A^o+A^o-A$ 

A radical may donate one unpaired electron or may accept one from another molecule, or may simply combine with a non-radical molecule. In each such case the non-radical is transformed to a radical to set up a chain reaction. Free radicals are highly reactive oxygen species; superoxide (O2-), hydroxyl (OH.), proxy (ROO.), peroxinitrite (. ONOO-) and nitric oxide (NO.) radicals; produced through the oxidative process within the mammalian body, biologically important materials (e.g., lipids, foods and oils) and industrially important products (e.g., rubber and lubricant). The free radical activity is terminated only when two free radicals meet. The free radical scavenging activity of extracts was evaluated based on the ability to scavenge the synthetic DPPH (2, 2-diphenyl-1-picryl-hydrazyl). DPPH is a stable free radical at room temperature

which acts as an acceptor of electrons or hydrogen radicals to become a stable diamagnetic molecule. The antioxidant activity or the capacity to scavenge the "stable" free radical DPPH was determined using the DPPH free-radical scavenging method was determined by the method described by Lai. This assay provides useful information on the reactivity of the compounds with stable free radicals, because of the odd number of electrons. DPPH shows a strong absorption band at 517 nm in visible spectrum (deep violet colour). As the electron became paired in the presence of free radical scavenging, the absorption vanishes and the resulting discoloration stoichiometrically coincides with respect to the number of electrons taken up. The bleaching of DPPH absorption is representative of the capacity of the test drugs to scavenge free radical independently.

#### Procedure

DPPH radical scavenging activity of Aq. Extract of Herbal tea was determined in terms of hydrogen donating or radical scavenging ability using the stable radical DPPH according to the method of Blois. Briefly, 3 ml of Herbal tea extract was added to 1 ml of DPPH (2, 2-diphenyl-1-picrylhydrazyl) solution (0.2 ml in methanol) as the free radical source. The mixture was shaken and kept for 30 min at room temperature. The decrease of solution absorbance due to proton donating activity of components of each extract was determined at 517nm. Lower absorbance of the reaction mixture indicated free radical scavenging activity. The DPPH radical scavenging activity was calculated using the following formula.

Radical Scavenging (%) = (Absorbance of Control – Absorbance of Sample) X 100Absorbance of Control



#### Principle

One of the major ways of controlling diabetes is by inhibiting a carbohydratehydrolyzing enzyme such as  $\alpha$ -amylase, which reduces the amount of glucose available for absorption into the body from the small intestine.  $\alpha$ -amylase cleaves  $\alpha$ -1,4 glycosidic bonds to convert complex dietary carbohydrates like starch into oligosaccharides and disaccharides, which are further broken down into absorbable monosaccharides such as glucose and fructose by glucosidases.

Reagents: Stock solution, Distilled water, Amylase solution, Starch solution, DNSA Solution

Preparation steps of 3,5-dinitrosalicylic acid solution 100(ml):

- i Dissolve 30(g) of Potassium sodium tartrate tetrahydrate in 20(mL) distilled water. Add the salt to water gradually.
- ii Prepare 2(N) sodium hydroxide solution 20 (mL). Dissolve smoothly sodium hydroxide in water using a glass rod and stirring the mixture of granules in water.
- iii Dissolve 1(g) of 3,5-dinitrosalicylic acid in 50 (mL) of distilled water while the solution is mixed by magnetic stirrer with hot plate at 90-95°C.
- iv Add gradually the solution of potassium sodium tartrate tetrahydrate (prepared solution in Step 1) to 3,5- dinitrosalicylic acid solution (prepared solution the Step 3) while the solution is mixed by magnetic stirrer with hot plate at 90-95°C.
- Add slowly 2(N) sodium hydroxide solution (the solution prepared in step 2) to the solution prepared in step 4 while the solution is mixed by magnetic stirrer with hot plate at 90-95°C.
- vi After the components are completely dissolved, filter the final solution by filter paper.

vii Transfer the solution in dark glass bottles and storage at ambient temperature.

#### Procedure-

- 1. Prepare extract solution as 100, 200, 300,400,500µg/ml.
- 2. Add 1 ml sodium phosphate buffer and 1 ml CaCl<sub>2</sub> and 1ml amylase solution in each test tube.
- 3. Add 1ml 10% starch solution in each test tube.
- 4. Mix above solution vigoursly and allow to stand it for 15 min.

- 5. Add 0.75 ml DNSA solution in each test tube.
- 6. Heat the solution on boiling water bath
- 7. Measure the absorbance of above solution at 540nm by UV visible spectroscopy.
- 8. Follow the same procedure for blank solution except addition of extract solution

% Amylase inhibition = 100 ×AbScontrol -AbSsample ÷ AbScontrol



Figure 12. Antidiabetic test



# **11. RESULT AND DISCUSSION:**

# Macroscopic evaluation:

	haracteristics	
Sr. no.	Parameters	Observation
1.	Colour	Vivid blue
2.	Odour	Aromatic
3.	Taste	Aromatic
4.	Appearance	Acceptable
5.	Solubility	soluble in water

#### > Physical evaluation:

### Table 5. Physical evaluation

Sr. no.	Parameters	Observation
1.	Loss on drying	6.54%
2.	pH (1%W/W)	7.68
3.	Bulk untapped density(g/cm <sup>3</sup> )	0.41
4.	Tapped density(g/cm <sup>3</sup> )	0.57
5.	Total Ash value	11%
6	Acid insoluble	4%
7.	Water soluble	7%
8.	Extractive value	91.66%

### > Phytochemical Evaluation:

### Table 6.Chemical test

Table of enemiest i	
Test	Result
Dragendroff's test	(+)
Mayer's test	(+)
Lead acetate test	(+)
Alkaline reagent test	(+)
Fehling's test	(+)
Molisch's test	(+)
Tannins test	(-)
	Test         Dragendroff's test         Mayer's test         Lead acetate test         Alkaline reagent test         Fehling's test         Molisch's test         Tannins test

### Table 7. Estimation of Total Phenol Content:

Concentration(µg/ml)	Absorbance	
10	0.4884	
20	0.6039	
30	1.0231	
40	1./536	

# Formulation and Evaluation of Pomegranate Blue Tea

50	1.3487
Extract 100	0.4671
Regression Equation	y=0.0227x+0.2425 $R^{2}=0.9632$
% of Gallic acid equivalent in Extract	9.89%



## Figure 13. Graph of Total Phenolic Content

### Pharmacological evaluation :

Table 8. In-vuro Evaluation of Free	% inhibition
tandard concentration (µg/m)	51.99/
25	31.878
50	54.54%
75	61.36%
13	62.27%
100	69 54%
200	0,0089
Regression Equation	y = 0.0988x + 31.01 $R^2 = 0.9135$
10	10.22
1050	NEGE

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Formulation and Evaluation of Pomegranate Blue Tea



Figure 14. Antioxidant activity by DPPH Scavenging assay

a. 1. 1		activity activity		
Standard concentration	Absorbance	% Inhibition		
100	2.56	6 569343		
200	2.33	14.9635		
300	2.11	22.9927		
400	1.8	34.30657		
500	1.54	43.79562		
Blank1	2.74			
Regression Equation	y = 0.0938x	x - 3.6131		
	$\mathbf{R}^2 = 0.$	9961		
IC <sub>50</sub>		14.787		

Table 9. Estimation of Amylase inhibitory activ	vitu
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# Conclusion :

The herbal tea as formulated and evaluated using various natural herbs and by using the process of decoction. The natural herbs used in the preparation of herbal tea shows the promising effect as an antioxidant and reach in phenol and flavonoid content. The herbal tea evaluated for its taste, appearance, fragrance and colour. Promising feedback was obtained from volunteers by the feedback analysis. Thus from the present work it can be concluded that the prepared herbal tea can be a simple, alternative approach as a healthy drink and can replace the normal tea for the better human health.



# Formulation and Evaluation of Pomegranate Blue Tea

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### **K K WAGH COLLEGE OF PHARMACY**

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# 1.3.3

# **B - INTRENSHIP**



### **K K WAGH COLLEGE OF PHARMACY**

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# 1.3.3

# List of Student

### Internship 2023-2025

1.4.1	Sr.No	Name of Student	Name and Address of the firm	Dunat
18 18	1.	Pravin Karwar	Delta Finochem Pyt Ltd. Satour Nashik	Duration
	2.	Patil Mayuri Sudhir	Core Analyticals, Ozar, Nashik	July 2024-Aug2024
1	3.	Medhane Priyanka Ravindra	Maxheal Pharmaceuticals (I). Nashik	July 2024-Aug2024
100	4.	Patil Vaishnavi Shriram	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
	5.	Shivale Sakshi Rajendra	Vital Healthcare Pvt Ltd.,Nashik	July 2024-Aug2024
- Mail	6.	Kanchan Bandu Megha	Avesta Pharma Pvt Ltd, Palghar	July 2024-Aug2024
Ľ	7.	Vadje Priyanka Yuvraj	Precise chemipharma, Dindori, Nashik	July 2024-Aug2024
	8.	Khairnar Priyanka Sanjay	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
	9.	Chaudhari Ashwini Bhaskar	FDC Limited, Malegaon	July 2024-Aug2024
	10.	Sonar Harshali Shashikant	SciTech Specialities Pvt Ltd., Sinnar	July 2024-Aug2024
-	11.	Pawar Dinesh Bhausaheb	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
Y	12.	Mandlik Yuvraj Balasaheb	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
0	13.	Omkar Sandip Bhagwat	Shrinivasa Ayurvedic Pvt Ltd.Dindori,Nashik	July 2024-Aug2024
	14.	Malpure Pratiksha Ravindra	Glenmark Pharmaceuticals, Nashik	July 2024-Aug2024
1	15.	Tile Prasad Bhaskar	Holden Medical Laboratories, Nashik	July 2024-Aug2024
1	16.	Deore Manjusha Gokul	Precise chemipharma, Dindori, Nashik	July 2024-Aug2024
	17.	Pathade Aashutosh Bapu	Shrinivasa Ayurvedic Pvt Ltd.Dindori,Nashik	July 2024-Aug2024
E.F.	18.	Ugale Darshana Kiran	Maxheal Pharmaceuticals (I), Nashik	July 2024-Aug2024
1	19.	Gorane Yash Ramesh	Delta Finochem Pvt Ltd.,Satpur,Nashik	July 2024-Aug2024
	20.	Khapare Sejal Sanjay	Vital Healthcare Pvt Ltd.,Nashik	July 2024-Aug2024
1	21.	Gaikwad Akshada Balasaheb	Precise chemipharma, Dindori, Nashik	July 2024-Aug2024
1	22.	Patil Sujata Madhukar	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
2	23.	Chavan Rushikesh Hiraman	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug2024
2	4. 1	Jgale Kamodi Anil	Wockhardt Biotech Park,Sambhaji Nagar	July 2024-Aug2024
2	5. H	lardik Hemant Patil	Vital Healthcare Pvt Ltd., Nashik.	July 2024-Aug2024
2	6. 0	Sangurde Siddhi Kiran	Vital Healthcare Pvt Ltd., Nashik	July 2024 Aug2024
2	7. P	agare Suraj Prabhakar	Vital Healthcare Pvt Ltd. Nashik	July 2024-Aug2024
28	8. B	havar Privanka Shantaram	Vital Healthcare Pvt Ltd. Nashik	July 2024-Aug2024
29	). A	charva Sakshi Deepak	Vital Healthcare Pvt Ltd. Nashik	July 2024-Aug2024
30	). V	aishnavi Ashok Patil	Medispray Laboratories Pyt Ltd Satara	July 2024-Aug2024
31	. TI	upe Shradha Sanjay	Wockhardt Biotech Park,Sambhaji	July 2024-Aug2024 July 2024-Aug2024
32	. Ka	the Shraddha Vilas	Koral Pharma Satpur Nashik	July 2024-Aug2024
33	Gi	rase Sanivot Chhotusing	Koral Pharma Satour Nashik	July 2024-Aug2024
34	So	nawane Dipti Vilas	FDC Limited Malegaon	July 2024-Aug2024
35	Pa	war Prachi Sudam	Vital Healthcare Pyt I to Nashik	July 2024-Aug2024
26	D2	rade Sarthak Ramesh	Glenmark Pharmaceuticals Nashik	July 2024-Aug2024
27	00	ni Arnay Homant	Shriniyaga Ayunyadia Dut	July 2024-Aug2024
37.			Ltd.Dindori,Nashik	July 2024-Aug2024
38.	Da	Anacha Millind	Ltd.Dindori,Nashik	July 2024-Aug2024
39.	Вас	ie Anagna Milling	Holden Medicar Laboratories, Nashik	July 2024-Aug2024



	Rargal Caleht Dille	Sanaaata Dharma Malagaan	
41	Garia Om Douidae	Vital Healthears Dut Ltd. Nachik	July 2024-Aug2
41.	Deshaanda Dhamanitii		July 2024-Aug2
42.	Desnpande Bhargavi Krushanant	Holden Medical Laboratories, Nashik	July 2024-Aug2
43.	Malve Bhakti Sachin	Yugandhar Pharma, Dindori	July 2024-Aug2
44.	Patil Kapil Dipak	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug20
45.	Naik Saurabh Ajay	HCG Manavata Cancer Centre, Nashi	k July 2024-Aug20
46.	Anvay Satish More	Vital Healthcare Pvt Ltd., Nashik	July 2024-Aug20
47.	Landge Charushila Jibhau	Vital Healthcare Pyt Ltd. Nashik	July 2024-Aug20
48.	Darak Yashwant Navneet	Sun Pharmaceuticals Pvt Ltd.Ahmednagar	July 2024-Aug20
49.	Vaishnavi Tushar Mahajan	Hexagon Nutrition Dindori Nashik	July 2024 Aug20
50.	Nagpure Athary Mukund	Vital Healthcare Pvt I td. Nashik	July 2024-Aug20
51.	Pingale Sayali Vilas	Kaliberr Bioscience Dut	July 2024-Aug20
52	Kalan Kal	Ltd.,Dindori Nashik	July 2024
52.	Kadam Vaishnavi Shashikant	Kaliberr Bioscience Pyt	1.1.2024
53	More Chipmowi Dolog I	Ltd., Dindori, Nashik	July 2024
	More chinnayi kajendra	Glenmark Pharmaceuticals Pvt	July 2024 Aug 202
54.	Kothule Sakshi Kailas	Ltd, Nashik	July 2024-Aug202
55.	Gavali Saloni Shriniyas	Vital Healthcare Pvt Ltd.,Nashik	July 2024-Aug202
		Kaliberr Bioscience Pvt	July 2024-Aug202
56.	Chaudhari Aditya Chhotu	Kalibert Bioscience Dit	1011 2024 Aug202
57		Ltd., Dindori Nashik	July 2024-Aug202
57.	Holgir Sonali Dattu	Hexagon Nutrition Dindori Nashik	0-0-
58.	Yeole Sakshi Jagannath	Meher Medical Nashik	July 2024-Aug2024
59.	Ostwal Sakshi Ravindra	Koral Pharma Satour Nachile	July 2024-Aug2024
60.	Wagh Abhishek Vitthal	Saniiyani Hospital Shace	July 2024-Aug2024
61.	Kalokhe Mansi Dnyaneshwar	SciTech Specialities Distance	July 2024-Aug2024
62.	Khadangale Pratik Pramod	Kalibor Disasi	July 2024-Aug2024
<b>C</b> 2		Ltd. Dindori Nachik	July 2024
63.	Khare Shruti Deepak	Koral Pharma Satour Nachik	5017 2024
64.	Vyavahare Aditi Prashant	Glaxosmithkline Pharma And	July 2024-Aug2024
65.	Shirode Saket Vilas	Kaliberr Biosciones Dut	July 2024-Aug2024
66	Paradhi Daw I	Ltd., Dindori, Nashik	July 2024-Aug2024
00.	Faladhi Pandurangnath Ananda	Kaliberr Bioscience Pyt	7 =0= 1 Hug2024
67.	Chawhan Humayu Yousuf	Ltd., Dindori, Nashik	July 2024
<u></u>		Shrinivasa Ayurvedic Pvt	July 2024
68.	Ahire Prachi Vijay	Koral Pharma Sataus Museum	July 2024-Aug2024
69.	Ahirrao Harshal Sanjay	Shriniyasa Auroa U	July 2024-Aug2024
70	Anwat Phone in	Ltd. Dindori Nashik	July 2024 Aug2024
71	Anna Brastle Mil	Vital Healthcare Pyt Ltd Nashik	
72	Apre Pratik Vijay	Vital Healthcare Pvt Ltd. Nashik	July 2024-Aug2024
72	Rondola Vet	Vidhisha Analytical Nashik	July 2024-Aug2024
74	Chaulte Valshnavi Kisan	Vidhisha Analytical Nachik	July 2024-Aug2024
/4.	cnaudhari Gayatri Sudhir	Kaliberr Bioscience Dut	July 2024-Au-2024
75.	Chavan Vaishnavi Atmos	Ltd., Dindori, Nashik	July 2024
76	Gaikwad Sanika Paratu	Koral Pharma, Satpur, Nashik	
7	Garud Vikaa Samud	Audumbar Laboratories Put Ltd. ht	July 2024-Aug 202
1.	Chadasana C	Vital Healthcare Pyt I to Nech	July 2024 Aug2024
8. 	Griddasare Seema Subhash	Keral Pharma Salpur Nachin	July 2024 -
		an ingenik	2024-Aug2024
	1	121	July 202

