



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

### S232 – ENGINEERING CHEMISTRY

Lecture: 4 Periods/week

Internal Marks : 25

Tutorial: 1Period

External Marks : 75

Credits : 3

External Examination: 3 Hrs

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#### UNIT - I

**WATER TECHNOLOGY:** Sources of water and quality. Hardness of Water - Temporary and Permanent hardness. Units and their interrelation. Problems on Temporary and Permanent hardness. Disadvantages of hard water in various industries.

**Boiler troubles** – scale & sludge formation, Caustic Embrittlement, boiler corrosion, priming & foaming (carryover).

**Internal Treatment** - Phosphate, Calgon, Carbonate, Sodium aluminate Conditioning of Water.

**External Treatment** - Lime-Soda Process, Zeolite process, Ion- Exchange Process merits and demerits. (Note-Problems on lime-soda process are not included)

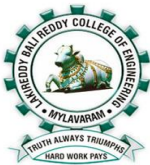
**Desalination of brackish water**-Electrodialysis, reverse osmosis

#### UNIT - II

**Fuel Technology:** Definition and classification of Fuels, merits and demerits of solid liquid and gaseous fuels. Gross and net calorific values – (definition only).

**Solid fuels**- coal - analysis, Proximate and ultimate analyses of coal – significances.

**Liquid Fuels** – petroleum-origin and refining of petroleum- cracking- fixed bed and moving bed methods, synthetic petrol – Bergius and Fischer Tropsch's methods.



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**Working of I.C and C.I engines** –Knocking in I.C and C.I engines, antiknocking agents  
Octane number, Cetane number(Definitions only)

**Gaseous fuels**- Natural gas, CNG Advantages of CNG, Flue gas analysis – Orsat's apparatus.

### UNIT - III

**CORROSION:** Definition, Examples.

**Dry Corrosion**(Direct Chemical corrosion), Types of dry corrosion-oxidative corrosion, Pilling Bed worth rule, corrosion by other gases, liquid metal corrosion.

**Wet Corrosion** (Electro Chemical corrosion) Mechanism- Oxygen absorption Hydrogen evolution type, Types of wet corrosion, Galvanic Corrosion, passivity, Galvanic Series Concentration Cell Corrosion, intergranular corrosion, stress corrosion, Soil corrosion.

**Factors Influencing Corrosion**- Nature of metal and nature of environment.

**Control of Corrosion** - Proper Design, Use of pure metals and metal alloys, Cathodic Protection - Sacrificial anode and Impressed Current, Modifying the Environment and use of Inhibitors.

### UNIT - IV

**Polymer Science and Technology:** Definition, classification of polymers, Functionality, Types of polymerization-addition, condensation, copolymerization

**Plastics** preparation, properties and engineering applications of, PVC, Teflon, Bakelite, PMMA.


**Conducting polymers:** Polyacetylene, Polyaniline, conduction, doping, application.

**Rubbers** Natural rubber and its processing, disadvantages of Natural rubber, Vulcanization and significance.

**Elastomers**- preparation, properties and engineering applications of Buna S, Buna N, Thiokol.

**Fibers**- preparation, properties and engineering applications of Polyester, fiber reinforced plastics (FRP).

### UNIT – V

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARTMENT</b>			
	<b>LESSON PLAN – CSE</b>			
	Subject :	<b>ENGINEERING CHEMISTRY (EC) - S232</b>		
	Academic Year :	<b>2015-16</b>	Semester :	<b>II</b>
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**a. Green chemistry** -Goals and significance of green chemistry. Basic components (alternative starting materials, reagents, reaction conditions, final products) of green\_chemistry research.

**b. Liquid crystals** –Classification of liquid crystals (Thermo tropic, lyotropic) and applications.

### **TEXT BOOKS**

1. Jain & Jain, A text book of Engineering Chemistry by DhanpatRai Publishing Company, New Delhi (15<sup>th</sup> Edition) (2006).
2. Dr. S.S Dara, Dr.S.S Umare A Text book of Engineering Chemistry by S.Chand Publications, 12th Edition, 2010.
3. ShashiChawla, A Text book of Engineering Chemistry by DhanpatRai Publishing Company, Third Edition, 2003.

### **REFERENCES**

1. Dr. Y. BharathiKumari and Dr. JyotsnaCherukuri, A Text book of Engineering Chemistry by VGS Publications, First Edition, 2009
2. R.V. Gadag, A.Nityananda Shetty, I.K. International publishing house 1<sup>st</sup> edition 2006
3. Dr. M. R. Senapati, Advanced Engineering Chemistry by University Science Press (Impart from Laxmi Publications), 3<sup>rd</sup> Edition 2009.

### **Course Educational Objectives:**

Through this course the student will learn

- The concept of water technology with special focus on hardness & softness of water, methods of softening and desalination of brackish water.



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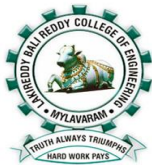
- The concept of conventional and alternative fuels and working of petrol and diesel engines.
- The concept of corrosion and control measures.
- The concept of polymers and polymerization.
- The concept of green chemistry and applications of liquid crystals.

#### Course Outcomes:

After undergoing the training in this course the students will acquire the ability to:

- Analyze the quality of water and its maintenance for industrial purposes.
- Analyze issues related to fuels and their synthesis and able to understand working of IC and Diesel engines.
- Realize the principles of corrosion and make use of the principles for maintenance of various equipments more effectively.
- Get hands on experience in various processes like polymerization, preparation, properties and applications of plastics and rubbers.
- Acknowledge the important aspects of green chemistry and realize the use of liquid crystals in various technological applications .

S.No	Teaching Learning Process (TLP)	Delivery Methods (DM)	Assessment Methods (AM)
1	Solving Real world problem	Chalk & Talk	Assignments
2	Explaining application before theory	ICT tools	Quiz
3	Solving problems	Group discussions	Tutorials
4	Designing of experiments	Industrial visit	Surprise Tests



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5	Problems on environmental, economics, health & safety	Field work	Mid Exams
6	Problems on professional & ethics	Case studies	Model Exam
7	Seminar	Mini Projects	END Exams
8	Problems using software	Numerical treatment	
9	Self study	Design / Exercises	

### Detailed Lesson Plan

S.NO	TOPIC TO BE COVERED	Date		TLP	DM	AM
		Tentative	Actual			
<b>UNIT-I: WATER TECHNOLOGY</b>						
1	Orientation class-1	5 -7-16		2	1	1,3.5.7
2	Orientation class-2	7 -7-16		2	1	
3	Orientation class-3	8-7-16		2	1	
4	Introduction to chapters of the Engg.Chemistry	9-7-16		2	1	
5	Pre requisites for Engg.chemistry	12-7-16		2	1	
6	Pre requisites for Engg.chemistry	13-7-16		2	1	
7	Pre requisites for Engg.chemistry	14-7-16		3	1	
8	Pre requisites for Engg.chemistry	15-7-16		3	1	
9	Pre requisites for Engg.chemistry	16-7-16		1	1	



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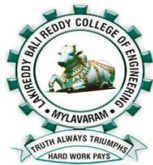
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Year :	<b>I</b>	Section :		<b>To</b>
				<b>17-11-16</b>

10	Sources of water & quality, Concept of hardness	19-7-16		1	1
11	Types Hardness, Units of hardness - inter-conversions	20-7-16		2	1
12	Hardness problems	21-7-16		2	1
13	<b>Tutorial</b>	22-7-16		1,2	9
14	Scale and Sludge formation	23-7-16		1,2	1
15	caustic embrittlement	26-7-16		1,2	1
16	Priming and foaming & boiler corrosion	27-7-16		1,2	1
17	<b>Tutorial</b>	28-7-16		1,2	9
18	L.S process, principle and equations	29-7-16		2	1
<b>UNIT-II:</b>					
<b>FUEL TECHNOLOGY</b>					
19	Cold & hot lime soda process	30-7-16		2	1
20	Zeolite process, advantages and demerits	2-08-16		2	1
21	Ion Exchange process, advantages and demerits	3-08-16		2	1
22	Internal treatment, Desalination Electro dialysis. reverse osmosis	4-08-16		2	1
23	<b>Assignment</b>	5-08-16		2	9
24	S,L,G fuels merit & demerits	6-08-16		2	1
25	G.C.V,& L.C.V Definitions coal, its origin, types.	9-08-16		2	1
26	Proximate analysis, significance	9-08-16		2	1
27	Ultimate analysis, significance	10-08-16		2	1



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28	<b>Tutorial</b>	11-08-16		2	9	1,3.5.7
29	Refining of petroleum, cracking	12-08-16		2	1	
30	Fixed bed, moving bed cracking methods	13-08-16		2	1	
31	Fischer Tropschs & Bergius process	16-08-16		2	1	
32	<b>Tutorial</b>	17-08-16		2	9	
33	Working of I.C &C.I engines	18-08-16		2	1	
34	Natural gas, C.N.G .analysis of flue gases	19-08-16		2	1	
35	<b>Assignment</b>	20-08-16		2	9	
36	Revision for mid-1	23-08-16		2	1	
37	Revision for mid-1	24-08-16		2	1	
38	revision for mid-1	26-08-16		2	1	
39	revision for mid-1	27-08-16		2	1	
40	revision for mid-1	30-08-16		2	1	
41	Instructions for mid exam	31-08-16		2	1	
42	Mid1	01-09-16				
43	Mid1	02-09-16				5
44	Mid1	03-09-16				5
<b>UNIT-III: CORROSION</b>						
45	Corrosion, definition, examples.	6 -09-16		2	1	
46	Dry corrosion & types Pilling bedworth rule	7-09-16		2	1	
47	Wet corrosion. mechanism	8-09-16		2	1	



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48	Tutorial	9-09-16		2	1	
59	Galvanic corrosion. Passivity Galvanic series, significance.	10-09-16		2	1	
50	Concentration corrosion	13-09-16		2	1	
51	<b>Tutorial</b>	14-09-16		2	9	
52	Inter granular, stress corrosion ,soil corrosion	15-09-16		2	1	
53	Factors influencing corrosion	16-09-16		2	1	
54	Corrosion control	17-09-16		2	1	
55	<b>Tutorial</b>	20-09-16		2	9	
56	<b>Assignment</b>	21-09-16		2	1,9	
<b>UNIT-IV:</b>						
<b>POLYMER SCIENCE AND TECHNOLOGY</b>						
57	Basic terminology of polymers	22-09-16		2	1	1,3.5.7
58	Types of polymerization	23-09-16		2	1	
59	P.V.C, Teflon,	24-09-16		2		
60	Bakelite, PMMA	27 -09-16		2	1	
61	<b>Tutorial</b>	28-09-16		2	9	
62	Conducting polymers	29-10-16		2	1	
63	Conducting polymers	30-10-16		2	1	
64	Processing of natural rubber	1-10-16		2	1	
65	BUNA-S, BUNA-N, Thiokal	4-10-16		2	1	
66	Polyester & F.R.P	5-10-16		2	1	
67	<b>Tutorial</b>	6-10-16		2	9	





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#### UNIT-V: GREEN CHEMISTRY & LIQUID CRYSTALS

69	Introduction to green chemistry, significance	8-10-16		2	1
70	Goals of green chemistry	18-10-16		2	1
71	Alternative starting materials	19-10-16		2	1
72	Alternative reagents	20-10-16		2	1
73	Alternative reaction conditions & final products	21-10-16		2	1
74	Alternative reaction conditions	22-10-16		2	1
75	Alternative final products	25-10-16		2	1
76	<b>Tutorial</b>	26-10-16		2	9
77	Liquid crystals	27-10-16		2	1
78	Classification of liquid crystals	28-10-16		2	1
79	Classification of liquid crystals	29-11-16		2	1
80	Applications of liquid crystals	1-11-16		2	1
81	<b>Tutorial</b>	2-11-16		2	9
82	<b>Assignment</b>	3-11-16		2	1
83	Topics beyond syllabus	4-11-16		2	1
84	Topics beyond syllabus	5-11-16		2	1
85	revision	8-11-16		2	1
86	revision	09-11-16		2	1
87	revision	10-11-16		2	1
88	revision	11-11-16		2	1
89	Instructions for final examination	12-11-16		2	1



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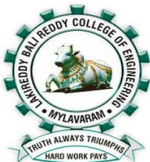
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#### Assessment Summary:

Assessment Task	Marks	Course Outcomes				
		CO1	CO2	CO3	CO4	CO5
Assignments	05					
Quizzes	--					
Tutorials	--					
Surprise Tests	--					
Mid Exams	20					
Model Exams	--					
End Exam	75					
Attendance	--					
Total	100					

#### Mapping Course Outcomes with Programme Outcomes:

Course Code	COs	POs										
		A	B	C	D	E	F	G	H	I	J	k
<b>S162</b>	CO1	3	2		2	2			2			2
	CO2	3	2		2	2			2			2



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CO3	3	2		2	2			2			2
CO4	3	2		2	2			2			2
CO5	3	2		2	2			2			2

Note: Where 3-Strongly correlated, 2-Moderately Correlated , 1-Slightly Correlated

	Instructor	Course Coordinator	Module Coordinator	HOD
Name	Dr. V.Parvathi	Dr .V.Parvathi	Dr .V.Parvathi	Dr.A.Rami Reddy
Sign with Date				



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### LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING (AUTONOMOUS)

L.B.Reddy Nagar, Mylavaram -521 230, Krishna Dist., A.P.

