LESSON PLAN FOR EVEN SEM
SESSION 2017-18

NAME OF ASSOCIATE PROFESSOR : Dr. Kiran Jain
CLASS/SECTION : M.Sc. (F) Sem IV (Classes on day 1, 2, 3, 5, 6)
SUBJECT : ORGANIC CHEMISTRY

UNIT/PART I	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 1-1-18	Isolation and nomenclature of steroids	
DAY2 DATE 2-1-18	synthesis (Woodward)	M.Sc(F Pr.) Organic Mix
DAY3 DATE 3-1-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY4 DATE 5-1-18	synthesis (Woodward)	**.....**
DAY5 DATE 6-1-18	Structure of cholesterol	**.....**
DAY6 DATE 8-1-18	Structure of cholesterol	**.....**
DAY7 DATE 9-1-18	Structure of cholesterol	M.Sc(F Pr.) Organic Mix
DAY8 DATE 10-1-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY9 DATE 12-1-18	Structure of cholesterol	**.....**
DAY10 DATE 13-1-18	stereochemistry of cholesterol	**.....**
DAY11 DATE 15-1-18	stereochemistry of cholesterol	**.....**
DAY 12 DATE 16-1-18	methods for conversion of Cholesterol to Testosterone	M.Sc(F Pr.) Organic Mix
DAY13 DATE 17-1-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY14 DATE 19-1-18	methods for conversion of Cholesterol to Progesterone	**.....**
DAY15 DATE 20-1-18	Methods for conversion of Cholesterol to alpha and beta cholanic acids.	**.....**
DAY16 DATE 22-1-18	**HOLIDAY**	**HOLIDAY**

DAY17 DATE 23-1-18	**SPORTS DAY**	**SPORTS DAY**
DAY18 DATE 24-1-18	**HOLIDAY**	**HOLIDAY**
DAY19 DATE 26-1-18	**HOLIDAY**	**HOLIDAY**
DAY 20 DATE 27-1-18	Johnson's hydrochrysene approach towards the synthesis of, Androsterone	**.....**
UNIT/PART II	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 29-1-18	Principle of Green chemistry and its applications, Basic Principle and need of green chemistry	**.....**
DAY2 DATE 30-1-18	Different tools for green synthesis (Elementary idea of green reagent , green solvent, green catalyst, solid phase, mw and ultrasound assisted) atom economy	M.Sc(F Pr.) Organic Mix
DAY3 DATE 31-1-18	**HOLIDAY**	**HOLIDAY**
DAY4 DATE 2-2-18	Different tools for green synthesis (Elementary idea of green reagent , green solvent, green catalyst, solid phase, mw and ultrasound assisted) atom economy	**.....**
DAY5 DATE 3-2-18	Role of biocatalysts in green synthesis – enzyme catalyzed oxidation	**.....**
DAY6 DATE 5-2-18	Role of biocatalysts in green synthesis – enzyme catalyzed oxidation	**.....**
DAY7 DATE 6-2-18	reduction and hydrolytic reactions	M.Sc(F Pr.) Organic Mix
DAY8 DATE 7-2-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY9 DATE 9-2-18	**ASSIGNMENT 1**	**.....**
DAY10 DATE 10-2-18	**HOLIDAY**	**HOLIDAY**
DAY11 DATE 12-2-18	synthesis of adipic acid	**.....**
DAY12 DATE 13-2-18	**HOLIDAY**	**HOLIDAY**
DAY13 DATE 14-2-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY14 DATE 16-2-18	synthesis of BHC synthesis of Ibuprofen.	**.....**
DAY15 DATE 17-2-18	Supramolecular chemistry	**.....**

DAY16 DATE 19-2-18	Crown ethers , cryptates	**.....**
DAY17 DATE 20-2-18	Cyclodextrins	M.Sc(F Pr.) Organic Mix
DAY18 DATE 21-2-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY19 DATE 23-2-18	calixarenes and micelles	**.....**
UNIT/PART III	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 24-2-18	**Alkaloids** Definition, nomenclature and physiological action, occurrence	**.....**
DAY2 DATE 26-2-18	methods of structure elucidation	**.....**
DAY3 DATE 27-2-18	**TEST & SEMINAR** **(PG CLASSES)**	M.Sc(F Pr.) Organic Mix
DAY4 DATE 28-2-18	**HOLIDAY**	**HOLIDAY**
DAY5 DATE 2-3-18	**HOLIDAY**	**HOLIDAY**
DAY6 DATE 3-3-18	**HOLIDAY**	**HOLIDAY**
DAY7 DATE 5-3-18	isolation, degradation, classification based on nitrogen heterocyclic ring, role of alkaloids in plants.	**.....**
DAY8 DATE 6-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Ephedrine	M.Sc(F Pr.) Organic Mix
DAY9 DATE 7-3-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY10 DATE 9-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Ephedrine	**.....**
DAY11 DATE 10-3-18	**ASSIGNMENT 2**	**.....**
DAY 12 DATE 12-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: (+)-Coniine	**.....**
DAY13 DATE 13-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Nicotine	M.Sc(F Pr.) Organic Mix
DAY14 DATE 14-3-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY15 DATE 16-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Quinine	**.....**
DAY16 DATE 17-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Quinine	**.....**

