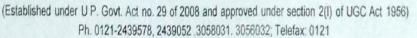
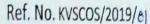
## **Agricultural and Leather Chemistry**



# Department of Chemistry Keral Verma Subharti College of Science

SWAMI VIVEKANAND SUBHARTI UNIVERSITY







Date: 10-08-2019

#### NOTICE

It's to inform all students of UG and PG that the Department of Chemistry, KVSCOS introduced Value Added Course from 19/8/2019. The topics are as follows:

- · Agricultural and Leather Chemistry
- · Chemical Technology and Society

Interested students give their name to HOD Chemistry, KVSCOS.

Dr. Suchitra Tyagi

HOD, Chemistry Department

Name of VAC Course: Agricultural and Leather Chemistry (VAC-C-006)

# KERAL VERMA SUBHARTI COLLEGE OF SCIENCE DEPARTMENT OF CHEMISTRY

VALUE ADDED COURSE AND ITS OBJECTIVES Session 2019-20



Course Name: Agricultural and

Leather Chemistry
Course Code:VAC-C-006

Course Coordinator: Dr.Ankita

Agarwal

Designation: Assistant Professor Contact no.-8094129582 Duration: 19/8/2019-6/9/2019



#### The objective of the program

The course will introduce agricultural chemical concepts. To learn and acquire knowledge on pesticides and insecticides. Help in the students to understand about leather industrial chemistry and acquire knowledge on the problems of pollution due to these industries



# Department of Chemistry Keral Verma Subharti College of Science

SWAMI VIVEKANAND SUBHARTI UNIVERSITY

(Established under U.P. Govt. Act no. 29 of 2008 and approved under section 2(1) of UGC Act 1956) Ph. 0121-2439578, 2439052 ,3058031, 3056032; Telefax: 0121



#### VALUE ADDED COURSE REGISTRATION FORM 2019-20

Session:		
Course :		
Year/Sem:		
Student Name:		
E-mail address:		
Best mailing address:		
Contact No:		

#### **VALUE ADDED COURSES**

#### 2019-20

#### Agricultural And Leather Chemistry

#### **VAC-C-006**

**Objectives:** This course will introduce agricultural chemical concepts. To learn and acquire knowledge on pesticides and insecticides. Help in the students to understand about leather industrial chemistry and acquire knowledge on the problems of pollution due to these industries.

Unit- I: Soil Chemistry

Soil Chemistry: Formation of Soil. Classification of soil and properties of soil - soil Acidity - Causes of acidity - soil alkalinity - determination of soil pH - Buffering of soils - Amending the soil - Reclamation of acid soil - Liming agents.

Unit- II: Soil Fertility and Productivity

Soil Fertility and Productivity: Fertilizers - Effect of Nitrogen, potassium and phosphorous on plant growth - commercial method of preparation of urea, triple superphosphate. Complex fertilizers and mixed fertilizers - their manufacture and composition. Secondary nutrients - micronutrients - their function in plants. Manures: Bulky organic manures - Farm yard manure - handling and storage-oil cakes- blood meal - fish manures.

Unit - III: Pesticides and Insecticides

Pesticides and Insecticides: Pesticides - classification of Insecticides, fungicides, herbicides as organic and inorganic - general methods of application and toxicity. Safety measures when using pesticides. Insecticides: Plant products - Nicotine, pyrethrin - Inorganic pesticides - borates. Organic pesticides - D.D.T. and BHC.

Unit -IV: Leather Chemistry

Leather Chemistry: Constituents of Animal Skin - Preparing skins and hides - Cleaning and soaking - Liming and degreasing - Manufacture of Leather - Leather Tanning - Vegetable Tanning - Chrome Tanning and Mineral Tanning - Dyeing and Fat liquoring - Leather finishing - oil tanning - by products.

**Unit V Tannery Effluents** 

Tannery Effluents - Pollution and Its Control - Water Pollution And Air Pollution - Waste Management - Primary, Secondary - Tertiary Treatment - Pollution Prevention.

#### Reference Books:

- 1. B.K. Sharma, Industrial Chemistry, Goel Publishing House, Meerut.
- 2. K.Bhagavathi Sundari, Applied Chemistry, MJP Publishers.
- 3. Jayashree Ghosh., Fundamental concept of Applied Chemistry, S. Chand & Company Ltd.,
- 4. J. Partridge Noyes, Park Ridge, N.J., Chemical treatment of hides a leather...
- 5. B.A. Yagodin, Agricultural Chemistry, Vol I & Vol II, New Century books (P) Ltd.,
- 6. Louis M. Thompson and Frederick. R. Troch, Soils and soil fertility, Tata Mc. Graw Hill.
- 7. T.D. Biswas and S.K. Mukerjee, Textbook of Soil Science, II Edition.
- 8. Fundamental of Leather Science Woodroffe Publications of CLRI Chennai.