\*

Kalyan Shivani Anil	Flamingo Pharmaceuticals Ltd,Naigaon,Nanded	July 2024-Aug2024
Kapate Samiksha Shivanand	Flamingo Pharmaceuticals Ltd.Naigaon,Nanded	July 2024-Aug2024
Kulkarni Aditya Nadkishor	Holden Medical Laboratories, Nashik	July 2024-Aug2024
Kulkarin Autya Raukisher	Avushree Pharmaceuticals, Bhiwandi	July 2024-Aug2024
Patil Vishal Harishchandra	Hudden Medical Laboratories Nashik	July 2024-Aug2024
Rahatal Omkar Kiran	Holden Medical Laboratoricoj testim	July 2024-Aug2024
84. Sonawane Pranita Sahebrao	Vatsal Ayurvedic Products Pvt	July 2024-Aug2024
	Ltd., Nashik	July 2024-Aug2024
85. Thorat Rohini Ashok	Vatsal Ayurvedic Products PV	July 2024
	Ltd.,Nashik	
Vidhate Akshada Dashrath	Kaliberr Bioscience Pvt Ltd., Dindori, Nashik	July 2024
	Kalyan Shivani AnilKapate Samiksha ShivanandKulkarni Aditya NadkishorPatil Vishal HarishchandraRahatal Omkar KiranSonawane Pranita SahebraoThorat Rohini AshokVidhate Akshada Dashrath	Kalyan Shivani AnilFlamingo Pharmaceuticals Ltd, Naigaon, NandedKapate Samiksha ShivanandFlamingo Pharmaceuticals Ltd, Naigaon, NandedKulkarni Aditya NadkishorHolden Medical Laboratories, NashikPatil Vishal HarishchandraAyushree Pharmaceuticals, BhiwandiRahatal Omkar KiranHolden Medical Laboratories, NashikSonawane Pranita SahebraoVatsal Ayurvedic Products Pvt Ltd., NashikThorat Rohini AshokVatsal Ayurvedic Products Pvt Ltd., NashikVidhate Akshada DashrathKaliberr Bioscience Pvt Ltd., Dindori, Nashik





### **K K WAGH COLLEGE OF PHARMACY**

(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

# 1.3.3

# CERTIFICATES



# **BLUE CROSS LABORATORIES PVT LTD.**

Nashik Plant : A-12, Ambad Industrial Area, Nashik - 422 010. Ph : 0253-6663700

Date: 21st Jul 2024

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr./Miss. Sarthak Ramesh Darade Student of K.K.Wagh College Education Society's, K.K.Wagh College of Pharmacy, Amrutdham, Panchavati, Nasik has successfully undergone and completed the Industrial Training in our organization.

We wish him/her all the success in his/her future endeavor.

for Blue Cross Laboratories Pvt. Ltd.,

Milind Jagtap Sr. Manager (P & A)

Place : Nasik

Date: 21.07.2024



Corporate & Registered Office : Peninsula Chambers, Peninsula Corporate Park, G. K. Marg, Lower Parel, Mumbai - 400 013 Ph : 6663 8000 Fax : 6663 8121 / 8122 www. bluecrosslabs.com CIN: U24230MH1980PTC022825



# SciTech Specialities Pvt. Ltd.

Office: 501 DLH Park, S.V. Road, Goregaon (West), Mumbai 400 062. India • Tel: +91 (22) 417 50000 E-mail: scitech@scitech.net.in • CIN: U85190MH2007PTC175484 Factory: A-3/12/13/44, STICE Musalgaon, Tal: Sinnar, Dist: Nashik 422112. Tel: +91 (2551) 240045 / 46 / 49 / 240244 Fax: +91 (2551) 240201 • E-mail: stsp@stsp.in

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Ankita Eknath Salunke K. K. Wagh College of Pharmacy, Nasik has undergone her Industrial training at our Company from 11 July 2024 to 09 Aug 2024.

During her training period we found her to be extremely hardworking, studious, honest and took keen interest in all activities of the Department.

We wish her the very best for her future endeavours.

With best wishes,

Chaitanya Borawake Sr. Manager HR & Admin

Date : 09 Aug 2024 Place: Sinnar







Date: 20/08/2024

### CERTIFICATE

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Pratiksha R Malpure** student of K.K Wagh College of Pharmacy, has successfully completed her Internship training as a part of her B. Pharmacy curriculum at Glenmark Pharmaceuticals Ltd, Nashik. She completed her Industrial training from 20 July to 20 August

We wish her all the best in her future endeavour.

For Glenmark Pharmaceuticals Ltd.

**Authorized Signatory** 



Glenmark Pharmaceuticals Ltd.

Plot No. E - 37, 39, D-Road, M.I.D.C., Satpur, Nashik - 422 007, Maharashtra State, India. T : 91 253 6613999, 6613748 F : 91 253 2352707 W : www.glenmarkpharma.com

Registered Office : B/2, Mahalaxmi Chambers, 22, Bhulabhai Desai Road, Mumbai 400 026 CIN - L24299MH1977PLC019982 Email Id : complianceofficer@glenmarkpharma.com



Date- 01.08.2024

Letter No-KBPL/IR/TR-003-24

#### To Whom It May Concern

This is to certify that Pratik Pramod Khadangle- KKWCOP/692/8/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Pratik Pramod Khadangle tenure with us, they were involved in **Production Department**. They demonstrated all the Production Instruments & GMP Documentation throughout their internship.

We found Pratik Pramod Khadangle to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Pratik Pramod Khadangle the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



Registered Office:

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India



Your Choice For Better Health

## Holden Medical Laboratories Pvt. Ltd.

A 4 ministrative Office : Unit No. 601 - A & B, Wi-Fi Park, 6" Floor, Wagle Estate, Thane - 400 604 Tel. : 022 2582 8764 / 2582 8815 / 2582 8847 / 2582 8076 Fax : 022 2582 8034 • E-mail : office@holdenlabindia.com, hml@mtnl.net.in CIN Number : U24239MH1995PTC085628

Date: - 01/08/2024

### TO WHOM SO-EVER IT MAY CONCERN

This is to certify that "Ms. Anagha Bade" student of K. K. WAGH COLLEGE OF PHARMACY, NASHIK. has completed her One month Industrial training from 2<sup>nd</sup> July 2024 to 1<sup>st</sup> August 2024.

We found her sincere in taking training with interest & enthusiasm.

We wish her good luck for future studies & career.

Thanking You,

Yours faithfully, For Holden Medical Laboratories Pvt. Ltd.

Rahul S. Bhadange (HR)



# KORAL



Regn. No: 2023-24/827

15th August 2024

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Sima Subhash Ghodsare has successfully completed one month Industrial training from 15th July 2024 to 15th August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

AMP

(Mr. Aniruddha M. Rajpathak)



RORAL PHARM -PLOT NO. 25/2/3 'O' ROAD, U; I. D. G., SATPUR UASHIE - 429007

Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001 Tel:- +91 253 2506962,



Date- 01.08.2024

Letter No-KBPL/IR/TR-004-24

#### **To Whom It May Concern**

This is to certify that Sayali Vilas Pingale- KKWCOP/662/10/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Sayali Vilas Pingale tenure with us, they were involved in **Regulatory** Affairs Department. They demonstrated all the Regulatory Affairs Instruments & GMP Documentation throughout their internship.

We found Sayali Vilas Pingale to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Sayali Vilas Pingale the very best in their future endeavours and trust that they will achieve great success in their career.



**Thanks & Regards** 

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171

#### **Registered Office:**

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India



#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India





18th August 2024

ORAL PHARMA PLOT NO. 25/2

O' BOAD. 1. D. G., SATFUR DUIE - 42300\*

#### TO WHOMSOEVER IT MAY CONCERN

CERTIFICAT

This is to certify that Mr/Ms. Mahadeo Vilas Wagh has successfully completed one month Industrial training from 18th July 2024 to 18th August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

(Mr. Aniruddha M. Rajpathak)

Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik -422001 Tel:- +91 253 2506962,



Ref. No.:- SAPL/21-24

Date:-02/08/2024

# CERTIFICATE OF INDUSTRIAL TRAINING

This is to certify that OMKAR S. BHAGWAT a student of Third Year B-Pharmacy K.K. WAGH COLLEGE OF PHARMACY, PANCHAWATI, NASHIK. College has completed industrial training conducted in 15 JUL 2024 - 01 AUG 2024 We found his sincere and hardworking during the training period We wish his all the best for his future.

NASHIK

For, Shriniwasa Ayurvedic Pvt. Ltd.

Brodare

Authorized Signature



Date- 01.08.2024

Letter No-KBPL/IR/TR-010-24

#### **To Whom It May Concern**

This is to certify that Saloni Shrinivas Gawali- KKWCOP/672/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 15.07.2024 to 31.07.2024.

During Saloni Shrinivas Gawali tenure with us, they were involved in Quality Control Department. They demonstrated all the Quality Control Instruments & GMP Documentation throughout their internship.

We found Saloni Shrinivas Gawali to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Saloni Shrinivas Gawali the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



#### **Plant Address:**

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India

# KORAL



Regn. No: 2023-24/816

31st July 2024

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Rohini Ashok Thorat has successfully completed one month Industrial training from 1st July 2024 to 31st July 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

Am

(Mr. Aniruddha M. Rajpathak)

GRAL PHARMA PLOT NG. 25/2/3 'O' ROAD. U: J. D. G., SATPUR CASULE - 422007



Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001 Tel:- +91 253 2506962,


## Holden Medical Laboratories Pvt. Ltd.

Administrative Office : Unit No. 601+ A & B, Wi-Fi Park, 6" Floor, Wagle Estate, Thane - 400 604 Tel. : 022 2582 8764 / 2582 8815 / 2582 8847 / 2582 8076 Fax : 022 2582 8034 • E-mail : office@holdenlabindia.com, hml@mtnl.net.in CIN Number : U24239MH1995PTC085628

Date: - 01/08/2024

#### TO WHOM SO-EVER IT MAY CONCERN

This is to certify that "Ms. Bhargavi Deshpande" student of K. K. WAGH COLLEGE OF PHARMACY, NASHIK. has completed her One month Industrial training from 2<sup>nd</sup> July 2024 to 1<sup>st</sup> August 2024.

We found her sincere in taking training with interest & enthusiasm.

We wish her good luck for future studies & career.

Thanking You,

Yours faithfully, For Holden Medical Laboratories Pvt. Ltd.

Rahul S. Bhadange (HR)



KORAL



Regn. No: 2023-24/777

22nd August 2024

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Sakshi Hemant Manore has successfully completed one month Industrial training from 22nd July 2024 to 22nd August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

Amp

(Mr. Aniruddha M. Rajpathak)

ORAL PHARM -PLOT NO. 25/2/3 'D' EGAD. D: J. D. G., SATFUP GASHIK - 42200"



Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Pratik Vijay Apre, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

## FOR VITAL HEALTHCARE PVT.LTD.





DATE :30TH JULY 2024

PLACE : NASHIK



WORKS : Piot no. H/10, MIDC, Satpur, Nasta 2017 Tel. +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZO

> Address of Correspondence CIN No.:2424OMH1992PTC069190

REGD. OFF: 5/6, Shreyas, 2nd Hasnabad Lune, Santacruz (West), Mumbai - 400.054, INDIA. TEL. Off: +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com / Website: www.vitalhealthcare.co





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Sakshi Deepak Acharya, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Om Devidas Garje, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co



 MANUFACTURERS & EXPORTERS OF FOOD, DRUGS & CHEMICALS

 Factory
 B-8,M.I.D.C. Industrial Estate, Waluj - 431136 (Dist Aurangabad)

 Phone
 :2554967,2554407, Fax :.0240-2554299, Email :waluj@fdcindia.com

Ref:-FDC/Waluj/HR -24

Date: 31-07-2024

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Ashwini Bhaskar Chaudhari**, a student of B. Pharmacy from K. K Wagh College of Pharmacy, Amrutdham, Panchavati, Nashik, has undergone Industrial Training from **02-07-2024 to 31-07-2024**. During this period she was given Induction Training on Introduction Process of Ophthalmic, Liquid & Powder, SOP's, Manufacturing Process, Production Machines & Equipments, Quality Control and Quality Assurance.

Her Performance during the training has been satisfactory.

We wish her good luck in his future career.

For FDC LIMITED (Waluj Plant)

Kelnmand

Roshan A. Bhurawane Human Resources

CORPORATE OFFICE

REGD. OFFICE

: 142-48, S.V. Road, Jogeshwari (W) Azambai - 400 102' Tel.: 91-22-3071 9100-399/2678 0652/2653/2656 + Fax: //1-22-2678 6393/8123/1912 E-mail : fdc@fdcindia.com Website oftp://www.fdcindia.com B-8 M.I.D.C. Industrial Estate, Waluj, Dist. Aurantuabat 431 136, Fax: 0240-554299, Tel .: 2554407, 2554967, E-mail : waluj@fdcindia.com



Date- 01.08.2024

Letter No-KBPL/IR/TR-005-24

#### To Whom It May Concern

This is to certify that Vaishnavi Shashikant Kadam- KKWCOP/692/11/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Vaishnavi Shashikant Kadam tenure with us, they were involved in Quality Control Department. They demonstrated all the Quality Control Instruments & GMP Documentation throughout their internship.

We found Vaishnavi Shashikant Kadam to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Vaishnavi Shashikant Kadam the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



Registered Office: S.No. 12/1, Plot No. 23, Tipre Coleay- Camp Read, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India





Regn. No: 2023-24/741

18th August 2024

AL PHARMA

T NO. 25/23

BOAD S. SATFUP 42200\*

211 1 2

#### TO WHOMSOEVER IT MAY CONCERN.

This is to certify that Mr/Ms. Prachi Vijay Ahire has successfully completed one month Industrial training from 18th July 2024 to 18th August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

Amp

(Mr. Anirudaha M. Rajpathak)



Factory: KORAL PHARMA | Plot No. 25/2/3. Shoad, SHDC 9 rpur, Nashik-422007. Maharashtra, India Tel- +91 053 2353523 | Email | loralenge min, websiter- www.koralpharma.in, Office: Koral Pharma, "Suthrut", Tilak Road, Neur Gaonkart Press, Nashik 422001 Telli and 200 200000



Laboratories Pvt. Ltd. L-1/1,1-1/2/2 & L-2, Additional MIDC Satara- 415004.

Date:- 14/07/2024

# **CERTIFICATE OF INTERNSHIP**

This is to certify that Miss. Patil Vaishnavi Ashok student of Bachelor of Pharmacy, K K Wagh college of pharmacy. Amruthdham Panchavati Nashik has successfully attended and completed her internship from 08/07/2024 to 14/07/2024 at Medispray Laboratories Pvt. Ltd.

During the above period she was found to be honest, sincere and very attentive to her duties.

We wish all the best in her future endeavours.

Note:- This letter Is confidential & issued after completion of training, hence should not be circulated further.