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### LESSON PLAN

<b>COURSE</b>	:	B.Tech, (I-Sem.,) – Section.B –R14-2016-Admitted Batch
<b>A.Y</b>	:	2016-17
<b>BRANCH</b>	:	Computer science and Engineering
<b>SUBJECT</b>	:	ENGINEERING CHEMISTRY (Code:S232)
<b>FACULTY</b>	:	Mr. K. JAMILIREDDY

S.No.	Tentative Date	Topics to be covered	No. of Classes	Actual Date	Content Delivery Method
<b>UNIT-I : WATER TECHNOLOGY</b>					
1.	04-07-16	Orientation class-1	1		DM-1
2.	05-07-16	Orientation class-2	1		DM-1
3.	05-07-16	Orientation class-3	1		DM-I
4.	07-07-16	Introduction to chapters of the Engg.Chemistry	1		DM-1
5.	09-07-16	Sources of water & quality, Concept of hardness	1		DM-1
6.	11-07-16	Types Hardness, Units of hardness - inter-conversions	1		DM-I
7.	12-07-16	Hardness problems	1		DM-1
8.	12-07-16	Tutorial-1	1		DM-2
9.	14-07-16	Scale and Sludge formation	1		DM-1
10.	16-07-16	caustic embrittlement	1		DM-I
11.	18-07-16	Priming and foaming & boiler corrosion	1		DM-1
12.	19-07-16	Tutorial-2	1		DM-2



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13.	19-07-16	L.S process, principle and equations	1		DM-1
14.	21-07-16	Cold & hot lime soda process	1		DM-1
15.	23-07-16	Zeolite process, advantages and demerits	1		DM-1
16.	25-07-16	Ion Exchange process, advantages and demerits	1		DM-1
17.	26-07-16	Internal treatment, Desalination Electro dialysis. reverse osmosis	1		DM-1
18.	26-07-16	Assignment	1		DM-4

#### UNIT-II :

19.	28-07-16	S,L,G fuels merit & demerits	1		DM-1
20.	30-08-16	G.C.V. Definition	1		DM-1
21.	01-08-16	L.C.V Definition	1		DM-1
22.	02-08-16	Coal its origin types	1		DM-1
23.	02-08-16	Proximate analysis,	1		DM-2
24.	04-08-16	significance	1		DM-I
25.	06-08-16	Ultimate analysis,	1		DM-1
26.	08-08-16	significance	1		DM-1
27.	09-08-16	Tutorial=1	1		DM-2
28.	09-08-16	Refining of petroleum	1		DM-1
29.	11-08-16	cracking	1		DM-1
30.	13-08-16	Fixed bed cracking methods	1		DM-1



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31.	16-08-16	moving bed cracking methods	1		DM-1
32.	16-08-16	Fischer Tropschs	1		DM-1
33.	18-08-16	Bergius process	1		DM-1
34.	20-08-16	Tutorial-2	1		DM-2
35.	22-08-16	Working of I.C & C.I engines	1		DM-1
36.	23-08-16	Natural gas, C.N.G .	1		DM-2
37.	23-08-16	analysis of flue gases	1		DM-I
38.	27-08-16	Assignment	1		DM-4
39.	29-08-16	Instructions for mid exam	1		DM-1
40.	30-08-16	revision	2		DM-1
41.	01-09-16	I Mid Examination	1		DM-1
42.	03-09-16	I Mid Examination	1		DM-1
43.	06-09-16	Paper distribution & discussion.	2		DM-1
44.	<b>UNIT-III</b>				
45.	08-09-16	Corrosion, definition, examples Dry corrosion & types.	1		DM-1
46.	10-09-16	Wet corrosion. mechanism	1		DM-1
46	13-09-16	Galvanic corrosion. Passivity	1		DM-1
47	13-09-16	Tutorial-1	1		DM-2



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48	15-09-16	Galvanic series, significance.	1	DM-1
49	17-09-16	Concentration corrosion	1	DM-1
50	19-09-16	Tutorial-2	1	DM-2
51	20-09-16	Water line corrosion, Inter granular	1	DM-1
52	20-09-16	stress corrosion ,soil corrosion	1	DM-1
53	22-09-16	Factors influencing corrosion	1	DM-1
54	24-09-16	Factors influencing corrosion	1	DM-1
55	26-09-16	Corrosion control	1	DM-1
56	27-09-16	Corrosion control	1	DM-1
57	27-09-16	Corrosion control	1	DM-1
58	29-09-16	Tutorial-3	1	DM-2
59	01-10-16	Assignment	1	DM-4
<b>UNIT-IV :</b>				
60	03-10-16	Types of polymers	1	DM-1
61	03-10-16	P.V.C, Teflon,	1	DM-1
62	04-10-16	BAKE LITE, PMMA	1	DM-1



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Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

63	04-10-16	Tutorial-1	1		DM-2
64	06-10-16	Conducting polymers	1		DM-1
65	08-10-16	Processing of natural rubber	1		DM-1
66	17-10-16	BUNA-S	1		DM-1
67	18-10-16	BUNA-N, Thiokal	1		DM-1
68	18-10-16	Polyester	1		DM-1
69	20-10-16	F.R.P	1		DM-1
70	22-10-16	Tutorial-2	1		DM-2
71	24-10-16	Assignment	1		DM-4
<b>UNIT-V</b>					
72	25-10-16	Goals of green chemistry	1		DM-1
73	25-10-16	Alternative starting materials	1		DM-1
74	27-10-16	Alternative reagents	1		DM-1
75	29-10-16	Alternative reaction conditions & final products	1		DM-1
76	31-10-16	Alternative final products and applications of green chemistry.	1		DM-1
77	01-11-16	Tutorial-1	1		DM-2
78	01-11-16	Introduction to liquid crystals	1		DM-1
79	03-11-16	Liquid crystals	1		DM-1
80	05-11-16	Classification of liquid crystals	1		DM-1
81	07-11-16	Classification of liquid crystals	1		DM-1





## LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE


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82	08-11-16	Classification of liquid crystals	1		DM-1
83	08-11-16	Tutorial-2	1		DM-2
84	10-11-16	Applications of Liquid crystals	1		DM-1
85	12-11-16	Assignment	1		DM-4
		Total Classes	87		
		Total Number of Classes Required to complete the Syllabus			
		Total Number of Classes Taken			

#### DELIVERY METHODS

<b>DM1</b>	Lecture interspersed with discussions /BB	<b>DM4</b>	Assignment/Test
<b>DM2</b>	Tutorial	<b>DM5</b>	Demonstration ( laboratory, field visit )
<b>DM3</b>	Lecture with a quiz	<b>DM6</b>	Presentations/PPT
<b>Signature</b>			
<b>Name</b>	Mr.K. Jamilireddy	Dr. V.Parvathi	Prof. A. Rami Reddy
	<b>Subject Teacher</b>	<b>Course Coordinator</b>	<b>HOD</b>

	<b>LAB SCHEDULE</b>				<b>Date: 04-07-16</b>
	<b>Sub Name: Engg. Chemistry Lab</b> <b>Faculty Name: Dr V.Parvathi</b> <b>Class: I B.Tech</b>				<b>To</b>  <b>17-11-16</b>
					<b>17-11-16</b>

No. of Periods	Date	Name of the experiment	Signature
1.	7 .7.2016	Engg. chemistry lab orientation	
2.	14.7.2016	Introduction of lab syllabus	
3.	21.7.2016	Demonstration of volumetric analysis,	
4.	28.7.2016	Model experiment	
5.	4.8.2016	Determination of alkalinity of water sample	
6.	25.8.2016	Determination of total Hardness of water by EDTA method	
7.	1.9.2016	Determination of permanent hardness of water by EDTA method	
8.	8.9.2016	Determination of the amount of Oxalic acid and Sulphuric acid in 1 liter solution by using given standard Sodium Hydroxide and Potassium Permanganate solution.	
9.	15.9.2016	Estimation of Mohr's salt by using potassium permanganate.	





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25.	31-08-16	Estimation of Mohr's salt by using potassium permanganate.	
26.	07-09-16	Determination of amount of potassium dichromate in given solution by using sodium thiosulphate	
27.	14-09-16	Preparation of Urea formaldehyde resin	
28.	21-09-16	Preparation of Phenol formaldehyde resin	
29.	28-09-16	Revision	
30.	05-10-16	Revision	
31.	19-10-16	Revision	
32.	26-10-16	Revision	
33.	02-11-16	Lab Internal examination ( first 30 students )	
34.	09-11-16	Lab Internal examination ( Second 30 students )	

	<b>Prepared by</b>	<b>Approved by</b>
<b>Signature</b>		
<b>Name</b>	Mr. K.JAMILIREDDY Asst. Professor/FED	HOD Dr. A. Rami Reddy Professor/FED

#### Detailed Lesson Plan

S.NO	TOPIC TO BE COVERED	Date		TLP	DM	AM
		Tentative	Actual			
<b>UNIT I: Differential equations of first order and first degree</b>						
1	Course Objective, introduction, their applications	4/7/16		2	1	
2	Differential equations of first order and first degree	5/7/16		2,3	1	
3	Separation of variables	7/7/16		2,3	1	
4	Homogeneous differential equations	8/7/16		2,3	1	
5	Non Homogeneous differential equations	9/7/16		2,3	1	
6	Exact differential equations	9/7/16		2,3	1	
7	Exact differential equations	11/7/16		2,3	1	
8	Non Exact differential equations-Integrating factor	12/7/16		2,3	1	



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9	Non Exact differential equations, Type I	14/7/16		2,3	1	1,2,3,5,7
10	Non Exact differential equations, Type II	15/7/16		2,3	1	
11	Non Exact differential equations, Type III	16/7/16		2,3	1	
12	<b>Tutorial-1</b>	16/7/16		3	1,9	
13	Non Exact differential equations, Type IV	18/7/16		2,3	1	
14	Linear differential equations	19/7/16		2,3	1	
15	Linear differential equations	21/7/16		2,3	1	
16	Bernoulli's Linear differential equations	22/7/16		2,3	1	
17	Bernoulli's Linear differential equations	23/7/16		2,3	1	
18	<b>Tutorial-2</b>	23/7/16		3	1,9	
19	Non-linear differential equations	25/7/16		2,3	1	
20	Orthogonal Trajectories in Cartesian form	26/7/16		2,3	1	
21	Orthogonal Trajectories in Polar form	28/7/16		2,3	1	
22	<b>Assignment in Unit I</b>	29/7/16		3		
23	<b>Quiz in UNIT I</b>	30/7/16		3		
24	<b>Tutorial-3</b>	30/7/16		3	1,9	
<b>UNIT II: Higher order differential equations</b>						
25	Homogeneous Linear Differential equations	1/8/16		2,3	1	1,2,3,5,7
26	Non Homogeneous and R.H.S of the form $e^{ax}$	2/8/16		2,3	1	
27	Non Homogeneous and R.H.S of the form $\sin ax$ or $\cos ax$	4/8/16		2,3	1	
28	Non Homogeneous and R.H.S of the form polynomial in x	5/8/16		2,3	1	
29	Non Homogeneous and R.H.S of the form $e^{ax}V(x)$	6/8/16		2,3	1	
30	<b>Tutorial-4</b>	6/8/16		3	1,9	
31	Non Homogeneous and R.H.S of the term $xv(x)$	8/8/16		2,3	1	
32	Non Homogeneous and R.H.S of the term $x^k v(x)$	9/8/16		2,3	1	
33	Method of Variation of Parameters	11/8/16		2,3	1	
34	Method of Variation of Parameters	12/8/16		2,3	1	
35	Cauchy's equation	16/8/16		2,3	1	
36	Cauchy's equation	18/8/16		2,3	1	
37	Legendre's Equation	19/8/16		2,3	1	
38	Legendre's Equation	20/8/16		2,3	1	
39	<b>Tutorial-5</b>	20/8/16		3	1,9	



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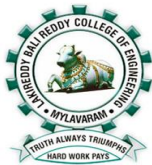
Year : **I**

Section :

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40	Applications of Linear differential equations	22/8/16		2,3	1	1,2,3,5,7
41	Applications of Linear differential equations	23/8/16		2,3	1	
42	Applications of Linear differential equations	26/8/16		2,3	1	
43	Related problems	27/8/16		2,3	1	
44	<b>Tutorial-6</b>	27/8/16		3	1,9	
45	<b>Assignment in Unit II</b>	29/8/16		3		
46	<b>Quiz in UNIT II</b>	30/8/16		3		
47	I MID EXAM	1/9/16				
48	I MID EXAM	2/9/16				
49	I MID EXAM	3/9/16				
50	I MID EXAM	3/9/16				
<b>UNIT III: Functions of several variables</b>						
51	Introduction	6/9/16		2,3	1	1,2,3,5,7
52	Taylor's series	8/9/16		2,3	1	
53	Taylor's series	9/9/16		2,3	1	
54	Maclaurin's series	13/9/16		2,3	1	
55	Functional of Several Variables	15/9/16		2,3	1	
56	Jacobians	16/9/16		2,3	1	
57	Functional Dependence	17/9/16		2,3	1	
58	<b>Tutorial-7</b>	17/9/16		3	1,9	
59	Maxima and Minima of functions of two variables	19/9/16		2,3	1	
60	Lagrange's Multiplier Method	20/9/16		2,3	1	
61	Introduction to Partial Differential Equations	22/9/16		2,3	1	
62	Formation of P.D.E. by eliminating arbitrary constants	23/9/16		2,3	1	
63	Formation of P.D.E. by eliminating arbitrary functions	24/9/16		2,3	1	
64	<b>Tutorial-8</b>	24/9/16		3	1,9	
65	Solutions of first order linear equations	26/9/16		2,3	1	
66	Lagrangian method	27/9/16		2,3	1	
67	<b>Assignment in Unit III</b>	29/9/16		3		
68	<b>Quiz in UNIT III</b>	30/9/16		3		
69	<b>Tutorial-9</b>	1/10/16		3	1,9	
<b>UNIT IV: Linear system of equations</b>						
70	Matrices Introduction and definitions	1/10/16		2,3	1	
71	Matrices Introduction and definitions	3/10/16		2,3	1	
72	Rank of a matrix, Problems	4/10/16		2,3	1	
73	Echelon Form	6/10/16		2,3	1	



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74	Normal form	7/10/16		2,3	1	1,2,3,5,7	
75	Normal form through PAQ	8/10/16		2,3	1		
76	<b>Tutorial-10</b>	8/10/16		3	1,9		
77	Solutions of linear homogeneous equations	17/10/16		2,3	1		
78	Solutions of linear non-homogeneous equations	18/10/16		2,3	1		
79	Gauss Elimination Method	20/10/16		2,3	1		
80	Gauss Jordan Method	21/10/16		2,3	1		
81	Gauss Jordan Method	22/10/16		2,3	1		
82	<b>Tutorial-11</b>	22/10/16		3	1,9		
83	Consistency and Inconsistency of equations	24/10/16		2,3	1		
84	Jacobi method	25/10/16		2,3	1		
85	Jacobi method	27/10/16		2,3	1		
86	Gauss Seidel method	28/10/16		2,3	1		
87	<b>Assignment in Unit IV</b>	29/10/16		3			
88	<b>Quiz in UNIT IV</b>	29/10/16		3			
<b>UNIT V: Eigen values and Eigen vectors</b>							
89	<b>Tutorial-12</b>	31/10/16		3	1,9		1,2,3,5,7
90	Eigen values and Eigen vectors	1/11/16		2,3	1		
91	Evaluation of Eigen vectors	3/11/16		2,3	1		
92	Evaluation of Eigen vectors	4/11/16		2,3	1		
93	Properties	5/11/16		2,3	1		
94	Properties	5/11/16		2,3	1		
95	<b>Tutorial-13</b>	7/11/16		3	1,9		
96	Cayley Hamilton Theorem	8/11/16		2,3	1		
97	Cayley Hamilton Theorem	10/11/16		2,3	1		
98	Related problems	11/11/16		2,3	1		
99	<b>Assignment in UNIT V</b>	12/11/16		3			
100	<b>Quiz in UNIT V</b>	12/11/16		3			
101	II MID EXAM	14/11/16					
102	II MID EXAM	15/11/16					

