Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Valuation Scheme

Branch : Electrical Engineering
Semester : 6th
Subject : DESIGN ENGINEERING 2 B
Faculty :

(i) Prof. B. N. Vaidya
(ii) Prof. J. B. Sarvaiya
(iii) Prof. T. B. Maniar
(iv) Prof. M. U. Ghanchi

Division/Batch : Electrical/AI
Subject Code : 3160001
Academic Year : 2022-23

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks					Total Marks
				Theory Marks			Practical Marks		
L	T	P	C	ESE(E)	PA(M)		ESE Viva (V)	PA (I)	
0	0	2	1	00	00	00	80	20	100

Evaluation Scheme for PA (I): (20 marks)

Marks	Particular						
	System level Design	Detailed Design	CAD Modelling & Analysis	Building the solutions	Final Prototype	Project Fair	Feedback is Final Report
CO1	2	1	2			1	
CO2	1	2		2		2	
CO3					2	2	9

Assessment Type		Attainment Levels
Internal Assessment	Level 1	50% of students scoring more than 50%marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

Prof. M. U. Ghanchi _____
(Course coordinator)

Prof & HOD
(Electrical)

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Valuation Scheme (Internal)

Branch : Electrical Engineering
Semester : 6th
Subject : Microprocessors and Microcontrollers
Faculty : Prof. S. K. patel (Course coordinator)

Division/Batch : Electrical/All
Subject Code : 3160914

Academic Year : 2022-23

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
						ESE(V)	PA(I)	
L	T	P	C	ESE(E)	PA(M)	ESE		
3	0	2	5	70	30	30	20	150

Examination Scheme for PA:
PAT will be conducted during semester. Distribution of marks nearly will be as per below

Marks	PAT	Assignment
CO1	10	
CO2	10	
CO3		5
CO4		5

Note: In PA component, for all the students it is mandatory to pass PAT/RPAT exam. If the student obtains less than 08 marks out of 20 in PAT, subsequently he/she is supposed to appear for a RPAT and having cleared the remedial test he/she is eligible to get 08 marks even though the student has obtained marks more than 08 in RPAT. CO3 and CO4 will be attained through Assignments and the assignment marks will be added to final PAT result out of 30 marks.

Examination Scheme for PA(I):
Valuation will be done on the basis of performance in practical.

	Practical									
	01	02	03	04	05	06	07	08	09	10
CO1							02	01	01	01
CO2	02	02	02	02	01	01				
CO3					01	01				
CO4								01	01	01

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

(i) Prof. S. K. Patel
(ii) Prof. M. U. Ghanchi

Prof & HOD (Electrical)

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Evaluation Scheme for Even term 2022-23

Name of the subject (code): Electrical Measurements and Measuring Instruments (3160915)
Semester/Branch: B.E. 6th Semester (UG), Electrical Engineering
Name of Concerned Department: Electrical
Name of faculty member/s: (i) Prof J B Sarvaiya (iii)Prof M.V.Gojiya.

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE (E)	PA(M)	ESE(V)	PA(I)	
04	00	02	05	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT
CO1	7
CO2	9
CO3	7
CO4	7

→ **Course Evaluation Plan for PA (I) Component: Total marks 20(Based on Lab performance and Viva)**
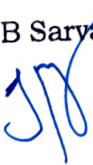
Marks	Laboratory
CO1	5
CO2	5
CO3	5
CO4	5

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	50% of students scoring more than 50% marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, for all the students it is mandatory to pass PAT/RPAT exam. If the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks even though the student has obtained marks more than 12 in RPAT .

Signature of the faculty member:

Prof J B Sarvaiya

H.O.D.
E.E. DEBT

Name of the subject: Wind and Solar Energy
Subject Code: 3160917
Semester/Branch: 6th – BE – Electrical
Name of Concerned Department: Electrical
Name of faculty member/s: (i) Prof A A Rathod (ii) Prof M U Ghanchi

GTU Scheme for the subject:

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE (E)	PA (M)	ESE(V)	PA(I)	
3	0	0	3	70	30	0	0	100

Course Evaluation Plan for PA (M) Component:

In the test of PA (M) component, for all the students have to appear for PAT/RPAT Theoretical exam.

