



ADHIYAMAAN COLLEGE OF ENGINEERING
(AUTONOMOUS)
DEPARTMENT OF MECHANICAL ENGINEERING



LESSON PLAN

Faculty Name : M SURESH
Subject : Power Plant and Energy Engineering
Academic year : 2017-2018
Year/Semester : IV/ VII - A Sec

Subject Code : 711MET05
Total no of Hrs : 60

SL NO	CLASS PERIOD/HOUR	TOPICS	REMARKS
WEEK:1		UNIT I- INTRODUCTION TO POWER PLANTS AND BOILERS	
1	Monday 3 rd	Introduction	Completed
2	Monday 6 th	Layout of Steam , Hydel	Completed
3	Tuesday 4 th	Layout of Diesel , MHD	Completed
4	Wednesday 7 th	Nuclear Power Plants	Completed
WEEK-2			
5	Monday 3 rd	Gas turbine Power	Completed
6	Monday 6 th	Combined Power cycles	Completed
7	Tuesday 4 th	comparison and selection	Completed
8	Wednesday 7 th	Load duration Curves	Completed
WEEK-3			
9	Monday 3 rd	Steam boilers and cycles	Completed
10	Monday 6 th	High pressure Boilers	Completed
11	Tuesday 4 th	Super Critical Boilers	Completed
12	Wednesday 7 th	Fluidized Bed Boilers	Completed
WEEK-4		UNIT II- STEAM POWER PLANT	
13	Monday 3 rd	Fuel and ash handling & types	Completed
14	Monday 6 th	Combustion Equipment for burning coal	Completed
15	Tuesday 4 th	Combustion Equipment for burning coal	Completed
16	Wednesday 7 th	Types of fuel burner	Completed
WEEK-5			
17	Monday 3 rd	Mechanical Stokers.	Completed
18	Monday 6 th	Pulveriser & types	Completed
19	Tuesday 4 th	Electrostatic Precipitator & types	Completed
20	Wednesday 7 th	Electrostatic Precipitator & types	Completed
WEEK-6			
21	Monday 3 rd	Draught- Different Types,	Completed
22	Monday 6 th	Draught- Different Types,	Completed
23	Tuesday 4 th	Surface condenser- Different Types	Completed
24	Wednesday 7 th	Cooling Towers	Completed
WEEK-7		UNIT III- NUCLEAR AND HYDEL POWER PLANTS	
25	Monday 3 rd	Nuclear Energy	Completed
26	Monday 6 th	Fission Reaction	Completed
27	Tuesday 4 th	Fusion Reaction	Completed
28	Wednesday 7 th	Types of Reactors	Completed
WEEK-8			
29	Monday 3 rd	Construction of Nuclear reactors	Completed
30	Monday 6 th	Pressurized water reactor	Completed

31	Tuesday 4 th	Boiling water reactor	Completed
32	Wednesday 7 th	Waste disposal and safety	Completed
WEEK-9			
33	Monday 3 rd	Hydel Power plant, Essential elements	Completed
34	Monday 6 th	Selection of turbines	Completed
35	Tuesday 4 th	Governing of Turbines	Completed
36	Wednesday 7 th	Micro hydel developments	Completed
WEEK-10			
UNIT IV- DIESEL AND GAS TURBINE POWER PLANTS			
37	Monday 3 rd	Types of Diesel Plants	Completed
38	Monday 6 th	Components	Completed
39	Tuesday 4 th	Selection of Engine type	Completed
40	Wednesday 7 th	Applications	Completed
WEEK-11			
41	Monday 3 rd	Gas turbine power plant	Completed
42	Monday 6 th	Layout of Gas turbine power plant	Completed
43	Tuesday 4 th	Fuels	Completed
44	Wednesday 7 th	Gas turbine material	Completed
WEEK-12			
45	Monday 3 rd	Open and closed cycles	Completed
46	Monday 6 th	Reheating - Regeneration	Completed
47	Tuesday 4 th	Intercooling	Completed
48	Wednesday 7 th	Combines cycle	Completed
WEEK-13			
UNIT V- RENEWABLE ENERGY & ECONOMICS OF POWER PLANTS			
49	Monday 3 rd	Bio Energy, Biomass, Biogas, Source, Composition	Completed
50	Monday 6 th	Wind Energy, Wind Data and Energy Estimation - wind Energy Conversion Systems	Completed
51	Tuesday 4 th	Bio Energy, Biomass, Biogas, Source	Completed
52	Wednesday 7 th	Geo thermal	Completed
WEEK-14			
53	Monday 3 rd	OTEC- Tidal energy	Completed
54	Monday 6 th	Solar central receiver system (Solar Power Tower plants)	Completed
55	Tuesday 4 th	Cost of electric Energy	Completed
56	Wednesday 7 th	Fixed and operating costs- Energy rates	Completed
WEEK-15			
57	Monday 3 rd	Types of tariffs	Completed
58	Monday 6 th	Economics of load sharing	Completed
59	Tuesday 4 th	Economics of load sharing	Completed
60	Wednesday 7 th	Comparison of various power plants.	Completed

Prepared by



(M SURESH)
Asst. Prof./Mech

Approved by



(HOD/ MECH)

PROFESSOR & HEAD
Department of Mechanical Engineering
Adhiyamaan College of Engineering (Autonomous)
Dr. M.G.R. Nagar, HOSUR - 635 109



ADHIYAMAAN ENGINEERING COLLEGE

(Autonomous)

Dr.M.G.R.Nagar – Hosur 635109

Department of Mechanical Engineering



LESSON PLAN

Faculty Name : **S.SHYLIN H. JOSE**

Subject Code : **415MET05**

Subject : **MANUFACTURING TECHNOLOGY - II**

Total no of Hrs : **45**

Academic year : **2017 - 18**

Semester : **IV/ C**

SL.NO	CLASS HOURS	TOPICS	REMARKS
WEEK:1			
Unit – I			
1	Tuesday 4 th	Introduction	Completed
2	Wednesday 4 th	Material removal process.	Completed
3	Friday 6 th	Types of machine tools	Completed
4	Friday 7 th	Importance of tool angles	Completed
WEEK:2			
1	Tuesday 4 th	Theory of metal cutting	Completed
2	Wednesday 4 th	Chip formation, Orthogonal cutting	Completed
3	Friday 6 th	Cutting tool materials	Completed
4	Friday 7 th	Tool wear, Tool life	Completed
WEEK:3			
1	Monday 4 th	Surface finish, cutting fluids.	Completed
Unit II			
2	Wednesday 2 nd	Introduction, centre lathe	Completed
3	Thursday 7 th	Constructional features, cutting tool geometry	Completed
4	Friday 3 rd	Taper turning, thread cutting, special attachments	Completed
WEEK:4			
1	Tuesday 4 th	Machining time and power estimation	Completed
2	Wednesday 4 th	Capstan and turret lathes	Completed
3	Friday 6 th	Automats, Single spindle.	Completed
4	Friday 7 th	Swiss type Automatic .	Completed
WEEK:5			
1	Tuesday 4 th	Multi spindle Automatic screw type	Completed
2	Wednesday 4 th	Turret indexing mechanism	Completed
3	Friday 6 th	Bar feeding mechanism	Completed
Unit III,			
4	Friday 7 th	Reciprocating machine tools	Completed
WEEK:6			
1	Tuesday 4 th	Milling and types	Completed
2	Wednesday 4 th	Milling cutters and operations	Completed
3	Friday 6 th	Drilling, quill mechanism	Completed
4	Friday 7 th	Reaming boring tapping	Completed
WEEK:7			
1	Tuesday 4 th	Sawing machine hack saw, band saw	Completed
2	Wednesday 4 th	Broaching machines	Completed
3	Friday 6 th	Broach construction pull and push	Completed
4	Friday 7 th	Surface and continuous broaching	Completed