(K.N.V.Lakshmi)

Signature of faculty

(A.Rami Reddy)

Signature of Course Coordinator

Signature of HOD



## Lakireddy Balireddy College of Engineering College

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	Teaching Learning Process (TLP)	Delivery Methods (DM)	Assessment Methods (AM)
1	Solving Real world problem	Chalk & Talk	Assignments
2	Explaining application before theory	ICT tools	Quiz
3	Solving problems	Group discussions	Tutorials
4	Designing of experiments	Industrial visit	Surprise Tests
5	Problems on environmental, economics, health & safety	Field work	Mid Exams
6	Problems on professional & ethics	Case studies	Model Exam
7	Seminar	Mini Projects	END Exams
8	Problems using software	Numerical treatment	
9	Self study	Design / Exercises	

### Detailed Lesson Plan

S.NO	TOPIC TO BE COVERED	Date		TLP	DM	AM
		Tentative	Actual			
<b>UNIT I: Differential equations of first order and first degree</b>						
1	Course Objective, introduction, their applications	4/7/16		2	1	
2	Differential equations of first order and first degree	7/7/16		2,3	1	
3	Separation of variables	7/7/16		2,3	1	
4	Homogeneous differential equations	8/7/16		2,3	1	
5	Non Homogeneous differential equations	9/7/16		2,3	1	
6	Exact differential equations	11/7/16		2,3	1	
7	Exact differential equations	13/7/16		2,3	1	
8	Non Exact differential equations-Integrating factor	14/7/16		2,3	1	
9	Non Exact differential equations, Type I	14/7/16		2,3	1	
10	Non Exact differential equations, Type II	15/7/16		2,3	1	
11	Non Exact differential equations, Type III	16/7/16		2,3	1	
12	<b>Tutorial-1</b>	18/7/16		3	1,9	





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13	Non Exact differential equations, Type IV	20/7/16		2,3	1	1,2,3,5,7	
14	Linear differential equations	21/7/16		2,3	1		
15	Linear differential equations	21/7/16		2,3	1		
16	Bernoulli's Linear differential equations	22/7/16		2,3	1		
17	Bernoulli's Linear differential equations	23/7/16		2,3	1		
18	<b>Tutorial-2</b>	25/7/16		3	1,9		
19	Non-linear differential equations	27/7/16		2,3	1		
20	Orthogonal Trajectories in Cartesian form	28/7/16		2,3	1		
21	Orthogonal Trajectories in Polar form	28/7/16		2,3	1		
22	<b>Assignment in Unit I</b>	29/7/16		3			
23	<b>Quiz in UNIT I</b>	30/7/16		3			
24	<b>Tutorial-3</b>	1/8/16		3	1,9		
<b>UNIT II: Higher order differential equations</b>							
25	Homogeneous Linear Differential equations	3/8/16		2,3	1		1,2,3,5,7
26	Non Homogeneous and R.H.S of the form $e^{ax}$	4/8/16		2,3	1		
27	Non Homogeneous and R.H.S of the form $\sin ax$ or $\cos ax$	4/8/16		2,3	1		
28	Non Homogeneous and R.H.S of the form polynomial in x	5/8/16		2,3	1		
29	Non Homogeneous and R.H.S of the form $e^{ax}V(x)$	6/8/16		2,3	1		
30	<b>Tutorial-4</b>	8/8/16		3	1,9		
31	Non Homogeneous and R.H.S of the term $xv(x)$	10/8/16		2,3	1		
32	Non Homogeneous and R.H.S of the term $x^k v(x)$	11/8/16		2,3	1		
33	Method of Variation of Parameters	11/8/16		2,3	1		
34	Method of Variation of Parameters	12/8/16		2,3	1		
35	Cauchy's equation	17/8/16		2,3	1		
36	Cauchy's equation	18/8/16		2,3	1		
37	Legendre's Equation	18/8/16		2,3	1		
38	Legendre's Equation	19/8/16		2,3	1		
39	<b>Tutorial-5</b>	20/8/16		3	1,9		
40	Applications of Linear differential equations	22/8/16		2,3	1	1,2,3,5,7	
41	Applications of Linear differential equations	24/8/16		2,3	1		
42	Applications of Linear differential equations	26/8/16		2,3	1		
43	<b>Tutorial-6</b>	27/8/16		2,3	1		
44	<b>Assignment in Unit II</b>	29/8/16		3	1,9		
45	<b>Quiz in UNIT II</b>	31/8/16		3			



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46	I MID EXAM	1/9/16				
47	I MID EXAM	1/9/16				
48	I MID EXAM	2/9/16				
49	I MID EXAM	3/9/16				

### UNIT III: Functions of several variables

50	Introduction	7/9/16		2,3	1	
51	Taylor's series	8/9/16		2,3	1	
52	Taylor's series	9/9/16		2,3	1	
53	Maclaurin's series	9/9/16		2,3	1	
54	Functional of Several Variables	12/9/16		2,3	1	
55	Jacobians	14/9/16		2,3	1	
56	Functional Dependence	15/9/16		2,3	1	
57	<b>Tutorial-7</b>	15/9/16		3	1,9	
58	Maxima and Minima of functions of two variables	16/9/16		2,3	1	
59	Lagrange's Multiplier Method	17/9/16		2,3	1	
60	Introduction to Partial Differential Equations	19/9/16		2,3	1	1,2,3,5,7
61	Formation of P.D.E. by eliminating arbitrary constants	21/9/16		2,3	1	
62	Formation of P.D.E. by eliminating arbitrary functions	22/9/16		2,3	1	
63	<b>Tutorial-8</b>	22/9/16		3	1,9	
64	Solutions of first order linear equations	23/9/16		2,3	1	
65	Lagrangian method	24/9/16		2,3	1	
66	<b>Assignment in Unit III</b>	26/9/16		3		
67	<b>Quiz in UNIT III</b>	28/9/16		3		
68	<b>Tutorial-9</b>	29/9/16		3	1,9	

### UNIT IV: Linear system of equations

69	Matrices Introduction and definitions	29/9/16		2,3	1	
70	Matrices Introduction and definitions	30/9/16		2,3	1	
71	Rank of a matrix, Problems	1/10/16		2,3	1	
72	Echelon Form	3/10/16		2,3	1	
73	Normal form	5/10/16		2,3	1	
74	Normal form through PAQ	6/10/16		2,3	1	
75	<b>Tutorial-10</b>	6/10/16		3	1,9	
76	Solutions of linear homogeneous equations	7/10/16		2,3	1	
77	Solutions of linear non-homogeneous equations	17/10/16		2,3	1	
78	Gauss Elimination Method	19/10/16		2,3	1	
79	Gauss Jordan Method	20/10/16		2,3	1	



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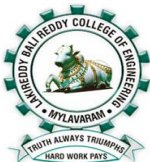
80	Gauss Jordan Method	20/10/16		2,3	1	1,2,3,5,7
81	<b>Tutorial-11</b>	21/10/16		3	1,9	
82	Consistency and Inconsistency of equations	22/10/16		2,3	1	
83	Jacobi method	24/10/16		2,3	1	
84	Jacobi method	26/10/16		2,3	1	
85	Gauss Seidel method	27/10/16		2,3	1	
86	<b>Assignment in Unit IV</b>	27/10/16		3		
87	<b>Quiz in UNIT IV</b>	28/10/16		3		
<b>UNIT V: Eigen values and Eigen vectors</b>						
88	<b>Tutorial-12</b>	29/10/16		3	1,9	1,2,3,5,7
89	Eigen values and Eigen vectors	31/10/16		2,3	1	
90	Evaluation of Eigen vectors	2/11/16		2,3	1	
91	Evaluation of Eigen vectors	3/11/16		2,3	1	
92	Properties	3/11/16		2,3	1	
93	Properties	4/11/16		2,3	1	
94	<b>Tutorial-13</b>	5/11/16		3	1,9	
95	Cayley Hamilton Theorem	7/11/16		2,3	1	
96	Cayley Hamilton Theorem	9/11/16		2,3	1	
97	Related problems	10/11/16		2,3	1	
98	<b>Assignment in UNIT V</b>	10/11/16		3		
99	<b>Quiz in UNIT V</b>	11/11/16		3		
100	II MID EXAM	14/11/16				
101	II MID EXAM	16/11/16				

Dr. A. Rami Reddy

Signature of faculty

Signature of Course Coordinator

Signature of HOD



## LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**


Year : **I**


Section :

To

**17-11-16**

	<b>Teaching Learning Process (TLP)</b>	<b>Delivery Methods (DM)</b>	<b>Assessment Methods (AM)</b>
1	Solving Real world problem	Chalk & Talk	Assignments
2	Explaining application before theory	ICT tools	Quiz
3	Solving problems	Group discussions	Tutorials
4	Designing of experiments	Industrial visit	Surprise Tests
5	Problems on environmental, economics, health & safety	Field work	Mid Exams
6	Problems on professional & ethics	Case studies	Model Exam
7	Seminar	Mini Projects	END Exams
8	Problems using software	Numerical treatment	
9	Self study	Design / Exercises	

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARTMENT</b>				
	<b>LESSON PLAN – CSE</b>				
	<b>Subject :</b>		<b>ENGINEERING CHEMISTRY (EC) - S232</b>		
	<b>Academic Year :</b>	<b>2015-16</b>	<b>Semester :</b>	<b>II</b>	<b>Date: 04-07-16</b>
<b>Year :</b>	<b>I</b>	<b>Section :</b>		<b>To</b>  <b>17-11-16</b>	

	<b>LESSON PLAN</b>	
	<b>Course Code&amp; Course Name: BASIC ELETRICAL ENGINEERING (S143)</b>	<b>SEM: I</b>
	<b>Programme: B.Tech, I Year</b> <b>Section : A</b>	<b>Department: CSE</b> <b>A.Y.: 2016-17</b>

**Course Objectives:**

The objective of this course is to analyze the electrical circuits and provide knowledge and skills needed to calculate efficiency of different machines, and also prepare the students to understand the working principles of both DC and AC machines, electrical and electronic measuring instruments.

**Course outcomes:**

After completion of the course students will be able to:

- CO1. Analyze different types of electrical circuits.
- CO2. Understand principle of working of different types of Machines
- CO3. Use the techniques to measure efficiency and regulation of AC Machines.
- CO4. Understand the working of electrical and electronics measuring instruments.

**Prerequisites:**

Electricity

**CO & PO Mapping:**

Course Outcomes PO's →	Basic Electrical Engineering											
	Programme Outcomes											
	a	b	c	d	e	f	g	h	i	j	k	l
CO1.	1						2					
CO2.	2				1							
CO3.	3	1	3	1			1					
CO4.	3		2									

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods	Remarks
<b>UNIT-I</b>						
1.	04/07/16	Subject introduction	04/07/16	1	DM1	
2.	05/07/16	Introduction to syllabus	5/07/16	1	DM1	



# Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

## FRESHMAN ENGINEERING DEPARTMENT

### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

3.	06/07/16	<b>Unit I Introduction</b>	6/07/16	1	DM1	
4.	7/07/16	Basic definitions of Electrical circuits	07/07/16	1	DM9	
5.	09/07/16	Types of elements and Examples	8/07/16	1	DM1	
6.	11/07/16	Series circuits & Voltage division rule	9/07/16	1	DM1	
7.	12/07/16	Series circuits & Voltage division rule problem	12/07/16	1	DM1	
8.	13/07/16	Parallel circuits & current division rule	13/07/16	1	DM1	
9.	14/07/16	Parallel circuits & current division rule	14/07/16	1	DM1	
10.	15/07/16	Series and parallel problems	15/07/16	1	DM1	
11.	16/07/16	Series and parallel problems	18/07/16	1	DM1	
12.	18/07/16	Source Transformation technique	19/07/16	1	DM1	
13.	19/07/16	Source Transformation technique problem	20/07/16	1	DM1	
14.	20/07/16	Mesh analysis	21/07/16	1	DM1	
15.	21/07/16	Mesh analysis problems	22/07/16	1	DM1	
16.	22/07/16	Delta-star transformations	23/07/16	1	DM1	
17.	23/07/16	Star-delta transformations	25/07/16	1	DM1	
18.	25/07/16	Problems on unit-1	26/07/16	1	DM1	
19.	26/07/16	Tutorial	27/07/16	1	DM2	
20.	27/07/16	<b>Unit II Introduction</b>	28/07/16	1	DM1	
21.	28/07/16	Construction of DC Generator	29/07/16	1	DM1	
22.	29/07/16	Principle of Operation of DC Generator	30/07/16	1	DM1	
23.	30/07/16	EMF Equation of DC Generator	03/08/16	1	DM1	
24.	01/08/16	Types of DC Machines	04/08/16	<b>1</b>	DM1	
25.	02/08/16	Tutorial	05/08/16	1	DM1	
26.	03/08/16	Magnetization	06/08/16	1	DM1	
27.	04/08/16	Load characteristics	08/08/16	1	DM1	
28.	05/08/16	problems	09/08/16	1	DM1	
29.	06/08/16	Principle of operation of DC Motor	10/08/16	1	DM1	
30.	08/08/16	Types of DC Motors	24/08/16	1	DM1	



# Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

## FRESHMAN ENGINEERING DEPARTMENT

### LESSON PLAN – CSE

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Academic Year : **2015-16**

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Section :

