Department of Chemistry

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

Co	OURSE OUTLINE TEN	Inorgania				
	9	Inorganic and Organic Quantitative Analysis Lab				
Co	urse Code	CII (21				
		CH 021	No. of Credits	2 (Practical)		
Dep	partment	Chemistry				
-		- Admistry	Faculty	Dr. Sunandan Sarkar		
Pro	gramme	M.Sc.(Chemistry)				
Pre-requisites						
Course Code		Nil				
Cou	rse Coordinator(s)	Dr. Sunandan Sarkar				
(if, a	applicable)	Di. Suhahuan Sarkar				
E-m		ssarkar@nitt.edu	Talak			
Course Type		Core course	1 crephone 140. 9153484492(M)			
COL	IDCE OVERV	Core course Elective course				
CUL	URSE OVERVIEW					
	This course is offere	d to the Ma				
and o	one practical ala (6.1	rs) will be conducted per v	hemistry) students TI	his is a 2 credit practical cou		
and O	he practical class (6 hou	rs) will be conducted	1	ins is a 2 credit practical cou		
	(viii be conducted per v	week.			
		var be conducted per v	week.			
COU	RSE OBJECTIVE	•	week.			
COU	RSE OBJECTIVE ntroduce the students abo	Out the:				
C OU To in	RSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitative	out the:				
C OU To in	RSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat	out the: /e estimation of mixtures of ion of organic compounds				
To in	TRSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CO	out the: ve estimation of mixtures of the compounds of organic compounds				
To in	rest objective ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CO end, the students should	out the: ye estimation of mixtures of ion of organic compounds be able to:	of cations s and analysis of oils			
To in	ntroduce the students about (i) Inorganic quantitative (ii) Quantitative estimates (SEE OUTCOMES (COE) end, the students should Understand the important the important control (COE)	out the: ye estimation of mixtures of ion of organic compounds be able to:	of cations s and analysis of oils			
To in	ntroduce the students about (i) Inorganic quantitative (ii) Quantitative estimates (SEE OUTCOMES (COE) end, the students should Understand the important the important control (COE)	out the: ye estimation of mixtures of ion of organic compounds be able to:	of cations s and analysis of oils			
COU To in	ntroduce the students above (i) Inorganic quantitative (ii) Quantitative estimate (iii) Quantitative estimate (iii) Quantitative estimate (iiii) Quantitative estimate (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	out the: ye estimation of mixtures of ion of organic compounds b) be able to: ance of the quantitative es experimental skills to solve	of cations s and analysis of oils stimation and its applic we the real life problem			
COU To in	rese objective ntroduce the students above (i) Inorganic quantitative (ii) Quantitative estimate RSE OUTCOMES (CO end, the students should Understand the import Employ the developed	out the: ye estimation of mixtures of ion of organic compounds be able to:	of cations and analysis of oils stimation and its applicate the real life problem			
COU To in	ntroduce the students above (i) Inorganic quantitative (ii) Quantitative estimate (iii) Quantitative estimate (iii) Quantitative estimate (iiii) Quantitative estimate (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	out the: ye estimation of mixtures of ion of organic compounds b) be able to: ance of the quantitative es experimental skills to solve	of cations s and analysis of oils stimation and its applic we the real life problem	cations ns		
COU To in	rese objective ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat rese outcomes (co end, the students should Understand the import Employ the developed rese TEACHING AND Week	out the: we estimation of mixtures of ion of organic compounds b) be able to: cance of the quantitative es experimental skills to solv LEARNING ACTIVITI	of cations and analysis of oils stimation and its application to the real life problem Topic	cations ns Mode of		
COU To in	rese objective ntroduce the students above (i) Inorganic quantitative (ii) Quantitative estimate RSE OUTCOMES (CO end, the students should Understand the import Employ the developed	out the: we estimation of mixtures of ion of organic compounds be able to: cance of the quantitative es experimental skills to solv LEARNING ACTIVITI Estimation of phen	of cations s and analysis of oils stimation and its applic we the real life problem Topic Topic	Cations ms Mode of Delivery		
COU To in	rese objective Introduce the students abore (i) Inorganic quantitative (ii) Quantitative estimate RSE OUTCOMES (CO) The end, the students should be understand the imported Employ the developed RSE TEACHING AND Week II week of July to	Dout the: ye estimation of mixtures of ion of organic compounds be able to: cance of the quantitative es experimental skills to solv LEARNING ACTIVITI Estimation of phen Estimation of ketor	of cations s and analysis of oils stimation and its applicate the real life problem Topic Topic Topic Topic method and the problem Topic method and the	Cations ms Mode of Delivery		
COU To in	rese objective ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CO end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July	Dut the: ye estimation of mixtures of ion of organic compounds b) I be able to: cance of the quantitative es experimental skills to solv LEARNING ACTIVITI Estimation of phen Estimation of ketor & gravimetric meth	of cations s and analysis of oils stimation and its applicate the real life problem Topic Topic Tolicate the problem of the	Cations ms Mode of Delivery		
COU To in	rese objective ntroduce the students abo (i) Inorganic quantitative (ii) Quantitative estimat RSE OUTCOMES (CC) end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July to I week of August	Dut the: we estimation of mixtures of ion of organic compounds be able to: cance of the quantitative estimation of phenes the distribution of setting and the distribution of setting and the distribution of activities.	of cations s and analysis of oils stimation and its applicate the real life problem (ES) Topic tol, aniline, ascorbic ache by volumetric method. cid value of an oil	Mode of Delivery cid. C&T, PPT		
COU To in	rese objective Introduce the students abore (i) Inorganic quantitative (ii) Quantitative estimate RSE OUTCOMES (CO) The end, the students should be understand the imported Employ the developed RSE TEACHING AND Week II week of July to	Dout the: We estimation of mixtures of ion of organic compounds I be able to: I ance of the quantitative es experimental skills to solve LEARNING ACTIVITI Estimation of phen Estimation of ketor & gravimetric meth Determination of sa Determination of sa Determination of sa	of cations s and analysis of oils stimation and its application and its application and its application, aniline, ascorbic actions and aniline, ascorbic actions and application value of an oil.	Mode of Delivery cid. C&T, PPT an oil.		
COU To in	RSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CC) end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July to I week of August II week of August to	Dout the: We estimation of mixtures of ion of organic compounds I be able to: I ance of the quantitative estimation of phen Estimation of ketor & gravimetric meth Determination of san Determination of action of phen Estimation of san Determination of action of action in the period of action in the period of action of action in the period	of cations s and analysis of oils stimation and its application and its application and its application and its application and its application, and its application value of an oil. Apponification value of an oil apponification value oil apponificatio	Mode of Delivery cid. C&T, PPT		
COU To in	rese objective Introduce the students about (i) Inorganic quantitative (ii) Quantitative estimate RSE OUTCOMES (CO) See end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July to I week of August	Dout the: Ive estimation of mixtures of ion of organic compounds D) I be able to: I ance of the quantitative estimation of phenes experimental skills to solve. LEARNING ACTIVITI Estimation of phenes estimation of ketorological estimation of according to the petermination o	of cations and analysis of oils and analysis of oils stimation and its applicate the real life problem and analysis of oils and analysis of an oil. Topic analysis of an oil. Apponification value of an oil. Topic apponification value of an oil.	Mode of Delivery cid. C&T, PPT an oil.		
COU To in	RSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CC) end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July to I week of August II week of August to	Dout the: We estimation of mixtures of ion of organic compounds D) I be able to: Cance of the quantitative estimation of phenes in the stimation of ketory & gravimetric methen Determination of active determination of active determination of active determination of ion Determination of lactory described in the stimation of lactory determination of lactory described in the stimation of lactory determination of lactory determination of lactory described in the stimation of lactory determination of lactory described in the stimation of lactory described in t	of cations and analysis of oils and analysis of oils stimation and its applicate the real life problem Topic Topic Topic Tolicate the second of an oil. The second of an oil. The second oil. The second of an oil.	ms Mode of Delivery cid. cod an oil. C&T, PPT		
COU To in	RSE OBJECTIVE ntroduce the students abo (i) Inorganic quantitativ (ii) Quantitative estimat RSE OUTCOMES (CC) end, the students should Understand the import Employ the developed RSE TEACHING AND Week II week of July to I week of August II week of August to	Dut the: We estimation of mixtures of ion of organic compounds I be able to: Sance of the quantitative estimation of phenes experimental skills to solve LEARNING ACTIVITI Estimation of phenes estimation of ketor & gravimetric methenes bettermination of active determination of active determination of ione estimation of lactors estimation of glucos estimation of glucos.	of cations and analysis of oils and analysis of oils stimation and its applicate the real life problem and analysis of oils and analysis of an oil. Topic analysis of an oil. Apponification value of an oil. Topic apponification value of an oil.	Mode of Delivery Cid. C&T, PPT and C&T, PPT		

