

LESSON PLAN FOR EVEN SEM SESSION 2017-18

NAME OF ASSOCIATE PROFESSOR : DR. SUNITA SHARMA
CLASS/SECTION : M.SC(SEM II)
SUBJECT : INORGANIC (TH+PR.)

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 2-1-18	Electronic arrangements of microstates d^1 to d^3	.....
DAY2 DATE 3-1-18	Electronic arrangements of microstates p^1 to p^6	.....
DAY3 DATE 4-1-18	Electronic arrangements of microstates d^4 to d^6	qualitative analysis of mixture
DAY4 DATE 5-1-18	.....	qualitative analysis of mixture
DAY5 DATE 6-1-18	Electronic arrangements of microstates d^8 to d^{10}	.....
DAY6 DATE 9-1-18	calculation of the number of microstates in various electronic arrangements	.....
DAY7 DATE 10-1-18	spectroscopic term symbols d^1 to d^4	.....
DAY8 DATE 11-1-18	spectroscopic term symbols d^8 to d^{10}	qualitative analysis of mixture
DAY9 DATE 12-1-18	.....	qualitative analysis of mixture
DAY10 DATE 13-1-18	Vector diagrams to indicates coupling of orbital angular momenta in p^2 , p^3 , d^2	.....
DAY 11 DATE 16-1-18	Vector diagrams to indicates coupling of orbital angular momenta in d^2	.....
DAY12 DATE 17-1-18	spectroscopic terms	.....
DAY13 DATE 18-1-18	spectral terms of d^2 to d^8 meta l ions,	qualitative analysis of mixture
DAY14 DATE 19-1-18	.....	qualitative analysis of mixture
DAY15 DATE 20-1-18	determining the ground state terms -Hund's rules	.....
DAY16 DATE 23-1-18	SPORTS DAY	
DAY17 DATE 24-1-18	HOLIDAY	
DAY18 DATE 25-1-18	derivation of the term symbol for a closed subshell.	qualitative analysis of mixture

DAY19 DATE 26-1-18	HOLIDAY	HOLIDAY
DAY 20 DATE 27-1-18	derivation of the term symbol for a closed subshell.	.....
UNIT/PART II	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 29-1-18	Interpretation of electronic spectra	.....
DAY2 DATE 30-1-18	Orgel diagrams	.....
DAY3 DATE 31-1-18	HOLIDAY	.....
DAY4 DATE 1-2-18	Orgel diagrams	qualitative analysis of mixture
DAY5 DATE 2-2-18	.....	qualitative analysis of mixture
DAY6 DATE 3-2-18	Tanabe-Sugano diagrams for transition metal complexes (d ¹ -d ⁹ states)	.....
DAY7 DATE 6-2-18	Tanabe-Sugano diagrams for transition metal complexes (d ¹ -d ⁹ states)	
DAY8 DATE 7-2-18	calculations of Dq, B and beta parameters	.....
DAY9 DATE 8-2-18	charge transfer spectra	qualitative analysis of mixture
DAY10 DATE 9-2-18	ASSIGNMENT 1	qualitative analysis of mixture
DAY11 DATE 10-2-18	HOLIDAY	
DAY12 DATE 13-2-18	HOLIDAY	
DAY13 DATE 14-2-18	Anomalous magnetic moments	.....
DAY14 DATE 15-2-18	magnetic exchange coupling and spin crossover.	qualitative analysis of mixture
DAY15 DATE 16-2-18	.....	qualitative analysis of mixture
DAY16 DATE 17-2-18	SESSIONAL 1	.....
DAY17 DATE 20-2-18	Polarized light, fundamental symmetry requirements	.....
DAY18 DATE 21-2-18	optical rotation	.....
DAY19 DATE 22-2-18	Cotton effect	qualitative analysis of mixture
DAY20 DATE 23-2-18	.....	qualitative analysis of mixture