Unit IV			
WEEK:8			
1	Tuesday 4 th	Abrasive process	Completed
2	Wednesday 4 th	Grinding wheel, specification and selection	Completed
3	Friday 6 th	Types of grinding process	Completed
4	Friday 7 th	Cylindrical grinding, centreless grinding	Completed
WEEK:9			
1	Tuesday 4 th	Honing , lapping	Completed
2	Wednesday 4 th	Super finishing, polishing	Completed
3	Friday 6 th	Buffing, Abrasive jet machining	Completed
4	Friday 7 th	Gear cutting, forming	Completed
WEEK:10			
1	Tuesday 4 th	Generation and shaping	Completed
2	Wednesday 4 th	Gear hobbing	Completed
Unit V			
3	Friday 6 th	Numerical control	Completed
4	Friday 7 th	Machine tools CNC Types	Completed
WEEK:11			
1	Tuesday 4 th	Constructional details, special features	Completed
2	Wednesday 4 th	Design considerations of CNC	Completed
3	Friday 6 th	machining accuracy	Completed
4	Friday 7 th	Structural members	Completed
WEEK:12			
1	Tuesday 4 th	Slide ways linear bearing	Completed
2	Wednesday 4 th	Spindle drives and feed drives	Completed
3	Friday 6 th	Part programming fundamentals, manual programming	Completed
4	Friday 7 th	Computer assisted part programming	Completed

Prepared By


(S.SHYLAH H JOSE)

Approved by


(HOD/ Mechanical)

PROFESSOR & HEAD
Department of Mechanical Engineering
Adhiyamaan College of Engineering (Autonomous)
Dr. M.G.R. Nagar, HOSUR - 635 109



ADHIYAMAAN COLLEGE OF ENGINEERING
(AUTONOMOUS)
DEPARTMENT OF MECHANICAL ENGINEERING



LESSON PLAN

Faculty Name: C.P. SHANTHANIKETHAN Subject Code : 415MET06
Subject : Machine Drawing Total no of Hrs: 60
Academic year : 2017-2018 Year/Semester : II /IV

SL NO	CLASS PERIOD/HOUR	TOPICS	REMARKS
WEEK-1			
1	Monday 5 th , 6 th & 7 th	Introduction Code of practice for engineering drawing	completed
2	Wednesday 5 th , 6 th & 7 th	Conventional representation of details Drilled and tapped holes	completed
WEEK-2			
3	Monday 5 th , 6 th & 7 th	Countersunk and counter bored holes, internal and external threads	completed
4	Wednesday 5 th , 6 th & 7 th	Conventional representation of standard components, Keys-Parallel, Taper, feather and woodruff key	completed
WEEK-3			
5	Monday 5 th , 6 th & 7 th	Riveted joints	Completed
6	Wednesday 5 th , 6 th & 7 th	Methods and concept of Assembly	Completed
WEEK-4			
7	Monday 5 th , 6 th & 7 th	Bill of Materials	completed
8	Wednesday 5 th , 6 th & 7 th	Methods of assembly and methods of arresting motion of a member in an assembly	Completed
WEEK-5			
9	Monday 5 th , 6 th & 7 th	Limits and fits	completed
10	Wednesday 5 th , 6 th & 7 th	Tolerances -types	completed
WEEK-6			
11	Monday 5 th , 6 th & 7 th	Allowances	completed
12	Wednesday 5 th , 6 th & 7 th	Geometric tolerance	completed
WEEK-7			
13	Monday 5 th , 6 th & 7 th	Surface finish symbols	completed
14	Wednesday 5 th , 6 th & 7 th	Blue print drawing	completed
WEEK-8			
15	Monday 5 th , 6 th & 7 th	Assembly drawing	completed
16	Wednesday 5 th , 6 th & 7 th	Assembly drawing with sectioning	completed
WEEK-9			
17	Monday 5 th , 6 th & 7 th	Bill of materials for part drawing	completed
18	Wednesday 5 th , 6 th & 7 th	Bill of Materials for assembly drawing	completed
WEEK-10			
19	Monday 5 th , 6 th & 7 th	Assembly drawing of Sleeve joint	completed
20	Wednesday 5 th , 6 th & 7 th	Assembly drawing of cotter joint	completed
WEEK-11			
21	Monday 5 th , 6 th & 7 th	Assembly drawing of Knuckle joint	completed
22	Wednesday 5 th , 6 th & 7 th	Assembly drawing of Universal coupling	completed
WEEK-12			
23	Monday 5 th , 6 th & 7 th	Assembly drawing of Flange coupling	completed
24	Wednesday 5 th , 6 th & 7 th	Assembly drawing of Plummer block	completed
WEEK-13			
25	Monday 5 th , 6 th & 7 th	Assembly drawing of Swivel bearing	completed
26	Wednesday 5 th , 6 th & 7 th	Assembly drawing of Screw jack	completed

WEEK-14			
27	Monday 5 th , 6 th & 7 th	Assembly drawing of Machine vice	completed
28	Wednesday 5 th , 6 th & 7 th	Assembly drawing of Lathe tailstock	completed
WEEK-15			
29	Monday 5 th , 6 th & 7 th	Assembly drawing of Petrol engine piston	completed
30	Wednesday 5 th , 6 th & 7 th	Assembly drawing of connecting rod	completed

Prepared By

(C.P.SHANTHANIKETHAN)

Approved by

(HOD/MECH)

PROFESSOR & HEAD

Department of Mechanical Engineering
 Adhiyaman College of Engineering (Autonomous)
 Dr. M.G.R. Nagar, MOGUR - 635 109



Adhiyamaan College of Engineering
(Autonomous)

Tr/Format No: ACE – QF – 7104-05

Dr.M.G.R Nagar- Hosur-635109

Department of Chemical Engineering
Lesson Plan

Faculty Name : Mrs.B.Umamaheswari
Subject Name : Chemical process plant safety
Academic year : 2017-2018
Year/ Semester : III/ VI

Subject code: 615CH04
Total no of hours : 45
Tutorial hours : 0
Lecture hours : 45

S.No	Topic	Hours Planned	Method of Delivery	Date & Period of topic covered	Initials / Remarks
UNIT I- Safety In Industries					
1	Need for Development, Important Safety Consciousness in Indian Chemical industry	2	Board	13/11/17 4 13/11/17 6	b
2	Social environmental setup; tolerance limit of the society	2	Board	14/11/17 6 16/11/17 2	b
3	Psychological attitude towards safety Programme, Elements of safety programme; effective realization	2	Board	17/11/17 3 20/11/17 2 20/11/17 4	b
4	Economic and social benefits; effective communication training at various levels of production and operation	3	Board	20/11/17 6 21/11/17 6	b
UNIT II- Toxicology and Industrial Hygiene					
5	Entry, elimination, and effects of toxicants on organisms	2	Board	27/11/17 4 27/11/17 6	b
6	toxicological studies	2	Board	28/11/17 6 30/11/17 2	b
7	Dose versus response, relative toxicity, and threshold limit values	2	Board	4/12/17 3 4/12/17 3	b
8	Laws and regulations, OSHA, EPA, DHS, Material Safety Data Sheets. Identification, evaluation, and control of industrial hygiene.	3	Board	4/12/17 6 5/12/17 6 7/12/17 1 12/12/17 6	b
UNIT III- Fires and Explosions, Prevention of Fires and Explosions					
9	The fire triangle, distinction between fires and explosions, definitions, flammability characteristics of liquids and vapors.	1	Board	14/12/17 2 18/12/17 4	b

10	Limiting oxygen concentration and inerting, flammability diagram	3	Board	18/12/18 4 18/12/18 5 19/12/18 6	✓
11	ignition energy, auto-ignition, auto-oxidation, adiabatic compression, ignition sources, sprays and mists, explosions	3	Board	21/12/18 2 21/11/18 6 4/1/18 2	✓
12	Inerting, static electricity, explosion-proof equipment and instruments, ventilation, and sprinkler systems	2	Board	8/1/18 3 9/1/18 6	✓
UNIT IV- Chemical Reactivity, Reliefs and Hazards Identification					
13	Identification, characterization, and control of reactive chemical hazards.	2	Board	11/1/18 2 18/1/18 2 22/1/18 4	✓
14	Concepts, definitions, location of relief systems	2	Board	22/1/18 6 23/1/18 6 25/1/18 2	✓
15	types, and characteristics of relief systems	2	Board	29/1/18 2 29/1/18 4	✓
16	Process hazards checklists, hazards surveys, hazards and operability studies (HAZOP), safety reviews.	3	Board	30/1/18 6 1/2/18 2 3/2/18 6 12/2/18 4	✓
UNIT V- Risk Assessment, Safety Procedures and Designs					
17	Review of probability theory, event trees, fault trees, quantitative risk analysis (QRA), layers of protection analysis (LOPA).	2	Board	12/2/18 6 13/2/18 6 13/2/18 2	✓
18	Process safety hierarchy and strategies, managing safety, operating procedures	2	Board	19/2/18 4 19/2/18 6	✓
19	permit procedures, safety reviews and accident investigations	2	Board	20/2/18 6 20/2/18 6 26/2/18 2	✓
20	permit procedures, safety reviews and accident investigations	3	Board	27/2/18 5	✓

Design process safety, fire & explosion, runaway rxn, handling dust.