000	III week of September to I week of November	Zn; Zn & Cu; F	Iving volumetric and gravimetric mixtures of cations Cu & Ni; Cu & Ce & Ni; Fe(II) & Fe(III)	C&T, PPT
COUR	SE ASSESSMENT ME	THODS		
S.No.	Mode of Assessment	Week/Date	Duration	
Practic	al		Duration	% Weightag
1	Practical class	Tuesday per week for a total of 4	6 hours per week	75%
2	Model practical	months II week of November, 2017	6 hours	Nil
3	End semester	III week of	6 hours	1.111
		November, 2017	o noui?	25%
OURSI	E EXIT SURVEY (ment	ion the wave in which	ib the fee H	
			h the feedback about the course is a	assessed and
Feedba Anonyr	ck from students during c nous feedback through qu	lass committee meetingstionnaire at the end	ngs. I of the semester.	assessed and
Feedba Anonyr	ck from students during c nous feedback through qu	lass committee meetingstionnaire at the end	ngs. I of the semester.	assessed and
Feedba Anonyr OURSE 75% att	ck from students during c mous feedback through que POLICY (including platendance is compulsory for	lass committee meeting in the end	ngs. I of the semester. nonesty, attendance, etc.)	
Feedba Anonyr OURSE 75% att For tho conduct	ck from students during comous feedback through quention of the policy o	lass committee meeting testionnaire at the end agiarism, academic har practical componen lasses due to genuine November 2017.	ngs. I of the semester. nonesty, attendance, etc.)	
Feedba Anonyr OURSE 75% att For the conduct	ck from students during comous feedback through question of the policy (including plants of the policy) for the policy of the po	lass committee meeting testionnaire at the end agiarism, academic has practical componen lasses due to genuine November 2017.	ngs. I of the semester. nonesty, attendance, etc.)	

(