DAY17 DATE 19-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Reserpine	**.....**
DAY18 DATE 20-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Reserpine	M.Sc(F Pr.) Organic Mix
DAY19 DATE 21-3-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY 20 DATE 23-3-18	**HOLIDAY**	**HOLIDAY**
DAY 21 DATE 24-3-18	Structure , stereochemistry, synthesis and biosynthesis of the: Reserpine	**.....**
UNIT/PART IV	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 26-3-18	**Drugs**: Antineoplastic Agents: Mechlorethamine, Chlorambucil	**.....**
DAY2 DATE 27-3-18	Antineoplastic Agents: carmustine, aminopterin, 6-mercaptopurine, paclitaxe, cyclophosphamide	M.Sc(F Pr.) Organic Mix
DAY3 DATE 28-3-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY5 DATE 30-3-18	Antimalarials: Chloroquine , primaquine, chloroguanide, pyrimethamine	**.....**
DAY6 DATE 31-3-18	Antimalarials: Chloroquine , primaquine, chloroguanide, pyrimethamine	**.....**
DAY7 DATE 2-4-18	Morphine and related compounds (codeine and heroin), acetaminophen, indomethacin	**.....**
DAY8 DATE 3-4-18	meperidine , methadone, aspirin	M.Sc(F Pr.) Organic Mix
DAY9 DATE 4-4-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY10 DATE 5-4-18	Phenylbutazone, mefenamic acid, ibuprofen, diclofenacn, naproxen	**.....**
DAY11 DATE 6-4-18	Antifertility agents: Ovulation inhibitors and related hormonal contraceptives - norethindrone , norethynodrel, estradiol, mestranol	**.....**
DAY12 DATE 7-4-18	non hormonal contraceptive –centchroman	**.....**
DAY13 DATE 9-4-18	Cardiovascular Drugs: Calcium channel blockers Beta-blockers	**.....**
DAY14 DATE 10-4-18	sorbitrate and diltiazem	M.Sc(F Pr.) Organic Mix
DAY15 DATE 11-4-18	**.....**	M.Sc(F Pr.) Organic Mix
DAY17 DATE 13-4-18	atenolol and verapamil	**.....**

DAY18 DATE 14-4-18	**HOLIDAY**	**.....**
DAY19 DATE 16-4-18	How HIV infects the system	**.....**
DAY20 DATE 17-4-18	AZT (synthesis)	M.Sc(F Pr.) Organic Mix
DAY21 DATE 18-4-18	**HOLIDAY**	**HOLIDAY**
DAY23 DATE 20-4-18	ddI, ddC, d4T and 3TC	**.....**

NAME OF ASSISTANT PROFESSOR: Dr. Kiran Jain
CLASS/SECTION : B.SC(III)(PRACTICAL)(DAY 4)
SUBJECT : CHEMISTRY

UNIT/PART I	**TOPIC:**	
	THEORY	**PRACTICAL**
DAY18 DATE 18-1-18	**.....**	qualitative analysis of mixture
DAY22 DATE 25-1-18	**.....**	qualitative analysis of mixture
DAY4 DATE 1-2-18	**.....**	qualitative analysis of mixture
DAY10 DATE 8-2-18	**.....**	qualitative analysis of mixture
DAY16 DATE 15-2-18	**.....**	qualitative analysis of mixture
DAY22 DATE 22-2-18	**.....**	qualitative analysis of mixture
DAY6 DATE 1-3-18	**.....**	**HOLIDAY**
DAY11 DATE 8-3-18	**.....**	qualitative analysis of mixture
DAY17 DATE 15-3-18	**.....**	qualitative analysis of mixture
DAY23 DATE 22-3-18	**.....**	qualitative analysis of mixture
DAY4 DATE 29-3-18	**.....**	**HOLIDAY**
DAY10 DATE 5-4-18	**.....**	qualitative analysis of mixture
DAY16 DATE 12-4-18	**.....**	qualitative analysis of mixture
DAY22 DATE 19-4-18	**.....**	qualitative analysis of mixture

NAME OF ASSISTANT PROFESSOR: Dr. Kiran Jain
CLASS/SECTION : M.SC (II SEM)(DAY 5)
SUBJECT :CHEMISTRY

UNIT/PART I	**TOPIC:**	
	THEORY	**PRACTICAL**
DAY1 DATE 12-1-18	Aliphatic Electrophilic Substitution	**.....**
DAY2 DATE 19-1-18	Bimolecular mechanisms - SE2 and SEi	**.....**
DAY3 DATE 26-1-18	**HOLIDAY**	**HOLIDAY**
DAY4 DATE 2-2-18	The SE1 mechanism, electrophilic substitution accompanied by double bond shifts	**.....**
DAY5 DATE 9-2-18	Effect of substrates	**.....**
DAY6 DATE 16-2-18	**ASSIGNMENT 1**	**.....**
DAY7 DATE 23-2-18	Leaving group and the solvent polarity on the reactivity	**.....**
DAY8 DATE 2-3-18	**HOLIDAY**	**HOLIDAY**
DAY9 DATE 9-3-18	Neighbouring group participation by non-bonding electrons	**.....**
DAY10 DATE 16-3-18	Classical and non-classical carbocation	**.....**
DAY11 DATE 23-3-18	**HOLIDAY**	**HOLIDAY**
DAY12 DATE 30-3-18	Carbocations rearrangements and migratory aptitudes	**.....**
DAY13 DATE 6-4-18	Wagner Meerwein rearrangement and pincol pinacolone rearrangement	**.....**
DAY14 DATE 13-4-18	Demjanove rearrangement	**.....**
DAY15 DATE 20-4-18	Tiffeneau -Demjanove ring expansion and aldehyde -ketone	**.....**