1/3/18 2
8/3/18 2
12/3/18 2.

Signature of the faculty

Head of the Department

Adhiyamaan College of Engineering, Hosur
Department of Mathematics
Lesson Plan

Faculty Name : S.Manjubarkavi
 Subject : Probability And Random Processes
 Academic Year: 2017-2018

Sem & Branch : IV Sem & ECE - C
 Total no of Hrs. : 60
 Tutorial Hrs. : 15

SL.NO	TOPICS	REMARKS
WEEK:1	UNIT - I – PROBABILITY AND RANDOM VARIABLE	
1.	Axioms of probability	Completed Completed Completed Completed Completed Jan
2.	"	
3.	Conditional probability & Total probability	
4.	"	
5.	Tutorial Hour	
WEEK:2		
6.	Baye's theorem	Completed Completed Completed Completed Completed Jan
7.	"	
8.	Random variables: Probability mass function	
9.	Probability density function and properties	
10.	Tutorial Hour	
WEEK:3		
11.	Moments	Completed Completed Completed Completed Completed Jan
12.	"	
13.	Moment Generating Function and properties	
14.	"	
15.	Tutorial Hour	
WEEK:4	UNIT - II – STANDARD DISTRIBUTIONS	
16.	Binomial distribution	Completed Completed Completed Completed Completed Jan
17.	"	
18.	Poisson distribution	
19.	"	
20.	Tutorial Hour	
WEEK:5		
21.	Uniform distributions	Completed Completed Completed Completed Completed Jan
22.	"	
23.	Exponential distributions	
24.	"	
25.	Tutorial Hour	
WEEK:6		
26.	Normal distributions and their properties	Completed Completed Completed Completed Completed Jan
27.	"	
28.	Functions of random variable	
29.	"	
30.	Tutorial Hour	
WEEK:7	UNIT - III TWO DIMENSIONAL RANDOM VARIABLES	
31.	Joint distributions-Marginal distributions	Completed Completed Completed Completed Completed Jan
32.	"	
33.	Conditional distributions	
34.	"	
35.	Tutorial Hour	
WEEK:8		
36.	Covariance	Completed Completed Completed Completed Completed Jan
37.	"	
38.	Correlation	
39.	"	

40.	Tutorial Hour	Completed	
WEEK:9			
41.	Regression	Completed	
42.	"	Completed	
43.	Central limit theorem (Statement and applications only for independent and identically distributed random variable)	Completed	Jan
44.	"	Completed	
45.	Tutorial Hour	Completed	
WEEK:10	UNIT- IV - RANDOM PROCESSES		
46.	Classifications	Completed	Jan
47.	"	Completed	
48.	Stationary process	Completed	
49.	"	Completed	
50.	Tutorial hour	Completed	
WEEK:11			
51.	Poisson process	Completed	Jan
52.	"	Completed	
53.	Markov process	Completed	
54.	"	Completed	
55.	Tutorial hour	Completed	
WEEK:12			
56.	Discrete parameter Markov chain	Completed	Jan
57.	"	Completed	
58.	Chapman kolmogorov equations	Completed	
59.	"	Completed	
60.	Tutorial hour	Completed	
WEEK:13	UNIT V CORRELATION AND SPECTRAL DENSITIES		
61.	Auto correlation	Completed	Jan
62.	Cross correlation	Completed	
63.	Properties	Completed	
64.	"	Completed	
65.	Tutorial hour	Completed	
WEEK:14			
66.	Power spectral density	Completed	Jan
67.	Cross spectral density	Completed	
68.	Properties	Completed	
69.	"	Completed	
70.	Tutorial hour	Completed	
WEEK:15			
71.	Wiener-Khintchine relation	Completed	Jan
72.	"	Completed	
73.	Relationship between cross power spectrum and cross correlation function	Completed	
74.	"	Completed	
75.	Tutorial hour	Completed	

Sheel
STAFF

Dr
(HOD/MATHS)

Adhiyamaan College of Engineering, Hosur
Department of Mathematics
Lesson Plan (2017-2018 Odd Sem)

Faculty Name : M. Sathyanarayanan
 Subject : Engineering Mathematics - III
 Academic year : 2017-2018
 Semester : III Sem

Total no. of Hrs : 60
 Tutorials : 15
 Class : II - ECE - B

S.No.	Topics	Remarks
Week :1	UNIT-I FOURIER SERIES	
1	Euler's formula	Completed
2	Dirichlet's conditions convergence statement only	Completed
3	General Fourier series	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :2		
1	Odd and even functions	Completed
2	Half range sine series	Completed
3	Half range cosine series	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :3		
1	Parseval's Identity	Completed
2	Complex form of Fourier Series	Completed
3	Harmonic Analysis	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :4	UNIT-II BOUNDARY VALUE PROBLEMS	
1	Classification of second order linear partial differential eqns.	Completed
2	Solutions of one dimensional wave equation	Completed
3	"	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :5		
1	One dimensional heat equation	Completed
2	"	Completed
3	"	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :6		
1	Steady state solution of two-dimensional heat equation	Completed
2	(Insulated edges excluded)	Completed
3	Fourier series solutions in Cartesian coordinates	Completed
4	"	Completed
5	Tutorial Hour	Completed
Week :7	UNIT- III LAPLACE TRANSFORM	
1	Laplace transform, Condition for existence	Completed
2	Transform of elementary function, Basic properties	Completed
3	Transform of derivatives and integrals	Completed
4	Transform of unit step function and impulse functions	Completed
5	Tutorial hour	Completed
Week:8		
1	Transform of periodic functions	Completed
2	Inverse Laplace transform as contour integral	Completed
3	Convolution theorem	Completed
4	"	Completed

5	Tutorial hour	Completed	
Week:9			
1	Initial and Final value theorem	Completed	
2	Solution of ODE of second order with Constant co-efficient Laplace transformation techniques	Completed	M
3	"	Completed	
4	"	Completed	
5	Tutorial hour	Completed	
Week:10	UNIT –IV FOURIER TRANSFORM		
1	The infinite Fourier transform	Completed	
2	Sine and cosine transforms	Completed	M
3	Properties	Completed	
4	"	Completed	
5	Tutorial hour	Completed	
Week:11			
1	Inversion theorem	Completed	
2	"	Completed	M
3	Finite Fourier Transforms	Completed	
4	"	Completed	
5	Tutorial hour	Completed	
Week:12			
1	Sine and cosine transforms Properties	Completed	
2	Convolution theorem	Completed	
3	Parseval's Identity	Completed	M
4	"	Completed	
5	Tutorial hour	Completed	
Week:13	UNIT – V Z TRANSFORM AND DIFFERENCE EQUATIONS		
1	Z transform - Elementary properties	Completed	
2	"	Completed	
3	Inverse Z transform	Completed	M
4	"	Completed	
5	Tutorial hour	Completed	
Week:14			
1	Inverse Z transform	Completed	
2	"	Completed	M
3	Convolution theorem	Completed	
4	"	Completed	
5	Tutorial hour	Completed	
Week:15			
1	Formation of difference equation	Completed	
2	"	Completed	M
3	Solution of difference equation using Z transform	Completed	
4	"	Completed	
5	Tutorial hour	Completed	