To

**17-11-16**

31.	09/08/16	Types of DC Motors	25/08/16	1	DM1	
32.	10/08/16	Problems	26/08/16	1	DM1	
33.	11/08/16	problems	27/08/16			
34.	12/08/16	Losses of DC Machines	29/08/16	1	DM1	
35.	13/08/16	Problems	30/08/16			
36.	14/08/16	efficiency of DC machines	31/08/16	1	DM1	
37.	16/08/16	Condition for max efficiency	01/09/16	1	DM1	
38.	19/08/16	Problems	02/09/16	1	DM1	
39.	20/08/16	Necessity of 3- point starter	03/09/16	1	DM1	
40.	22/08/16	3 point starter	06/09/16	1	DM1	
41.	23/08/16	Speed torque characteristics	07/09/16	1	DM1	
42.	24/08/16	Current torque characteristics, current speed characteristics	07/09/16	1	DM1	
43.	25/08/16	tutorial	07/09/16	1	DM1	
44.	26/08/16	Problems on second unit	08/09/16	1	DM2	
45.	27/08/16	<u>Revision</u>	09/09/16	1	DM2	
46.	29/08/16	Introduction to <b>UNIT-III</b>	12/09/16	1	DM1	
47.	30/08/16	Basic Definitions	13/09/16	1	DM1	
48.	31/08/16	Analysis of periodic waveforms	14/09/16	1	DM1	
49.	06/09/16	Concepts of Impedance & Admittance	15/09/16	1	DM1	
50.	07/09/16	Powers classification	19/09/16	1	DM1	
51.	08/09/16	Power factor & Problems	20/09/16	1	DM1	
52.	09/09/16	Tutorial	21/09/16	1	DM2	
53.	10/09/16	Principle of Operation of 1phase Transformers	22/09/16	1	DM1	
54.	12/09/16	Ideal Transformer	23/09/16	1	DM1	
55.	13/09/16	Practical Transformer	24/09/16	1	DM1	
56.	14/09/16	EMF Equation	26/09/16	1	DM4	
57.	15/09/16	Regulation-O.C and S.C tests	27/09/16	1	DM1	
58.	16/09/16	Problems	29/09/16	1	DM1	
59.	17/09/16	problems	30/09/16	1	DM1	
60.	19/09/16	Tutorial	01/10/16	1	DM1	
61.	20/09/16	problems on transformer	03/10/16	1	DM1	



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

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Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

62.	21/09/16	Revision	03/10/16	1	DM2	
63.	23/09/16	Revision	04/10/16	1	DM2	
64.	24/09/16	TEST ON Unit3	05/10/16	1	DM4	
65.	26/09/16	<b>Unit –IV</b> Introduction	06/10/16	1	DM1	
66.	27/09/16	Fundamentals of Alternating current	07/10/16	1	DM1	
67.	28/09/16	Principle of operation of Alternators	08/10/16	1	DM1	
68.	30/09/16	Salient and non salient pole rotors	13/10/16	1	DM1	
69.	01/10/16	Tutorial	14/10/16	1	DM1	
70.	03/10/16	Problems	18/10/16	1	DM1	
71.	04/10/16	problems	19/10/16	1	DM1	
72.	05/10/16	Voltage regulation by EMF Method	20/10/16	1	DM1	
73.	06/10/16	Problems	21/10/16	1	DM1	
74.	07/10/16	problems	22/10/16	1	DM1	
75.	08/10/16	Tutorial	27/10/16	1	DM2	
76.	17/10/16	Problems on regulation	28/10/16	1	DM1	
77.	18/10/16	Introduction about Induction Motors	28/10/16	1	DM1	
78.	20/10/16	Principle of operation of IM	31/10/16	1	DM1	
79.	21/10/16	Slip ring motors	01/11/16	1	DM1	
80.	22/10/16	Squirrel cage motors	01/11/16	1	DM1	
81.	24/10/16	Slip torque characteristics	01/11/16	1	DM1	
82.	25/10/16	Slip torque characteristics problems	2/11/16	1	DM1	
83.	26/10/16	tutorial	3/11/16	1	DM2	
84.	28/10/16	Test on Unit IV	4/11/16	1	DM4	
85.	29/10/16	REVISION	04/11/16	1	DM2	
86.	31/10/16	<b>UNIT V</b> Introduction	5/11/16	1	DM1	
87.	01/11/16	Basics about EMI	7/11/16	1	DM1	
88.	02/11/16	Different torques in instruments	8/11/16			
89.	03/11/16	Principles of Indicating instruments	9/11/16	1	DM1	
90.	04/11/16	PMDC Instruments	10/11/16	1	DM1	
91.	05/11/16	<b>Dynamometer</b>	11/11/16	1	DM4	
92.	07/11/16	<b>Moving Iron Attraction type instruments</b>	11/11/16	1	DM4	





# Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

## FRESHMAN ENGINEERING DEPARTMENT

### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

93.	08/11/16	<b>Moving Iron repulsion type instruments</b>	11/11/16	1	DM4	
94.	09/11/16	Tutorial	12/11/16	1	DM2	
95.	10/11/16	TEST ON UNIT V	12/11/16	1	DM1	
96.	11/11/16	REVISION	12/11/16	1	DM4	
97.	12/11/16	REVISION	12/11/16	1	DM2	


#### NOTE: DELIVERY METHODS:


**DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM4:** Assignment/Test,

**DM8:** Presentations/PPT, **DM9:** Asynchronous Discussion...

Signature	Name of the Faculty	Name of Course Co-ordinator	Name of Module Co-ordinator	HOD
	G.Tabita	G.Tabita	J.SIVA VARA PRASAD	Dr. M. Uma Vani

**Head of the Department**

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARTMENT</b>				
	<b>LESSON PLAN – CSE</b>				
	<b>Subject :</b>		<b>ENGINEERING CHEMISTRY (EC) - S232</b>		
	<b>Academic Year :</b>	<b>2015-16</b>	<b>Semester :</b>	<b>II</b>	<b>Date: 04-07-16</b>
<b>Year :</b>	<b>I</b>	<b>Section :</b>		<b>To</b>  <b>17-11-16</b>	

	<b>LESSON PLAN</b>			
	<b>Course Code&amp; Course Name: BASIC ELETRICAL ENGINEERING (S143)</b>			<b>SEM: I</b>
	<b>Programme: B.Tech, I Year</b>			<b>Department: CSE</b>
<b>Section : B</b>			<b>A.Y.: 2016-17</b>	

**Course Objectives:**

The objective of this course is to analyze the electrical circuits and provide knowledge and skills needed to calculate efficiency of different machines, and also prepare the students to understand the working principles of both DC and AC machines, electrical and electronic measuring instruments.

**Course outcomes:**

After completion of the course students will be able to:

- CO1. Analyze different types of electrical circuits.
- CO2. Understand principle of working of different types of Machines
- CO3. Use the techniques to measure efficiency and regulation of AC Machines.
- CO4. Understand the working of electrical and electronics measuring instruments.

**Prerequisites:**

Electricity

**CO & PO Mapping:**

Course Outcomes PO's →	Basic Electrical Engineering											
	Programme Outcomes											
	a	b	c	d	e	f	g	h	i	j	k	l
CO1.	1						2					
CO2.	2				1							
CO3.	3	1	3	1			1					
CO4.	3		2									

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods	Remarks
<b>UNIT-I</b>						
98.	04/07/16	Subject introduction	04/07/16	1	DM1	
99.	05/07/16	Introduction to syllabus	5/07/16	1	DM1	



# Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

## FRESHMAN ENGINEERING DEPARTMENT

### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

100.	06/07/16	<b>Unit I Introduction</b>	6/07/16	1	DM1	
101.	7/07/16	Basic definitions of Electrical circuits	07/07/16	1	DM9	
102.	09/07/16	Types of elements and Examples	8/07/16	1	DM1	
103.	11/07/16	Series circuits & Voltage division rule	9/07/16	1	DM1	
104.	12/07/16	Series circuits & Voltage division rule problem	12/07/16	1	DM1	
105.	13/07/16	Parallel circuits & current division rule	13/07/16	1	DM1	
106.	14/07/16	Parallel circuits & current division rule	14/07/16	1	DM1	
107.	15/07/16	Series and parallel problems	15/07/16	1	DM1	
108.	16/07/16	Series and parallel problems	18/07/16	1	DM1	
109.	18/07/16	Source Transformation technique	19/07/16	1	DM1	
110.	19/07/16	Source Transformation technique problem	20/07/16	1	DM1	
111.	20/07/16	Mesh analysis	21/07/16	1	DM1	
112.	21/07/16	Mesh analysis problems	22/07/16	1	DM1	
113.	22/07/16	Delta-star transformations	23/07/16	1	DM1	
114.	23/07/16	Star-delta transformations	25/07/16	1	DM1	
115.	25/07/16	Problems on unit-1	26/07/16	1	DM1	
116.	26/07/16	Tutorial	27/07/16	1	DM2	
117.	27/07/16	<b>Unit II Introduction</b>	28/07/16	1	DM1	
118.	28/07/16	Construction of DC Generator	29/07/16	1	DM1	
119.	29/07/16	Principle of Operation of DC Generator	30/07/16	1	DM1	
120.	30/07/16	EMF Equation of DC Generator	03/08/16	1	DM1	
121.	01/08/16	Types of DC Machines	04/08/16	<b>1</b>	DM1	
122.	02/08/16	Tutorial	05/08/16	1	DM1	
123.	03/08/16	Magnetization	06/08/16	1	DM1	
124.	04/08/16	Load characteristics	08/08/16	1	DM1	
125.	05/08/16	problems	09/08/16	1	DM1	
126.	06/08/16	Principle of operation of DC Motor	10/08/16	1	DM1	
127.	08/08/16	Types of DC Motors	24/08/16	1	DM1	



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

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Academic Year : **2015-16**

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Date: **04-07-16**

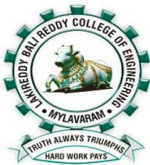
Year : **I**

Section :

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128.	09/08/16	Types of DC Motors	25/08/16	1	DM1	
129.	10/08/16	Problems	26/08/16	1	DM1	
130.	11/08/16	problems	27/08/16			
131.	12/08/16	Losses of DC Machines	29/08/16	1	DM1	
132.	13/08/16	Problems	30/08/16			
133.	14/08/16	efficiency of DC machines	31/08/16	1	DM1	
134.	16/08/16	Condition for max efficiency	01/09/16	1	DM1	
135.	19/08/16	Problems	02/09/16	1	DM1	
136.	20/08/16	Necessity of 3- point starter	03/09/16	1	DM1	
137.	22/08/16	3 point starter	06/09/16	1	DM1	
138.	23/08/16	Speed torque characteristics	07/09/16	1	DM1	
139.	24/08/16	Current torque characteristics, current speed characteristics	07/09/16	1	DM1	
140.	25/08/16	tutorial	07/09/16	1	DM1	
141.	26/08/16	Problems on second unit	08/09/16	1	DM2	
142.	27/08/16	<u>Revision</u>	09/09/16	1	DM2	
143.	29/08/16	Introduction to <b>UNIT-III</b>	12/09/16	1	DM1	
144.	30/08/16	Basic Definitions	13/09/16	1	DM1	
145.	31/08/16	Analysis of periodic waveforms	14/09/16	1	DM1	
146.	06/09/16	Concepts of Impedance & Admittance	15/09/16	1	DM1	
147.	07/09/16	Powers classification	19/09/16	1	DM1	
148.	08/09/16	Power factor & Problems	20/09/16	1	DM1	
149.	09/09/16	Tutorial	21/09/16	1	DM2	
150.	10/09/16	Principle of Operation of 1phase Transformers	22/09/16	1	DM1	
151.	12/09/16	Ideal Transformer	23/09/16	1	DM1	
152.	13/09/16	Practical Transformer	24/09/16	1	DM1	
153.	14/09/16	EMF Equation	26/09/16	1	DM4	
154.	15/09/16	Regulation-O.C and S.C tests	27/09/16	1	DM1	
155.	16/09/16	Problems	29/09/16	1	DM1	
156.	17/09/16	problems	30/09/16	1	DM1	
157.	19/09/16	Tutorial	01/10/16	1	DM1	
158.	20/09/16	problems on transformer	03/10/16	1	DM1	



# Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

## FRESHMAN ENGINEERING DEPARTMENT

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159.	21/09/16	Revision	03/10/16	1	DM2	
<b>160.</b>	23/09/16	Revision	04/10/16	1	DM2	
161.	24/09/16	TEST ON Unit3	05/10/16	1	DM4	
162.	26/09/16	<b>Unit –IV</b> Introduction	06/10/16	1	DM1	
163.	27/09/16	Fundamentals of Alternating current	07/10/16	1	DM1	
164.	28/09/16	Principle of operation of Alternators	08/10/16	1	DM1	
165.	30/09/16	Salient and non salient pole rotors	13/10/16	1	DM1	
166.	01/10/16	Tutorial	14/10/16	1	DM1	
167.	03/10/16	Problems	18/10/16	1	DM1	
168.	04/10/16	problems	19/10/16	1	DM1	
169.	05/10/16	Voltage regulation by EMF Method	20/10/16	1	DM1	
170.	06/10/16	Problems	21/10/16	1	DM1	
171.	07/10/16	problems	22/10/16	1	DM1	
172.	08/10/16	Tutorial	27/10/16	1	DM2	
173.	17/10/16	Problems on regulation	28/10/16	1	DM1	
174.	18/10/16	Introduction about Induction Motors	28/10/16	1	DM1	
175.	20/10/16	Principle of operation of IM	31/10/16	1	DM1	
176.	21/10/16	Slip ring motors	01/11/16	1	DM1	
177.	22/10/16	Squirrel cage motors	01/11/16	1	DM1	
178.	24/10/16	Slip torque characteristics	01/11/16	1	DM1	
179.	25/10/16	Slip torque characteristics problems	2/11/16	1	DM1	
180.	26/10/16	tutorial	3/11/16	1	DM2	
181.	28/10/16	Test on Unit IV	4/11/16	1	DM4	
182.	29/10/16	REVISION	04/11/16	1	DM2	
183.	31/10/16	<b>UNIT V</b> Introduction	5/11/16	1	DM1	
184.	01/11/16	Basics about EMI	7/11/16	1	DM1	
185.	02/11/16	Different torques in instruments	8/11/16			
186.	03/11/16	Principles of Indicating instruments	9/11/16	1	DM1	
187.	04/11/16	PMMC Instruments	10/11/16	1	DM1	
188.	05/11/16	<b>Dynamometer</b>	11/11/16	1	DM4	
189.	07/11/16	<b>Moving Iron Attraction type instruments</b>	11/11/16	1	DM4	



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

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190.	08/11/16	<b>Moving Iron repulsion type instruments</b>	11/11/16	1	DM4	
191.	09/11/16	Tutorial	12/11/16	1	DM2	
192.	10/11/16	TEST ON UNIT V	12/11/16	1	DM1	
193.	11/11/16	REVISION	12/11/16	1	DM4	
194.	12/11/16	REVISION	12/11/16	1	DM2	

#### NOTE: DELIVERY METHODS:

**DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM4:** Assignment/Test,

**DM8:** Presentations/PPT, **DM9:** Asynchronous Discussion...

Signature	Name of the Faculty	Name of Course Co-ordinator	Name of Module Co-ordinator	HOD
	G.Tabita	G.Tabita	J.SIVA VARA PRASAD	Dr. M. Uma Vani

**Head of the Department**



## Lakireddy Balireddy College of Engineering College

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Semester : **II**

Date: **04-07-16**

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Section :

To

**17-11-16**

**Subject Code: L126**

**C - PROGRAMMING LAB**

**Lecture: 3hrs/week**

**Continuous Internal Assessment: 25**

**Credits : 2**

**Semester End Examination: 50**

#### **COURSE EDUCATIONAL OBJECTIVES**

After learning the CP Lab the student:

- Understand, analyze and implement software development tools like algorithm, Pseudo codes and programming structure.
- Understand basic elements C programming structures like datatypes, expressions, Control statements, various I/O functions and how to solve simple mathematical Problems using control structures

#### **COURSE OUTCOMES**

At the end of the course the student will be able to

**CO-1:** Apply and practice logical ability to solve the problems..

- **CO-2:** Understand C programming development environment, compiling, debugging, linking and executing a program using the development environment.

