

Shantilal Shah Engineering College, Bhavnagar

Electrical Engineering Department

Subject Evaluation Scheme

Name of the subject (code): PROFESSIONAL ETHICS (3150709)

Semester/Branch: B.E. 5th 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
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	00	00	03	70	30	00	00	100

→ Course (M) marks 30

Evaluation Plan for PA Component: Total

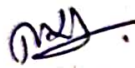
Marks	PAT
CO1	6
CO2	6
CO3	6
CO4	6
CO5	6
Total	30 marks


Assessment Type	Attainment Levels	
	Level 1	60% of students scoring more than 50% marks in

Internal Assessment		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:

(i) 
Prof M K Bhatt
(course coordinator)


Prof & HOD (Electrical)

Shantilal Shah Engineering College, Bhavnagar

Electrical Engineering Department

Subject Evaluation Scheme

Name of the subject (code): Industrial Electrical Systems (3170920) (professional Elective course)

Semester/Branch: B.E. 7th Semester, Electrical Engineering;

Name of Concerned Department: Electrical engineering

Name of faculty member: (i) Prof. M. K. Bhatt (ii) Prof J B Sarvaiya

GTU Scheme for the subject:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	00	00	03	70	30	00	00	100

→ Course (M) marks 30

Evaluation Plan for PA Component: Total

Marks	PAT
CO1	8
CO2	8
CO3	6
CO4	8
Total	30 marks

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

Internal Assessment	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:



(I) Prof M K Bhatt

(course coordinator)

(ii) Prof J B Sarvaiya



Prof & HOD (Electrical)

Shantilal Shah Engineering College - Bhavnagar

Department of Electrical Engineering

Subject Evaluation Scheme (Internal)

Branch: Electrical

Semester: 1st

Division:

Academic Year: 2022-23

Faculty coordinator: Prof. S. K. Patel

Subject: Basic Electrical Engineering

Subject code: 3110005

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
5	0	2	4	70	30	30	20	150

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

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

COs	Marks (PAT)	Marks (Assignments)
CO1	7	0
CO2	7	0
CO3	0	5
CO4	6	0
CO5	0	5

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

CO3 and CO5 will be attained by assignments given to students.




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


A Lab Manual to be submitted by the student at the end of SEM. In this Lab Manual student has to perform task in a group/individual and total max. Mark is 20.

COs	Lab Manual submission
CO1	10
CO2	6
CO3	0
CO4	2
CO5	2

Assessment Type	Attainment Level	
Internal Assessment	Level 1	50% of students scoring more than 50 % mark in internal assessment tools.
	Level 2	60% of students scoring more than 50 % mark in internal assessment tools.
	Level 3	65% of students scoring more than 50 % mark in internal assessment tools.

Signature of the faculty members:

MVG - 
 TBM - 
 SKP - 


 Prof. & HOD
 (Electrical)

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

Name of the subject (code): Control System Theory (3130905)
 Semester/Branch: B.E. 3rd Semester, Electrical Engineering
 Name of Concerned Department: Electrical
 Name of faculty member/s: (I) B.N.Vaidya

→ GTU Scheme for the subject:

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

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

Marks	PAT	ALA
CO1	20	--
CO2		--
CO3		--
CO4	--	10
CO5	--	

→ Course Evaluation Plan for PA (I) and ESE(V) Component: Total marks 20+30=50


	PA(I) 20 marks	ESE(V)
Marks	LAB Assignments	Viva
CO1	20	30
CO2		
CO3		
CO4		
CO5		

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	75% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for an additional test and having cleared that test he/she is eligible to get 8 marks for PA(M) component. ALA assignments are to be submitted for qualifying for remaining 10 marks and final marks out of 30 will be displayed.