STAFF *M*

HR
HOD

ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous)

Dr.MGR Nagar, Hosur – 635130

Department of Biomedical Engineering

Lesson Plan (2017-18)

Faculty Name : Mr.P.Ganesh Babu


Class : III BME

Subject : MP & MC

Semester : V

S.No	Topic	Remarks
WEEK : 1		
UNIT I 8085 MICROPROCESSOR		
1	In rodution	Completed
2	8085 Architecture	Completed
3	8085 Architecture	Completed
4	In struction set	Completed
WEEK : 2		
1	In struction set	Completed
2	Addressing modes	Completed
3	Addressing modes	Completed
4	Timing diagrams	Completed
WEEK : 3		
1	Timing diagrams	Completed
2	Assembly language programming	Completed
3	Assembly language programming	Completed
4	In terrupts	Completed
WEEK : 4		
UNIT II 8086 MICROPROCESSOR AND PERIPHERAL INTERFACING		
1	In tel 8086 Internal Architecture	Completed
2	In tel 8086 Internal Architecture	Completed
3	8086 Addressing modes	Completed
4	8086 Addressing modes	Completed
WEEK : 5		
1	In struction set	Completed
2	In struction set	Completed
3	8086 Assembly language Programming	Completed
4	8086 Assembly language Programming	Completed
WEEK : 6		
1	In terrupts	Completed
2	In terrupt service routine	Completed
3	Serial I/O (8251)	Completed
4	parallel I/O (8255)	Completed
WEEK : 7		
1	Keyboard and Display controller (8279)	Completed
UNIT III 8051 MICROCONTROLLER		
2	8051 Internal Architecture	Completed
3	8051 Internal Architecture	Completed
4	Pc rts and circuits	Completed
WEEK : 8		
1	Ex ternal memory	Completed
2	in struction set	Completed
3	in struction set	Completed
4	Addressing modes	Completed

WEEK : 9		
1	Assembly language programming	Completed
2	Assembly language programming	Completed
3	I/O port programming	Completed
4	Timer and counter programming	Completed
WEEK : 10		
1	Serial Communication	Completed
2	Interrupt programming	Completed
UNIT IV 8051 REAL WORLD INTERFACING		
3	8051 Interfacing	Completed
4	Keyboard Interfacing	Completed
WEEK : 11		
1	LCD Interfacing	Completed
2	Stepper Motors Interfacing	Completed
3	Interfacing to external memory and 8255	Completed
4	7-Segment display	Completed
WEEK : 12		
UNIT V PIC16F8XX MICROCONTROLLER		
1	Introduction to PIC16F8XX Flash microcontrollers	Completed
2	Introduction to PIC16F8XX Flash microcontrollers	Completed
3	Pin diagram of 16F8XX	Completed
4	Architectural features	Completed
WEEK : 13		
1	I/O Ports	Completed
2	I/O Ports	Completed
3	Timers	Completed
4	Timers	Completed
WEEK : 14		
1	Addressing modes of 16F877	Completed
2	Addressing modes of 16F877	Completed
3	Instruction Set	Completed
4	Instruction Set	Completed
WEEK : 15		
1	Revision	Completed
2	Revision	Completed
3	Question Paper Discussion	Completed
4	Question Paper Discussion	Completed

Prepared By: (Faculty) P.GANESH BABU	Approved By: (HoD) 	Revision No.				Date :		
						05	06	2017



ADHIYAMAAN COLLEGE OF ENGINEERING

(AUTONOMOUS)

Dr.M.G.R.Nagar – Hosur 635109

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LESSON PLAN

Faculty Name: P.S.LOGANATHAN


Subject: ELECTRICAL MACHINE DESIGN


Subject Code: 615EET01

Semester: VI/EEE-A Sec

Sl.No	Class Period / Hour	Topic	Remarks
WEEK : 1		UNIT-I INTRODUCTION	
Monday	5	Major considerations in Electrical Machine Design	} Completed
Monday	7	Electrical Engineering Materials	
Tuesday	1	Choice of Specific electric loading	
Tuesday	4	Choice of Specific magnetic loading	
Wednesday	2	Concept of magnetic circuits	
WEEK : 2			
Monday	5	Reluctance and MMF for air gap	} Completed
Monday	7	Reluctance and MMF for Teeth	
Tuesday	1	Real flux density of rotating machines	
Tuesday	4	Apparent flux density of rotating machines	
Wednesday	2	Thermal considerations: Heat flow – Temperature rise	
WEEK : 3			
Monday	5	Rating of machines	} Completed
Monday	7	Standard specifications	
Tuesday	1	Problem solving	
Tuesday	4	Problem solving	
Wednesday	2	Problem solving	
WEEK : 4		UNIT-II D.C. MACHINES	
Monday	5	Problem solving	} Completed
Monday	7	D.C. MACHINES	
Tuesday	1	Output equation of D.C. Machines	
Tuesday	4	Main dimensions of dc machines	
Wednesday	2	Choice of specific loadings	
WEEK : 5			
Monday	5	Choice of number of poles	} Completed
Monday	7	Armature design	
Tuesday	1	Design of field poles	
Tuesday	4	Design of field coil	
Wednesday	2	Design of commutator	
WEEK : 6			
Monday	5	Design of brushes	} Completed
Monday	7	performance prediction using design values	
Tuesday	1	Problems for Main dimensions of dc machines	
Tuesday	4	Problems for Armature design and Design of air gap	
Wednesday	2	Problems for Design of field poles and coil	
WEEK : 7		UNIT-III TRANSFORMERS	
Monday	5	Problems for design of commutator	} Completed
Monday	7	TRANSFORMERS: Construction – Main Dimensions	
Tuesday	1	KVA output equation for single and three phase transformers	
Tuesday	4	Overall dimensions, Optimum design of transformers	
Wednesday	2	Design of core	

WEEK : 8			
Monday	5	Design of yoke	} Completed
Monday	7	Design of winding for core type transformer	
Tuesday	1	Design of winding for shell type transformers	
Tuesday	4	Design of small single phase transformer	
Wednesday	2	Temperature rise in Transformers	
WEEK : 9			
Monday	5	Design of tank and cooling tubes of transformers	} Completed
Monday	7	Problems for Design of core	
Tuesday	1	Problems for Design of yoke	
Tuesday	4	Problems for design of core and shell type transformers	
Wednesday	2	Problems for design of tanks and cooling tubes of transformers	
WEEK : 10			
UNIT-IV THREE PHASE INDUCTION MOTORS			
Monday	5	Introduction	} Completed
Monday	7	Construction - Output equation of Induction motor	
Tuesday	1	Main dimensions of induction motor	
Tuesday	4	choice of specific loadings	
Wednesday	2	Design of Length of air gap	
WEEK : 11			
Monday	5	design of stator	} Completed
Monday	7	Derivation of squirrel cage rotor	
Tuesday	1	Design of slip ring induction rotor	
Tuesday	4	Estimation of operating characteristics	
Wednesday	2	Performance calculation from design data	
WEEK : 12			
Monday	5	Problem for Output Equations of three phase transformers	} Completed
Monday	7	Problems for Main dimensions of three phase transformers	
Tuesday	1	Problems for Design of stator	
Tuesday	4	Problems for design of squirrel cage induction motor	
Wednesday	2	Problems for design of slip ring induction motor	
WEEK : 13			
UNIT -V SYNCHRONOUS MACHINES			
Monday	5	Introduction	} Completed
Monday	7	Output equation of synchronous machines	
Tuesday	1	Main dimensions of synchronous machines	
Tuesday	4	choice of specific loadings	
Wednesday	2	Design of salient pole machines – Short circuit ratio	
WEEK : 14			
Monday	5	shape of pole face – Armature design – Armature parameters	} Completed
Monday	7	Estimation of air gap length	
Tuesday	1	Design of rotor	
Tuesday	4	Design of damper windings, Determination of full load field mmf	
Wednesday	2	Design of field coil	
WEEK : 15			
Monday	5	Design of turbo alternators	} Completed
Monday	7	Problems for Output equation of synchronous machines	
Tuesday	1	Problems for Design of stator & rotor of cylindrical pole machines	
Tuesday	4	Problems for Design of stator & rotor of salient pole machines	
Wednesday	2	Problems for Design of damper winding & field coil of machines	