Saurabh Jagdale Unit Head Medispray Laboratories Pvt. Ltd



Medispray Laboratories Pvt. Ltd.

Registered Office: Plot No.: 344/345, Kundaim Ind. Estate, Kundaim, Goa-403 115



Registered Office:Plot No. 44/18 (A), Behind Indian Tools, Satpur, M.I.D.C., Nashik-422 007.Phone:(0253) 2351832, 83800 33385E-mail:info@chaitanyapharma.comWebsite:www.chaitanyapharma.com

Date: 25.08.2024

# TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Miss Shraddha Shivaji Chawhanke**, Student of K.K.Wagh college, of pharmacy Nashik has successfully completed her internship from 15<sup>th</sup> July 2024 to 15<sup>th</sup> August 2024 for 1 month. Her Project was "RM testing, IPQC testing, BMR and documentation".

We wish her best luck in all her future endeavors.

Thanking you, For Chaitanya Pharmaceuticals Pvt. Ltd.

Pratik Joshi Sr.H.R. Executive







Regn. No: 2023-24/828

15th August 2024

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Vaishnavi Atmaram Chavan has successfully completed one month Industrial training from 15th July 2024 to 15th August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

Am

(Mr. Aniruddha M. Rajpathak)

IORAL PHARMA PLOT NO. 25/2/3 'O' ROAD, E; I. D. C., SATPUR GABBLE - 429007



Factory: KORAL PHARMA | Plot No. 25/2/3. "C" Road 1500C, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001 Tel:- +91 253 2506962,



a any

**Bidwai Chemicals Pvt.Ltd.** 

WORKS & OFFICE : Survey No. 109. Nanded-Latur Road, Khupserwadi, Post, Vadepuri, Tq&Dist Nanded-431606 POSTAL ADDRESS : "KOSHISH" Plot No. 142 Vikas Nagar Old Kautha, Nanded-431603 Mob : 9423440826,8888043444

Date :

DATE:- 10/08/2024

# **INDUSTRIAL INPLANT TRAINING CERTIFICATE**

This is to certify that Miss. Shivani Anil Kalyan.

Of K.K.Wagh College of Pharmacy, Panchavati, Nashik-422003.

thas completed inplant training, in our organization from 10th July 2024 to

10th August 2024.

She has taken training successfully on following topics.

Good Manufacturing Practices, Good Laboratory Practices, Good Housekeeping Practices., Good Documentation Practices., Validation., Stabilty Study Testing., Change Control., Process control., Deviations., SOP.

During the Training period, we found her to be sincere & punctual in attendance.

We wish him to success in her future.

Approved By

Manager Q.A.

Authorized By







## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Siddhi Kiran Gangurde, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Plot no, H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com / Website : www.vitalhealthcare.co



Date- 01.08.2024

Letter No-KBPL/IR/TR-007-24

#### To Whom It May Concern

This is to certify that Gayatri Sudhir Chaudhari- KKWCOP/692/19/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Gayatri Sudhir Chaudhari tenure with us, they were involved in Quality Assurance Department. They demonstrated all the Quality Assurance Instruments & GMP Documentation throughout their internship.

We found Gayatri Sudhir Chaudhari to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Gayatri Sudhir Chaudhari the very best in their future endeavours and trust that they will achieve great success in their career.



**Thanks & Regards** 

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



Registered Office: S.No. 12/1, Plot No. 23, Tipre Colony, Camp Bload, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India









## **TO WHOM SO EVER IT MAY CONCERN**

This is to certify that Mr. Bhagwat Santosh Anwat, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK

WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007, Tel.: +91-253-2354074/76. Drug Lic No. NKD-22// NKD-39 GST No.:27AAA CV4682N1ZQ Address of Correspondence CIN No. 24240MH1992PTC069196 REGD. OFF.: 5/6, Shreyas, 2nd Hashebad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off :+91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevit\*!@gmail.com / Website : www.vitalhealthcare.co



Ref. No.:- SAPL/21-24

Date:-02/08/2024

# CERTIFICATE OF INDUSTRIAL TRAINING

This is to certify that **AASHUTOSH B. PATHADE** a student of Third Year B-Pharmacy K.K. WAGH COLLEGE OF PHARMACY, PANCHAWATI, NASHIK. College has completed industrial training conducted in 15 JUL 2024 - 01 AUG 2024 We found his sincere and hardworking during the training period We wish his all the best for his future.

NASHI

For, Shriniwasa Ayurvedic Pvt. Ltd.

Bradare.

**Authorized Signature** 

## Letter of Internship

Sanjivni Hospital Shrihari Medical Shegaon, Tq.Shegaon, Dist.Buldhana ,444203 27/07/2024 Abhishek Vitthal Wagh Sadguru Nagar, Shegaon, Tq.Shegaon, Dist.Buldhana ,444203 Subject : Experience Letter Dear Abhishek Vitthal Wagh.

This letter confirms that you have worked with Sanjivni Hospital for 22 days as Learner (for getting Experience) from 05/07/2024 to 27/07/2024.

During your tenure, you have demonstrated exceptional skills and dedication.

We wish you the best in your future endeavors and are happy to provide any recommendations or references as needed.

Please feel free to contact us if you require any further assistance.

Sincerely,

Mr.Vivek Khond

Manager

Sanjivni Hospital,

Shrihari Medical, Shegaon



Tayade Dr.Dnyaneshwar B. B.A.M.S., C.C.H., C.G.O. Reg.No.1-43916 A1 PITAL SHEGAON 444207

## Letter of Internship

Sanjivni Hospital Shrihari Medical Shegaon, Tq.Shegaon, Dist.Buldhana ,444203 27/07/2024 Abhishek Vitthal Wagh Sadguru Nagar, Shegaon, Tq.Shegaon, Dist.Buldhana ,444203

Dear Abhishek Vitthal Wagh,

This letter confirms that you have worked with Sanjivni Hospital for 22 days as Learner (for getting Experience) from 05/07/2024 to 27/07/2024.

During your tenure, you have demonstrated exceptional skills and dedication.

We wish you the best in your future endeavors and are happy to provide any recommendations or references as needed.

Please feel free to contact us if you require any further assistance.

Sincerely,

Mr. Vivek Khond

Manager

Sanjivni Hospital,

Shrihari Medical, Shegaon

SHRI HARI MEDICAL SHEGAON



B. Tayade

Dr.Dnyaneshwar B. Tayaue B.A.M.S., C.C.H., C.G.O. Reg.No.I-43916 A1

2024.07.27 13:51





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Sakshi Kailas Kothule, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co



POSTAL ADDRESS : "KOSHISH" Plot No. 142 Vikas Nagar Old Kautha, Nanded-431603 Mob - 9423440826,88880434 Date :

DATE:- 10/08/2024

# INDUSTRIAL INPLANT TRAINING CERTIFICATE

Chemicals P

FICE : Survey No. 109. Nanded-Latur Road, Khupserwadi, Post. Vadepuri, Tq&Dist Nanded-431606

This is to certify that Miss. Sakshi Sanjay Tekale.

Of K.K.Wagh College of Pharmacy, Panchavati, Nashik-422003.

thas completed inplant training, in our organization from 10th July 2024 to

10th August 2024.

She has taken training successfully on following topics.

Good Manufacturing Practices, Good Laboratory Practices, Good Housekeeping Practices., Good Documentation Practices., Validation., Stabilty Study Testing., Change Control., Process control., Deviations., SOP.

During the Training period, we found her to be sincere & punctual in attendance.

We wish him to success in her future.

Approved By

Manager Q









## **TO WHOM SO EVER IT MAY CONCERN**

This is to certify that Mr. Vikas Sureshrao Garud, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

## FOR VITAL HEALTHCARE PVT.LTD.



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co

DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



## **AUDUMBAR LABORATORIES PVT. LTD**

## **Training Certificate**

Date: 09 Aug 2024

This is to certify that, Ms. Sanika Rambhau Gaikwad has successfully completed Industrial Training at Audumbar Laboratories Pvt. Ltd from 9 July 2024 to 9 Aug 2024.

This training demonstrated good understanding and application of theoretical knowledge in practical scenarios. She showed excellent teamwork and communication skills while working with colleagues.

We wish her all the best in his future endeavors.

For Audumbar Laboratories Pvt.Ltd.

Director

Mr. Sanket Gaikwad Director Audumbar Laboratories Pvt. Ltd

> Registered Office : 01, Aasandi, Saptarang, Pathardi Phata, Nashik,Maharashtra India-422010. Contact Details: +91 7888099672/9763667692 e-mail: info@audumbarlabs.com / audumbarlabs@gmail.com



# kaliberr

Date- 01.08.2024

Letter No-KBPL/IR/TR-008-24

#### To Whom It May Concern

This is to certify that Pandurangnath Ananda Pardhi- KKWCOP/651/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Pandurangnath Ananda Pardhi tenure with us, they were involved in **Production Department**. They demonstrated all the Production Instruments & GMP Documentation throughout their internship.

We found Pandurangnath Ananda Pardhi to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Pandurangnath Ananda Pardhi the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Pawar Dinesh Bhausaheb, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

## FOR VITAL HEALTHCARE PVT.LTD.

Authorized Signatory

DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK





WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co





## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Priyanka Shantaram Bhavar, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

## FOR VITAL HEALTHCARE PVT.LTD.



DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Piot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel. +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39. GST No. 27AAACV4682N1ZQ Address of Correspondence CIN No. 24240MH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off.: +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co





#### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Sejal Sanjay Khapare, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

#### FOR VITAL HEALTHCARE PVT.LTD.

(HCA)

NASHU



DATE :30<sup>TH</sup> JULY 2024 PLACE : NASHIK



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:2424OMH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co



## Holden Medical Laboratories Pvt. Ltd.

Administrative Office : Unit No. 601- A & B, Wi-Fi Park, 6<sup>th</sup> Floor, Wagle Estate, Thane - 400 604 Tel. : 022 2582 8764 / 2582 8815 / 2582 8847 / 2582 8076 Fax : 022 2582 8034 • E-mail : office@holdenlabindia.com, hml@mtnl.net.in CIN Number : U24239MH1995PTC085628

Date: - 02/08/2024

#### TO WHOM SO-EVER IT MAY CONCERN

This is to certify that "**Mr. Prasad B. Tile**" student of K K Wagh College of Pharmacy, Nashik. has completed has One month Industrial training from 3<sup>rd</sup> **July 2024 to 02<sup>nd</sup> August 2024.** 

We found him sincere in taking training with interest & enthusiasm.

We wish him good luck for future studies & career.

Thanking You,

Yours faithfully, For Holden Medical Laboratories Pvt. Ltd.

**Rahul S. Bhadange** (HR)







# TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Sujata Madhukar Patil, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training she was sincere, regular and very much enthusiastic in learning. We wish her good luck in her career.

FOR VITAL HEALTHCARE PVT.LTD.



PLACE : NASHIK

DATE :30<sup>TH</sup> JULY 2024



WORKS : Piot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:24240MH1992PTC069190 CIN No.:24240MH1992PTC069190 TEL Off : +91-22- 2649033 E-mail: exportsvital@gmail.com / purchasevital@gmail.com / Website : www.vitalhealthcare.co

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



Date- 01.08.2024

Letter No-KBPL/IR/TR-009-24

#### To Whom It May Concern

This is to certify that Aditya Chhotu Chaudhari- KKWCOP/670/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 15.07.2024 to 31.07.2024.

During Aditya Chhotu Chaudhari tenure with us, they were involved in **Production Department**. They demonstrated all the Production Instruments & GMP Documentation throughout their internship.

We found Aditya Chhotu Chaudhari to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Aditya Chhotu Chaudhari the very best in their future endeavours and trust that they will achieve great success in their career.



**Thanks & Regards** 

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



#### **Registered Office:**

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India



Date- 01.08.2024

Letter No-KBPL/IR/TR-006-24

#### To Whom It May Concern

This is to certify that Akshada Dashrath Vidhate- KKWCOP/692/16/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 01.07.2024 to 31.07.2024.

During Akshada Dashrath Vidhate tenure with us, they were involved in Quality Control Department. They demonstrated all the Quality Control Instruments & GMP Documentation throughout their internship.

We found Akshada Dashrath Vidhate to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Akshada Dashrath Vidhate the very best in their future endeavours and trust that they will achieve great success in their career.



**Thanks & Regards** 

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171

#### **Registered Office:**

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.



ant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India





Regn. No: 2023-24/815

31st July 2024

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Pranita Sahebrao Sonawane has successfully completed one month Industrial training from 1st July 2024 to 31st July 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

Amp

(Mr. Aniruddha M. Rajpathak)



Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001 Tel:- +91 253 2506962,



## AVESTA PHARMA PVT. LTD.

Admin Office : Shivam Chambers, 106/108, 1st Floor, S.V. Road,

Goregaon (West), Mumbai - 400 062, (INDIA).

• Tel No. : 0091-22-41716100 / 41716200 / 26764173

E-Mail : avestapharma@avestapharma.net

Website : www.avestapharma.net • CIN : U24239MH2009PTC192677

Factory :

Plot No 2, Gut No: 189/1, 189/2, 191/2,191/6, 194, 165/3, 166, 167, 168, 169, At & Post. Alonde, Tal - Vikramgad, Dist. Palghar - 421 303 (INDIA)

To, K. K. Wagh College of Pharmacy, Hirabai Haridas Vidyanagari, Amrutdham, Panchvati, Nashik – 422 003

Date: 30th July 2024

#### CERTIFICATE

This to certify that **Ms. Kanchan B. Megha** Student of B. Pharma Final year **K. K. Wagh College of Pharmacy, Hirabai Haridas Vidyanagari, Amrutdham, Panchvati, Nashik 422 003** has Successfully completed her one month in Plant training during 02<sup>nd</sup> July 2024 to 30<sup>th</sup> July 2024 in Avesta Pharma Pvt. Ltd. At/Post- Alonde, Tal-Vikramgad Dist-Palghar. Her attendance was regular and conduct was satisfactory.

Best Wishes for her future.

For AVESTA PHARMA PVT. LTD.

Mr.Amol Raut (Plant Head)





Ref. No .:- SAPL/21-24

Date:- 05/08/2024

# CERTIFICATE OF INDUSTRIAL TRAINING

This is to certify that SURAJ P. PAGARE a student of Third Year Of B-Pharmacy K. K. WAGH COLLEGE OF PHARMACY, PANCHAVATI, NASHIK. College has completed industrial training conducted in 05-JUL-2024 - 05-AUG-2024 We found his sincere and hardworking during the training period We wish his all the best for his future.

For, Shriniwasa Ayurvedic Pvt. Ltd.

Authorized Signature



KORAL



Regn. No: 2023-24/777

22nd August 2024

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms. Sakshi Hemant Manore has successfully completed one month Industrial training from 22nd July 2024 to 22nd August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

AMP

(Mr. Aniruddha M. Rajpathak)

CRAL PHARM. PLOT NO. 25/2/3 '0' ROAD, 1: J. D. G., SATFUR UASWIK - 42200"

Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001



(Formerly known as Hexagon Nutrition Private Limited)

Date: 17th August 2024

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms.Sonali Dattu Holgir, a student of Final year B Pharmacy of K K Wagh College of Pharmacy, Nashik has satisfactory completed her In - Plant Training in our HNL, from 18<sup>th</sup> July 2024 to 17<sup>th</sup> August 2024.

During her training, she was found to be sincere and hardworking. She evinced keep interest in learning and involved herself in all aspects of her study.

We wish her all the success in future endeavors.

Jur any

Tushar Katkade Senior Manager – HR & Admin

#### CIN:- U24110MH1993PLC072189

404 Global Chamber, Adarsh Nagar, Link Road, Andheri (W), Mumbal (Maharashtra) - 400053 - INDIA. Tel. No.: +91-22-62136710/711 Website : www.hexagonnutrition.com Email ID: enquiry@hexagonnutrition.com









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MANUFACTURERS & EXPORTERS OF FOOD, DRUGS & CHEMICALS Factory B-8,M1D C. Industrial Estate, Waluj - 431136 (Dist Aurangabad) Phone 2554967,2554407, Fax 0240-2554299, Email waluj@fdcindia.com

Date: 31-07-2024

Ref:-FDC/Waluj/HR -24

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Dipti Vilas Sonawane, a student of B. Pharmacy from K. K Wagh College of Pharmacy, Amrutdham, Panchavati, Nashik, has undergone Industrial Training from 02-07-2024 to 31-07-2024. During this period she was given Induction Training on Introduction Process of Ophthalmic, Liquid & Powder, SOP's, Manufacturing Process, Production Machines & Equipments, Quality Control and Quality Assurance.