	PA: 30 marks
Marks	PAT
CO1	7
CO2	7
CO3	7
CO4	5
CO5	4

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

    In the test of PA (M) component, there will be 30 marks exam. If the student obtains less than 12 marks out of 30, subsequently he/she can appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks out of 30.

Signature of the HOD

Signature of the faculty members:

    Prof A A Rathod

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Valuation Scheme (Internal)

Branch	:	Electrical Engineering	
Semester	:	6th	
Subject	:	Elements of Electrical Design	
Faculty	:	Prof. B. N. Vaidya	
		Prof. M. U. Ghanchi	

Division/Batch : Electrical/A1
Subject Code : 3160918
Academic Year : 2022-23

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE(E)	PA(M)	ESE(V)	PA(I)	
3	0	0	3	70	30	0	0	100

Examination Scheme for PA (M):

PAT will be conducted during semester. Distribution of marks nearly will be as per below.

Marks	PA(M)	Assignment
CO1		
CO2	20	
CO3		
CO4		10
Total		Total

Note: In PA(M) component, for all the students it is mandatory to obtain at least 08 marks in PAT. If the student obtains less than 08 marks in PAT, he/she is supposed to appear for a remedial work. After satisfactory work in remedial work, he/she is eligible to get 08 marks even though the student has obtained marks more than 08 in remedial work.

Assignments are to be submitted to qualify the remaining 10 marks. Marks out 30 will be displayed.

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	50% of students scoring more than 50% marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Course Coordinator:

(i) Prof. M. U. Ghanchi _____

(ii) Prof. B.N. Vaidya

HOD (Electrical)

Name of the subject (code): Electrical Drive (3160919)
Semester/Branch: B.E. 6th Semester, Electrical Engineering;
Name of Concerned Department: Electrical engineering
Name of faculty member: Prof. M. K. Bhatt

GTU Scheme for the subject:

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE (E)	PA (M)	ESE Viva (V)	PA (I)	
03	01	02	05	70	30	30	20	150

→ Course Evaluation Plan for PA (M) Component: Total marks 30

Marks	PAT
CO1	8
CO2	8
CO3	8
CO4	6

→ Course Evaluation Plan for PA (I) Component: Total marks 20

Marks	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Exp 6	Exp 7	Exp 8	Exp 9	Exp 10
CO1	2					2				
CO2		2	2				2			
CO3				2	2			2	2	
CO4										2

→ Rubrics: Marks obtained in each experiment based on the rubrics criterion will be normalized as per above distribution and mapping of CO.

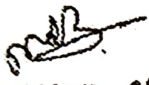| Criteria	Performance level				
	Very poor	Poor	Good	Very good	Excellent
	0	2	3	4	5
Purpose of experiments / identify objective	Students cannot able to identify the objective of experiments.	Students can able to name the experiments with little description, but not fully aware with objective.	Student can able to explain the objective with satisfactory explanation.	Student can able to identify the objective with proper justification	Students can able to identify objective with correct justification. Student shows the excellent skill to relate the experiments with real life technical issues.
Understanding of the experimental set up / software tools	Students cannot able to name of the apparatus/ software tool required in the experiments.	Students can able to name the apparatus/software required in the experiments with little description, but not fully aware with setup.	Student can able to explain use of apparatus / software with satisfactory level.	Student can able to use of all apparatus/ software used in experiments with proper justification	Student can able to use of all apparatus/ software used in experiments with suggesting technical alternate arrangement for the experiment.

Analyzing / Conclusion	Students cannot able to conclude objective of experiment.	Students can able to conclude but not fully aware with justification.	Student can able to conclude with satisfactory explanation.	Student can able to conclude with proper justification	Students can able to conclude with correct justification. Student shows the excellent skill to suggest relevant change in conclusion.

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks.