Prepared by	Approved by	Revision No.	Date:		
P.S.LOGANATHAN AP/EEE	 HOD / EEE		10	11	2017


Signature of the staff



ADHIYAMAAN COLLEGE OF ENGINEERING

(AUTONOMOUS)

Dr.M.G.R.Nagar – Hosur 635109

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LESSON PLAN

Faculty name : M.SUKANYA


Semester: VI


Department: BE EEE-A Section

Subject : HIGH VOLTAGE ENGINEERING

Subject Code: 615EET04

Sl.No	Day	Class Period/ Hour	Topic	Remarks
Week : 1			UNIT – I INTRODUCTION- TRANSIENT OVERVOLTAGES IN ELECTRIC POWER SYSTEMS	
1	Tuesday	2	Electric Power Systems	} completed
2	Tuesday	5	Natural Causes of Over voltages	
3	Wednesday	3	Lightning Phenomena	
4	Friday	1	Charge formation in the Clouds	
Week : 2				
1	Tuesday	2	Over voltages due to Switching Surges	} completed
2	Tuesday	5	Origin of Switching Surges	
3	Wednesday	3	Power Frequency overvoltage in power systems	
4	Friday	1	Control of Overvoltages due to switching	
Week : 3				
1	Tuesday	2	System Faults	} completed
2	Tuesday	5	Abnormal Conditions	
3	Wednesday	3	Transmission Waves on Transmission Lines	
4	Friday	1	Transmission Waves on Transmission Lines	
Week : 4			UNIT – II ELECTRICAL BREAKDOWN IN GASES,SOLIDS AND LIQUIDS	
1	Tuesday	2	Classical Gas Laws	} completed
2	Tuesday	5	Ionization Processes	
3	Wednesday	3	Townsend's Criterion	
4	Friday	1	Paschen's Law	
Week : 5				
1	Tuesday	2	Streamer theory	} completed
2	Tuesday	5	Breakdown in non-uniform fields and Corona Discharges	
3	Wednesday	3	Practical considerations in using gases for insulation purposes	
4	Friday	1	Vacuum insulation	
Week : 6				
1	Tuesday	2	Conduction & Breakdown in pure and commercial liquids	} completed
2	Tuesday	5	Intrinsic breakdown in solids	
3	Wednesday	3	Electromechanical breakdown & thermal breakdown	
4	Friday	1	Breakdown in composite dielectrics	
Week : 7			UNIT – III GENERATION OF HIGH VOLTAGES AND HIGH CURRENTS	
1	Tuesday	2	Introduction	} completed
2	Tuesday	5	Generation of High D.C Voltage	
3	Wednesday	3	Half Wave & Full Wave Rectifier Circuit	
4	Friday	1	Voltage Doubler Circuits	

Week : 8			
1	Tuesday	2	Cascaded Voltage Doubler Circuit & Cockcroft-Walton Voltage Multiplier Circuit
2	Tuesday	5	Generation of High Alternating voltages
3	Wednesday	3	Cascade Transformer connection
4	Friday	1	Resonant Transformers
Week : 9			
1	Tuesday	2	Impulse Voltage Generation
2	Tuesday	5	Impulse Generators & Standard switching Impulse voltage
3	Wednesday	3	Impulse Current Generation
4	Friday	1	Tripping and control of Impulse Generators
Week : 10			
UNIT – IV MEASUREMENT OF HIGH VOLTAGE AND HIGH CURRENTS			
1	Tuesday	2	Measurement of High DC Voltages
2	Tuesday	5	Measurement of High AC Voltages
3	Wednesday	3	Capacitance Voltage Transformer
4	Friday	1	Measurement of High Impulse Voltages
Week : 11			
1	Tuesday	2	Potential Dividers
2	Tuesday	5	Peak Reading Voltmeters for Impulse Voltages
3	Wednesday	3	Measurement of High DC Currents
4	Friday	1	Measurement of High AC Currents
Week : 12			
1	Tuesday	2	Measurement of High Impulse Currents
2	Tuesday	5	CRO for Impulse voltage and Current Measurement
3	Wednesday	3	Digital Techniques in High voltage Measurement
4	Friday	1	Digital Techniques in High voltage Measurement
Week : 13			
UNIT – V HIGH VOLTAGE TESTING OF ELECTRICAL POWER APPARATUS			
1	Tuesday	2	Introduction-Need for Testing of Over voltages
2	Tuesday	5	Testing of Insulators
3	Wednesday	3	Testing of Bushings
4	Friday	1	Testing of Isolators
Week : 14			
1	Tuesday	2	Testing of Circuit Breakers
2	Tuesday	5	Testing of Cables
3	Wednesday	3	Testing of Transformers & Surge Arresters
4	Friday	1	Tan Delta Measurement
Week : 15			
1	Tuesday	2	Partial Delta Measurement
2	Tuesday	5	Radio Interference Measurement
3	Wednesday	3	International and Indian Standard Specifications
4	Friday	1	Revision
Prepared by:		Approved by: HOD	
M.SUKANYA AP/EEE			
		Revision No.	
		Date:	
		13.11.17	


Signature of the staff

ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS)

17-18

Dr. M.G.R Nagar, Hosur-635109

DEPARTMENT OF BIOMEDICAL ENGINEERING

Lesson Plan

EVEN SEMESTER (2017-18)

Faculty Name: **KUMAR KANDUKURI**

Subject: **811BMT01- HOSPITAL ENGINEERING AND MANAGEMENT**

Class: **BME**

Semester: **VIII**

S. No	Class/ Period/ Hour	Topic	Remarks
WEEK:1			
1	Mon(11.25-12.20)	Hospital various Departmental Planning & Design	Completed
2	Mon(02.15-3.10)	Hospital various Departmental Planning & Design	Completed
3	Tue(9.25-10.20)	BME Services in Hospitals	Completed
4	Tue(1.20-2.15)	Role & Responsibilities	Completed
5	Wed(9.25-10.20)	Biomedical Equipment Procurement Procedure	Completed
WEEK:2			
1	Mon(11.25-12.20)	Purchase & Contract Procedures	Completed
2	Mon(02.15-3.10)	Purchase & Contract Procedures	Completed
3	Tue(9.25-10.20)	Selection Testing, Calibration and Installation	Completed
4	Tue(1.20-2.15)	Selection Testing, Calibration and Installation	Completed
5	Wed(9.25-10.20)	Training to Medical Staffs	Completed
WEEK:3			
1	Mon(11.25-12.20)	Operating Instructions.	Completed
2	Mon(02.15-3.10)	Revision of Unit - I	Completed
3	Tue(9.25-10.20)	Management of Medical Equipments	Completed
4	Tue(1.20-2.15)	Management of Medical Equipments	Completed
5	Wed(9.25-10.20)	Planned Preventive Maintenance System	Completed
WEEK:4			
1	Mon(11.25-12.20)	Planned Preventive Maintenance System	Completed
2	Mon(02.15-3.10)	Preventive Maintenance & Repair	Completed
3	Tue(9.25-10.20)	Preventive Maintenance & Repair	Completed
4	Tue(1.20-2.15)	Requirements of Inter Departmental Computerization	Completed
5	Wed(9.25-10.20)	Requirements of Inter Departmental Computerization	Completed
WEEK:5			
1	Mon(11.25-12.20)	DBMS in Hospital	Completed
2	Mon(02.15-3.10)	DBMS in Hospital	Completed
3	Tue(9.25-10.20)	Computerized Medical Record Evaluation	Completed
4	Tue(1.20-2.15)	Computerized Medical Record Evaluation	Completed