Signature of the faculty members:


 B.N.Vaidya


 Prof & HOD (Electrical)

Shantilal Shah Engineering College, Bhavnagar
Electrical Engineering Department

Subject Evaluation Scheme

Name of the subject (subject code): Analog & Digital Electronics (3130907)

Semester / Branch: B.E. 3rd Semester, Electrical Engineering

Name of Concerned Department: Electrical

Name of Faculty Member: T. B. Maniar, S. K. Patel

GTU Scheme for the subject:

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

Course Evaluation Plan for PA (M) Component: Total Marks 30(20Marks PAT + 10 Marks Assignments):

	PAT	Assignments
CO1	20	----
CO3		----
CO2	----	10
CO4	----	

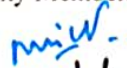
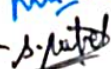
Course Evaluation Plan for PA (I) and ESE (V) Component: Total Marks 30*+20 = 50

	PA (I) 20 Marks	ESE (V) 30 Marks
	LAB Assignments	Viva
CO1	20	30
CO2		
CO3		
CO4		

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

In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for an additional test and having cleared that test, he/she is eligible to get 8 marks for PA (M) component. Assignments are to be submitted for qualifying for remaining 10 marks and final marks out of 30 will be displayed.

Signature of Faculty Members:

1. T. B. Maniar 
2. S. K. Patel 


Prof. & Head (Electrical)

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

Name of the subject (code): Electrical Circuit Analysis (3130906)

Semester/Branch: 3rd Electrical

Name of Concerned Department: Electrical

Name of faculty member/s: (i) Prof. A K Dhandhia (ii) Prof. A M Upadhyay (iii) Prof. J B Sarvaiya

GTU Scheme for the subject:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				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

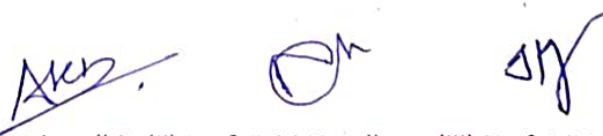
Marks	PAT	Assignment 1	Assignment 2
CO1	7		
CO2	7		
CO3		5	
CO4			5
CO5	6		

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

Marks	Tut 1	Tut 2	Tut 3	Tut 4	Tut 5	Tut 6	Tut 7	Tut 8	Tut 9	Tut 10
CO1	1	1	2							
CO2						4				
CO3									2	2
CO4							2	2		
CO5				2	2					

Assessment Methods	Attainment Levels ^o	
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 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks. Two assignments each of 5 marks are also to be submitted and final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) those of two assignments.



Signature of the faculty members: (i) Prof. A K Dhandhia (ii) Prof. A M Upadhyay (iii) Prof. J B Sarvaiya

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

Name of the subject (code): Contributor Personality Development Program (3150004)
Semester/Branch: B.E. 5th Semester (UG), Electrical Engineering
Name of Concerned Department: Electrical
Name of faculty member/s: (i) Prof A A Rathod (ii) Prof. M. D. Solanki

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		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**

This component is divided in to two parts.

(1) **PAT Exam:** There will be PAT exam of 20 marks.

(2) **Assignment:** There will be two assignments for 5 marks each.

	PAT (out of 20 Marks)	Assignment (out of 10 Marks)
CO1	5	-
CO2	5	-
CO3	5	-
CO4	5	-
CO5	-	5
CO6	-	5

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 8 marks out of 20 in PAT exam, subsequently he/she is supposed to appear for a remedial test RPAT and have to clear the remedial test.



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


A Workbook to be submitted at the end of semester. In this workbook student has to perform task in a group or individual and total max. Mark is 20.

Marks	Workbook submission
CO1	3
CO2	3
CO3	3
CO4	3
CO5	4
CO6	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

Signature of the faculty members:

- (i) Prof. A A Rathod 
- (ii) Prof. M.D. Solanki 


 Prof & HOD
 (Electrical)

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

Prof. A. A. Rathod
 Prof. M. D. Solanki

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

Branch : Electrical Engineering
Semester : 7th
Subject : AC Machine Design
Faculty : Prof. M. U. Ghanchi
 Prof. M. K. Bhatt

Division/Batch : Electrical/All
Subject Code : 3170909
Academic Year : 2022-23

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE(E)	PA(M)	ESE(V)	PA(I)		
3	0	2	4	70	30	30	20	150

Examination Scheme for PA (M):

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

Marks	PA(M)
CO1	30
CO2	
CO3	
CO4	

Note: In PA(M) component, for all the students it is mandatory to obtain at least 12 marks in PAT. If the student obtains less than 12 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 12 marks even though the student has obtained marks more than 12 in remedial work.