Her Performance during the training has been satisfactory.

We wish her good luck in his future career.

For FDC LIMITED (Waluj Plant)

Roshan A. Bhurawane Human Resources



CORPORATE OFFICE

REGD. OFFICE

: 142-48,S.V. Road, Jogeshwari (W), Mumbai - 400 102' Tel : 91-22-3071 9100-399/2678 0652/2653/2656 • Fax : 91-22-2678 6393/8123/1912 E-mail: fdc@fdcindia.com Website: http://www.fdcindia.com B-8 M.I.D.C. Industrial Estate, Waluj, Dist. Aurangabad - 431 136, Fax: 0240-554299, Tel : 2554407,2554967, E-mail: waluj@fdcindia.com



**Omkar Medical And General Store** 

# **INTERNSHIP LETTER**

To

Rohit Sudam Agale

At komalwadi Post wadangali Tal sinnar Dist Nashik Student Of K.k.wagh college of Pharmacy Nashik .

I Certify That Rohit Sudam Agale Has undergone training Spread over from Date 1 July 2024

to 1 august 2024 for a period of 1 month under my Supervision.

1) working knowledge of records required by various acts affecting the profession of Pharmacy

and

a) the Manipulation of pharmaceutical apparatus in common use. b) the reading, translation and copying of prescription includ ing the checking of doses

c) the the dispensing of Prescription During his working period we found him a sincere ,honest, hardworking, dedicated employee d) the storage of Drugs and Medicinal Preparations.

with a professional attitude and very good job knowledge. I absolutely have no hesitation in giving this experience certificate.

Name of Owner pharmacist - Manisha Vishal Sanap

Date - 5 - 8 - 24

Winelo

OMKAR MEDICAL AND GENERAL STORES NIMGAON SINNAR. DIST NASHIK MOB 9834031972

++91 98340 31972

At post-Nimgaon Tal - Sinnar Dist - Nashik 422103



· (Formerly known as Hexagon Nutrition Private Limited)

Date: 17th August 2024

# **TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Ms. Vaishnavi Tushar Mahajan, a student of Final year B Pharmacy of K K Wagh College of Pharmacy, Nashik has satisfactory completed her In - Plant Training in our HNL, from 18<sup>th</sup> July 2024 to 17<sup>th</sup> August 2024.

During her training, she was found to be sincere and hardworking. She evinced keep interest in learning and involved herself in all aspects of her study.

We wish her all the success in future endeavors.

Tushar Katkade

Senior Manager – HR & Admin



(C







care Brand 2016 "Clinic By Brand of

By Brand of the year 2016 The Economic Times" Clinical Nutrition Clinical Nutrition Clinical Nutrition Clinical Nutrition

CIN:- U24110MH1993PLC072189

404 Global Chamber, Adarsh Nagar, Link Road, Andheri (W), Mumbai (Maharashtra) - 400053 - INDIA. Tel. No.: +91-22-62136710/711 Website : www.hexagonnutrition.com Email ID: enquiry@hexagonnutrition.com

"2015 Dietary Supplement Company of the year"

Supplement "Exce the year" Ch pharma

Chemicals & pharmaceuticals Sector By Dun & Bradstreet



Ref. No. FPL-Nanded/08/2024

Date: 20/08/2024

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that <u>Ms. Samiksha Shivanand Kapate</u> a Student of Bachelor of Pharmacy from KK Wagha Collage of Pharmacy, Nashik, has successfully completed an industrial Training with us from 15<sup>th</sup> July 2024 to 14<sup>th</sup> August 2024.

During this period, she was exposed to related areas and we found her exhibiting good learning's skills. She was found sincere in her internship period with us.

For Flamingo Pharmaceutical Ltd.

Authorized signatory



Flamingo Pharmaceuticals Ltd. CIN: U31900MH1985PLC036572

Nanded Plant : Plot No. NPH-1, Krushnoor MIDC, Pharma SEZ, Dist. Nanded-431 709. INDIA.

Corporate Office : 7/1, Corporate Park, Sion-Trombay Road, P.O. Box No. : 27257, Chembur, Mumbai-400 071. INDIA Phone: 02465 - 299389

E-mail : ashf@flamingopharma.com Phor Website : www.flamingopharma.com Fax

Phone: 91-22 - 3000 9300 Fax : 91-22 - 2523 3085 91-22 - 6797 5249

### Scanned by CamScanner





DATE :- 30/07/2024

# TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Hardik Hemant Patil, student of K.K. Wagh College of Pharmacy, Nashik has completed Industrial training in our organization from 1<sup>st</sup> July 2024 to 30<sup>th</sup> July 2024.

During the period of training he was sincere, regular and very much enthusiastic in learning. We wish him good luck in his career.

# FOR VITAL HEALTHCARE PVT.LTD.



UNASHIK NASHIK

DATE :30<sup>TH</sup> JULY 2024

PLACE : NASHIK



WORKS : Plot no. H/10, MIDC, Satpur, Nashik - 422 007. Tel.: +91-253-2354074/76. Drug Lic No. NKD-22 / NKD-39 GST No.:27AAACV4682N1ZQ Address of Correspondence CIN No.:2424ONIH1992PTC069190 REGD. OFF.: 5/6, Shreyas, 2nd Hasnabad Lane, Santacruz (West), Mumbai - 400 054, INDIA. TEL. Off : +91-22- 26490353 E-mail: exportsvital@gmail.com / purchasevital@gmail.com Website : www.vitalhealthcare.co



# VIDISHA ANALYTICAL

Date: 15/08/2024

# **TO WHOM IT MAY CONCERN**

This is to certify that **Miss. Avhad Sayali Subhash**, a student of K.K. Wagh College of pharmacy, Nashik has successfully completed One month "Pharma Industrial Training" from 16/07/2024 to 15/08/2024 in Vidisha Analytical laboratory.

During her tenure, we found **Miss. Avhad Sayali Subhash**, to be hard working, conscientious and a responsible person. The feed back of her participant has always been positive.

We wish her all the best of luck in future endeavor.

Regards.

(Digambar More)

Director, Vidisha analytical, Nashik.





Flat No.1, Datar apartment, first floor, Behind swaraj tractor centre, off NH-03, Dwarka, Nashik-422011 Contact no. +91-9763483903 / 8888068444 Email id: vidisha.analytical@gmail.com



Date: 14th Aug, 2024

# TO WHOM IT MAY CONCERN

It is hereby certified that Ms. Mayuri Sudhir Patil student of K.K. Wagh College of Pharmacy, , Nashik (Course: B. Pharm) has completed industrial Training from 14<sup>th</sup> July, 2024 to 14<sup>th</sup> August, 2024 at Core Analyticals Pvt. Ltd. Nashik.

During the above training period, she has shown keen interest while carrying out the given job responsibilities and she has acquired practical knowledge in the referred area.

During her tenure with us we found her sincere and hardworking.

We wish her a great success in the future.

For Core Analyticals Private Limited

Authorized Signatory





www.coreanalyticals.com

Core Analyticals Pvt. Ltd. Shop No.- 1 to 4, Behind Hotel Manoranjan, Off NH-3, 10" Mile, Jaulke, Nashik-422206 Ph.No.: 02557-279911, Email : admin@coreanalyticals.com



# SciTech Specialities Pvt. Ltd.

Office: 501 DLH Park, S.V. Road, Goregaon (West), Mumbai 400 062. India • Tel: +91 (22) 417 50000 E-mail: scitech@scitech.net.in • CIN: U85190MH2007PTC175484 Factory: A-3/12/13/44, STICE Musalgaon, Tal: Sinnar, Dist: Nashik 422112. Tel: +91 (2551) 240045 / 46 / 49 / 240244 Fax: +91 (2551) 240201 • E-mail: stsp@stsp.in

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Harshali Shashikant Sonar K. K. Wagh College of Pharmacy, Nasik has undergone her Industrial training at our Company from 11 July 2024 to 09 Aug 2024.

During her training period we found her to be extremely hardworking, studious, honest and took keen interest in all activities of the Department.

We wish her the very best for her future endeavours.

With best wishes,

Chaitanya Borawake Sr. Manager HR & Admin

Date : oq Aug 2024 Place: Sinnar





# kaliberr

Date- 04.08.2024

Letter No-KBPL/IR/TR-012-24

# To Whom It May Concern

This is to certify that Ms. Priyanka Sunil Ambhore- KKWCOP/707/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 04.07.2024 to 03.08.2024.

During Ms. Priyanka Sunil Ambhore tenure with us, they were involved in Quality Assurance Department. They demonstrated all the Quality Assurance Instruments & GMP Documentation throughout their internship.

We found Ms. Priyanka Sunil Ambhore to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Ms. Priyanka Sunil Ambhore the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

# Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberriabs.com info@kaliberriabs.com

(+91) 9730 180 899 (+91) 9730 555 171 Registered Office: S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

### Plant Address:

Survey No: 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindorl, Dist.: Nashik, Pin Code: 422202 Maharashtra, India



Ref. No.:- SAPL/21-24

Date:- 05/08/2024

# CERTIFICATE OF INDUSTRIAL TRAINING

This is to certify that KAPIL D. PATIL a student of Third Year Of B-Pharmacy K. K, WAGH COLLEGE OF PHARMACY, PANCHAVATI, NASHIK. College has completed industrial training conducted in 05-JUL-2024 - 05-AUG-2024 We found his sincere and hardworking during the training period We wish his all the best for his future.

For, Shriniwasa Ayurvedic Pvt. Ltd.

Authorized Signature



Holden Medical Laboratories Pvt. Ltd.

Your Choice For Better Health

Administrative Office : Unit No. 601- A & B, Wi-Fi Park, 6<sup>\*</sup> Floor, Wagle Estate, Thane - 400 604 Tel. : 022 2582 8764 / 2582 8815 / 2582 8847 / 2582 8076 Fax : 022 2582 8034 • E-mail : office@holdenlabindia.com, hml@mtnl.net.in CIN Number : U24239MH1995PTC085628

Date: -17/08/2024

#### TO WHOM SO-EVER IT MAY CONCERN

This is to certify that "Mr. Aditya N. kulkarni." student of K. K. Wagh College of Pharmacy, Nashik. has completed his One Month Industrial training from 18<sup>th</sup> July 2024 to 17<sup>th</sup> August 2024.

We found his sincere in taking training with interest & enthusiasm.

We wish good luck for future studies & career.

Thanking You,

Yours faithfully, For Holden Medical Laboratories Pvt. Ltd.



Rahul S. Bhadange (HR)





Letter No-KBPL/IR/TR-011-24

Date- 01.08.2024

# To Whom It May Concern

This is to certify that Saket Vilas Shirode- KKWCOP/671/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 15.07.2024 to 31.07.2024.

During Saket Vilas Shirode tenure with us, they were involved in **Production Department**. They demonstrated all the Production Instruments & GMP Documentation throughout their internship.

We found Saket Vilas Shirode to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Saket Vilas Shirode the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

## Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



#### **Registered Office:**

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India



Letter No-KBPL/IR/TR-011-24

Date- 01.08.2024

# To Whom It May Concern

This is to certify that Saket Vilas Shirode- KKWCOP/671/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 15.07.2024 to 31.07.2024.

During Saket Vilas Shirode tenure with us, they were involved in **Production Department**. They demonstrated all the Production Instruments & GMP Documentation throughout their internship.

We found Saket Vilas Shirode to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Saket Vilas Shirode the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

## Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com

(+91) 9730 180 899 (+91) 9730 555 171



#### **Registered Office:**

S.No. 12/1, Plot No. 23, Tipre Colony, Camp Road, Malegaon Dist.: Nashik, Pin Code: 423203 Maharashtra, India.

#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, Dist.: Nashik, Pin Code: 422202 Maharashtra, India

KORAL

Regn.'No; 2023-24/733

15th August 2024

C',ROAD.

16 - 42200

TO WHOMSOEVER IT MAY CONCERN

ERTIFICA

This is to certify that Mr/Ms. Sanjyot Chhotusingh Girase has successfully completed one month Industrial training from 15th July 2024 to 15th August 2024 in our company.

We have observed that the candidate is having hard working nature and sincere during the period and wish him/her for better in studies as well as in career.

For Koral Pharma

(Mr. Aniruddha M. Rajpathak)



Factory: KORAL PHARMA | Plot No. 25/2/3, "C" Road, MIDC, Satpur, Nashik-422007, Maharashtra, India Tel:- +91 253 2351523 | Email : koralenq@gmail.com, website:- www.koralpharma.in, Office: Koral Pharma, "Sushrut", Tilak Road, Near Gaonkari Press, Nashik-422001 Tel:- +91 253 2506962, ·

# DELTA FINOCHEM PVT. LTD.



Date: 14 July 2024

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Pravin Nanaji Karwar student of Final Year B. Pharmacy K. K Wagh College of Pharmacy, Nashik has completed internship training in our organization from 2<sup>nd</sup> July 2024 To 14<sup>th</sup> July 2024.

He has completed training in Quality Assurance department on GMP, Documentation, SOP preparation.

We wish him all the success in his future endeavors.

For Delta Finochem Pvt. Ltd. A HOCHEN

IL

FD

SHIT

Manoj Muley Head – HR





Ref. No.:- SAPL/21-24

Date:- 05/08/2024

# CERTIFICATE OF INDUSTRIAL TRAINING

This is to certify that RUSHIKESH H. CHAVAN a student of Third Year Of B-Pharmacy K. K, WAGH COLLEGE OF PHARMACY, PANCHAVATI, NASHIK.

College has completed industrial training conducted in 05-JUL-2024 - 05-AUG-2024 We found his sincere and hardworking during the training period We wish his all the best for his future.

NASHIK

For, Shriniwasa Ayurvedic Pvt. Ltd.

**Authorized Signature** 



Ref: SPN/HR/12/23-24

Date:16/08/2024

#### CERTIFICATE

This is to certify that Ms Sakshi D Bargal studying in B Pharmacy at K. K. Wagh College of Pharmacy Nashik she has completed Industrial Training from 16-07-2024 to 16-08-2024 in our Company Sinnar. She has collected all information, which was required for the purpose of completion of her Training program.

Ms Sakshi D Bargal was shown around the facility through all manufacturing sections & quality sections she is very interested, observant and kind.

We wish her all the best for future endeavors.

For Sangeeta Pharma.





# **CORPORATE OFFICE:**

Nandu Smruti Bldg, G. No. 07, Purna, Thane - 421302, Maharashtra, India. Tel. No. : +91 2522-662706 D.L. No.: 20B-318311 VALID UPTO 21/04/2024 D.L. No.: 21B-318312 VALID UPTO 21/04/2024 Email : info@sangeetapharma.co.in, exports@sangeetapharma.co.in, sangeeta.pharma@hotmail.com

#### FACTORY:

Plot No. A-35, Malegaon MIDC, Sinnar, Nashik - 422103 Taluka: Sinnar, District: Nashik Z-2 District Tel. No. : +91 2551 295033 D.L. No.: FORM 28-MH/103017 VALID UPTO 14/05/2024 D.L. No.: FORM 25-MH/103016 VALID UPTO 14/05/2024

GSTIN: 27ABOFS5361B1Z2 PAN No: ABOFS5361B Web : www.sangeetapharma.co.in



# VIDISHA ANALYTICAL

Date: 15/08/2024

# **TO WHOM IT MAY CONCERN**

This is to certify that **Miss. Bendale Vaishnavi Kisan**, a student of K.K. Wagh College of pharmacy, Nashik has successfully completed One month "Pharma Industrial Training" from 16/07/2024 to 15/08/2024 in Vidisha Analytical laboratory.

During her tenure, we found **Miss. Bendale Vaishnavi Kisan**, to be hard working, conscientious and a responsible person. The feed back of her participant has always been positive.

We wish her all the best of luck in future endeavor.

Regards,

(Digambar More)

Director, Vidisha analytical, Nashik.