**Pre requisite:** Know the Procedure of executing the programs

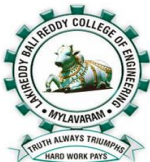
**I)** Write a program in 'C' language to cover the following problems.

a) Example program which shows the usage of various preliminary Data types available in C









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e) Write an example program to illustrate use of external & static storage classes.

f) Write an example program to illustrate the usage of command line arguments.

g) Program to illustrate the usage of dynamic memory management functions.

**VII)** a) Write an example program using structures to process the student record. Assume suitable fields for student structures ( Different kinds of initialization of structure variables are to be exercised)

b) Write a program to read records of 10 employees and find their average salary

( exercise array of structures & Nested structures concepts through this program).

c) Write a program to handle a structure variable using pointers and implement self referential structure(i.e. A structure variable having a pointer to itself)

**VIII)** Write an example program on file to perform following operations:

a) Accessing content from files and writing content in to it.

(Exercise different file operation modes)

b) Copy the contents of one file into another (Exercise different file operation modes)

#### LAB CYCLES

No. of Periods	Date	Lab Cycles	Signature
35.	07-07-2016	Introduction	
36.	14-07-2016	CYCLE I	
37.	21-07-2016	CYCLE I	
38.	28-07-2016	CYCLE II	
39.	04-08-2016	CYCLE II	



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40.	11-08-2016	CYCLE III	
41.	18-08-2016	CYCLE III	
42.	25-08-2016	CYCLE IV	
43.	01-09-2016	CYCLE IV	
44.	08-09-2016	CYCLE V	
45.	15-09-2016	CYCLE V	
46.	22-09-2016	CYCLE VI	
47.	29-09-2016	CYCLE VI	
48.	06-10-2016	CYCLE VII	
49.	20-10-2016	CYCLE VII	
50.	27-10-2016	CYCLE VIII	
51.	03-11-2016	CYCLE VIII	
52.	10-11-2016	Internal Lab Examination	

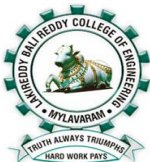
#### TEXT BOOKS

1. The C Programming Language, B.W. Kernighan, Dennis M.Ritchie, PHI/Pearson Education.
2. C and Data Structures, N.B.Venkateswarlu and E.V.Prasad

#### REFERENCES

1. Programming in C – Reema Thareja, Oxford Publications.
2. Programming in C – Stephen G. Kochan, III Edition, Pearson Eductaion
3. Programming in C – Pradeep Dey, Oxford Publications.

	<b>Prepared by</b>	<b>Approved by</b>	<b>Course</b>
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## LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**


Year : **I**

Section :

To

**17-11-16**

			Coordinator
Signature			
Name	A.Raja Gopal	Dr.N.RaviShankar	
Designation	Asst.Professor	Professor HOD-CSE	
Date	03-07-2016	04-07-2016	

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARTMENT</b>			
	<b>LESSON PLAN – CSE</b>			
	Subject :	<b>ENGINEERING CHEMISTRY (EC) - S232</b>		
	Academic Year :	2015-16	Semester :	II
Year :	I	Section :		To  17-11-16

**Subject Code: L126**

**C - PROGRAMMING LAB**

**Lecture: 3hrs/week**

**Continuous Internal Assessment: 25**

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### **COURSE OUTCOMES**

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**CO-1:** Apply and practice logical ability to solve the problems..

- **CO-2:** Understand C programming development environment, compiling, debugging, linking and executing a program using the development environment.

**Pre requisite:** Know the Procedure of executing the programs

**I) Write a program in 'C' language to cover the following problems.**

- a) Example program which shows the usage of various preliminary Data types available in C Language.
- b) Example program which shows the usage of various Operators available in C Language.

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARTMENT</b>			
	<b>LESSON PLAN – CSE</b>			
	Subject :	<b>ENGINEERING CHEMISTRY (EC) - S232</b>		
	Academic Year :	2015-16	Semester :	II
Year :	I	Section :		

c) Example programs to illustrate the *order of evaluation*.

**II) WRITE EXAMPLE PROGRAMS:**

- a) To check whether the given year is leap year (or) not
- b) Roots of Quadratic Equation.
- c) Finding smallest & biggest number from the given set of 4 numbers using 'if' statement.
- d) Calculate the student grade in the examination – assume suitable Constraints.
- e) Prepare electricity bill for the consumed units – assume suitable Constraints.
- f) Converting given two digit number into words using switch statement
- g) To illustrate the usage of 'goto' statement.

**III) EXAMPLE PROGRAMS:**

- a) To Display first N natural numbers
- b) To find whether the given number is Armstrong (or) not
- c) To find reverse of the given number and to check whether it is palindrome (or) not.
- d) To find whether given number is strong number (or) not.
- e) To check whether given number is Prime (or) not
- f) To display prime numbers with in the given range (Nesting of Loops).
- g) To display the following structure(Nesting of Loops)

i) <pre> 1   2     3   4 3 2 1     1 2 3   1 2 3 4 1 2 3 4 5         </pre>	ii) <pre> 5 4 3 2 1   4 3 2 1     3 2 1       2 1         1         </pre>
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- IV)** Write example programs in C Language to perform following operations:
- Finding the sum and average of given numbers using Arrays.
  - To display elements of array in reverse order
  - To search whether the given element is in the array (or) not using linear search & binary search.
  - Write a C program to perform the following operations
    - Addition, subtraction and multiplication of Matrices
    - Transpose of given matrix(The above operations are to be exercised using functions also by passing arguments)
  - Write a C program to find whether the given string is palindrome (or) not.
  - To accept line of text and find the number of characters, number of vowels and number of blank spaces in it.
  - Write an example program to illustrate the use of any 5 string handling functions.
- V)**
- Example program to bring clarity on pointer declaration & initialization and Pointer arithmetic.
  - Write an example program to describe the usage of *call by reference*.
  - Write a program to find sum of the elements of the array using functions.
- VI)** Write example programs in C Language:
- To find factorial of a given number using functions.
  - Swap two numbers using functions.
  - To find GCD of two numbers using recursion
  - Write a recursive function to solve Towers of Hanoi problem.
  - Write an example program to illustrate use of external & static storage classes.
  - Write an example program to illustrate the usage of command line arguments.



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g) Program to illustrate the usage of dynamic memory management functions.

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56.	28-07-2016	CYCLE II	
57.	04-08-2016	CYCLE II	
58.	11-08-2016	CYCLE III	
59.	18-08-2016	CYCLE III	
60.	25-08-2016	CYCLE IV	
61.	01-09-2016	CYCLE IV	
62.	08-09-2016	CYCLE V	
63.	15-09-2016	CYCLE V	





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64.	22-09-2016	CYCLE VI	
65.	29-09-2016	CYCLE VI	
66.	06-10-2016	CYCLE VII	
67.	20-10-2016	CYCLE VII	
68.	27-10-2016	CYCLE VIII	
69.	03-11-2016	CYCLE VIII	
70.	10-11-2016	Internal Lab Examination	

#### TEXT BOOKS

3. The C Programming Language, B.W. Kernighan, Dennis M.Ritchie, PHI/Pearson Education.
4. C and Data Structures ,N.B.Venkateswarlu and E.V.Prasad

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	Prepared by	Approved by	Course Coordinator
Signature			
Name	A.Raja Gopal	Dr.N.RaviShankar	
Designation	Asst.Professor	Professor HOD-CSE	
Date	03-07-2016	04-07-2016	



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L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

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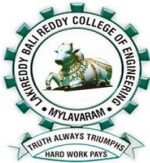
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S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
<b>UNIT-I: ALGORITHMS, FLOWCHARTS, BASIC PROGRAMMING CONSTRUCTS</b>					
1.	4.07.2016	Introduction		1	DM1
2.	5.07.2016	Introduction to computers		1	DM1
3.	6.07.2016	Types and Generation of Computers		1	DM1
4.	7.07.2016	Software and Hardware		1	DM1
5.	8.07.2016	Basic Mathematical Formula		1	DM1
6.	9.07.2016	Basic Mathematical Formula		1	DM1
7.	11.07.2016	Operating system, Compiler and Interpreter		1	DM1
8.	12.07.2016	Fundamentals of computer		1	DM1
9.	13.07.2016	Introduction to Programming		1	DM1
10.	14.07.2016	Algorithm/pseudo code		1	DM1
11.	15.07.2016	Flow charts, Examples		1	DM1
12.	16.07.2016	Examples on Algorithm/pseudo code.		1	DM1/DM5
13.	18.07.2016	Examples on Flow charts.		1	DM1
14.	19.07.2016	Introduction to c language		1	DM1
15.	20.07.2016	C advantages, C tokens		1	DM1
16.	21.07.2016	Constants, keywords		1	DM1
17.	22.07.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 1</b>		1	DM2/DM3/DM4
18.	23.07.2016	Identifiers, variables		1	DM1
19.	25.07.2016	Structure of a c program, Input and output statements,		1	DM1
20.	26.07.2016	Basic data types and sizes.variable declaration & initialization.		1	DM1
21.	27.07.2016	Arithmetic, relational and logical operators .		1	DM1
22.	28.07.2016	Increment/decrement, assignment and conditional operators		1	DM1



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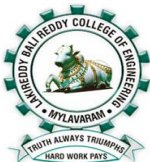
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23.	29.07.2016	Bitwise operators, conditional expressions, order of evaluation		1	DM1
24.	30.07.2016	Type conversion, Examples		1	DM5
25.	1.08.2016	Decision making with simple if ,If else and nested if else statements.		1	DM1
26.	2.08.2016	Else if ladder, switch statement		1	DM1
27.	3.08.2016	Programs on IF constructs		1	DM1
28.	4.08.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 2</b>		1	DM2/DM3/DM4
29.	5.08.2016	while, do- while loops		1	DM1
30.	6.08.2016	For statements, break & continue statements		1	DM1
31.	8.08.2016	goto and labels		1	DM1
32.	9.08.2016	exercises Programming examples		1	DM5
<b>UNIT – II ARRAYS , STRINGS</b>					
33.	10.08.2016	Arrays definition, declaration and examples		1	DM1
34.	24.08.2016	Accessing elements, storing elements.		1	DM1
35.	25.08.2016	Two- dimensional arrays, Accessing element		1	DM1
36.	26.08.2016	Multi-dimensional arrays, applications of arrays.		1	DM1
37.	27.08.2016	Example Programs		1	DM5
38.	29.08.2016	Character arrays – Strings, Accessing		1	DM1
39.	30.08.2016	Program on String accessing, operation		1	DM1
40.	31.08.2016	String handling functions		1	DM1
41.	1.09.2016	Usage of String functions in programs		1	DM1
42.	2.09.2016	Programs without using string handling functions		1	DM5
43.	3.09.2016	Example programs		1	DM5
44.	6.09.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 3</b>		1	DM2/DM3/DM4
<b>I – MID EXAMINATIONS</b>					



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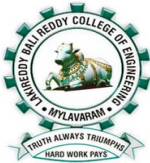
#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

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#### UNIT- III POINTERS , FUNCTIONS

45.	7.09.2016	Pointers: concepts, initialization of pointer variables	1	DM1
46.	8.09.2016	Pointers and Arrays, Strings.	1	DM1
47.	9.09.2016	Pointers to pointers, Examples	1	DM1/DM5
48.	14.09.2016	Pre-processor directives, Macros	1	DM1
49.	14.09.2016	Example Programs on pointers	1	DM5
50.	15.09.2016	Example Programs on pointers	1	DM5
51.	17.09.2016	Introduction to modular programming	1	DM1
52.	17.09.2016	Functions	1	DM1
53.	19.09.2016	Basics of functions, categories,	1	DM1
54.	21.09.2016	Standard library functions,	1	DM1
55.	21.09.2016	Parameter passing techniques, Examples	1	DM5
56.	22.09.2016	Recursion in functions, examples	1	DM5
57.	24.09.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 4</b>	1	DM2/DM3/DM4
58.	24.09.2016	Functions with arrays, passing arrays as parameters	1	DM1
59.	26.09.2016	Functions with pointers	1	DM1
60.	28.09.2016	Programs on functions with arrays and pointers	1	DM1
61.	28.09.2016	Storage classes – auto, static, extern, register	1	DM1
62.	29.09.2016	Dynamic memory management techniques, examples	1	DM5
63.	1.10.2016	Command line arguments, programs	1	DM1



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64.	1.10.2016	Programs on Command line arguments		1	DM5
<b>UNIT – IV Derived Data Types</b>					
65.	3.10.2016	Introduction to structures, use of structures in programming		1	DM1
66.	5.10.2016	Structures declaration, definition and initialization		1	DM1
67.	5.10.2016	Programs on structure creation, accessing and printing		1	DM5
68.	6.10.2016	Use of arrays as members in structure		1	DM1
69.	17.10.2016	Nested structures, Arrays of structures		1	DM1
70.	19.10.2016	Example programs on structures		1	DM5
71.	19.10.2016	Structures and functions, examples		1	DM1/DM5
72.	20.10.2016	Pointers to structures		1	DM1
73.	22.10.2016	Self-referential structures		1	DM1
74.	22.10.2016	Unions and differences over structures		1	DM1
75.	24.10.2016	Typedef, bit fields		1	DM1
76.	26.10.2016	Example programs on Unions		1	DM5
77.	26.10.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 5</b>		1	DM2/DM3/DM4
<b>UNIT – V FILES</b>					
78.	27.10.2016	File Concept, text files, reading & writing		1	DM1
79.	29.10.2016	binary files, modes of operation		1	DM1
81.	29.10.2016	Standard I/O operations		1	DM1
82.	31.10.2016	Standard I/O operations		1	DM1
83.	2.11.2016	Formatted I/O operations		1	DM1
84.	2.11.2016	File I/O operations		1	DM1
85.	3.11.2016	File I/O operations		1	DM1
86.	5.11.2016	Modes of operation		1	DM1
87.	5.11.2016	Error handling functions		1	DM1
88.	7.11.2016	Programs on file creation		1	DM5



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89.	9.11.2016	Programs on file accessing, reading and writing data		1	DM5
90.	9.11.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 6</b>		1	DM2/DM3/DM4
91.	10.11.2016	Revision		1	DM1/DM5/DM6
<b>II – MID Examinations</b>					
Total Classes					91
Total number of classes required to complete the syllabus					
Total number of classes available as per Schedule					

**NOTE: DELIVERY METHODS :** **DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration ( laboratory, field visit ), **DM6:** Presentations/PPT

At the End of the course, students attained the **Course Outcomes: CO1, CO2, CO3, CO4, CO5** & sample proofs are enclosed in Course file.