Examination Scheme for PA(I):

Valuation will be done on the basis of performance in practical.

Marks-->	Practical							
	01	02	03	04	05	06	07	08
CO1				2		1		1
CO2				4		2		2
CO3					2		2	
CO4					2		2	

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

Name of the subject: Switch Gear and Protection
Subject Code: 3170908
Semester/Branch: 7th Electrical
Name of Concerned Department: Electrical
Name of faculty member/s: (i) Prof A B Parmar

GTU Scheme for the subject: Total marks 30

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

Course Evaluation Plan for PA (M) Component: 20

Marks	PAT	Assignment 1	Assignment 2
CO1	7		
CO2	7		
CO3	6		
CO4	0	5	5

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

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

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 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks.

Signature of the faculty

Signature of the HOD

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

Name of the subject: Power System Operation and Control
Subject Code: 3170919
Semester/Branch: 7th Electrical
Name of Concerned Department: Electrical
Name of faculty member: V B Pandya
Academic Year: 2022-23

▪ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA(M)	PA(V)	PA(I)		
3	0	0	4	70	30	0	0	100

▪ **Course Outcomes Evaluation Plan for PA (M) Component: Total Marks 30**

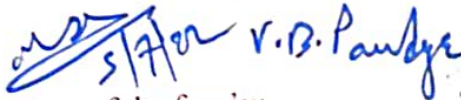
Course Outcomes	30 Marks distribution			
	PAT	Quiz-1 /Test	Quiz-2 /Assignment-2	Quiz-3 /Assignment-3
CO1	5	--	--	--
CO2	--	5	--	--
CO3	10	--	--	--
CO4	--	--	5	--
CO5	--	--	--	5
Total marks	15	5	5	5

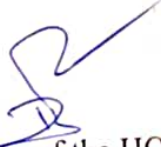
▪ **NOTE**

- For CO1 and CO3 the Progressive Assessment Test (PAT) will be of total 30 marks and the marks obtained by the students out of 30 will be converted into that out of 15. The students getting *less than 12 marks out of 30 in PAT* will have to appear for remedial test. Passing the remedial exam will make the student appeared in the remedial test get max. 6 marks out of 15. If the students get less than 6 marks in the remedial test, higher marks obtained from PAT or the remedial test will be considered as out of 15.
- These quiz or test for CO2 may contain questions like multiple choice type / fill in the blank type / answer in brief statement type / numerical / theoretical type.
- Evaluation of CO4 and CO5 will be done by quiz of types as mentioned in point no. 2 or the assignments with questions based on numerical problems and theory.
- Total marks obtained by the students in PA (M) components of 30 marks will be sum of marks obtained in each of COs as mentioned above.

▪ **CO Attainment Details**

Assessment Type	Attainment Levels and details	
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
 (Course Coordinator)


 Signature of the HOD

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

Name of the subject: Smart Grid
Semester/Branch: 7th Electrical
Name of Concerned Department: Electrical
Name of faculty member/s: Prof. M. D. Solanki

Subject Code: 3170922

GTU Scheme for the subject:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE Viva (V)	PA (I)	
03	00	00	03	70	30	00	00	100

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

Marks	PAT	Assignment 1	Assignment 2
CO1	12		
CO2	8		
CO3		5	
CO4			5

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

In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks. Two assignments each of 5 marks are also to be submitted and final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) those of two assignments.