UNIT/PART III	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 24-2-18	Metal carbonyls and reactions	.....
DAY2 DATE 27-2-18	structure and bonding	.....
DAY3 DATE 28-2-18	HOLIDAY	.....
DAY4 DATE 1-3-18	HOLIDAY	HOLIDAY
DAY5 DATE 2-3-18	HOLIDAY	HOLIDAY
DAY6 DATE 3-3-18	HOLIDAY	HOLIDAY
DAY7 DATE 6-3-18	vibrational spectra of metal carbonyls	.....
DAY8 DATE 7-3-18	important reactions of metal carbonyls	.....
DAY9 DATE 8-3-18	important reactions of metal carbonyls	qualitative analysis of mixture
DAY10 DATE 9-3-18	.....	qualitative analysis of mixture
DAY11 DATE 10-3-18	ASSIGNMENT 2	.....
DAY12 DATE 13-3-18	preparation of transition metal nitrosyl	.....
DAY13 DATE 14-3-18	Bonding transition metal nitrosyl	.....
DAY14 DATE 15-3-18	important reactions of transition metal nitrosyl	qualitative analysis of mixture
DAY15 DATE 16-3-18	.....	qualitative analysis of mixture
DAY16 DATE 17-3-18	structure of transition metal nitrosyl	.....
DAY17 DATE 20-3-18	dinitrogen complexes	.....
DAY18 DATE 21-3-18	dioxygen complexes	.....
DAY19 DATE 22-3-18	tertiary phosphine as ligand.	qualitative analysis of mixture
DAY 20 DATE 23-3-18	HOLIDAY	HOLIDAY
DAY 21 DATE 24-3-18	tertiary phosphine as ligand.	.....
UNIT/PART IV	TOPIC	

	THEORY	PRACTICAL
DAY1 DATE 27-3-18	Higher boranes	.....
DAY2 DATE 28-3-18	Higher boranes	.....
DAY3 DATE 29-3-18	HOLIDAY	HOLIDAY
DAY4 DATE 30-3-18	.....	qualitative analysis of mixture
DAY5 DATE 31-3-18	carboranes	.....
DAY6 DATE 3-4-18	carboranes	.....
DAY7 DATE 4-4-18	metalloboranes	.....
DAY8 DATE 5-4-18	Metal carbonyl	qualitative analysis of mixture
DAY9 DATE 6-4-18	.....	qualitative analysis of mixture
DAY10 DATE 7-4-18	SEMINAR	.....
DAY11 DATE 10-4-18	halide clusters	.....
DAY12 DATE 11-4-18	compounds with metal-metal multiple bonds	.....
DAY13 DATE 12-4-18	compounds with metal-metal multiple bonds	qualitative analysis of mixture
DAY14 DATE 13-4-18	.....	qualitative analysis of mixture
DAY15 DATE 14-4-18	HOLIDAY	HOLIDAY
DAY16 DATE 17-4-18	test of carboranes	.....
DAY17 DATE 18-4-18	HOLIDAY	HOLIDAY
DAY18 DATE 19-4-18	compounds with metal-metal multiple bonds	qualitative analysis of mixture
DAY19 DATE 20-4-18	.....	qualitative analysis of mixture

NAME OF ASSOCIATE PROFESSOR : DR. SUNITA SHARMA
CLASS/SECTION : B.SC(III)
SUBJECT :PRACTICAL (DAY 1)

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 1-1-18	qualitative analysis of mixture
DAY2 DATE 8-1-18	qualitative analysis of mixture
DAY3 DATE15-1-18	qualitative analysis of mixture
DAY4 DATE 22-1-18	HOLIDAY	HOLIDAY
DAY5 DATE 29-1-18	qualitative analysis of mixture
DAY6 DATE 5-2-18	qualitative analysis of mixture
DAY7 DATE 12-2-18	qualitative analysis of mixture
DAY8 DATE 26-2-18	qualitative analysis of mixture
DAY9 DATE 5-3-18	qualitative analysis of mixture
DAY 10 DATE 12-3-18	qualitative analysis of mixture
DAY10 DATE 19-3-18	qualitative analysis of mixture
DAY11 DATE 26-3-18	qualitative analysis of mixture
DAY7 DATE 2-4-18	qualitative analysis of mixture
DAY13 DATE 9-4-18	qualitative analysis of mixture
DAY19 DATE 16-4-18	qualitative analysis of mixture