<b>Signature</b>			
	<b>Name of the Faculty</b>	<b>Name of Course Co-ordinator</b>	<b>HOD</b>
	K Sundeep Saradhi		



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### S170 – COMPUTER PROGRAMMING(CP)

**Lecture : 4 Periods/week**

**Internal Marks : 25**

**Tutorial : 1**

**External Marks : 75**

**Credits : 3**

**External Examination : 3 Hrs**

#### UNIT – I


Algorithm / pseudo code, flowchart, example flow charts, structure of C program, identifiers, basic data types and sizes, Constants, variables, Input-output statements, A sample cprogram, operators: arithmetic, relational and logical operators, increment and decrement operators, conditional operator, bit-wise operators, assignment operators, expressions, type conversions, conditional expressions, precedence of operators and order of evaluation. Conditional statements: if, ifelse, else if ladder and switch statements, continue, go to and labels. Loops: while, do-while and for statements, break, programming examples.

#### UNIT – II

**Arrays-** one dimensional arrays-concept, declaration, definition, accessing elements, storing elements, two dimensional and multi-dimensional arrays. **Character Strings:** declaration initialization, reading, writing strings, arithmetic operations on characters, string handling functions programming examples

#### UNIT – III

**Pointers-** concepts, declaring & initialization of pointer variables, pointer expressions, address arithmetic, pointers and arrays, pointers and character strings, pointers to pointers, Pre-processor Directives and macros. **Functions:** basics, category of functions, parameter passing techniques, recursive functions, Functions with arrays, storage classes extern, auto, and register, static, scope rules, Standard library functions., dynamic memory management functions, command line arguments, c program examples.

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#### UNIT – IV

**Derived types-** structures- declaration, definition and initialization of structures, accessing structures, nested structures, arrays of structures, structures and functions, pointers to structures, self-referential structures, unions, typedef, C program examples.

#### UNIT - V

**Files** – concept of a file, text files and binary files, streams, standard I/O, Formatted I/O, file I/O operations, error handling, C program examples.


#### TEXT BOOKS

1. B.W. Kernighan, Dennis M.Ritchie, The C Programming Language, PHI/Pearson Education.
2. N.B.Venkateswarlu and E.V.Prasad ,C and Data Structures.

#### REFERENCES

1. ReemaThareja, Programming in c ,Oxford Publications.
2. Stephen G. Kochan, Programming in C Pearson Eductaion, 3rd Edition.
3. PradeepDey, Programming in c, Oxford Publications.



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### **Course Educational Objectives and Outcomes (CEOs & Cos)**

#### **Course Educational Objectives:**

*The Students will learn*

1. The basic elements C programming structures like data types, expressions, control statements, various I/O functions and how to solve simple mathematical problems using control structures.
2. Modular programming using functions.
3. The derived data types like arrays, strings, various operations and Memory management using pointers.
4. User defined structures and various operations on it.
5. The basics of files and its i/o operations.

#### **Course Outcomes:**

*After undergoing the training in this course the students will acquire the ability to:*

**CO1:**Identify basic elements of C programming structures like data types, expressions, control statements, various I/O functions and Evaluation of simple mathematical problems using control structures.

**CO2:**Implementation of derived data types like arrays, strings and various operations.

**CO3:**Understanding of memory management using pointers and designing of modular programming.

**CO4:**Construct user defined structures and implements various applications.

**CO5:** Create text & binary type files and understanding of various file I/O operations.

**Pre Requisite:** The students should have basic knowledge in Maths & computers



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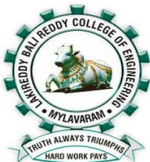
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### LESSON PLAN

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
<b>UNIT-I:ALGORITHMS, FLOWCHARTS, BASIC PROGRAMMING CONSTRUCTS</b>					
80.	04.07.2016	Introduction		1	DM1
81.	05.07.2016	Introduction to computers		1	DM1
82.	07.07.2016	Types and Generation of Computers		1	DM1
83.	08.07.2016	Software and Hardware		1	DM1
84.	09.07.2016	Basic Mathematical Formula		1	DM1
85.	11.07.2016	Basic Mathematical Formula		1	DM1
86.	12.07.2016	Operating system, Compiler and Interpreter		1	DM1
87.	13.07.2016	Fundamentals of computer		1	DM1
88.	14.07.2016	Introduction to Programming		1	DM1
89.	15.07.2016	Algorithm/pseudo code		1	DM1
90.	16.07.2016	Flow charts, Examples		1	DM1
91.	18.07.2016	Examples on Algorithm/pseudo code.		1	DM1/DM5
92.	19.07.2016	Examples on Flow charts.		1	DM1
93.	20.07.2016	Introduction to c language		1	DM1
94.	21.07.2016	C advantages , C tokens		1	DM1
95.	22.07.2016	Constants, keywords		1	DM1
96.	23.07.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 1</b>		1	DM2/DM3/DM4
97.	25.07.2016	Identifiers, variables		1	DM1
98.	26.07.2016	Structure of a c program, Input and output statements,		1	DM1
99.	27.07.2016	Basic data types and sizes.variable declaration & initialization.		1	DM1
100	28.07.2016	Arithmetic,relational and logical operators .		1	DM1



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101	29.07.2016	Increment/decrement, assignment and conditional operators	1	DM1
102	30.07.2016	Bitwise operators, conditional expressions, order of evaluation	1	DM1
103	01.08.2016	Type conversion, Examples	1	DM5
104	02.08.2016	Decision making with simple if ,If else and nested if else statements.	1	DM1
105	03.08.2016	Else if ladder, switch statement	1	DM1
106	04.08.2016	Programs on IF constructs	1	DM1
107	05.08.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 2</b>	1	DM2/DM3/DM4
108	06.08.2016	while, do- while loops	1	DM1
109	24.08.2016	For statements, break & continue statements	1	DM1
110	25.08.2016	goto and labels	1	DM1
111	26.08.2016	exercises Programming examples	1	DM5
<b>UNIT – II ARRAYS , STRINGS</b>				
112	27.08.2016	Arrays definition, declaration and examples	1	DM1
113	29.08.2016	Accessing elements, storing elements.	1	DM1
114	29.08.2016	Two- dimensional arrays, Accessing element	1	DM1
115	30.08.2016	Multi-dimensional arrays, applications of arrays.	1	DM1
116	31.08.2016	Example Programs	1	DM5
117	01.09.2016	Character arrays – Strings, Accessing	1	DM1
118	01.09.2016	Program on String accessing, operation	1	DM1
119	02.09.2016	String handling functions	1	DM1
120	03.09.2016	Usage of String functions in programs	1	DM1
121	07.09.2016	Programs without using string handling functions	1	DM5



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122	08.09.2016	Example programs		1	DM5
123	08.09.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 3</b>		1	DM2/DM3/DM4
<b>UNIT- III POINTERS , FUNCTIONS</b>					
124	09.09.2016	Pointers: concepts,initialization of pointer variables		1	DM1
125	09.09.2016	Pointers and Arrays, Strings.		1	DM1
126	12.09.2016	Pointers to pointers, Examples		1	DM1/DM5
127	13.09.2016	Pre-processor directives, Macros		1	DM1
128	14.09.2016	<b>I – MID Examinations</b>			
129	15.09.2016				
130	16.09.2016				
131	17.09.2016				
132	19.09.2016				
133	20.09.2016	Pre-processor directives, Macros		1	DM5
134	21.09.2016	Example Programs on pointers		1	DM1
135	22.09.2016	Example Programs on pointers		1	DM5
136	22.09.2016	Introduction to modular programming		1	DM5
137	23.09.2016	Functions			
138	24.09.2016	Basics of functions, categories,		1	DM1
139	26.09.2016	Standard library functions,		1	DM1
140	27.09.2016	Parameter passing techniques,Examples		1	DM1
141	28.09.2016	Recursion in functions, examples		1	DM1
142	29.09.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 4</b>		1	DM2/DM3/DM4
143	30.09.2016	Functions with arrays, passing arrays as parameters		1	DM1



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144	01.10.2016	Functions with pointers		1	DM5
145	03.10.2016	Programs on functions with arrays and pointers		1	DM1
146	04.10.2016	Storage classes – auto, static, extern, register		1	DM1
147	05.10.2016	Dynamic memory management techniques, examples		1	DM5
148	06.10.2016	Command line arguments, programs		1	DM1
149	07.10.2016	Programs on Command line arguments		1	DM1
<b>UNIT – IV Derived Data Types</b>					
150	08.10.2016	Introduction to structures, use of structures in programming		1	DM5
151	13.10.2016	Structures declaration, definition and initialization		1	DM1/DM5
152	14.10.2016	Programs on structure creation, accessing and printing		1	DM1
153	15.10.2016	Use of arrays as members in structure		1	DM1
154	17.10.2016	Nested structures, Arrays of structures		1	DM1
155	18.10.2016	Example programs on structures		1	DM1
156	19.10.2016	Structures and functions, examples		1	DM5
157	20.10.2016	Pointers to structures		1	DM1
158	21.10.2016	Self-referential structures		1	DM1
159	22.10.2016	Typedef, bit fields		1	DM1
81.	24.10.2016	Example programs on Unions		1	DM1
82.	25.10.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 5</b>		1	DM2/DM3/DM4
<b>UNIT – V FILES</b>					
83.	26.10.2016	File Concept, text files, reading & writing		1	DM1
84.	27.10.2016	binary files, modes of operation		1	DM1
85.	29.10.2016	Standard I/O operations		1	DM1



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86.	31.10.2016	Standard I/O operations		1	DM1
87.	01.11.2016	Formatted I/O operations		1	DM1
88.	02.11.2016	File I/O operations		1	DM5
89.	03.11.2016	File I/O operations		1	DM5
90.	04.11.2016	<b>TUTORIAL /QUIZ/ASSIGNMENT- 6</b>		1	DM2/DM3/DM4
91.	05.11.2016	Modes of operation			
92.	07.11.2016	Error handling functions			
93.	08.11.2016	Programs on file creation			
94.	09.11.2016	Programs on file creation			
95.	10.11.2016	Programs on file accessing, reading and writing data		1	DM1/DM5/DM6
96.	11.11.2016	Programs on file accessing, reading and writing data		1	DM1/DM5/DM6
97.	12.11.2016	Revision		1	DM1/DM5/DM6
		<b>II – MID Examinations</b>			
		Total Classes			97
		Total number of classes required to complete the syllabus			90
		Total number of classes available as per Schedule			97


**NOTE: DELIVERY METHODS :**

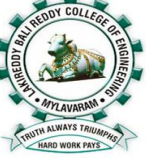
**DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz,

**DM4:** Assignment/Test, **DM5:** Demonstration ( laboratory, field visit ),**DM6:** Presentations/PPT

At the End of the course, students attained the **Course Outcomes:CO1,CO2,CO3,CO4,CO5**& sample proofs are enclosed in Course file.

	Prepared by	Approved by	Course Coordinator
Signature			
Name	A.Raja Gopal	Dr. N.RaviShankar	
Designation	Asst.Professor	Professor HOD-CSE	
Date	03-07-2016	04-07-2016	

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	<b>LESSON PLAN</b>			
	Subject :	<b>ELCS- L144</b>		
	Academic Year :	2016-17	Semester :	I
Year :	I	Section :	CSE A	

### Course Educational Objectives

In this course, the students will learn to


- Better pronunciation through emphasis on word accent.
- Use language effectively to face interviews, group discussions, public Speaking.
- Possess positive attitude and group behavior.
- Negotiate well with inter personal skills and intra personal skills.
- Speak spontaneously on any topic given.

### Course Outcomes

After the completion of this course, prospective engineers will have the ability to

- Withstand the global competition in the job market with proficiency in English communication.
- Articulate English with good pronunciation.
- Face competitive exams like GRE, TOEFL, IELTS etc.
- Face interviews and skillfully manage through group discussions
- Communicate with the people effectively.