Signature of the faculty members:

M. D. Solanki

Prof. M. D. Solanki


 Prof & HOD (Electrical)

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

Name of the subject (code): Industrial Automation (3170925)
Semester/Branch: B.E. 7th Semester (UG), Electrical Engineering
Name of Concerned Department: Electrical Engg. (Open electives subject)
Name of faculty member/s: (i) Prof S. K. Patel

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE(V)	PA(I)		
2	0	2	3	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	10
CO2	10
CO3	10
CO4	-

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 in PAT exam, subsequently he/she is supposed to appear for a remedial test 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 Lab Manual to be submitted by the student at the end of SEM. In this Lab Manual student has to perform task in a group/individual and total max. Mark is 20.

Marks	Lab Manual submission
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

S.K. Patel
 Prof. S. K. Patel


→ 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:

(i) 
 Prof M K Bhatt
 (course coordinator)


 Prof & HOD (Electrical)

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

Name of the subject: Industrial Electrical System

Subject Code: 3170920

Semester/Branch: VIIth Electrical

Name of Concerned Department: Electrical

Name of faculty member/s: (i) Prof A B Parmar

GTU Scheme for the subject: Total marks 30

Teaching Scheme				Credits	Examination Marks				Total Marks
L	T	P	C		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	00	00	03	70	30	0	0	100	

Course Evaluation Plan for PA (M) Component:

		Assignment	
Marks	PAT		
CO1	9		
CO2	6		
CO3	6		
CO4	9		

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

Signature of the HOD

Shantilal Shah Engineering College, Bhavnagar

Electrical Engineering Department

Subject Valuation Scheme (Internal)

Branch : Electrical Engineering

Semester : 5th

Subject : Signals and Systems

Faculty : Prof. M. U. Ghanchi

Division/Batch : Electrical/All

Subject Code : 3150912

Academic Year : 2023-24

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE(E)	PA(M)	ESE(V)	PA(I)	
3	0	2	4	70	30	30	20	150

Examination Scheme for PA (M):

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

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

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.

Examination Scheme for PA(I):

Valuation will be done on the basis of performance in practical.

Marks-->	Practical									
	01	02	03	04	05	06	07	08	09	10
CO1	2	2								
CO2						2	2	2	2	
CO3			2	2	2					
CO4										2

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. M. U. Ghanchi



HOD (Electrical)

Shantilal Shah Engineering College – Bhavnagar

Department of Electrical Engineering

Subject Evaluation Scheme (Internal)

Branch: Electrical
Semester: 5th
Division: Electrical

Faculty coordinator: Prof. T. B. Maniar
Subject: Operation Research
Subject code: 3151910

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
03	0	0	03	70	30	0	0	100

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

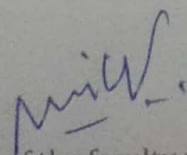
PAT will be conducted during the semester. Distribution of marks nearly will be as per below:

COs	Marks (PAT)	Marks (Assignments)
CO1	8	1
CO2	8	1
CO3	4	1
CO4	-	4
CO5	-	3

Note: In PA component, for all the students it is mandatory to pass PAT exam. If the student obtains less than 8 marks out of 20 in PAT, subsequently he/she is supposed appear for a RPAT exam and after clearing the RPAT he/she is eligible to get 8 marks even though the student has obtained marks more than 8 in RPAT.

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

Signature of the faculty members:



Prof. & HOD

(Electrical)

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

Name of the subject (code): Electrical Machine II (3150910)
 Semester/Branch: 5th Electrical
 Name of Concerned Department: Electrical
 Name of faculty member/s: (i) Prof. A K Dhandhia (ii) Prof. M U Ghanchi

GTU Scheme for the subject:

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

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

Marks	PAT	Assignment 1	Assignment 2
CO1	10		
CO2		5	
CO3	10		
CO4			5

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

Assessment Methods	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 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks. Two assignments each of 5 marks are also to be submitted and final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) those of two assignments.