Flat No.1, Datar apartment, first floor, Behind swaraj tractor centre, off NH-03, Dwarka, Nashik-422011 Contact no. +91-9763483903 / 8888068444 Email id: vidisha.analytical@gmail.com



## **K K WAGH COLLEGE OF PHARMACY**

(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, MSBTE, Mumbai & Approved by PCI)

# 1.3.3

# **Sample Report**



#### KALIBERR BIOSCIENCE PRIVATE LIMITED

Survey No. 444/1, Koshimba Road, Khadki Lakhmapur, Dindori, Maharashtra 422202

(Session – 2023-24)

Submitted by

### STUDENT NAME :-SALONI SHRINIVAS GAVALI

PRN NO:-F2154501823095



K.K.Wagh College Of Pharmacy, Nashik



kaliberr

Date- 01.08.2024

#### Letter No-KBPL/IR/TR-010-24

#### **To Whom It May Concern**

This is to certify that Saloni Shrinivas Gawali- KKWCOP/672/2024, a student of K. K. Wagh College of Pharmacy, has successfully completed a 1 month internship at kaliberr Bioscience Pvt Ltd. from 15.07.2024 to 31.07.2024.

During Saloni Shrinivas Gawali tenure with us, they were involved in Quality Control Department. They demonstrated all the Quality Control Instruments & GMP Documentation throughout their internship.

We found Saloni Shrinivas Gawali to be dedicated, enthusiastic, and eager to learn. They adapted well to our work environment and contributed positively to our team's projects.

We wish Saloni Shrinivas Gawali the very best in their future endeavours and trust that they will achieve great success in their career.



Thanks & Regards

#### Kaliberr BioScience Pvt. Ltd.

Connect at: www.kaliberrlabs.com info@kaliberrlabs.com (+91) 9730 180 899 (+91) 9730 555 171



#### Plant Address:

Survey No. 444/1, Koshimba Road, Khadki, Lakhmapur Tai: Dindori, ·Dist.: Nashik, Pin Code: 422202 Maharashtra, India

**Registered Office:** 

Maharashtra, India.

S.No. 12/1, Plot No. 23,

Tipre Colony, Camp Road, Malegaon

Dist.: Nashik, Pin Code: 423203

# DECLARATION

I SALONI SHRINIVAS GAVALI, hereby declare that I have successfully completed my industrial training **KALIBERR Bioscience Pvt Limited**, **Dindori**, from 15th July 2024 to 31th July 2024. During this period, I was exposed to various aspects of the pharmaceutical industry, including research and development, quality control, production, and regulatory affairs.

I would like to express my gratitude to the entire at **KALIBERR Bioscience Pvt Limited**, **Dindori**, at for providing me with valuable insights and hands-on experience in the pharmaceutical field. This training has enhanced my knowledge and skills, and I am now better equipped to contribute to the industry.

I also commit to maintaining the confidentiality of any proprietary information I have gained during my training at **KALIBERR Bioscience Pvt Limited**, **Dindori**, and I will use the knowledge and skills acquired responsibly and ethically.

I am confident that this industrial training experience will greatly benefit my future career in the pharmaceutical sector, and I am eager to apply what I have learned to make meaningful contributions to the industry.

Signature:

SALONI S. GAVALI Trainee



# AKNOWLEDGEMENT

I would like to express my sincere gratitude to KALIBERR Bioscience Pvt Limited

, **Dindori**, for providing me with the opportunity to complete my internship and gain valuable experience in the pharmaceutical industry. This internship has been an invaluable learning experience, and I am grateful for the support and guidance I have received throughout my time here.

I would like to extend my heartfelt thanks to Mrs.Priyanka sontake , my internship supervisor and the whole team of production department, for their mentorship, patience, and the knowledge they shared with me during this internship. Their guidance has been instrumental in enhancing my understanding of the pharmaceutical field.

I am also thankful to the entire team at KALIBERR Bioscience Pvt Limited ,

**Dindori,** for their warm welcome, cooperation, and willingness to involve me in various projects. Working alongside such dedicated professionals has been inspiring and educational.

Furthermore, I appreciate the opportunity to contribute to the projects at KALIBERR Bioscience Pvt Limited, Dindori, which allowed me to apply the theoretical knowledge I gained during my academic studies to real-world situations.

Last but not least, I want to express my gratitude to our college principal **Dr. K.S. Salunke Sir** for giving me an opportunity to visit manufacturing facility and explore practical procedure in pharmaceutical industry and their unwavering support and encouragement throughout this internship.

Overall, this internship at **KALIBERR Bioscience Pvt Limited**, **Dindori**, has been a rewarding experience that has enriched my skills and knowledge in the pharmaceutical sector. I am confident that the lessons learned here will serve as a solid foundation for my future endeavours in this field.

Thank you once again for this incredible opportunity.

Sincerely,

#### SALONI S. GAVALI

Third Year B Pharmacy K.K. Wagh College of Pharmacy



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# **INTRODUCTION**

Kaliberr Labs is an emerging Pharmaceutical Company and also has a Service Contract division with a business model dedicated to delivering superior quality medicines to marketing companies. Thus contributing to improvise the quality of lives all around the globe. Aim is to offer superior quality products to our valued Buyers and ultimately patients and continuously innovate to identify the unmet medical needs .To achieve our aim, we have an ecosystem with superior quality suppliers and manufacturers. All our products are manufactured at GMP, WHO GMP facilities and accreditations of various countries.

The company is Manufacturing plant (**Liquid, Lyophilized and Dry Powder**) and dedicated to the manufacturing, and marketing of high-quality injectable medications. With a state-of-the-art facility equipped with advanced technology and a team of highly skilled professionals, the company ensures the production of safe, effective, and affordable pharmaceutical products. Kaliberr Bioscience is committed to excellence, adhering to

stringent quality standards and regulatory requirements to meet the global healthcare needs.

The predecessor companies of Kaliberr have an experience of Pharmaceutical Manufacturing and Tradingfor more than 35 years. Kaliberr BioScience was established in May 2020.

# VISION AND MISSION

Vision : To strive towards progressing and sustaining healthy communities by improving the quality

of life.

Mission: To support groundbreaking solutions for major advancements & scale up in order

to achieve tenable social and environmental impact.

Values- Integrity: Applying high ethical standards on daily basis

**Collaboration:** With the inclusion and diversity, championing high performing teams.

**Innovation:**The only solution to improving healthcare needs

Quality: by taking pride in doing ordinary things extraordinarily well

**Reliability:**Dependable. Reliable. Call it what you will, we've made it a habit. We strive to be there through thick and thin, rain or shine, delivering on every promise, every time. That's why people Around the corner and across the world count on Kaliberr. Service-We understand that "it's not about us"-it's about helping others-and we believe there's no situation we can't handle. We would do whateverit takes, work 'round the clock, cross any river and spare no effort-all to meet someone's need

# LIST OF PRODUCTS

## **Anti-Infective**

- 1. Colistimethate Sodium Inj. 3/4.5 MIU
- 2. Polymyxin B Sulphate Inj. 7,50,000 IU
- 3. Vancomycin Inj. 500/1000 mg
- 4. Doxycycline Inj . 100 mg
- 5. Polymyxin B Sulphate Inj. 7,50,000 IU
- 6. Vancomycin Inj. 500/1000 mg
- 7. Clindamycin Inj. 300/600 mg

## Gastroenterology

1. Pantoprazole Inj. BP 40 mg

## **Alkalinizing Agent**

1. Sodium Bicarbonate Infusion BP 5%

# **Ampoule (Liquid)**

- 1. Clindamycin Inj. 300/600 mg
- 2. Sodium Bicarbonate Infusion BP 5%
- 3. Thiamine Inj. 100 mg/mL

# Vial (Dry Powder)

- 1. Pantoprazole Inj. BP 40 mg
- 2. Colistimethate Sodium Inj. 3/4.5 MIU
- 3. Artesunate Inj. 60/120 mg



- 4. Polymyxin B Inj. 7,50,000 IU
- 5. Vancomycin 500/1000 mg
- 6. Doxycycline Inj.100 mg

## Vitamins

1. Thiamine Inj. 100mg

# Anti-Epileptic

1. Levetiracetam Inj.100 mg

# Anti-Malarial

1. Artesunate Inj. PhI 60/120 mg

# Vial (Liquid)

1.Levetiracetam Inj.100 mg

# Vial (Lyophilized)

- 1. Doxycycline for Inj. 100 mg
- 2. Teicoplanin Inj. 400 mg
- 3. Tigecycline Inj. 50 mg







# LAYOUT





# **QUALITY CONTROL**

- Before consuming any type of medicine, they need to be tested and approved for consumption in prepared pharmaceutical laboratories, so that they can be sold and consumed by the population. In this article, we will see in some topics how these processes work and their main function.
- The main objective of quality control in the Pharmaceutical Industry is to test the drugs in their various stages of production, verifying that they are able to proceed to the next stage and release the manufacturing process in accordance with the regulations and specifications required for consumption.
- For complete control of the quality of the medication that is being produced, they need to be tested in several work areas. The main areas of research and analysis are:
- Physical-Chemical Laboratory
- Microbiological Laboratory
- Packaging Material Laboratory
- Process Control Laboratory
- There are some necessary regulations so that there is a correct production and quality control of medicines. Each country has its rules and laws that govern these processes and each industry must follow and have the proper authorizations for production. To ensure that the rules and laws are being applied correctly, there are internal and external audits, aiming at the inspection of good medicine manufacturing practices.
- Analyzes are performed according to what each drug requires and depending on the phase this drug is in. In the physical-chemical laboratory, controls of all types are carried out, from the simplest to the most complex. We can mention as simple analyzes the product's appearance, hardness, density and pH. As more complex, we can mention the most used method today in the largest pharmaceutical industries in the world, the content of the product (dosage), carried out in a device called HPLC (High Performance Liquid Chromatography).
- Each product goes through a production process and in a physico-chemical laboratory it is analyzed from the raw material, passing through the initial product, final product and stability study. Each phase requires special attention in its tests, following the literature established by the countries of dispatch and consumption of the drug. In Portugal, the European Pharmacopoeia is used as the main literature.

### **Raw Material**



Raw material means any substance, active or not, and whatever its origin, used in the production of medicine, whether it remains unchanged or changes or disappears during the process. Raw materials thus include excipients and active substances.

#### **Intermediate Product**

Intermediate product is the partially processed mixture of the raw material with the necessary inputs in their due measures that must be subjected to subsequent manufacturing steps before becoming a bulk product.

### **Bulk or Finished Product**

Bulk or finished product is any product that has gone through all the stages of production of the medicine before the packaging process is completed. Sterile products in their primary packaging are considered bulk products.

## **INSTRUMENTATION :**



HPLC





**DIGITAL PH METER** 







**VERNIER CALIPER** 

In summary, the training at KALIBERR Bioscience Private Limited has been a pivotal experience, providing both theoretical and practical insights into the pharmaceutical industry.

This experience has laid a solid foundation for a successful career in pharmaceutical manufacturing and quality management, equipping me with the necessary skills to contribute effectively to the field.



#### INDUSTRIAL TRAINING REPORT

AT

#### SHRINIWASA AYURVEDIC PRIVATE LIMITED,

Tal-Dindori, Nashik, Maharashtra

#### **Industrial Training Report**

By

Suraj Prabhakar Pagare

**Final Year B Pharmacy** 

K.K. Wagh College of Pharmacy

PRN no: 2154501823048

Roll no: 37

Duration: 5th July to 2024 to 5th Aug 2024

Academic Year: 2024-2025



#### DECLARATION

I hereby declare that I have successfully completed my industrial training at Shriniwasa Pharmaceutical Private Limited from 5th July to 2024 to 5th Aug 2024. During this period, I was exposed to various aspects of the pharmaceutical industry, including research and development, quality control, production, and regulatory affairs.

I would like to express my gratitude to the entire team at Shriniwasa Pharmaceutical Private Limited for providing me with valuable insights and hands-on experience in the pharmaceutical field. This training has enhanced my knowledge and skills, and I am now better equipped to contribute to the industry.

I also commit to maintaining the confidentiality of any proprietary information I have gained during my training at Shriniwasa Pharmaceutical Private Limited, and I will use the knowledge and skills acquired responsibly and ethically.

I am confident that this industrial training experience will greatly benefit my future career in the pharmaceutical sector, and I am eager to apply what I have learned to make meaningful contributions to the industry.

Suraj Prabhakar Pagare 26 August , 2024



#### AKNOWLEDGEMENT

I would like to express my sincere gratitude to Shriniwasa Ayurvedic Private Limited for providing me with the opportunity to complete my internship and gain valuable experience in the pharmaceutical industry. This internship has been an invaluable learning experience, and I am grateful for the support and guidance I have received throughout my time here.

I would like to extend my heartfelt thanks to **Mr. Kunal Bhushan Madane**, my internship supervisor, for their mentorship, patience, and the knowledge they shared with me during this internship. Their guidance has been instrumental in enhancing my understanding of the pharmaceutical field.

I am also thankful to the entire team at Shriniwasa Ayurvedic Private Limited for their warm welcome, cooperation, and willingness to involve me in various projects. Working alongside such dedicated professionals has been inspiring and educational.

Furthermore, I appreciate the opportunity to contribute to the projects at Shriniwasa Ayurvedic Private Limited, which allowed me to apply the theoretical knowledge I gained during my academic studies to real-world situations.

Last but not least, I want to express my gratitude to our college principal **Dr. K.S. Salunke Sir** for giving me an opportunity to visit manufacturing facility and explore practical procedure in pharmaceutical industry and their unwavering support and encouragement throughout this internship.

Overall, this internship at Shriniwasa Ayurvedic Private Limited has been a rewarding experience that has enriched my skills and knowledge in the pharmaceutical sector. I am confident that the lessons learned here will serve as a solid foundation for my future endeavors in this field.

Thank you once again for this incredible opportunity.

Sincerely, Suraj Prabhakar Pagare Final Year B Pharmacy K.K. Wagh College of Pharmacy. 26 August , 2024


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#### **Organization Information:**

- Shriniwasa Ayurvedic Private Limited in Nashik is one of the Leading Businesses in the Manufacturing of Ayurvedic Medicines, Ayurvedic Oil, Face Pack and Many More.
- Founded in 1972 by Late Dr. Madhav Dattatray Rajpathak who was in the field of Ayurveda for 50 years as a teacher as well as eminent Ayurvedic Practitioner. Dr. Rajpathak was Dean of Faculty of Ayurvedic medicine, University of Pune, Maharashtra & Dean of Ayurveda College, Nashik
- He was also foundering member of Ayurveda Seva Sangh, Nashik.
- The Company is making a steady progress on the path laid by his great vision, able guidance & leadership. In 1972 the company started its operations with launching of few Proprietary products.
- From 1982 it started manufacturing of Generic products like Ras Rasayan, Bhasma.
- In 1992 company shifted to M.I.D.C. Area (Govt. Industrial area) in Satpur, MIDC, Nashik, Maharashtra.
- Here a new factory building of app. 10000 sq.ft. is constructed as per the guidelines & specifications of Food & Drugs Administration (F.D.A.). We have G.M.P. License approved under Schedule-T of Drugs & Cosmetics Act 1940.
- In this new factory building we have following departments which are approved by F.D.A. 1.Oils
  - 2. Ointment
  - 3. Tablets with Coating
  - 4. Bhasma
  - 5. Churna
  - 6. Syrups
  - 7. Kupistha Rasayan etc.
  - 8.Gold preparations
  - 9. Sch. MII-B- Creams, Ointments, Lotion, Gels etc.
  - 10. Alcohol Fragrance Solution- Deodorants, Perfumes, Sanitizers.
- At present we are in manufacturing of various types of Hair Oils, Nutraceuticals, Medicinal Oils, Tablets, Gold compounds in large quantities. Along with these we have entered in the field of Special Purpose Medicines like Ayurveda based Herbal Hair Shampoo, Hair Conditioner, Hair Tonic, Herbal Face pack, Creams and Body Lotions.
- In 2019, we have started new line of cosmetics production.
- In this, we can manufacture ointments, creams, lotions, pomades, gels, shampoo, etc. and alcohol fragrance solutions-deodorants, perfumes, sanitizers etc.