5	Wed(9.25-10.20)	Database Approach to Labarotary Computerization	Completed
WEEK: 6			
1	Mon(11.25-12.20)	Database Approach to Labarotary Computerization	Completed
2	Mon(02.15-3.10)	Case study on a Hospital DBMS	Completed
3	Tue(9.25-10.20)	Case study on a Hospital DBMS	Completed
4	Tue(1.20-2.15)	Revision of Unit - II	Completed
5	Wed(9.25-10.20)	Hospital Electrical Supply & Power System	Completed
WEEK: 7			
1	Mon(11.25-12.20)	Hospital Electrical Supply & Power System	Completed
2	Mon(02.15-3.10)	Hospital Electrical Systems	Completed
3	Tue(9.25-10.20)	General Power & Lighting Systems	Completed
4	Tue(1.20-2.15)	General Power & Lighting Systems	Completed
5	Wed(9.25-10.20)	Hospital Wiring Systems	Completed
WEEK: 8			
1	Mon(11.25-12.20)	Hospital Wiring Systems	Completed
2	Mon(02.15-3.10)	Electrical Safety	Completed
3	Tue(9.25-10.20)	Isolated Power Supply	Completed
4	Tue(1.20-2.15)	Line Isolation Monitor	Completed
5	Wed(9.25-10.20)	Performance Testing of Isolated Power Supply	Completed
WEEK: 9			
1	Mon(11.25-12.20)	Performance Testing of Isolated Power Supply	Completed
2	Mon(02.15-3.10)	IPS in Patient Care Areas	Completed
3	Tue(9.25-10.20)	Generator Sets	Completed
4	Tue(1.20-2.15)	UPS & Voltage Stabilizers	Completed
5	Wed(9.25-10.20)	Causes of Failure of Electrical Supply, Ways to Minimize them	Completed
WEEK: 10			
1	Mon(11.25-12.20)	Causes of Failure of Electrical Supply, Ways to Minimize them.	Completed
2	Mon(02.15-3.10)	Revision of Unit - III	Completed
3	Tue(9.25-10.20)	Basics of Air conditioning and Refrigeration	Completed
4	Tue(1.20-2.15)	Basics of Air conditioning and Refrigeration	Completed
5	Wed(9.25-10.20)	Air changes Filtering & Sterility	Completed
WEEK: 11			
1	Mon(11.25-12.20)	Air changes Filtering & Sterility	Completed
2	Mon(02.15-3.10)	Hospital Gas Supply Systems	Completed
3	Tue(9.25-10.20)	Hospital Gas Supply Systems	Completed
4	Tue(1.20-2.15)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
5	Wed(9.25-10.20)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
WEEK: 12			
1	Mon(11.25-12.20)	Revision of Unit - IV	Completed
2	Mon(02.15-3.10)	Medical Codes And Standards	Completed

ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS)

17-18

Dr. M.G.R Nagar, Hosur-635109

DEPARTMENT OF BIOMEDICAL ENGINEERING

Lesson Plan

EVEN SEMESTER (2017-18)

Faculty Name: **KUMAR KANDUKURI**

Subject: **811BMT01- HOSPITAL ENGINEERING AND MANAGEMENT**

Class: **BME**

Semester: **VIII**

S. No	Class/ Period/ Hour	Topic	Remarks
WEEK:1			
1	Mon(11.25-12.20)	Hospital various Departmental Planning & Design	Completed
2	Mon(02.15-3.10)	Hospital various Departmental Planning & Design	Completed
3	Tue(9.25-10.20)	BME Services in Hospitals	Completed
4	Tue(1.20-2.15)	Role & Responsibilities	Completed
5	Wed(9.25-10.20)	Biomedical Equipment Procurement Procedure	Completed
WEEK:2			
1	Mon(11.25-12.20)	Purchase & Contract Procedures	Completed
2	Mon(02.15-3.10)	Purchase & Contract Procedures	Completed
3	Tue(9.25-10.20)	Selection Testing, Calibration and Installation	Completed
4	Tue(1.20-2.15)	Selection Testing, Calibration and Installation	Completed
5	Wed(9.25-10.20)	Training to Medical Staffs	Completed
WEEK:3			
1	Mon(11.25-12.20)	Operating Instructions.	Completed
2	Mon(02.15-3.10)	Revision of Unit - I	Completed
3	Tue(9.25-10.20)	Management of Medical Equipments	Completed
4	Tue(1.20-2.15)	Management of Medical Equipments	Completed
5	Wed(9.25-10.20)	Planned Preventive Maintenance System	Completed
WEEK:4			
1	Mon(11.25-12.20)	Planned Preventive Maintenance System	Completed
2	Mon(02.15-3.10)	Preventive Maintenance & Repair	Completed
3	Tue(9.25-10.20)	Preventive Maintenance & Repair	Completed
4	Tue(1.20-2.15)	Requirements of Inter Departmental Computerization	Completed
5	Wed(9.25-10.20)	Requirements of Inter Departmental Computerization	Completed
WEEK:5			
1	Mon(11.25-12.20)	DBMS in Hospital	Completed
2	Mon(02.15-3.10)	DBMS in Hospital	Completed
3	Tue(9.25-10.20)	Computerized Medical Record Evaluation	Completed
4	Tue(1.20-2.15)	Computerized Medical Record Evaluation	Completed

5	Wed(9.25-10.20)	Database Approach to Labarotary Computerization	Completed
WEEK: 6			
1	Mon(11.25-12.20)	Database Approach to Labarotary Computerization	Completed
2	Mon(02.15-3.10)	Case study on a Hospital DBMS	Completed
3	Tue(9.25-10.20)	Case study on a Hospital DBMS	Completed
4	Tue(1.20-2.15)	Revision of Unit - II	Completed
5	Wed(9.25-10.20)	Hospital Electrical Supply & Power System	Completed
WEEK: 7			
1	Mon(11.25-12.20)	Hospital Electrical Supply & Power System	Completed
2	Mon(02.15-3.10)	Hospital Electrical Systems	Completed
3	Tue(9.25-10.20)	General Power & Lighting Systems	Completed
4	Tue(1.20-2.15)	General Power & Lighting Systems	Completed
5	Wed(9.25-10.20)	Hospital Wiring Systems	Completed
WEEK: 8			
1	Mon(11.25-12.20)	Hospital Wiring Systems	Completed
2	Mon(02.15-3.10)	Electrical Safety	Completed
3	Tue(9.25-10.20)	Isolated Power Supply	Completed
4	Tue(1.20-2.15)	Line Isolation Monitor	Completed
5	Wed(9.25-10.20)	Performance Testing of Isolated Power Supply	Completed
WEEK: 9			
1	Mon(11.25-12.20)	Performance Testing of Isolated Power Supply	Completed
2	Mon(02.15-3.10)	IPS in Patient Care Areas	Completed
3	Tue(9.25-10.20)	Generator Sets	Completed
4	Tue(1.20-2.15)	UPS & Voltage Stabilizers	Completed
5	Wed(9.25-10.20)	Causes of Failure of Electrical Supply, Ways to Minimize them	Completed
WEEK: 10			
1	Mon(11.25-12.20)	Causes of Failure of Electrical Supply, Ways to Minimize them.	Completed
2	Mon(02.15-3.10)	Revision of Unit - III	Completed
3	Tue(9.25-10.20)	Basics of Air conditioning and Refrigeration	Completed
4	Tue(1.20-2.15)	Basics of Air conditioning and Refrigeration	Completed
5	Wed(9.25-10.20)	Air changes Filtering & Sterility	Completed
WEEK: 11			
1	Mon(11.25-12.20)	Air changes Filtering & Sterility	Completed
2	Mon(02.15-3.10)	Hospital Gas Supply Systems	Completed
3	Tue(9.25-10.20)	Hospital Gas Supply Systems	Completed
4	Tue(1.20-2.15)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
5	Wed(9.25-10.20)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
WEEK: 12			
1	Mon(11.25-12.20)	Revision of Unit - IV	Completed
2	Mon(02.15-3.10)	Medical Codes And Standards	Completed