Signature of the faculty members:

Prof & HOD (Electrical)

(i)   Prof M K Bhatt
       (course coordinator)

~~Prof~~ ~~Solanki~~

Shantilal Shah Engineering College, Bhavnagar.

Electrical Engineering Department

Course Evaluation Plan

Name of Subject: Interconnected Power System   **Subject Code:** 3160920

Academic Year : 2022-23

Semester/Branch: B.E. Sem-6th (Electrical)

Name of Concerned Department : Electrical

Name of Faculty Member(s) : Prof. V. B. Pandya

- **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE (E)	PA(M)	ESE(V)	PA(I)	
03	00	02	04	70	30	30	20	150

- **Course Evaluation Plan for PA (M) Component: Total marks 30**

Course Outcome	Progressive Assessment Test# (Descriptive)	Assignment##
		3
CO-1	-	-
CO-2	7.5	-
CO-3	6	6
CO-4	-	-
CO-5	7.5	9
Total	21	40%
Passing Marks	40%	

PAT marks will be normalized out of 21. Passing marks for PAT is 8.4 out of 21. Students failing to score passing marks will be allowed to appear in Remedial PAT with the passing standard remaining the same. However, students passing in remedial test shall be considered to have scored only passing marks, i.e. 8.4 out of 21.

Assignment for CO-1 will have to be solved and submitted by the students before due date for CO1 and CO4.

Course Evaluation Plan for PA (I) Component: Total marks 20

Course Outcome	Laboratory Assignments*									
	1	2	3	4	5	6	7	8	9	10
CO-1	-	-	-	-	-	-	-	-	-	-
CO-2	20	20	20	20	20	-	-	20	-	-
CO-3	-	-	-	-	-	20	20	-	-	-
CO-4	-	-	-	-	-	-	-	-	20	20
CO-5	-	-	-	-	-	-	-	-	-	-

* Total marks obtained in laboratory assignments 1 to 10 will be averaged to calculate PA(I) marks obtained out of 20.

Assessment Type		Attainment Level
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	75% of students scoring more than 50% marks in internal assessment tools

V B Pandya

Name and Signature of Faculty

Prof. & Head

DEVELOPMENT OF RUBRICS FOR EVALUATING THE SKILLS OF STUDENTS BY MAPPING PERFORMANCE CRITERIA WITH COURSE OUTCOMES

INTERNAL EVALUATION (20 MARKS), ACADEMIC YEAR-2022-23

NAME OF COURSE : (3160920) Interconnected Power System

NAME OF SUBJECT COORDINATOR : V B Pandya

S.NO.	CATEGORY	PERFORMANCE CRITERIA/ ASSESSMENT PROCESS	ANALYTICAL SCALE (1 to 5) FOR RATING THE PERFORMANCE OF STUDENT				
			POOR (1)	AVERAGE (2)	GOOD (3)	VERY GOOD (4)	EXCELLENT (5)
1	APPLICATION OF THEORY CONCEPT	Laboratory assignment includes a numerical problem which needs to be solved manually as well as using a computer program.	The student does not understand the theory concept or how to apply it for solution of given problem.	The student demonstrates partial understanding of the concept with no/little idea about its application.	The student demonstrates full understanding of the concept and its application with minor errors/suggestions.	The student demonstrates very good understanding of the concept and solves given problem(s) correctly without any errors/suggestions.	The student demonstrates excellent understanding of the concept, applies correctly for solution of the given problem and also has self understanding of its application in various scenarios.
2	USE OF SOFTWARE TOOLS	A MATLAB program/simulation is to be prepared for the solution of the given problem.	The student is not able to write any algorithm or instructions of the program or is not able to select required simulation blocks.	The student is either able to prepare an algorithm/block diagram for computer program/simulation with some errors/suggestions.	The student is able to prepares a computer program/simulation for solution of given problem using the given data.	The student is able to prepare an interactive computer program/simulation for solution of given problem without errors following few hints/suggestions.	The student is able to prepare a generic user interactive computer progrma/simulation which would work for solution of a variety of problems based on the same concept.
3	ANALYSIS OF RESULTS	Output of the program in the form of computed results and/or graphs must be verified for correctness in different scenarios. A valid conclusion must be derived from the information obtained.	The student is not able to verify correctness of the results/graphs.	The student is able to verify the correctness of results/graphs for the given problem but unable to derive some valid conclusions from the results.	The student is able to verify the correctness of results/graphs and is able to make valid conclusions from them for the given problem following a few hints/suggestions.	The student is able to verify the correctness of results/graphs, is able to make valid conclusions, for the given problemwithout any hints/suggestions.	The student is able to verify the correctness of the results/graphs, draw valid conclusions, and is also able to explain the effect of change in input parameters on the results for the given problem as well as for any similar problem.
4	PRESENTATION	A laboratory assignment must be prepared and submitted before due date. The assignment must include manual solution of the problem, computer program and its results and the conclusion derived.	The student is not able to prepare the correct lab assignment within prescribed time limit.	The student is able to prepare and submit the lab assignment but has significant errors/corrections or poor/average quality of presentation or there is late submission of assignment without errors.	The student is able to prepare and submit the lab assignment/ manual within prescribed time limit without significant errors/corrections but has average quality of presentation/formatting.	The student is able to prepare and submit the lab assignment within prescribed time limit without any erros and has good quality presentation/formatting.	The student is able to prepare and submit the lab assignment within prescribed time limit without any erros and has very good quality presentation/formatting.