Shriniwasa Ayurvedic Private Limited provide more than 500 Ayurvedic Medicines, Cosmetic products and Herbal wellness products through 16 different manufacturing departments for various product categories using our more than 49 years of expertise in flexible production systems from 1000 to 1000000 quantity that improve the lives of the patients through doctors, distributors, and other pharma companies across India.



#### **Quality Assurance:**

We provide a pure form of Ayurvedic and Herbal products which ready to fulfill consumer's satisfaction.

#### **Organization Mission:**

Motto is to provide Consumer a pure Ayurvedic and Herbal form of medicine.

#### **Organization Belief:**

Our company's dream is to make our nation and the whole world healthy by treat with our best traditional ayurvedic formularies. We must assure our consumers will be happy and healthier with us. We try to reach our herbal formulations to each and every one.

#### **Organization Vision:**

To build a healthier trust of each consumer and grow our brand widely in the world.

#### **Core Values:**

- 1. Transparency
- 2. Commitment to Excellence
- 3. Respect for Human Life



#### Various Department in Organization:

**1. Human Resources (HR):** This department is responsible for recruiting, hiring, and training employees. They also develop compensation and benefits programs, and manage employee relations.

- First there was a visit to a HR department where they gave me information about the company and its protocols.
- Then as an in-plant trainee what are the documents we need to submit where taken for information.
- After the process completion of administration, they gave me the 15 days schedule for working as in-plant trainee.
- That schedule was made in a manner so that each and every department in plant should be covered and shown perfectly for industrial knowledge.
- There is a rule while entering the manufacturing facility to wear mask, hair mask, shoe cover, apron, and get sanitized.

**2. Warehouse**: It is a facility for storing of raw materials and distributing pharmaceutical products. It has different sections for raw materials, produce products and quarantine area. The warehouse is responsible for receiving, storing, picking, packing, and shipping produce products. The warehouse also ensure that the products are stored in a safe and secure environment that meets all regulatory requirement.

- The storage area was big enough to stock the material which is needed.
- The store was segregated in many areas as per the product need and ease of carrying in and out of the plant.
- The store was on ground floor as per the protocols and has two doors for the material in and out called Receiving-bay and Finished product dispatching bay.
- There were two Receiving-bay, one for raw material and another for packing material.
- There was quarantine area for the material to store them for some period.
- After receiving the material de-dusting is done in pre-cleaning area for removal of dust and any foreign material present on it.
- The material is again weighed in weighing area for re-confirmation of the weight of the received good.
- There is a washing area where the containers are washed for decontamination and cleanliness.
- Then the material is taken in the store and stocked as per its category in specific store rooms.
  - There were many rooms like
  - 1) Ayurvedic API store room
  - 2) Ayurvedic excipients
  - 3) Packaging material store room
  - 4) Finished product store room
  - 5) Raw material store room



**3. Quality Control (QC)**: This department is responsible for ensuring the quality of products. They test the products for purity, potency, and safety. They also monitor the manufacturing process to ensure that it is carried out in accordance with good manufacturing practices (GMP).

- The quality control function exists within operations and manufacturing and uses the standards set by QA as the basis for inspecting and testing products.
- There are four types of Quality Control process control, acceptance sampling, control charts, and product quality control.
- Duty of Quality Control Inspector Monitoring operations to ensure that they meet production standards.
- Three main objectives of QC department
  - a) Enhance product quality and reduce risk.
    - b) Gain production efficiencies.
    - c) Garner customer loyalty.
- Three types of QC inspections:
  - a) Pre-production
  - b) In-line
  - c) Final
- Four main components of Quality Management process:
  - Quality planning
  - Quality assurance
  - Quality control
  - Continuous improvement

**4. Quality Assurance:** Quality assurance is the process of ensuring a product or service meets a company's quality standards. Quality assurance department establishes and maintains set requirements for developing or manufacturing reliable products.

- This cycle for quality assurance consists of four steps: plan, do, check, and act. Because it verifies existing conditions and methods used to provide the product for service customers.
- Quality assurance set the documentations like BMR, BPR, SOP's, MFR, STP, records, validation protocols, IN-process checks and for receiving material and dispatch finished products.
- It ensures the QC methods and procedures for testing for the drug or finished product efficacy.

**5. Production:** This department is responsible for producing Ayurvedic products.

- They use a variety of methods, such as extraction, distillation, fermentation, granulation and compression to produce the products.
- They have separate section for production of Oils, Ointment, Tablets with Coating, Bhasma, Churna, Syrups, Kupistha Rasavan, Gold preparations, Sch. MII-B- Creams, Ointments, Lotion, Gels etc. Alcohol Fragrance Solution- Deodorants, Perfumes, Sanitizers. In production the largescale machines are used for filling the formulation in the containers and sealing the containers is done by automatic sealing machine.



- Automatic Labeling machine is filled with the label roles and it sticks to the containers rightly and perfectly.
- The label contains the manufacturing date, expiry date, brand name, contains, direction to use, storage conditions, batch number, and at last the manufactured by.
- Human source is used to identify the defective container with wrong labeling, leakage, and damaged packaging.
- At last, the whole carton is filled in the inner cartons and then those in outer cartons for dispatch in market.
- The outer cartons are stored in the warehouse in dispatch area with dispatch labels on it.
- The production inspector duty is to look at the quality packaging and dispatching of the finished products and maintain the records and logbook.

**6. Packaging:** This department is responsible for packaging products. They ensure that the products are packaged in a way that protects them from contamination and degradation.

**7. Marketing:** This department is responsible for promoting and selling products. They develop marketing strategies, create advertising campaigns, and distribute products to retailers.

**8. Sales:** This department is responsible for selling Ayurvedic products to retailers and consumers. They build relationships with customers, answer questions about products, and process orders.

**9. Finance:** This department is responsible for managing the financial affairs of the company. They track revenue and expenses, prepare financial statements, and make investment decisions.



#### Machines and Equipment's:

#### **1. Rotatory Tablet Machine**



Rotary Tablet Machine is an ergonomically designed high speed tableting machine that is uses for producing tablets with high precision. This system is a highly efficient mechanical device that compresses the ingredients into desired tablet shape with utmost accuracy. Rotary tablet press is a mechanical device that unlike the single punch tablet press has several tooling stations which rotates to compress granules/powder mixture into tablets of uniform size, shape (depending on the punch design) and uniform weight. It was developed to increase the output of tablets. In rotary tablet press, the compaction force on the fill material is exerted by both the upper and lower punches leaving the powder granules to be compressed in the middle. This is known as accordion type of compression. The capacity of a rotary tablet press is determined by the rotation speed of the torrent and the number of stations on the press.

#### **Precautions:**

- Ensure that operators are properly trained to use rotary table machines safely and are familiar with the machine's controls, functions, and safety features.
- Keep all safety guards and barriers in place while the machine is in operation. These guards are designed to prevent access to moving parts and reduce the risk of accidents.
- Conduct regular inspections of the rotary table machine to check for wear, damage, loose parts, or other potential hazards.



- Ensure that the machine is equipped with easily accessible emergency stop buttons or switches, and operators know how to use them in case of an emergency.
- Maintain a clean and organized work area around the rotary table machine. Remove any obstacles, debris, or materials that could interfere with safe operation.
- Provide and enforce the use of appropriate PPE, such as safety glasses, hearing protection, gloves, and safety shoes, based on the specific hazards associated with the machine.
- Adhere to the machine's specified load capacity limits. Overloading the rotary table can lead to equipment failure and accidents.
- Ensure that tooling and fixtures are securely fastened and correctly aligned to prevent tool or workpiece ejection during rotation.\
- Use proper techniques when loading and unloading workpieces onto the rotary table to prevent injuries and damage to the machine.
- Operate the rotary table at the appropriate speed for the specific task. High-speed rotation can create hazards if not controlled properly.
- Use proper lifting equipment and techniques when handling heavy or bulky materials to avoid strain injuries.
- Follow a scheduled maintenance plan to keep the rotary table machine in good working condition and reduce the risk of unexpected failures.
- Develop and enforce safety guidelines and protocols specific to the rotary table machine's operation in your facility.

#### Advantages:

- High productivity can be gained with a minimal amount of labor while saving money.
- Rotary press has an output of between 9000 234000 tab/hour thus saves time and meets up with the high demand of tablet dosage form.
- The powder filled cavity can be automatically managed by a moving feeder.
- Rotary press decreases waste of valuable formulation in non-specific tablets.
- The machine allows independent control of both weight and hardness.

#### 2. Capsule Filling Machine



Manual capsule filling machine is a flexible bench top pharmaceutical equipment that boasts of having the capacity to produce about 8000 capsules per hour. The machine is hence deemed felicitous for clinical research organizations and special laboratories as they require cost effective manual capsule filler for smaller runs. The non-contact parts of the manual capsule filler, on the other hand, are manufactured using mild steel and hard chrome plated for an aesthetic look. A 300 Holes Manual Capsule Filler is potent enough to handle difficult powder and products. The manual capsule filling machine has evolved from simple design making few capsules per hour to huge production outputs and as such can be used commercially. Some of the important advantages of this equipment include simplicity in design, hygienic, accurate and precise operation, durability and cost effectiveness for small to medium scale operation.

#### Advantages:

- Large number of capsules can be filled per hour depending on machine design and model.
- Different models are available for various clients based on their manufacturing needs.
- Equipment designed to handle a wide variety of capsules.
- Easy mounting and user-friendly operation and parts replacement hence very low-down times.
- Easy assembly and disassembly for cleaning and maintenance purposes.
- The equipment is fully washable as per the good manufacturing practices (GMP) rules.
- Newer improved designs have negligible final product rejections and ensure better return on investment.
- Contact parts made of stainless steel and non-corrosive materials to eliminate contamination and easy cleaning.
- Long life and trouble-free operations.
- Table and partial filling attachments can be offered to fit the specific needs of the business and specific formulations.
- High quality loading plates.

#### 3. Granulator

Granulator equipment is generally used to render powders to a specific form that facilitates their flow ability and handling. We offer typical granulator machine for cosmetic, spices and pharmaceutical industries to formulate several ingredients like powdered incipient, small amounts of active ingredients and the liquid binder that locks the powder as granules to prevent segregation. In general, pharmaceutical industries require separate equipment's to pre-disperse, blend and to granulate various powders, but all these problems can be solved with our multi step granulator machine.





#### Silent Features:

- Efficient reciprocating type Granulator. It is suitable for granulating dry and wet materials.
- It is quiet in operation and robust and durable in design.
- A totally enclosed gearbox is mounted on a base pillar at a convenient height.
- All gearing is enclosed in oil bath. No grease or other external lubrication is required.
- Hopper, the granulating blades both for dry and wet, sieves and all other parts which come in contact with the material to be granulated are made from stainless steel.
- Separate stirrers for dry and wet granulations are provided and they are so designed that the efficiency of granulation process is optimized in each case. The stirrers can also be replaced quickly and easily.
- A simple and positive arrangement of holding and tensioning of the screen is provided. The arrangement is such that the screen remains stretched throughout the operation and very close and uniform gap is maintained. Thus, it produces better excessive wear on both stirrer and the mesh.
- Even there is a good saving on the cost of the stainless-steel sieve, as the cut size of the sieve to fit to the machine is smaller than that required for another machine.
- All the parts working on the materials being granulated can be easily and quickly dismantled for through washing without the use of spanners.
- Lower Guard of polished Stainless Steel & Upper Guards of Acrylic Material.



#### Technical details:

#### **Granulator Machine:**

Machine Type	Bhagwati ACRA-GRA-8	Bhagwati ACRA-GRA-12
Hopper Size	8" (200 mm)	12" (300 mm)
Electric Motor	1.H.P., 1440 R.P.M., 440 V., 3 Phase, 50 Cycles, A.C.	1.H.P., 1440 R.P.M., 440 V., 3 Phase, 50 Cycles, A.C.
Output	200 Kgs/hr. (Output depends upon size of granules and type of material)	200 Kgs/ hr. (Output depends upon size of granules and type of material)
Overall Dimensions(cm)	46 W x 770 D x 123 H	60 W x 109 D x 150 H
Case Dimensions (cm)	66 x 92 x 165 H	91.5 x 145 x 178 H
Net weight	250 kgs.	500 kgs.
Gross weight	370 kgs.	620 kgs.

### 4. Fluidized Bed Dryer



A fluidized bed dryer works by passing Hot air with high pressure through a perforated bed of moist solid particles. The hot air passes at a velocity greater than the settling velocity of the particles resulting, particles starting to suspend in the air. As the moist particle suspends in hot air, the moisture content of solid particles reduces to achieve the desired loss on drying (LOD). The drying vapors carry the vaporized liquid away from the moist solid particles. In some cases, the leaving gas is recycled to conserve energy.

#### Advantages of FBD

- If the gas-particle constant is excellent, it can lead to efficient heat and mass transfer rates, which results in faster removal of moisture.
- If part of the thermal energy for drying is supplied by the internal heat exchanger, high thermal efficiency is usually achieved.
- Lower initial and ongoing costs.
- Drying contact time is reduced.
- Stability and easy to control.

#### **Disadvantages of FBD**

- Considerable pressure drops are caused by the necessity to suspend the entire bed in gas, resulting in high energy usage.
- Increased gas handling is required due to substantial exhaust gas recirculation for high thermal efficiency operation.
- Inadequate fluidization and flexibility, particularly if the feed is overly wet.
- In case of organic solvents to eliminated by drying, this is not the best equipment • to use.
- For certain types of fluidized bed dryers, product quality is non-uniform.
- There is a high risk of attrition and, in some situations, the fine particle becomes • aggregate.
- When processing poisonous or flammable substances, traditional hot air fluidized bed dryers are not a good solution since there is a risk of fire or explosion if flammability limitations are exceeded.

#### 5. Semisolid Formulation Mixing Machine

A semisolid formulation mixing machine is a device that is used to mix ingredients for the production of semi-solid products, such as creams, gels, ointments, etc. There are different types of mixers that can be used, depending on the formulation and the desired properties of the final product.

#### **Advantages:**

- These machines ensure thorough and consistent mixing of pharmaceutical ingredients, • resulting in reliable and uniform dosage forms.
- Precise control over parameters like speed and temperature enables accurate dosing and adherence to formulation specifications.
  Automation reduces the risk of human errors, erucial for maintaining dosage accuracy.





- Many machines are designed for easy cleaning and adhere to pharmaceutical hygiene standards, minimizing contamination risks.
- They can handle a range of formulations, allowing production of various semisolid dosage forms with the same equipment.
- Semisolid mixing machines are efficient, reducing production time and time-to-market for pharmaceutical products.
- Available in different sizes, they can be scaled up for large manufacturing facilities or used in smaller labs.
- These machines ensure batch-to-batch consistency, promoting product quality.
- Precise temperature control is available for formulations with specific temperature requirements.
- They can effectively mix challenging or non-homogeneous ingredients.
- Machines can often be customized to meet specific production needs.
- Monitoring and control systems provide a record of the manufacturing process for quality assurance and compliance.
- Efficient mixing minimizes product wastage, maximizing production yield and cost-effectiveness.

#### 6. Ointment Filling Machine

An ointment tube filling machine is a type of pharmaceutical equipment used to fill ointments into tubes. These machines typically consist of a hopper for holding the ointment, a filling nozzle that dispenses the ointment into the tubes, and a capping mechanism for sealing the tubes after filling. Some ointment tube filling machines may also include features such as a labeler for applying labels to the filled tubes and a quality control system for checking the accuracy of the filling process. Ointment tube filling machines are commonly used in the pharmaceutical and cosmetic industries to fill tubes with ointments, creams, and other semi-solid products.



They are typically designed to handle a wide range of tube sizes and can be adjusted to fill tubes with different volumes of ointment.



#### Advantages:

- The material contact part of ointment filling machine is made of stainless steel, which can make the material neat and will not stick to the equipment and affect the equipment.
- Ointment filling machine conforms to the international regulations The hygienic requirements of the product, this equipment has good performance, beautiful equipment, intelligent sealing equipment is installed, and it is easy to operate.

#### **Precaution:**

- Please clean up the surrounding environment before using the hose filling and sealing machine.
- The main transmission system of ointment filling machine is located at the bottom of the machine and is closed by a stainless-steel door with a lock.
- When adjusting the loading capacity, it must be opened and adjusted by a special person (operator or maintenance technician). Before starting the machine again, be sure to confirm that all doors are in good condition.