5	Wed(9.25-10.20)	Database Approach to Labarotary Computerization	Completed
WEEK: 6			
1	Mon(11.25-12.20)	Database Approach to Labarotary Computerization	Completed
2	Mon(02.15-3.10)	Case study on a Hospital DBMS	Completed
3	Tue(9.25-10.20)	Case study on a Hospital DBMS	Completed
4	Tue(1.20-2.15)	Revision of Unit - II	Completed
5	Wed(9.25-10.20)	Hospital Electrical Supply & Power System	Completed
WEEK: 7			
1	Mon(11.25-12.20)	Hospital Electrical Supply & Power System	Completed
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3	Tue(9.25-10.20)	General Power & Lighting Systems	Completed
4	Tue(1.20-2.15)	General Power & Lighting Systems	Completed
5	Wed(9.25-10.20)	Hospital Wiring Systems	Completed
WEEK: 8			
1	Mon(11.25-12.20)	Hospital Wiring Systems	Completed
2	Mon(02.15-3.10)	Electrical Safety	Completed
3	Tue(9.25-10.20)	Isolated Power Supply	Completed
4	Tue(1.20-2.15)	Line Isolation Monitor	Completed
5	Wed(9.25-10.20)	Performance Testing of Isolated Power Supply	Completed
WEEK: 9			
1	Mon(11.25-12.20)	Performance Testing of Isolated Power Supply	Completed
2	Mon(02.15-3.10)	IPS in Patient Care Areas	Completed
3	Tue(9.25-10.20)	Generator Sets	Completed
4	Tue(1.20-2.15)	UPS & Voltage Stabilizers	Completed
5	Wed(9.25-10.20)	Causes of Failure of Electrical Supply, Ways to Minimize them	Completed
WEEK: 10			
1	Mon(11.25-12.20)	Causes of Failure of Electrical Supply, Ways to Minimize them.	Completed
2	Mon(02.15-3.10)	Revision of Unit - III	Completed
3	Tue(9.25-10.20)	Basics of Air conditioning and Refrigeration	Completed
4	Tue(1.20-2.15)	Basics of Air conditioning and Refrigeration	Completed
5	Wed(9.25-10.20)	Air changes Filtering & Sterility	Completed
WEEK: 11			
1	Mon(11.25-12.20)	Air changes Filtering & Sterility	Completed
2	Mon(02.15-3.10)	Hospital Gas Supply Systems	Completed
3	Tue(9.25-10.20)	Hospital Gas Supply Systems	Completed
4	Tue(1.20-2.15)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
5	Wed(9.25-10.20)	Centralized Supply of Air, Oxygen, Nitrous Oxide & Vacuum	Completed
WEEK: 12			
1	Mon(11.25-12.20)	Revision of Unit - IV	Completed
2	Mon(02.15-3.10)	Medical Codes And Standards	Completed

3	Tue(9.25-10.20)	ISO standards	Completed
4	Tue(1.20-2.15)	MDRA standards	Completed
5	Wed(9.25-10.20)	Labor Laws	Completed
WEEK: 13			
1	Mon(11.25-12.20)	JCA standards	Completed
2	Mon(02.15-3.10)	Radiation safety laws	Completed
3	Tue(9.25-10.20)	National codes and international codes	Completed
4	Tue(1.20-2.15)	Medical ethics	Completed
5	Wed(9.25-10.20)	Revision of Unit - V	Completed
WEEK: 14			
1	Mon(11.25-12.20)	Beyond the syllabus	Completed
2	Mon(02.15-3.10)	Beyond the syllabus	Completed
3	Tue(9.25-10.20)	Question Paper Discussion	Completed
4	Tue(1.20-2.15)	Case Studies	Completed
5	Wed(9.25-10.20)	Case Studies	Completed
WEEK: 15			
1	Mon(11.25-12.20)	Revision of Unit - I	Completed
2	Mon(02.15-3.10)	Revision of Unit - II	Completed
3	Tue(9.25-10.20)	Revision of Unit - III	Completed
4	Tue(1.20-2.15)	Revision of Unit - IV	Completed
5	Wed(9.25-10.20)	Revision of Unit - V	Completed

Prepared By: (Staff) Kumar Kandukuri @imef	Approved By: (HOD) Dr. Udhaya Suriya.	Revision No.				Date:		
						05	06	2017



ADHIYAMAAN ENGINEERING COLLEGE (Autonomous)

Dr.M.G.R.Nagar – Hosur 635109
Department of Chemical Engineering



LESSON PLAN

Faculty Name : B.UMAPRIYA Subject Code : 315CHE05
Subject : Chemical Engineering Fluid Mechanics Total no of Hrs : 60
Academic year : 2017-2018 Tutorial Hrs : 15
Year/Semester : II - B/ IV Lecture Hrs : 45

S.No	Topic to be covered	Hours Planned	Method of Delivery	Date & Period of topic covered	Initials/Remarks
UNIT-I					
1	Unit system	1	Board	18/11/17 1	UP
2	Laws of dimensional homogeneity –	1	Board	18/11/17 4	UP
3	The principle of dimensional homogeneity	1	Board	22/11/17 2	UP
4	The Pi – theorem	1	Board	24/11/17 2	UP
5	Relationship between dimensional analysis and similitude	1	Board	25/11/17 2	UP
6	Use of dimensional analysis for scale up studies	1	Board	23/11/17 7	UP
7	Problems	1	Board	25/11/17 1	UP
8	Hydrostatic pressure distributions-	1	Board	30/11/17 7	UP
9	Laws of buoyancy	1	Board	29/11/17 2	UP
10	Pressure measurements manometers	1	Board	11/12/17 2	UP

11	Decanters – gravity and centrifugal	1	Board	6/12/17	Ⓟ
12	Problems	1	Board	2/12/17 4	Ⓟ
13	Revision	1	Board	5/12/17 1	Ⓟ

UNIT-II

1	Nature of fluids	1	PPT	7/12/17 5	Ⓟ
2	Physical properties of fluids	1	Board	8/12/17	Ⓟ
3	Compressible and incompressible fluids	1	Board	2 9/12/17	Ⓟ
4	Types of fluids-Newtonian and Non Newtonian fluids	1	Board	4 11/12/17	Ⓟ
5	Types of flow – laminar and turbulent	1	Board	7 12/12/17	Ⓟ
6	Problems	1	Board	16/12/17 3	Ⓟ
7	Concept of boundary layer	1	Board	13/12/17 2	Ⓟ
8	Basic equation of fluid flow –	1	Board	14/12/17 7	Ⓟ
9	Equations of continuity and momentum	1	Board	15/12/17 2	Ⓟ
10	Energy equations	1	Board	19/12/17 1	Ⓟ
11	Bernoulli's equations with and without friction	1	Board	20/12/17 2	Ⓟ
12	Problems	1	Board	20/12/17	Ⓟ
13	Revision	1	Board	4 21/12/17	Ⓟ

UNIT-III

1	Reynolds number regimes	1	PPT	22/12/17 2	Ⓟ
2	Internal versus viscous flow	1	Board	23/12/17	Ⓟ
3	Laminar flow in pipes and annular pipe	1	Board	4 2/1/18	Ⓟ
4	Newtonian liquids	1	Board	1 5/1/18	Ⓟ
5	Problems	1	Board	2 4/1/18	Ⓟ
6	Hagen Poiseuille equations	1	Board	6/1/18 4	Ⓟ
7	Laminar flow of non	1	Board	10/1/18 2	Ⓟ

8	Newtonian liquids	1	Board	21/11/18	Ⓢ
9	Turbulent flow in pipes and channels	1	Board	17/11/18	Ⓢ
10	Problems	1	Board	21/11/18 2	Ⓢ
11	Head losses in fittings and valves	1	Board	18/11/18 7	Ⓢ
12	Problems	1	Board	23/11/18	Ⓢ
13	Revision	1	Board	24/11/18 2	Ⓢ