### Syllabus:

	<b>Lakireddy Balireddy College of Engineering</b> Teaching Learning Process (TLP) Delivery Methods (DM) L.B.Reddy Nagar, Mylavaram, Krishna District, A.P (AM)			Learning Methods <b>(AM)</b>
	<b>FRESHMAN ENGINEERING DEPARTMENT</b>			
	Solving Real world problem	<b>LESSON PLAN - CSE</b>		Assignments
2	Explaining application before theory	<b>Subject : ENGINEERING CHEMISTRY (EC) - S232</b> <b>ICT tools</b>		Quiz
	Academic Year : 2015-16	Semester : II		Date: 04-07-16
3	Solving problems	Year : I	Group discussions	Tutorials
4	Designing of experiments		Industrial visit	Surprise Tests
5	Problems on environmental, economics, health & safety		Field work	Mid Exams 17-11-16
6	Problems on professional & ethics		Case studies	Model Exam
7	Seminar		Mini Projects	END Exams
8	Problems using software		Numerical treatment	
9	Self study		Design / Exercises	

1. Introduction to English Phonemes; Phonetic Transcription, Stress.
2. JAM
3. Role Play
4. Information Transfer
5. Group Discussions

#### SUGGESTED SOFTWARE

1. Digital Mentor: Globarena, Hyderabad, 2005
2. Sky Pronunciation Suite: Young India Films, Chennai, 2009
3. Mastering English in Vocabulary, Grammar, Spelling, Composition, Dorling Kindersley, USA, 2001
4. Dorling Kindersley Series of Grammar, Punctuation, Composition, USA, 2001
5. Oxford Talking Dictionary, The Learning Company, USA, 2002
6. Learning to Speak English - 4 CDs. The Learning Company, USA, 2002
7. Cambridge Advanced Learners English Dictionary (CD). Cambridge University Press, New Delhi, 2008





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#### S239 – ENGLISH - I

Lecture: 4 Periods / week

Internal Marks : 25

Tutorial:

External Marks : 75

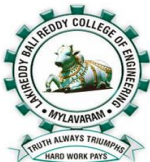
S. No.	No. of Lecture Hours	Tentative Dates	Topics	Actual Dates	TLP	DM	AM
1	3	08.07.2016	General Introduction		1	1	
2	3	15.07.2016	JAM		4,9	2,6	4
3	3	22.07.2016	JAM		4,9	2,6	4
4	3	29.07.2016	JAM		4,9	2,6	4
5	3	05.08.2016	Role play		4,9	9	4
6	3	26.08.2016	Role play		4,9	9	4
7	3	09.09.2016	Role play		4,9	9	4
8	3	16.09.2016	Information Transfer		7,9	2	4
9	3	23.09.2016	Information Transfer		7,9	2	4
10	3	30.09.2016	Information Transfer		7,9	2	4
11	3	07.10.2016	Group Discussions		4,9	3	4
12	3	21.10.2016	Group Discussions		4,9	3	4
13	3	04.11.2016	Phonetics		1,3	1,2,9	2
14	3	11.11.2016	LAB Internal		1,3	1,2,9	2

Credits : 3

External Examination : 3 Hrs

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#### Course Educational Objectives



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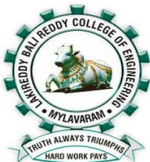
In this course, the students will learn

- The standard vocabulary along with the meaning and usage of the words
- The concepts of functional grammar and syntax for better writing and speaking skills
- The concepts of skimming, scanning and critical reading for better comprehension abilities.
- The effective pronunciation, language usage through extensive reading
- The concepts of writing reports, resume, statement of purpose, memos and e-mails etc.

#### Course Outcomes

After the completion of this course, students will have the ability to

- Read, write and aptly understand what ever is written and spoken in English
- speak fluently with acceptable pronunciation and write using appropriate words,
- spellings, grammar and syntax



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- Read the lines, between lines and beyond lines excelling in comprehension skills
- Draft Reports, memos, mails & letters as part of their work
- Speak grammatically error free English

**Syllabus:**

**UNIT – I**

**Astronomy (Learning English)**

**Grammar: Parts of Speech**

**Vocabulary: Antonyms**

**Analytical Writing: Unscrambling words in a sentence; Un-jumbling the sentences into a**

**paragraph; Types of sentences; Paragraph writing**

**UNIT – II**



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**Travel and Transport (Learning English)**

**The Trailblazers - Jagadis Chandra Bose(Masterminds)**

**Grammar: prepositions; word plurals; sentence completion**

**Vocabulary: Synonyms**

**Analytical Writing: Drafting E-Mails; Letter writing (Formal & Informal)**

**UNIT - III**


**Humour (Learning English)**

**The Trailblazers – Prafulla Chandra Ray (Masterminds)**

**Grammar: Active & Passive Voices**

**Vocabulary: Pre-fixes & Suffixes**

**Analytical Writing: Note-making**

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#### UNIT - IV

Health and Medicine (Learning English)

The Trailblazers – Srinivasa Ramanujam (Masterminds)

Grammar: Tenses

Vocabulary: Deriving words

Analytical Writing: Abstract writing/Synopsis writing

#### UNIT - V


The World of Figures and Physics – Chandra Sekhara Venkata Raman (Masterminds)

Grammar: Articles

Vocabulary: One-Word substitutes

Analytical Writing: Essay writing; Dialogue writing (Formal & Informal)

TEXT BOOKS

	<b>LakireddyBalireddy College of Engineering College</b> L.B.Reddy Nagar, Mylavaram , Krishna District, A.P <b>FRESHMAN ENGINEERING DEPARMENT</b>			
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	Subject :		<b>ENGINEERING CHEMISTRY (EC) - S232</b>	
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1 “Learning English”, Orient Longman Private Limited. 2008 JNTU edition

2 Enakshi Chatterjee, “Masterminds”, Orient Longman Private Limited. 2002 (Reprint)

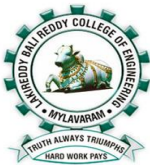
#### REFERENCE BOOKS

1. Andrea J Rutherford, “Basic Communication Skills for Technology”, Pearson Education, New Delhi, 1st edition, 2009

2. Murphy, “English Grammar with CD”, Cambridge University Press, New Delhi, 2004

3. Rizvi & M. Ashraf, “ Effective Technical Communication”, Tata McGraw Hill, New Delhi, 2008.

4. Blum Rosen, “Word Power”, Cambridge University Press, New Delhi, 2009.



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S.No	Teaching Learning Process (TLP)	Delivery Methods (DM)	Assessment Methods (AM)
1	Solving Real world problem	Chalk & Talk	Assignments
2	Explaining application before theory	ICT tools	Quiz
3	Solving problems	Group discussions	Tutorials
4	Designing of experiments	Industrial visit	Surprise Tests
5	Problems on environmental, economics, health & safety	Field work	Mid Exams
6	Problems on professional & ethics	Case studies	Model Exam
7	Seminar	Mini Projects	END Exams
8	Problems using software	Numerical treatment	
9	Self study	Design / Exercises	

### Detailed Lesson Plan

S.NO	TOPIC TO BE COVERED	Date		TLP	DM	AM
		Tentative	Actual			
<b>UNIT-I</b>						
1	Introductory Period	04.07.2016		2	1	1,2,3,5,7
2	Parts of speech	05.07.2016		2	1,3	
3	Parts of speech	09.07.2016		2	1,3	
4	Antonyms	11.07.2016		2	1,3	
5	Unscrambling words in a sentence / Unjumbling the sentences into a paragraph	12.07.2016		2	1,9	
6	Unscrambling words in a sentence / Unjumbling the sentences into a paragraph	13.07.2016		2	1,9	



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

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7	Types of sentences	16.07.2016		2	1,9	
8	Tutorial-Parts of Speech/Antonyms	18.07.2016		3	3,9	
9	Paragraph Writing	19.07.2016		2	1,9	
10	Paragraph Writing	20.07.2016		2	1,9	
11	Astronomy	23.07.2016		2	1,9	
12	Astronomy	25.07.2016		2	1,9	
13	Tutorial: Astronomy/ Paragraph Writing	26.07.2016		3	3,9	
<b>UNIT-II</b>						
14	J.C. Bose	27.07.2016		2	1,3	
15	J.C. Bose	30.07.2016		2	1,9	
16	J.C. Bose	01.08.2016		2	1,9	
17	Prepositions	02.08.2016		3	1,9	
18	Prepositions	03.08.2016		3	1,9	
19	Tutorial: J.C. Bose/prepositions	06.08.2016		3	3,9	
20	Word plurals	08.08.2016		2	1,9	
21	Word plurals	09.08.2016		2	1,9	
22	Sentences completion	10.08.2016		2	1,3	
<b>Pushkar Holidays - 11.08.2016 To 23.08.2016</b>						
23	Sentences completion	24.08.2016		2	1,3	1,2,3,5,7
24	Synonyms	24.08.2016		3	1,3	
25	Travel and transport	27.08.2016		2	1,9	
26	Travel and transport	29.08.2016		2	1,9	
27	Travel and transport	30.08.2016		2	1,9	
28	Drafting E-mails	31.08.2016		3	1,3	





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L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

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29	Drafting E-mails	03.09.2016		3	1,3	
30	Tutorial: Travel and transport/E-mail	06.09.2016		3	3,9	
31	Letter writing	07.09.2016		3	1,3	
32	Letter writing	07.09.2016		3	1,3	
33	Letter writing	10.09.2016		3	1,3	
	MID - I	13-09-2016 To 19-09-2016				5
<b>UNIT-III</b>						
34	P.C.Ray	14.09.2016		2	1,3	1,2,3,5,7
35	P.C.Ray	14.09.2016		2	1,3	
36	P.C.Ray	21.09.2016		2	1,3	
37	Prefixes and suffixes	21.09.2016		2	1,3	
38	Tutorial: P.C Ray/ Prefixe& suffixes	24.09.2016		3	3,9	
39	Humour	26.09.2016		2	1,9	
40	Humour	27.09.2016		2	1,9	
41	Tutorial: Humour	28.09.2016		3	3,9	
42	Active&passive voice	28.09.2016		3	1,3	
43	Active&passive voice	01.10.2016		3	1,3	
44	Note making	03.10.2016		2	1,3	
45	Note making	04.10.2016		2	1,3	



## Lakireddy Balireddy College of Engineering College

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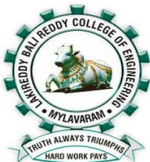
Year : **I**

Section :

To

**17-11-16**

46	Tutorial: Voice/Note making	05.10.2016		3	3,9	
<b>UNIT-IV</b>						
47	Health&Medicine	05.10.2016		2	1,9	1,2,3,5,7
48	Health&Medicine	08.10.2016		2	1,3	
49	Tenses	17.10.2016		3	1,3	
50	Tenses	18.10.2016		3	1,3	
51	Tutorial: Health&Medicine/Tenses	19.10.2016		3	1,3	
52	Abstract writing	19.10.2016		3	3,9	
53	Abstract writing	22.10.2016		3	1,3	
54	Srinivasa Ramanujan	24.10.2016		3	1,3	
55	Srinivasa Ramanujan	25.10.2016		2	1,9	
56	Srinivasa Ramanujan	26.10.2016		2	1,9	
57	Tutorial: Srinivasa Ramanujan/Abstract writing	26.10.2016		2	1,9	
58	Deriving words	29.10.2016		3	3,9	
59	Deriving words	31.10.2016		3	1,3	
60	Deriving words	01.11.2016		3	1,9	
<b>UNIT-V</b>						
61	Articles	02.11.2016		3	1,3	
62	C.V.Raman	02.11.2016		3	1,3	
63	C.V.Raman	05.11.2016		3	1,3	
64	Tutorial: C.V.Raman/Articles	07.11.2016		2	1,9	
65	Essay writing	08.11.2016		2	1,9	
66	Dialogue writing	09.11.2016		2	1,9	



## LakireddyBalireddy College of Engineering College

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**FRESHMAN ENGINEERING DEPARTMENT**

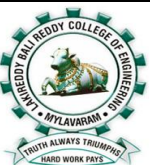
### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year :	2015-16	Semester :	II	Date: 04-07-16  To  17-11-16
Year :	I	Section :		

67	One word substitutes, Tutorial: Dialogue/ Essay writing	09.11.2016		3	3,9	1,2,3,5,7
68	One word substitutes, Tutorial: Dialogue/ Essay writing	12.11.2016		3	3,9	
	MID - II	14-11-2016 To 16-11-2016				5

	Instructor	Course Coordinator	Module Coordinator	HOD
Name	Mr. B. Sreenivasa Reddy	Dr.B.Samrajya Lakshmi	Dr.B.Samrajya Lakshmi	Dr.A.Rami Reddy
Sign with Date				



## LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

**FRESHMAN ENGINEERING DEPARTMENT**

### LESSON PLAN

Subject : **ELCS- L144**



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Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

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Academic Year : **2016-17**

Semester : **II**

Date: **04.07.2016**

Year : **I**

Section : **CSE B**

To

**12.11.2016**

### Course Educational Objectives

In this course, the students will learn to

- Better pronunciation through emphasis on word accent.
- Use language effectively to face interviews, group discussions, public Speaking.
- Possess positive attitude and group behavior.
- Negotiate well with inter personal skills and intra personal skills.
- Speak spontaneously on any topic given.

### Course Outcomes

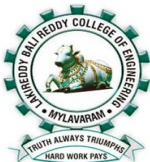
After the completion of this course, prospective engineers will have the ability to

- Withstand the global competition in the job market with proficiency in English communication.
- Articulate English with good pronunciation.
- Face competitive exams like GRE, TOEFL, IELTS etc.
- Face interviews and skillfully manage through group discussions
- Communicate with the people effectively.

### Syllabus:

6. Introduction to English Phonemes; Phonetic Transcription, Stress.
7. JAM
8. Role Play
9. Information Transfer
10. Group Discussions

### SUGGESTED SOFTWARE



## Lakireddy Balireddy College of Engineering College

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### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

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Section :

To

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1. Digital Mentor: Globarena, Hyderabad, 2005
2. Sky Pronunciation Suite: Young India Films, Chennai, 2009
3. Mastering English in Vocabulary, Grammar, Spelling, Composition, Dorling Kindersley, USA, 2001
4. Dorling Kindersley Series of Grammar, Punctuation, Composition, USA, 2001

S. No.	No. of Lecture Hours	Tentative Dates	Topics	Actual Dates	TLP	DM	AM
1	3	08.07.2016	General Introduction		1	1	
2	3	15.07.2016	JAM		4,9	2,6	4
3	3	22.07.2016	JAM		4,9	2,6	4
4	3	29.07.2016	JAM		4,9	2,6	4
5	3	05.08.2016	Role play		4,9	9	4
6	3	26.08.2016	Role play		4,9	9	4
7	3	09.09.2016	Role play		4,9	9	4
8	3	16.09.2016	Information Transfer		7,9	2	4
9	3	23.09.2016	Information Transfer		7,9	2	4
10	3	30.09.2016	Information Transfer		7,9	2	4
11	3	07.10.2016	Group Discussions		4,9	3	4
12	3	21.10.2016	Group Discussions		4,9	3	4
13	3	04.11.2016	Phonetics		1,3	1,2,9	2
14	3	11.11.2016	LAB Internal		1,3	1,2,9	2

5. Oxford Talking Dictionary, The Learning Company, USA, 2002
6. Learning to Speak English - 4 CDs. The Learning Company, USA, 2002
7. Cambridge Advanced Learners English Dictionary (CD). Cambridge University Press, New Delhi, 2008



## LakireddyBalireddy College of Engineering College

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**FRESHMAN ENGINEERING DEPARTMENT**

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### S239 – ENGLISH - I

Lecture: 4 Periods / week

Internal Marks : 25

Tutorial:

External Marks : 75

Credits : 3

External Examination : 3 Hrs

---

#### Course Educational Objectives

In this course, the students will learn

- The standard vocabulary along with the meaning and usage of the words
- The concepts of functional grammar and syntax for better writing and speaking skills  
The concepts of skimming, scanning and critical reading for better comprehension abilities.
- 
- The effective pronunciation, language usage through extensive reading
- The concepts of writing reports, resume, statement of purpose, memos and e-mails etc.