#### 7. Extraction Tank

Extraction tanks play a crucial role in pharmaceutical companies for various purposes, primarily in the production of pharmaceutical products and ingredients. Here's how extraction tanks are commonly used in the pharmaceutical industry.

- **Plant-Based Extracts:** Many pharmaceutical products are derived from plant-based sources. Extraction tanks are used to extract active compounds, such as alkaloids or essential oils, from medicinal plants. Solvents like ethanol or supercritical CO2 are often employed for this purpose.
- Herbal Medicine Production: Herbal medicines often require the extraction of medicinal compounds from herbs and plants. Extraction tanks are used to create concentrated extracts that can be used in various formulations.
- Active Pharmaceutical Ingredient (API) Production: Pharmaceutical companies use extraction tanks to extract and purify APIs from various sources. For example, certain



antibiotics or anti-cancer drugs may be extracted from microbial cultures or natural sources.

- **Pharmaceutical Solvent Extraction:** Extraction tanks are utilized to separate and purify pharmaceutical compounds from solid or liquid mixtures. This is common in the production of antibiotics, steroids, and other pharmaceutical ingredients.
- **Removal of Impurities:** In some cases, extraction tanks are used to remove impurities or unwanted substances from a pharmaceutical product. For example, solvent extraction can be employed to remove impurities from a drug intermediate.
- **Recrystallization:** Extraction tanks can also be used in recrystallization processes to purify and refine pharmaceutical compounds. This is a common technique to improve the quality and purity of APIs.
- **Solvent Recovery:** Pharmaceutical companies often aim to minimize waste and reduce costs. Extraction tanks are equipped with solvent recovery systems to recycle and reuse solvents, making the process more environmentally friendly and cost-effective.
- **Quality Control and Testing:** Extracts and purified substances obtained from extraction tanks are subject to rigorous quality control and testing to ensure they meet pharmaceutical standards for safety, efficacy, and purity.
- **Research and Development:** Extraction tanks are used in pharmaceutical research and development to study the extraction and purification of new compounds, develop new extraction processes, and optimize existing ones.



#### Advantages

- Extraction tanks allow for efficient extraction of active pharmaceutical ingredients (APIs) and other compounds from raw materials, ensuring a high yield of valuable substance.
- Modern extraction tanks are equipped with advanced control systems that enable precise control over factors like temperature, pressue, and agitation, leading to consistent and reproducible results.
- Extraction tanks can be used with a wide range of solvents, making them versatile for different extraction processes and pharmaceutical compounds.

- Properly designed extraction processes can yield highly pure extracts, which is essential in pharmaceutical manufacturing to meet stringent quality standards.
- Extraction tanks often have solvent recovery systems, allowing for the recycling and reuse of expensive solvents, reducing production costs.
- Extraction processes can be scaled up from laboratory-scale to industrial-scale production, making it possible to meet the demands of large pharmaceutical manufacturing operations.
- Extraction tanks are vital in pharmaceutical R&D for the development of new products, processes, and formulations, enabling the exploration of novel drug candidates.

#### **Precautions:**

- Due to the use of flammable solvents and high-pressure conditions, safety measures must be strictly followed, including explosion-proof equipment and proper training of personnel.
- Rigorous quality control and testing are essential to ensure that the extracted compounds meet pharmaceutical purity and efficacy standards.
- The pharmaceutical industry is highly regulated. Extraction processes and equipment must adhere to Good Manufacturing Practices (GMP) and other regulatory requirements.
- Careful consideration is required when selecting solvents to ensure they are safe, compatible with the product, and can be effectively recovered.
- Proper disposal or treatment of waste streams, including spent solvents and extracted materials, must be in compliance with environmental regulations.
- Regular maintenance and cleaning of extraction tanks are necessary to prevent contamination and ensure the equipment operates effectively.
- Validation of extraction processes is crucial to demonstrate that they consistently produce the desired results within specified limits.
- Personnel operating extraction tanks should receive thorough training to ensure their safety and the integrity of the process.

#### 8. Tray Dryer



A tray dryer in the pharmaceutical industry is used to dry powders, granules, and other types of materials. It consists of a heated chamber with trays to place materials. The trays are usually stacked one on top of each other, and the drying process is usually done under controlled temperature and humidity conditions. The principle of a tray dryer is based on the process of convection drying. Convection drying involves the use of hot air to remove moisture from the material being dried. The hot air is circulated throughout the drying chamber, and as it passes over the trays, it removes moisture from the materials on the trays. The temperature and humidity inside the chamber are controlled to ensure that the materials are dried at the appropriate rate. in short; hot air is continuously calculated inside the chamber, and forced convection heating takes place to remove moisture from the solid spread in trays.

Uses:

- A tray dryer provides a uniform drying process that prevents the materials from getting damaged, this is particularly important in the pharmaceutical industry since the material may be sensitive to heat.
- It is used to dry materials like; excipients, tablets, powder, and wet granules to dry.
- It is most efficient to dry for sticky materials.
- Tray drier also used to dry equipment and glassware.
- It is easy to clean and required less time in product-to-product changeover.

#### Advantages:

- In try dryer, handling of materials (loading and unloading) can be done without losses.
- Try the dryer is operated batch-wise.
- Most efficient and consume less energy.
- As it is available in different sizes with different price ranges, so it becomes easy to control capital cost.
- It can be used on small scale as well as on a medium scale.
- It reduces the drying time by removing moisture at an efficient rate.
- Easy to operate and handle.
- Easy to installed.

#### **Disadvantages:**

- The tray dryer required more labor to load and unload hence the cost increase.
- The process is time-consuming depending on the materials.
- The dusty solids are not drier in a tray dryer.
- It has limited capacity; so, it cannot use in a large-scale production.
- It is not suitable for Thermolabile materials, liquids, and slurries.



#### 9. Labelling Printing Machine:



Label printing machines used for labeling pharmaceutical products are typically specialized and designed to meet the stringent requirements of the pharmaceutical industry, which includes compliance with regulatory standards, high print quality, and security features. It adheres to strict regulatory requirements, such as FDA (U.S. Food and Drug Administration) regulations. High print quality is essential to ensure that all critical information, including batch numbers, expiration dates, dosage instructions, and barcodes, is clear and legible. Label printers provides with highresolution printing capabilities (e.g., 300 dpi or higher). Pharmaceutical labeling often involves sensitive information. Ensure that the label printing system has robust security features to protect data integrity and prevent unauthorized access or tampering. Pharmaceutical labels often require variable data printing, such as unique serial numbers, lot numbers, and patient-specific information. The label printer is capable of handling variable data efficiently. Ensures the integrity of pharmaceutical products and preventing tampering or counterfeiting. The label printer can work with a variety of label materials suitable for pharmaceutical applications, including options for vial labeling, blister packs, and bottle labeling. Depending on your production volume, choose a label printer can scale to meet your needs, whether you have a small pharmaceutical operation or a largescale manufacturing facility.

#### **Precautions:**

- Ensure that operators are properly trained in the operation of the specific label printing machine they will be using. Training should cover safety procedures, troubleshooting, and routine maintenance.
- Depending on the machine and the materials used, operators may need PPE, such as safety glasses, hearing protection, gloves, and safety shoes. Use appropriate PPE as required.
- Set up the label printing machine in a clean and well-ventilated area with adequate lighting. Ensure it is placed on a stable, level surface.
- Connect the machine to a suitable and properly grounded power source as specified in the user manual. Avoid overloading circuits.



- Use label materials and inks/ribbons that are compatible with the machine. Incompatible materials can damage the equipment and affect print quality.
- Handle label materials with care to prevent contamination, wrinkling, or damage. Ensure materials are loaded correctly onto the machine.
- Follow the manufacturer's maintenance schedule and guidelines. Regularly clean and inspect the machine to identify and address any issues promptly.
- Keep all safety guards and covers in place while the machine is in operation. Do not bypass or remove safety features.
- Know the location of the emergency stop button or switch, and be prepared to use it if needed. Ensure it is easily accessible and functioning correctly.
- Stay alert and focused while operating the machine. Avoid distractions, and do not leave the machine unattended during printing.
- Ensure proper alignment of label materials and that they are loaded correctly to prevent jams or misprints.
- When performing maintenance tasks or changing consumables like ink or ribbons, switch the machine to maintenance mode to prevent accidental printing.
- Some label printers can generate heat during extended use. Allow the machine to cool down as recommended in the user manual to prevent overheating.
- Ensure that labels are collected or dispensed properly to avoid clutter and obstructions that could interfere with the machine's operation.
- Dispose of label waste appropriately, following workplace guidelines for recycling or disposal of label materials and consumables.
- Maintain records of operator training, machine maintenance, and any incidents or issues for reference and compliance purposes.

#### 10. Syrup filling & Capping Machine



A syrup filling and capping machine used in a pharmaceutical company is a critical piece of equipment designed to automate the process of filling bottles with liquid syrup medications and sealing them with caps. The machine accurately measures and dispenses the specified volume of syrup into individual bottles, ensuring consistent dosage levels. After filling, the machine securely seals each bottle with caps, maintaining the product's integrity and preventing contamination.



These machines are engineered to work at high speeds while maintaining precise filling and capping operations, optimizing production efficiency. Pharmaceutical-grade filling and capping machines adhere to strict hygiene and regulatory standards to guarantee the safety and quality of medicinal products. Integrated quality control mechanisms may be part of the machine, verifying filled volumes and cap integrity to meet pharmaceutical industry standards.

#### Advantages:

- These machines ensure precise and consistent filling of syrup into bottles, minimizing dosage variations and enhancing product quality.
- Automation reduces manual labor, increasing production speed and efficiency, resulting in higher output and cost savings.
- Controlled, automated processes minimize the risk of contamination, maintaining the integrity of the pharmaceutical product.
- Filling and capping machines are designed to meet strict hygiene and regulatory standards, ensuring compliance with pharmaceutical industry regulations.
- Capping machines securely seal bottles, preventing tampering and preserving the product's integrity and shelf life.
- Over time, the investment in these machines can lead to significant cost savings through reduced labor and increased production rates.
- These machines can be adapted for various bottle sizes and types, making them suitable for a wide range of syrup-based pharmaceutical products.
- Many machines incorporate quality control mechanisms, such as reject systems for improperly filled or capped bottles, ensuring consistent product quality.
- Precise filling reduces product waste, minimizing the loss of valuable pharmaceutical ingredients.

#### **Precautions:**

- Ensure that operators are properly trained to operate the machine, including safety procedures, machine settings, and troubleshooting.
- Maintain strict hygiene standards in the machine's operation area. Regularly clean and sanitize the machine to prevent contamination of syrup and bottles.
- Implement a robust quality control system to monitor and verify the accuracy of filling and capping operations. Conduct regular checks to ensure the machine is working within specified tolerances.
- Establish a routine maintenance schedule to keep the machine in optimal working condition. Regularly inspect and replace parts as needed to prevent breakdowns and ensure consistent performance.
- Ensure that the machine is compatible with the syrup and bottle materials being used. Some syrups may require specific materials or coatings to prevent interaction with the container.
- Implement safety features such as emergency stop buttons, guards, and safety interlocks to protect operators from accidents.
- Maintain thorough records of machine operation, maintenance, and quality control checks. This documentation is crucial for regulatory compliance and troubleshooting.
- Regularly calibrate and validate the machine to ensure it is operating within specified parameters. This is especially important for accuracy in pharmaceutical production.



- Develop contingency plans for potential machine failures or quality issues. Have backup procedures in place to maintain production continuity.
- Ensure that the machine complies with all relevant pharmaceutical regulations and standards. Stay updated on any changes in regulations that may affect machine operation.
- Train operators to use personal protective equipment (PPE) as necessary and follow safety protocols when working with the machine.
- Have procedures in place for responding to emergencies such as machine malfunctions, spills, or accidents. Train personnel on these procedures.
- Properly label bottles filled with syrup to maintain traceability and avoid mix-ups. Ensure that all documentation, including batch records, is accurate and up to date.
- Dispose of waste materials and chemicals properly, considering environmental regulations.

#### 11. Label Applicator Machine

The machine typically has a roll of labels that are fed into the system. These labels are usually on a backing material or liner. The machine separates individual labels from the liner. This can be done using various mechanisms such as a peel plate, vacuum system, or a combination of methods. Once separated, the label is dispensed precisely at the target location, often guided by sensors or registration marks. Adhesive is applied to the back of the label, either before or after separation, depending on the machine's design. This adhesive ensures the label sticks to the product. The machine applies the label to the product, ensuring it is positioned accurately and securely. Some machines may include a mechanism to press the label firmly onto the product to ensure good adhesion. The liner, which carried the labels, is typically rewound or discarded.



#### Advantages:

- Label applicator machines can apply labels quickly and accurately, which increases production efficiency.
- They ensure uniform label placement and alignment, improving the overall appearance of products.
- Automation reduces the need for manual labor, saving on labor costs.
- These machines can handle various label sizes and shapes, making them versatile for different product types.

- Automation reduces the risk of human errors in label application.
- Label applicator machines can work at high speeds, keeping up with fast-paced production lines.
- Some machines can be programmed for label placement and printing customization.

#### **Disadvantages:**

- Label applicator machines can be expensive to purchase and install.
- They require regular maintenance to ensure proper functioning.
- Setting up the machine and adjusting it for different label sizes can be time-consuming.
- Some machines may not be adaptable to label changes or new label designs.
- Operating and troubleshooting the machine may require technical knowledge.
- They may take up significant floor space in the production area.
- Employees need training to operate the machine effectively.

#### **Pecautions:**

- Always start by reading the manufacturer's instruction manual thoroughly. This will provide specific guidance on the safe operation of your particular machine.
- Ensure that operators are properly trained in the use of the machine. Inexperienced or untrained operators can make mistakes that lead to accidents.
- Before each use, inspect the machine for any signs of damage or wear. Check for loose bolts, frayed cables, or any other issues that could affect safety or performance.
- Keep the work area around the machine clear of obstructions. Ensure there's adequate lighting to see labels and machine components clearly.
- Make sure the machine is properly connected to a suitable power source and that the electrical components are in good condition. Use grounded outlets and extension cords if necessary.
- Use the appropriate label material recommended by the machine's manufacturer. Using the wrong label material can lead to jams or other issues.
- Ensure labels are loaded correctly and aligned properly in the machine to prevent misalignment or jamming during application.
- Set the machine to the correct label size, speed, and other parameters as specified in the manual. Incorrect settings can result in wasted labels and machine malfunctions.
- Regularly perform routine maintenance tasks such as cleaning, lubrication, and parts replacement as recommended by the manufacturer.
- When performing maintenance or clearing jams, ensure the machine is unplugged or properly locked out to prevent accidental start-up.
- When changing label rolls or handling adhesive materials, use caution to avoid contact with skin or eyes. Chemical-resistant gloves may be necessary.
- Keep records of training and maintenance tasks to ensure that everything is performed according to schedule.



#### Formulations

#### 1. Bhringraj Hair Oil



#### **Ingredients:** -

- 1. Maka (Bhringraj): Promotes hair Growth, repair hair damage, etc.
- 2. Vadparambi: Vadparambi extracts make hair roots strong.
- 3. Neem leaves: Neem leaves treat dandruff and an itchy scalp.
- 4. Nagarmotha: Nagarmotha controls hair fall associated with dandruff.
- 5. Amla: Condition your scalp, boost the volume of hair, treat head lice.
- 6. Brahmi: Reduces dryness, itchiness, and flakiness. Helps in reducing hair fall.
- 7. Korphad Ras: Korphad Ras is known as aloe vera juice it cleanses hair and scalp, conditions and protects hair.
- 8. Teel Oil: Nourishes hair follicles, retains natural hair colour, soothes the scalp.

Туре	Hair Growth
Packaging Size	100 ml
Usage/Application	Hair Care
Fragrance	Natural
Ingredient	Herbal
Packaging Type	Bottle

#### 2. Aloe Vera Hair Oil

#### **Ingredients: -**

- 1. Aloe vera (Korphad): Promotes hair growth, Conditions, and protects hairs.
  - 2. Vadparambi: Strengthen hair.