UNIT-IV

1	Flow past immersed bodies	1	Board	25/11/18 7	Ⓢ
2	Skin and form drag	1	PPT	1/2/18 7	Ⓢ
3	Drag coefficients	1	Board	31/11/18 2	Ⓢ
4	Fluid flow through packed bed	1	Board	21/2/18 2	Ⓢ
5	Kozney – Carman equations	1	Board	3/2/18	Ⓢ
6	Mechanics of particle motion	1	Board	12/2/18 4	Ⓢ
7	Terminal velocity	2	Board	14/2/18 2	Ⓢ
8	Gravity and centrifugal settling	1	Board	13/2/18	Ⓢ
9	Settling regimes- hindered settling	1	Board	15/2/18 7	Ⓢ
10	Fluidization – types of fluidization	1	Board	16/2/18 2	Ⓢ
11	Conditions of fluidization	1	Board	30/11/18	Ⓢ
12	Minimum fluidization velocity – Ergun equation – Problems	1	Board	17/2/18 2	Ⓢ
13	Revision	1	Board	17/2/18 4	Ⓢ

UNIT-V

1	Metering of fluids	2	Board	20/2/18 1	Ⓢ
2	Orifice meter – venture meter- Pitot tube – Rotameter	1	Board	21/11/18 2	Ⓢ
3	Problems	1	Board	24/2/18 4	Ⓢ
4	Weirs – notches – principle and application of Doppler effect and flow measurement	1	PPT	23/2/18 2	Ⓢ

5	Valves – Types of Valves	1	Board	28/2/18 1	
6	Fluid moving machinery	1	Board	22/2/18 7	
7	Problems	1	Board	27/2/18 1	
8	Centrifugal pumps	1	Board	1/3/18 7	
9	Pump characteristics	1	Board	14/3/18 2	
10	Positive displacement pumps reciprocating and rotator pumps	1	Board	3/3/18 4	
11	Air lift and Diaphragm pumps	1	Board	8/3/18 7	
12	Fans – blowers – compressors	1	Board	15/3/18 17	
13	Steam jet ejectors	1	Board	16/3/18 2	
14	Revision	1	Board	19/3/18 2	

Prepared By

(R.UMAPRIYA)

Approved by

(HOD/CHEM.)

DEPARTMENT OF CHEMICAL ENGINEERING
ADHIYAMAAN COLLEGE OF ENGINEERING, HOSUR - 635109

Lesson Plan (2017- 2018)

Faculty Name: E.YUVANASHREE
 Subject Name : Mass Transfer – II

Subject Code : 615CHT01
 Year / Semester : III / VI- A

S No	Topic to be delivered	Hours Planned	Method of Delivery	Date & Period of topic Covered	Initials/ Remarks
Absorption					
1	Equilibrium and operating line concept in absorption calculations	1	Board	13/11/17-6 14/11/17-5	Completed EY
2	Selection of solvent for absorption	1	Board	15/11/17-1	Completed EY
3	Types of contactors, design of plate type absorbers	2	Board	18/11/17-1 21/11/17-3	Completed EY
4	Tutorial class	1	Board	21/11/17-7 22/11/17-1	Completed EY
5	Design of packed type absorbers, concepts of HETP, NTU, HTU and overall volumetric mass transfer coefficients	2	Board	22/11/17-4 24/11/17-1	Completed EY
6	Tutorial class	1	Board	25/11/17-1	Completed EY
7	Tutorial class	1	Board	28/11/17-7 29/11/17-1	Completed EY
8	Operating characteristics of stage-wise and differential contactors	1	Board	29/11/17-4	Completed EY
9	Multicomponent absorption	1	Board	5/12/17-3	Completed EY
10	Absorption with chemical reaction	1	Board	5/12/17-7	Completed EY
Distillation -I					
11	Multicomponent absorption	1	Board	6/12/17-1	Completed EY
12	Absorption with chemical reaction	1	Board	6/12/17-4	Completed EY
13	Flash distillation	1	Board	8/12/17-1	Completed EY
14	Differential distillation for binary mixtures	1	Board	8/12/17-2	Completed EY
15	Continuous rectification - binary systems, multistage tray towers	1	Board	12/12/17-3	Completed EY
16	Method of Mc Cabe and Thiele, enriching section, stripping section, feed introduction	2	Board	12/12/17-7 15/12/17-1	Completed EY
17	Total reflux, minimum and optimum reflux ratios	1	Board	15/12/17-4	Completed EY
18	Mc Cabe and Thiele method – tray tower design Calculations -Tutorial	3	Board	19/12/17-3 19/12/17-5 19/12/17-7	Completed EY

19	Types of condensers, tray efficiencies, Steam distillation	1	Board	20/12/18-1,4 22/12/18-1 21/1/18-3	Completed Eg
Distillation -II					
20	The Ponchon-Savarit method; the enriching and stripping sections	2	Board	02/1/18-4,7	Completed Eg
21	Composition - Enthalpy diagram	1	Board	03/1/18-1	Completed Eg
22	Feed tray location, total reflux, minimum and optimum reflux ratios	1	Board	4/1/18-1 5/1/18-1,2	Completed Eg
23	Ponchon-Savarit method -Tutorial	2	Board	9/1/18-3,7 10/1/18-1 17/1/18-1	Completed Eg
24	Continuous contact distillation	1	Board	18/1/18-3	Completed Eg
25	Packed tower design calculations	1	Board	23/1/18-3 23/1/18-7	Completed Eg
26	Tutorial-Packed tower height calculations	1	Board	24/1/18-1 29/1/18-3	Completed Eg
27	Extractive and azeotropic distillation,	1	PPT	30/1/18-3	Completed Eg
28	Comparison of azeotropic and extractive distillation, Low pressure distillation.	1	Board	31/1/18-1 2/2/18-1	Completed Eg
29	Introduction to multi component distillation	1	Board	3/2/18-1	Completed Eg
Liquid-Liquid Extraction					
30	Equilibrium in ternary systems; solvent selection	1	Board	12/2/18-3	Completed Eg
31	Equilibrium stage wise contact calculations for batch and continuous extractors -Immiscible systems	2	Board	16/2/18-1 17/2/18-1	Completed Eg
32	Equilibrium stage wise contact calculations for batch and continuous extractors -Partially miscible systems	2	Board	19/2/18-3 20/2/18-3	Completed Eg
33	Differential contact extraction equipment - packed extractor	2	Board	20/2/18-7 23/2/18-1,2	Completed Eg
34	Spray and mechanically agitated extractors	1	PPT	26/2/18-3	Completed Eg
35	Pulsed extractors, centrifugal extractors, Selection of extractors.	1	PPT	27/2/18-3 7	Completed Eg
36	Tutorial class	1	Board	27/2/18-7	Completed Eg
37	Tutorial class	1	Board	27/2/18-8	Completed Eg
38	Tutorial class	1	Board	2/3/18-4	Completed Eg
Solid-Liquid Extraction (Leaching) and Adsorption					
39	Solid-liquid equilibria	1	Board	5/3/18-3	Completed Eg
40	Leaching equipment-batch and continuous types	1	Board	12/3/18-3	Completed Eg
41	Calculation of number of stages - Constant underflow	1	Board	13/3/18-3	Completed Eg
42	Calculation of number of stages - variable underflow	1	Board	14/3/18-1	Completed Eg
43	Tutorial class	1	Board	14/3/18-2	Completed Eg
44	Tutorial class	1	Board	16/3/18-1	Completed Eg

45	Theories of adsorption of gases and liquids; industrial adsorbents	1	Board	17/3/18-1	Completed
46	Adsorption equipment for batch and continuous operations	2	Board	19/3/18-3 20/3/18-3	Completed
47	Principles of ion-exchange	1	Board	20/3/18-2	Completed
48	Tutorial class	2	Board	21/3/18-1	Completed


Faculty


Head of the Department