#### Course Outcomes

After the completion of this course, students will have the ability to

- Read, write and aptly understand what ever is written and spoken in English



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- speak fluently with acceptable pronunciation and write using appropriate words,
- spellings, grammar and syntax
- Read the lines, between lines and beyond lines excelling in comprehension skills
- Draft Reports, memos, mails & letters as part of their work
- Speak grammatically error free English

**Syllabus:**

**UNIT – I**

**Astronomy (Learning English)**

**Grammar: Parts of Speech**

**Vocabulary: Antonyms**

**Analytical Writing: Unscrambling words in a sentence; Un-jumbling the sentences into a**

**paragraph; Types of sentences; Paragraph writing**



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### UNIT – II

**Travel and Transport (Learning English)**

**The Trailblazers - Jagadis Chandra Bose(Masterminds)**

**Grammar: prepositions; word plurals; sentence completion**

**Vocabulary: Synonyms**

**Analytical Writing: Drafting E-Mails; Letter writing (Formal & Informal)**

### UNIT - III

**Humour (Learning English)**

**The Trailblazers – Prafulla Chandra Ray (Masterminds)**

**Grammar: Active & Passive Voices**

**Vocabulary: Pre-fixes & Suffixes**

**Analytical Writing: Note-making**

### UNIT - IV





## Lakireddy Balireddy College of Engineering College

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**Health and Medicine (Learning English)**

**The Trailblazers – Srinivasa Ramanujam (Masterminds)**

**Grammar: Tenses**

**Vocabulary: Deriving words**

**Analytical Writing: Abstract writing/Synopsis writing**

**UNIT - V**

**The World of Figures and Physics – Chandra Sekhara Venkata Raman (Masterminds)**

**Grammar: Articles**

**Vocabulary: One-Word substitutes**

**Analytical Writing: Essay writing; Dialogue writing (Formal & Informal)**

**TEXT BOOKS**

**1 “Learning English”, Orient Longman Private Limited. 2008 JNTU edition**

**2 Enakshi Chatterjee, “Masterminds”, Orient Longman Private Limited. 2002 (Reprint)**

**REFERENCE BOOKS**



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

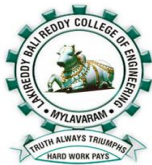
Academic Year :	2015-16	Semester :	II	Date: 04-07-16  To  17-11-16
Year :	I	Section :		

1. Andrea J Rutherford, “Basic Communication Skills for Technology”, Pearson Education, New Delhi, 1st edition, 2009
2. Murphy, “English Grammar with CD”, Cambridge University Press, New Delhi, 2004
3. Rizvi & M. Ashraf, “ Effective Technical Communication”, Tata McGraw Hill, New Delhi, 2008.
4. Blum Rosen, “Word Power”, Cambridge University Press, New Delhi, 2009.

S.No	Teaching Learning Process (TLP)	Delivery Methods (DM)	Assessment Methods (AM)
1	Solving Real world problem	Chalk & Talk	Assignments
2	Explaining application before theory	ICT tools	Quiz
3	Solving problems	Group discussions	Tutorials
4	Designing of experiments	Industrial visit	Surprise Tests
5	Problems on environmental, economics, health & safety	Field work	Mid Exams
6	Problems on professional & ethics	Case studies	Model Exam
7	Seminar	Mini Projects	END Exams
8	Problems using software	Numerical treatment	
9	Self study	Design / Exercises	

### Detailed Lesson Plan

S.NO	TOPIC TO BE COVERED	Date		TLP	DM	AM
		Tentative	Actual			
<b>UNIT-I</b>						



# LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

**FRESHMAN ENGINEERING DEPARMENT**

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Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

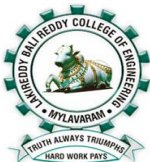
Year : **I**

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1	Introductory Period	04.07.2016		2	1	1,2,3,5,7
2	Parts of speech	05.07.2016		2	1,3	
3	Parts of speech	09.07.2016		2	1,3	
4	Antonyms	11.07.2016		2	1,3	
5	Unscrambling words in a sentence / Un-jumbling the sentences into a paragraph	12.07.2016		2	1,9	
6	Unscrambling words in a sentence / Un-jumbling the sentences into a paragraph	13.07.2016		2	1,9	
7	Types of sentences	16.07.2016		2	1,9	
8	Tutorial-Parts of Speech/Antonyms	18.07.2016		3	3,9	
9	Paragraph Writing	19.07.2016		2	1,9	
10	Paragraph Writing	20.07.2016		2	1,9	
11	Astronomy	23.07.2016		2	1,9	
12	Astronomy	25.07.2016		2	1,9	
13	Tutorial: Astronomy/ Paragraph Writing	26.07.2016		3	3,9	
<b>UNIT-II</b>						
14	J.C. Bose	27.07.2016		2	1,3	
15	J.C. Bose	30.07.2016		2	1,9	
16	J.C. Bose	01.08.2016		2	1,9	
17	Prepositions	02.08.2016		3	1,9	
18	Prepositions	03.08.2016		3	1,9	
19	Tutorial: J.C. Bose/prepositions	06.08.2016		3	3,9	
20	Word plurals	08.08.2016		2	1,9	



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21	Word plurals	09.08.2016		2	1,9	1,2,3,5,7
22	Sentences completion	10.08.2016		2	1,3	
Pushkar Holidays - 11.08.2016 To 23.08.2016						
23	Sentences completion	24.08.2016		2	1,3	
24	Synonyms	24.08.2016		3	1,3	
25	Travel and transport	27.08.2016		2	1,9	
26	Travel and transport	29.08.2016		2	1,9	
27	Travel and transport	30.08.2016		2	1,9	
28	Drafting E-mails	31.08.2016		3	1,3	
29	Drafting E-mails	03.09.2016		3	1,3	
30	Tutorial: Travel and transport/E-mail	06.09.2016		3	3,9	
31	Letter writing	07.09.2016		3	1,3	
32	Letter writing	07.09.2016		3	1,3	
33	Letter writing	10.09.2016		3	1,3	
	MID - I	13-09-2016 To 19-09-2016				5
<b>UNIT-III</b>						
34	P.C.Ray	14.09.2016		2	1,3	1,2,3,5,7
35	P.C.Ray	14.09.2016		2	1,3	
36	P.C.Ray	21.09.2016		2	1,3	
37	Prefixes and suffixes	21.09.2016		2	1,3	



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38	Tutorial: P.C Ray/ Prefixe& suffixes	24.09.2016		3	3,9	
39	Humour	26.09.2016		2	1,9	
40	Humour	27.09.2016		2	1,9	
41	Tutorial: Humour	28.09.2016		3	3,9	
42	Active &passive voice	28.09.2016		3	1,3	
43	Active & passive voice	01.10.2016		3	1,3	
44	Note making	03.10.2016		2	1,3	
45	Note making	04.10.2016		2	1,3	
46	Tutorial: Voice/Note making	05.10.2016		3	3,9	
<b>UNIT-IV</b>						
47	Health & Medicine	05.10.2016		2	1,9	
48	Health & Medicine	08.10.2016		2	1,3	
49	Tenses	17.10.2016		3	1,3	
50	Tenses	18.10.2016		3	1,3	
51	Tutorial: Health & Medicine / Tenses	19.10.2016		3	1,3	
52	Abstract writing	19.10.2016		3	3,9	
53	Abstract writing	22.10.2016		3	1,3	1,2,3,5,7
54	Srinivasa Ramanujan	24.10.2016		3	1,3	
55	Srinivasa Ramanujan	25.10.2016		2	1,9	
56	Srinivasa Ramanujan	26.10.2016		2	1,9	
57	Tutorial: Srinivasa Ramanujan/Abstract writing	26.10.2016		2	1,9	
58	Deriving words	29.10.2016		3	3,9	
59	Deriving words	31.10.2016		3	1,3	
60	Deriving words	01.11.2016		3	1,9	



## LakireddyBalireddy College of Engineering College

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UNIT-V						
61	Articles	02.11.2016		3	1,3	
62	C.V.Raman	02.11.2016		3	1,3	
63	C.V.Raman	05.11.2016		3	1,3	
64	Tutorial: C.V.Raman/Articles	07.11.2016		2	1,9	
65	Essay writing	08.11.2016		2	1,9	
66	Dialogue writing	09.11.2016		2	1,9	
67	One word substitutes, Tutorial: Dialogue/ Essay writing	09.11.2016		3	3,9	1,2,3,5,7
68	One word substitutes, Tutorial: Dialogue/ Essay writing	12.11.2016		3	3,9	
	MID - II	14-11-2016 To 16-11-2016				5

	Instructor	Course Coordinator	Module Coordinator	HOD
Name	K.Sridevi		Dr.B.Samrajya Lakshmi	Dr.A.Rami Reddy
Sign with Date				



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

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### COs and CEOs

**Department: COMPUTER SCIENCE AND ENGINEERING**

**Program: B.Tech**

**Course: – ITWS LAB (17CI61)**

**SEM: I**

**Academic Year: 2016-17**

**1. Pre-requisites: -NIL-**



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Semester : **II**

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Year : **I**

Section :

To

**17-11-16**

## 2. Course Educational Objectives (CEOs):

### In this course student will learn about

After completing this course, students will be able to identify the basic peripherals, understand the process of assembling a personal computer and installation of the system software like MS Windows, Create professional word documents using LaTeX, excel spread sheets and power point presentations and work with visual programming development environment based on flow charts using RAPTOR Interpreter.

## 3. Course Outcomes (COs): At the end of the course, the student will be able to :

**CO1:** Apply and practice logical formulations to solve some simple problems leading to specific applications.

**CO2:** Demonstrate C programming development environment, compiling, debugging, linking and executing a program using the development environment.

**CO3:** Design effectively the required programming components that efficiently solve computing problems in real world.

## 4. Course Articulation Matrix:

Course Code	COs	Programme Outcomes												PSOs		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
<b>17CI61</b>	CO1					1				2			2	1		
	CO2					3					3		2	1		
	CO3					3					3		2	1		
		<b>1 = Slight (Low)</b>				<b>2 = Moderate (Medium)</b>				<b>3-Substantial(High)</b>						

## 4. Course Delivery Plan:

S.NO	TOPIC TO BE COVERED	No.of Classes		Date	DM
		As per the Schedule	Taken		





## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram, Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

1	Introduction to Computer	3			2,5
2	Introduction to Hardware	3			2,5
3	WEEK 1	3			2,5
4	WEEK 2	3			2,5
5	WEEK 3	3			2,5
6	WEEK 4	3			2,5
7	WEEK 5	3			2,5
8	WEEK 6	3			2,5
9	WEEK 7	3			2,5
10	WEEK 8	3			2,5
11	WEEK 9	3			2,5
12	WEEK 10	3			2,5
13	WEEK 11	3			2,5
14	WEEK 12	3			2,5
15	Practice Session	3			3
16	Internal Lab Exam	3			4

#### Delivery Methods (DM):

1. Chalk & Talk
2. ICT Tools
3. Tutorial
4. Assignment/Test/Quiz
5. Laboratory/Field Visit
6. Web based learning.

	Course Instructor	Course Coordinator	Module Coordinator	HOD
Signature				
Name of the Faculty	<b>L KRANTHI KUMAR</b>			<b>Dr. N Ravi Shankar</b>



#### COs and CEOs

**Department: COMPUTER SCIENCE AND ENGINEERING**

**Program: B.Tech**

**Course: – ITWS LAB (17CI61)**

**SEM: I**

**Academic Year: 2016-17**



## Lakireddy Balireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARTMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

To

**17-11-16**

#### 5. Pre-requisites: -NIL-

#### 6. Course Educational Objectives (CEOs):

##### In this course student will learn about

After completing this course, students will be able to identify the basic peripherals, understand the process of assembling a personal computer and installation of the system software like MS Windows, Create professional word documents using LaTeX, excel spread sheets and power point presentations and work with visual programming development environment based on flow charts using RAPTOR Interpreter.

#### 7. Course Outcomes (COs): At the end of the course, the student will be able to :

**CO1:** Apply and practice logical formulations to solve some simple problems leading to specific applications.

**CO2:** Demonstrate C programming development environment, compiling, debugging, linking and executing a program using the development environment.

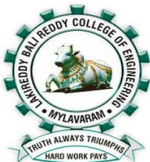
**CO3:** Design effectively the required programming components that efficiently solve computing problems in real world.

#### 4. Course Articulation Matrix:

Course Code	COs	Programme Outcomes												PSOs		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
<b>17CI61</b>	CO1					1				2			2	1		
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		<b>1 = Slight (Low)</b>				<b>2 = Moderate (Medium)</b>				<b>3-Substantial(High)</b>						

#### 8. Course Delivery Plan:

S.NO	TOPIC TO BE COVERED	No.of Classes		Date	DM
		As per the Schedule	Taken		



## LakireddyBalireddy College of Engineering College

L.B.Reddy Nagar, Mylavaram , Krishna District, A.P

### FRESHMAN ENGINEERING DEPARMENT

#### LESSON PLAN – CSE

Subject : **ENGINEERING CHEMISTRY (EC) - S232**

Academic Year : **2015-16**

Semester : **II**

Date: **04-07-16**

Year : **I**

Section :

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**17-11-16**

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6	WEEK 4	3			2,5
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9	WEEK 7	3			2,5
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11	WEEK 9	3			2,5
12	WEEK 10	3			2,5
13	WEEK 11	3			2,5
14	WEEK 12	3			2,5
15	Practice Session	3			3
16	Internal Lab Exam	3			4

#### **Delivery Methods (DM):**

1. Chalk & Talk
2. ICT Tools
3. Tutorial
4. Assignment/Test/Quiz
5. Laboratory/Field Visit
6. Web based learning.

	<b>Course Instructor</b>	<b>Course Coordinator</b>	<b>Module Coordinator</b>	<b>HOD</b>
Signature				
Name of the Faculty	<b>B SIVARAMA KRISHNA</b>			<b>Dr. N Ravi Shankar</b>