- 3. Mehndi: Natural hair dye, adds lusters to tresses.
- 4. Methi: For hair growth for itchy scalp, as a hair conditioner.
- 5. Neem leaves: Treats dandruff and itchy scalp.
- 6. Maka: Nourishment to the hair.
- 7. Jawanda Phool: Gives hair natural shines, makes hair smoother and silky.
- 8. Teel oil: Maintains healthy scalp and prevent hair from sun damage.



Extraction Method	Cold Pressed
Usage/Application	Pharma
Packaging Size	100ml
Packaging Type	Plastic Bottle
Organic	Yes
Shelf Life	24 Months

#### 3. Castor Oil

Castor Oil is rich in Anti-oxident, Vitamin E and essential Fatty acids including omega 6 to give intensive nourishing care to your hair, skin, eyelashes, eyebrows, lips and nails. Castor Oil is a versatile product that has been trusted for thousands of years to promote hair growth, improve hair texture, minimize split ends, soften hand skin (heels, knees, elbows), reduce skin's uneven tone, delay wrinles and strengthen nails. You can use this oil on its own or blended with other cold pressed vegetable oil.





Extraction Method	Cold Pressed
Usage/Application	Pharma
Packaging Size	50 ml
Packaging Type	Plastic Bottle
Organic	Yes
Color	Pale Yellow
Health Benefits	Skin Care

#### 4. Ayurvedic Neem Oil

Ayurvedic text describe neem as "Sarva Roga Nivarini". This Neem Oil is 100% pure and Cold-Pressed from organic neem seeds from the farms. Rich an antioxidant, Neem Oil has been used for centuries for treating both skin and hair disorders. Its antibacterial action treats skin issues such as acne, rashes, hyper- pigmentation, burns, and abrasions while protecting and moisturizing with its high essential fatty acid and vitamin content. It clarifies the hair and scalp to relieve dandruff, environmental damage and stimulates hair follicles for improved hair volume and growth.

Extraction Method	Cold Pressed		
Usage/Application	Pharma		
Packaging Size	100ml		
Packaging Type	Plastic Bottle		
Form	Liquid		
Shelf Life	24 Months		
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#### 5. Mahanarayan Oil



Packaging size	50ml
Packaging Type	Box
Usage/Application	Pain Relief
Composition	With Saffron
Prescription	No
Shelf Life	2 Years



#### 6. Arshazone Piles Capsule

Natural Remedy for Piles, Fissure, Hemorrhoid, Hemorrhage, Rip. Also, best ayurvedic medicine for Bleeding, Non-Bleeding, Painless, External & Internal Piles.



Dosage: One capsule thrice a day or as directed by a physician.

#### **Contains:**

- 1. Sunthi- Sunthi is helpful in dealing with motion sickness and nausea. It is also known to support digestive health.
- 1. Nagkeshar: -Nagkeshar helps to manage conditions like indigestion, bleeding piles, due to its Ushna (hot), Deepan (appetizer), Pachan (digestion) and Vata, Pitta, Kapha balancing properties.
- 2. Mankanda: Mankand helps to cleans motions and balance digestion system.
- 3. Dhamasa: Infusion is effective as cooling agent in stomatitis.
- 4. Patha: Patha is used in the treatment of chronic non-healing ulcers and sinuses.
- 5. Suran Kwath: Proceed in one part of Suran Kandh Kwath use for improves digestion, strength by reducing bloating and irregular bowel movements.
- 6. Marich: Provides Protection from Infections.
- 7. Pimapali: This helps to improve body's metabolism and thus promotes weight loss by eliminating toxins from the body. Also, Pippali helps to reduce the amount of fat in the body.
- 8. Subhra Turti: Alum mainly uses as a water purifier in water treatment by flocculation method; it is the process in which colloidal particle separates and sediments under the form of flakes; once the sediment is thrown away, the water is boiled to kill bacteria, it is due to the adding clarifying agent.
- 9. Sajjikshar: Sajjikshar is a medicine that is used for the treatment of Stimulate the appetite, Increases the passage of urine, and other conditions.
- 10. Shuddha Guggul: Suddha Guggul has anti-inflammatory and anti-obesity properties.
- 11. Daru Haridra: In Daru Haridra there are antibacterial and anti-inflammatory properties.



- 12. Trivrutta: Trivrutta herbs are good to resolve the problem of Hemorrhoids. It helps to relief symptoms associated with hemorrhoids like itching, irritation, redness, soreness, and others.
- 13. Tankan Lahi: Tankan Bhasma is used for productive cough, breathing problems, wheezing, bronchitis, abdominal pain, dysmenorrhea, dandruff, bad breath, and foul-smelling urine.

Packaging Size	30 Capsules
Form	Capsule
Packaging Type	Box
Treatment	Piles
Item Name	Arshazone

#### 7. Mauli Ayurvedic Pain Balm



Packaging Size	10gm	
Usage/Application	Pain Relief	
Packaging Type	Box	
Dosage Form	Balm	
Grade Standard	Medicine Grade	
Shelf Life	12 Months	
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8. Mauli Adulsa Cough Syrup Mauli Adulsa Ayurvedic Cough Syrup is For Various Types of Coughs, like dry cough and wet cough. Best ayurvedic cough syrup. Fortifies with haldi, Tulsi, Aloe Vera and Kantakari.



Brand	Ayurvedic
Bottle Size	100 ml
Manufacturer	Shriniwasa Ayurvedic Pvt. Ltd.
Syrup Type	Ayurvedic
Shelf Life	3 Years
Bottle Type	Plastic



#### **Activities Performed During internship**

During my internship at Shriniwasa Ayurvedic private limited, I engaged in a variety of activities that provided me with valuable insights and practical experience in the field. These activities included:

**1. Product Development:** I participated in the process of developing Ayurvedic formulations, which involved researching traditional herbal ingredients, conducting experiments, and collaborating with the research and development team to create new products.

**2. Quality Control:** I learned about the rigorous quality control standards in the Ayurvedic industry. This included conducting quality tests on raw materials and finished products to ensure they met regulatory and company standards.

**3. Manufacturing:** I had the opportunity to observe and assist in the manufacturing process of Ayurvedic medicines and herbal products. This involved understanding the machinery and techniques used for production.

**4. Regulatory Compliance:** I gained knowledge about the regulatory requirements governing Ayurvedic pharmaceuticals. I assisted in preparing documentation for product registrations and certifications.

**5. Herbal Extraction:** I learned about various methods of herbal extraction and purification techniques used in Ayurvedic medicine production, which played a crucial role in product quality.

**6. Research and Documentation:** I was involved in literature reviews, data analysis, and documentation of research findings related to the efficacy and safety of Ayurvedic formulations.

**7. Market Analysis:** I conducted market research to understand consumer preferences and trends in the Ayurvedic pharmaceutical industry, helping the company make informed business decisions.

**9. Inventory Management:** I assisted in managing inventory levels to ensure that the production process ran smoothly and products were readily available for distribution.

**10. Team Collaboration:** I worked closely with cross-functional teams, including pharmacists, researchers, and production staff, to gain a holistic view of the company's operations.

Overall, my internship at the Shriniwasa Ayurvedic private limited, provided me with a comprehensive understanding of the industry, from product development to regulatory compliance. It enhanced my practical skills and deepened my appreciation for the rich heritage of Ayurvedic medicine.

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#### **Documents Handled**

During my internship at the Ayurvedic pharmaceutical company, I was responsible for handling a variety of documents critical to the company's operations. These documents included:

**1. Product Formulation Records:** I managed records related to the formulation of Ayurvedic medicines, which included detailed information about the ingredients, proportions, and manufacturing processes used in each product.

**2. Quality Control Reports:** I maintained records of quality control tests conducted on raw materials and finished products, ensuring compliance with industry standards and regulatory requirements.

**3. Regulatory Documentation:** I assisted in the preparation and organization of documents required for product registrations, certifications, and compliance with regulatory authorities.

**4. Research and Development Reports:** I handled documentation related to research projects, including literature reviews, experimental data, and findings, which were essential for product development and improvement.

**5. Inventory Records:** I maintained records of inventory levels, ensuring that raw materials and finished products were adequately stocked to meet production and distribution demands.

**6. Market Research Reports:** I organized market research data and reports, which helped the company stay informed about consumer preferences, market trends, and competitive analysis.

**7. Herbal Ingredient Sourcing:** I managed records related to the sourcing of herbal ingredients, including supplier information, quality assessments, and compliance with sustainable and ethical sourcing practices.

**9. Standard Operating Procedures (SOPs):** I reviewed and updated SOPs to ensure that employees followed established procedures for various tasks, promoting consistency and quality in operations.

Handling these documents was a crucial part of my internship, as it ensured that the companymaintained transparency, quality, and compliance in all its activities. It also provided me with valuable experience in document management and the importance of accurate record-keeping in the pharmaceutical industry.



#### **Skills Developed during Internship**

- 1. Punctuality.
- 2. Team work.
- 3. Honesty.
- 4. Leadership.
- 5. Efficient in completing tasks.
- 6. Time management skills.
- 7. Knowledge regarding product.
- 8. Proactive working.
- 9. Communication skills with other colleagues.
- 10. Adaptation in surrounding.



#### Summary

My internship experience in the Shriniwasa Ayurvedic private limited was both enriching and educational. Over the course of my internship, I had the privilege to engage in a wide array of activities and gain valuable insights into this traditional yet evolving sector.

I was exposed to the intricate world of Ayurvedic product development, which involved researching traditional herbal ingredients and actively participating in the formulation process. This hands-on experience allowed me to appreciate the delicate balance of ancient wisdom and modern science that underpins Ayurvedic medicine.

Quality control was a cornerstone of my internship, where I learned the meticulous standards upheld in the industry. Conducting tests on raw materials and finished products taught me the importance of precision and adherence to regulatory guidelines.

Witnessing the manufacturing process was another eye-opening aspect of my internship. Understanding the machinery and techniques used to produce Ayurvedic medicines provided me with a deeper appreciation for the artistry involved in this field.

Navigating the intricate web of regulatory compliance was both challenging and insightful. I was involved in the preparation of documentation required for product registrations and certifications, gaining a holistic understanding of the industry's compliance landscape.

My exposure to herbal extraction methods and purification techniques underscored the emphasis on product quality. It reinforced the significance of using the right methods to extract and process herbs for maximum efficacy.

Engaging in research and documentation activities broadened my knowledge base. I had the privilege of contributing to research reports and literature reviews, which not only enhanced my research skills but also deepened my understanding of the science behind Ayurvedic formulations. Market analysis revealed the dynamic nature of the pharmaceutical industry. Conducting market research allowed me to identify consumer preferences and market trends, which were crucial for informed decision-making.

Inventory management and teamwork rounded out my experience, showcasing the operational intricacies of the industry and the importance of collaboration across different departments.

It provided me with a well-rounded view of the industry, from product development to regulatory compliance, and deepened my appreciation for the heritage and science behind Ayurvedic



medicine. It was a journey of learning and growth, equipping me with practical skills and knowledge that will undoubtedly prove invaluable in my future endeavors.





#### **K K WAGH COLLEGE OF PHARMACY**

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## 1.3.3

### **C-INDUSTRIAL VISIT**



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#### **1.3 Curriculum Enrichment**

1.3.3 Number of students undertaking project work/field work/ internships

# <mark>C – Industrial Visit</mark>

Sr. No.	Date	Location	Number of students
1.	15/03/2024	Vital Pharmaceutical Pvt. Ltd., Satpur, MIDC, Nashik	50
2.	23/04/2024	Maxheal Pharmaceuticals, Satpur, Nashik	96
3.	24/04/2024	Macleods Pharmaceuticals, Kachigam, Vapi, Gujrat	111
4.	26/04/2024	SciTech Specialties Pvt Ltd., Sinnar, Nashik	45
5.	30/04/2024	Sahyadri Farm, Mohadi, Nashik	90
6.	10/05/2024	SciTech Specialties Pvt Ltd., Sinnar, Nashik	45
(B. Pharmacy & D. Pharmacy) Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003. (Maharashtra) India. T: 0253 - 2221121, 2517003, 2510262 Web : www.pharmacy.kkwagh.edu.in Email: principal-bpharmacy@kkwagh.edu.in, disp-bpharmacy@kkwagh.edu.in

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# Industry Visit Report

- Visit Day and Date: Wednesday, 24 April, 2024
- 2. Visit Time: 1.00pm to 4.00 pm
- 3. Venue: Macleods Pharmaceuticals, Kachigam, Vapi, Gujarat 4. Objective of the Industry visit:

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To provide students an insight into production, quality control, quality assurance, packaging and maintenance department and interact with highly trained and experienced personnel.

5. Outcome of the Industry visit:

Students got to know the actual working environment of Pharmaceutical Industry. They also got insight into practical usage of equipment and machinery they studied in the curriculum. Students were guided about the process flow among various departments.

6. Number of participants: 111 students of Final year and T.Y.B. Pharmacy with five faculty members

## Faculty members-

1. Dr. Vaibhav Bhamare 2. Dr. Sarika Malode 3. Dr. Sainath Aher 4. Ms. S. B. Jadhav 5. Ms. M, R. Pawar

### **Outline of Visit:** 7.

Total 111 students of Final year and T.Y.B. Pharmacy with five faculty members participated in the visit. The visits started at 1.30 pm. Students were divided into four groups and they were taken to different sections like production department including granulation, compression, coating, packaging, etc. The in-charge of each section explained about the various functionalities of the department. A brief overview of Quality Assurance and Dispatch section was also given.





# (B. Pharmacy & D. Pharmacy)

Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003. (Maharashtra) India.

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Email: principal-bpharmacy@kkwagh.edu.in, disp-bpharmacy@kkwagh.edu.in

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## 8. Event Photos





**GPS Map Camera** Kachigam, Gujarat, India 9VGQ+XVG, Vapi-Kachigam Rd, Kachigam, Vapi, Gujarat 396001, India Lat 20.375352°

Long 72.889722° 24/04/24 04:49 PM GMT +05:30













Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003. (Maharashtra) India. : 0253 - 2221121, 2517003, 2510262 Web : www.pharmacy.kkwagh.edu.in Email: principal-bpharmacy@kkwagh.edu.in, disp-bpharmacy@kkwagh.edu.in

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#### **Report** on

**Industry Visit** 

Date: 15/03/2024

Time: 10:00 am to 02:30 pm

Venue: Vital Pharmaceuticals Pvt.Ltd.,Satpur,MIDC,Nashik.

#### **Objective of the Program:**

- To enhance the practical and industrial knowledge of manufacturing of different dosage form like parentrals/injections.
- To update with an overview on the raw materials, API, finished goods and their quality control test.
- To learn about sterile techniques and aseptic zone of manufacturing.
- To understand different departments and their workings.

#### The Outcome of the Industrial Visit:

All the students were made familiar with working of industry facilitating manufacturing of

parentrals /injectable as well as different dosage form. Students were motivated to work in

manufacturing plants in future.

No. of students Benefited :50 students of First Year D. Pharmacy

No. of Faculty/Staff Benefited: 4 staff

#### **Outline of the Program:**

An industrial visit was planned and designed in the sense to gain practical knowledge to students at Vital Healthcare Pvt.Ltd. Satpur MIDC, Nashik on 15/03/2024.Total strength of students was 50 with 4 faculty members.K.M.Choudhari,J.V.More,Y.S.Saidane and O.R.Patil.Students reached at visit Destination by K.K.Wagh Education Society busses at 11:30 am and welcomed by plant QA manager Mr.Rahul Sawant sir. Students were divided in three groups for plant visit.Mr.Rahul Sawant. have Introduced manufacturing process, instruments, raw material, filling and scaling, labeling and packing To students. Faculty and students were encouraged to look after actual in plant processing. The QA staff And other staff from industry had interaction with students after visit and motivated to students and gave An idea about the challenges and scope in pharmaceutical industry.



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Photographs (Gcotagged photographs)







(B. Pharmacy & D. Pharmacy)

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K.M.Choudhari. Coordinator

S.B.Jadhav TPO

Janu

V.S.Lokhande. HOD

1024. Dr. R. D. Amrutkar.

IQAC Coordinator

S. Salunkhe. Dr. K. Principal