Swam Vilokanand Subharti University MEERUT



# KERAL VERMA SUBHARTI COLLEGE OF SCIENCE

SWAMI VIVEKANAND SUBHARTI UNIVERSITY Subhartipuram, NH-58 Delhi-Haridwar-Meerut Bypass Road, Meerut -250005

# Department of Chemistry

# Report on Value Added Course

A value added course on "Agricultural and Leather Chemistry" was conducted in Chemistry department for all students, one hour per day. The course starts on 19-08-2019. The session was handled by Dr. Ankita Agarwal, Chemistry on the need for "Agricultural and Leather Chemistry". On that session students learnt about the basic concepts of agricultural and leather chemistry. Students felt that this value added session on Agricultural and Leather Chemistry was very much useful for them and they got the basic idea for developing their knowledge about agricultural field and leather industry. The course will introduce agricultural chemical concepts. To learn and acquire knowledge on pesticides and insecticides. Help in the students to understand about leather industrial chemistry and acquire knowledge on the problems of pollution due to these industries. It is planned to extend this value added training in the next semester with having more refined and advanced tool for their development.

(Department of Chemistry)



### Student List of Value added Course 2019-2020

Odd Semester No of Student: 54

Course Name: Agriculture & Leather Chemistry

Course Code: VAC-C-006

S.No.	Course Programme	Name	Student enrollment number
1	BSC H CHEMISTRY	Preeteshwar Singh	1706010000964
2	BSC H CHEMISTRY	Akshita	1706010000979
3	BSC H CHEMISTRY	Ankitabharti	1706010001264
4	BSC H CHEMISTRY	Anshikhatyagi	1706010000980
5	BSC H CHEMISTRY	Deepanshityagi	1706010000981
6	BSC H CHEMISTRY	Hardikpanchal	1706010000982
7	BSC H CHEMISTRY	Nainakaranwal	1706010000983
8	BSC H CHEMISTRY	Nitesh Kumar	1706010000984
9	BSC H CHEMISTRY	Prachi Sharma	1706010000985
10	BSC H CHEMISTRY	Vaishali Gupta	1706010000986
11	BSC H CHEMISTRY	Vershaverma	1706010000987
12	BSC H CHEMISTRY	Adit Sharma	1706010001078
13	BSC H CHEMISTRY	Ambujkaushik	1706010001081
14	BSC H CHEMISTRY	Md Jamal Muzaffar	1706010001080
15	BSC H CHEMISTRY	Medhagarg	1706010001082
16	BSC H CHEMISTRY	Yogendra	1706010001083
17	BSC H CHEMISTRY	Akanshabassi	1706010001226
18	BSC H CHEMISTRY	Areebchaudhary	1706010001428
19	BSC H CHEMISTRY	Hiteshichoudhary	1706010001204
20	BSC H CHEMISTRY	Nikita Malik	1706010001219
21	BSC H CHEMISTRY	Khushboo	1806000021364
22	BSC H CHEMISTRY	Pratham Maheshwari	1806000022142

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23	BSC H CHEMISTRY	Abhay Chauhan	1806000021714
24	BSC H CHEMISTRY	Daniyal Elahi	1806000021713
25	BSC H CHEMISTRY	Varneet Kaur	1806000021365
26	BSC H CHEMISTRY	Vicky Kumar	1806000021367
27	BSC H CHEMISTRY	Himanshi Sharma	1806000021366
28	BSC H CHEMISTRY	Jyoti Yadav	1806000021374
29	BSC H CHEMISTRY	Aastha Soni	1806000022006
30	BSC H CHEMISTRY	Mansi Tyagi	190600001371
31	BSC H CHEMISTRY	Shivani	190600001372
32	BSC H CHEMISTRY	Tanisha Khatri	1906000001373
33	BSC H CHEMISTRY	Kartik Saini	1906000001374
34	BSC H CHEMISTRY	Simran Mehdi	1906000001375
35	BSC H CHEMISTRY	Akansha Rana	190600001376
36	BSC H CHEMISTRY	Mehvish Arif	190600001721
37	BSC H CHEMISTRY	Chesta Jain	1906000002242
38	MSC CHEMISTRY	Abhishek Verma	1506010001628
39	MSC CHEMISTRY	Megha Sharma	1609010003092
40	MSC CHEMISTRY	Priti Singhal	1609010003113
41	MSC CHEMISTRY	Diwakar Saraswat	1806000021474
42	MSC CHEMISTRY	Mahima Chaudhary	1806000021479
43	MSC CHEMISTRY	Vaibhav Bhatia	1806000021715

44	MSC CHEMISTRY	Atul Kumar	1706020001085
45	MSC CHEMISTRY	Riya Choudhary	1906000001994
46	MSC CHEMISTRY	Vaishali Singh	1906000001379
47	MSC CHEMISTRY	Niraj Singh Nambam	1906000001377
48	MSC CHEMISTRY	Shubham Kumar	1906000001296
49	MSC CHEMISTRY	Reshu Kakran	1906000002601
50	MSC CHEMISTRY	Skand Sharma	1906000001378
51	MSC CHEMISTRY	Somya Garg	1606010002158
52	MSC CHEMISTRY	Rohit Kumar	1906000002592
53	MSC CHEMISTRY	Vijay Verma	1906000002365
54	MSC CHEMISTRY	Teena Tyagi	1606010002162

Registrar Swami Vivekanand Subharti University MEERUT



# Swami Vivekanand Subharti University Meerut Keral Verma Subharti College of Science Department of Chemistry

### **Certificate of Value Added Course**

HOD Shall

Course Co-ordinator