## Theory Course Details (UNIT-1 TO V)

HOURS	Unit-I General	LECTURER NAME
	Lab, Safety Introduction and Basics	
	-Introduction of lab.safetyIntroduction of chemical laboratory -Use of MSDS SheetUse of Internet, Books, and other sources for identify chemical natureImportance of various symbol (Health Hazard, Explosive, Corrosive)	PROF.INAMDAR K.B.
2	-General information on PPE kit like face shield, goggles etc.	
2 HOURS	Unit-II	LECTURER NAME
HOURS	Chemical Nature in Laboratory	
3	Chemical Nature Identify Chemical naturePoisonous, -Non-poisonous, -Explosive -Acute toxic -Chronic toxicete.	PROF.INAMDAR K.B.
3 HOURS	Unit-III	LECTURER NAME
4	Rules and regulation in Laboratory  Rule and regulation to avoid any health hazard or accidents and Guidelines  No Food or Drink.  Wear Your PPE and Proper Lab Attire.  Good Hygiene.  Use Proper Storage Containers.  Label Your Work Space.  Don't Work Alone.  Stay Focused and Aware of Your Surroundings.  Participate in Safety Exercisesetc.	Dr.KANDE S.R.



3	Unit-IV	1
HOURS	Major key points in Laboratory for sofety	LECTURER NAME
5	While performing work in chemical laboratory some major key points are given below as- Dispose of waste properly -Avoid ingestion chemical - Leave experiments at the lab -Label properly -Do not taste or smell chemicals -Act responsibly in the lab -Understanding hazards -Pay attention hazardous symboletc.	DR.KANDE S.R.
3 HOURS	Unit-V	
	Medical Emergency And Accident Case	LECTURER NAME
6	Students have knowledge that while performing work sometime emergency or accidents happens so how to deal with that situation is included in this unit-fire extinguisher  -Alarm  - Use of Social network-mobile, landline.etcDon't be panic and lean how to handle situation -Use of Medical appliances - Identify and manage which type of emergency -Call experts, policeknowledge of chemicals for handling situation.	PROEPOTANGALI C.N.
2 HOURS	Unit-VI Use Of Internet,Reserch Paper, Reference Books Etc.	LECTURER NAME
7	By the use of internet, research papers, reference booksetc. are useful for find chemicals nature and guide to ideal work in lab.	PROF.POTANGALI

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## Practical Course Details (UNIT-V TO VII)

	Unit-V	LECTURER
3 HOURS	Practical(Activity Oriented)	NAME
	Learn how to use of PPE kit, MSDS sheets.	PROF.INAMDAR K.B.
HOURS	Unit-VI Practical(Activity Oriented)	LECTURER NAME
2	Key to identify different types of nature Chemicals.	PROF.INAMDAR K.B.
HOURS.	Unit-VI Practical(Activity Oriented)	LECTURER NAME
3	Learn to identify symbols and its use	PROF.INAMDAR K.B.
HOURS.	Unit-VI Practical(Activity Oriented)	LECTURER NAME
4	Perform one activity like manage Fire handling.	Dr. KANDE S.R.
3 HOURS	Unit-VI Practical(Activity Oriented)	LECTURER NAME
5	Use of water shower, Fume hood, other useful resources in lab	Dr.KANDE S.R.
3 HOURS	Unit-VI(Activity Oriented)	LECTURER NAME
6	Use social network Alarm system Call emergency systemetc.	PROF.POTANGALE C.N.
3 HOURS	Unit-VI(Activity Oriented)	LECTURER NAME
7	How to spread awareness in our field workers and in society	PROF.POTANGALE C.N.
3 HOURS	Unit-VI(Activity Oriented)	LECTURER NAME
8	Investigation system e.g. any case industry	PROF.INAMDAR K.B.
6 HOURS	Unit-VII Laboratory visit(One Day)	LECTURER NAME
9	Visit to well-equipped laboratory for gaining better knowledge regarding safety.  Observe the various lab.safety equipment's like fume hood, fire extinguisher, and water showeredetc	PROF.INAMDAR K.B.

## Advantage of the Course and future Prospects And expected Outcomes:

- Students can get sufficient knowledge about safety. IX.
- Students by using its knowledge they perform well hygiene work in laboratory. X.
- Students understand the importance of safety. XI.
- In future when the get job in various chemical, pharma industry they easily apply this XII. knowledge.
- XIII. Students understand how to handle medical and accidental situation.
- XIV. Today environmental issue is very serious situation so they understand how to dispose various chemicals.
- Students also guide to other who work in lab.
- XVI. Students also learn how to use research paper, internet..etc. for safety purpose.

## Reference books:

- 1. Prudent Practices in the Laboratory by Natl. Research Council Staff (Editor); Committee on Prudent Practices in the Laboratory
- 2. Bretherick's Handbook of Reactive Chemical Hazards by Peter Urben (Editor)
- 3. Hazardous Chemicals Desk Reference by Richard J. Lewis
- 4. Laboratory Safety for Chemistry Students by Robert H. Hill Jr. (Author), David C.

Finster(Author)

5. 1st Edition, Chemical Safety in the Laboratory ,By Stephen K. Hall

COURDINATOR

Chemisty Depart PMT'S A. : & Science College, S. Jist. A'Nagar

Skill Development Centre PMT's ACSC, Shevgaon

Shevgaon,