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Valuation Scheme (Internal)

Branch : Electrical Engineering
Semester : 6th

Division/Batch : Electrical/All

Subject : Electrical Materials

Subject Code : 3160918

Faculty : Prof. S. K. Patel
(Course coordinator)

Academic Year : 2022-23

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	ESE(E)	PA(M)	ESE(V) ESE	PA(I)	Marks
3	0	0	3	70	30	0	0	100

Examination Scheme for PA:

PAT will be conducted during semester. Distribution of marks nearly will be as per below

Marks	PAT
CO1	10
CO2	10
CO3	10
CO4	

Note: In PA component, for all the students it is mandatory to pass PAT/RPAT exam. If the student obtains less than 12 marks out of 30 in PAT, subsequently he/she is supposed to appear for a RPAT and having cleared the remedial test he/she is eligible to get 12 marks even though the student has obtained marks more than 12 in RPAT.

Assessment Type		Attainment Levels
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

(i)   Prof. S. K. Patel

Prof & HOD (Electrical)

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department
Subject Evaluation Scheme

Name of the subject (code): Contributor Personality Development Program (3160002)
Semester/Branch: B.E. 6th Semester (UG), Electrical Engineering
Name of Concerned Department: Electrical
Name of faculty member/s: Prof. M. D Solanki

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P	C	Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE(V)	PA(I)	
2	0	0	2	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Theory Component: Total marks 30**

In the test of PA (M) component, for all the students have to appear for PAT/RPAT Theoretical exam.

Marks	PAT
CO1	7.5
CO2	7.5
CO3	7.5
CO4	7.5
CO5	-
CO6	-

In PA (M) component, it is mandatory to pass PAT/RPAT exam. If the student obtains less than 12 marks out of 30 in PAT exam, subsequently he/she is supposed to appear for a RPAT and have to clear the remedial test. He/She is eligible to get 12 marks even though the student has obtained marks more than 12 in RPAT.

→ **Course Evaluation Plan for PA (I) Practical Component: Total marks 20**

A Workbook to be submitted at the end of sem. In this workbook student has to perform tasks in a group or individual of total max. Marks as 20.

Marks	Workbook submission
CO1	2.5
CO2	2.5
CO3	2.5
CO4	2.5
CO5	5
CO6	5

NOTE: All above evolution components will be conducted by offline/ online mode as per government guidelines due to COVID-19.

Assessment Type		Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools	
	Level 2	70% of students scoring more than 50% marks in internal assessment tools	
	Level 3	80% of students scoring more than 50% marks in internal assessment tools	

Signature of the faculty members:

Prof. M. D Solanki

Prof & HOD (Electrical)