Signature of the faculty members: (i) Prof. A K Dhandhia (ii) Prof. M U Ghanchi

AKD *MU*
 course coordinator

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

Branch : Electrical Engineering
Semester : 5th
Subject : DESIGN ENGINEERING 2A
Faculty : Prof. M V GOJIYA
Division/Batch : Electrical/All
Subject Code : 3150001
Academic Year : 2023-24

Teaching and Examination Scheme:

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

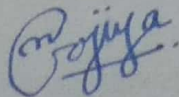
For 5th semester, internal Viva-Voce examination will be conducted at the end of the semester by a team of three examiners - One internal guide, one inter/own departmental faculty, one industry expert (industry expert may be optional but recommended).

- Two department level panel will be formed for Viva-Voce examination with member of two laboratory faculty and one internal guide (if internal guide other than laboratory faculty.)

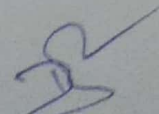
Evaluation Scheme for PA (I): (20 marks-Given by Internal Guide)

	Reverse Engineering (Selection of Branch specific tittle and detail study of project)	Preparation of canvases/frame-work and Prior art search	Preparing Learning Need Matrix (LNM) and Pre design calculation	Dirty Mock-ups/ Fast-prototype / Schematic plan	Continuous Assessment Card	Report
CO1	3					
CO2		5				
CO3			3	3		
CO4					3	3

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 assessmenttools
	Level 3	70% of students scoring more than 50% marks in internal assessmenttools



Signature of the Subject Faculty:



HOD (Electrical)

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

Name of the subject (code): Summer Internship (3170001)
Semester/Branch: B.E. 7th Semester (UG), Electrical Engineering
Name of Concerned Department: Electrical
Name of faculty member/s: (i) Prof M U GHANCHI

→ **GTU Scheme for the subject:**

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

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

This PA (I) component evaluated by institute mentor for 20 marks scheme as per below.

Marks	Student regularity during the Internship period and proactiveness / responsiveness towards the given tasks (10 Marks)	Quality of the prepared report (10 Marks)
CO1	4	-
CO2	-	5
CO3	-	5
CO4	3	-
CO5	3	-

Evaluation Rubrics

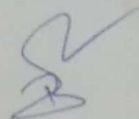
Internal Evaluation - 20 Marks PA(I) (To be carried out by the mentor in consultation with Industry) Minimum Passing Marks: 10					
Parameter	Excellent	Very Good	Good	Not up the level of Satisfaction	Obtained Marks
Mark range	10	09-08	07-05	Below 5	
Student regularity during the Internship period and proactiveness/responsiveness towards the given tasks 10 marks					
Quality of the prepared report 10 marks					
Total Marks Obtained Out of 20 PA(I)					

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 U GHANCHI



HOD (Electrical)

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

Name of the subject (code): High Voltage Engineering (3170917)
 Semester/Branch: B.E. 7th Semester (UG), Electrical Engineering
 Name of Concerned Department: Electrical Engineering
 Name of faculty member: Prof M V Gojiya

→ **GTU Scheme for the subject:**

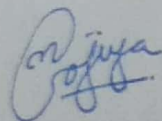
Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA(M)	ESE(V)	PA(I)	
03	00	02	05	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**
PA (I) Component: Total marks 20

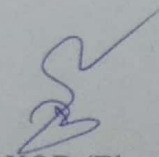
COs	PA(M)	PA(I)
	PAT	Laboratory
CO1	10	2
CO2	9	4
CO3	-	6
CO4	11	6
CO5	-	2

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, for all the students it is mandatory to pass PA(M) component. If the student obtains less than 12 marks out of 30 in PAT examination, 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 only even though the student has obtained marks more than 12 in RPAT.



Prof. M V Gojiya
 (Course Coordinator)



Prof & HOD (Electrical)

Shantilal Shah Engineering College, Bhavnagar.

Electrical Engineering Department

Course Evaluation Plan

Name of Subject: Power System-II

Subject Code: 3150911

Academic Year: 2023-24

Semester/Branch: B.E. Sem-5th (Electrical)

Name of Concerned Department: Electrical

Name of Faculty Member(s): Prof. V. B. Pandya and Prof. Dr. A. K. Dhandhia

• **GTU Scheme for the subject:**

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

Course Outcome (Theory):

After learning the course the students should be able to:

Sr. No.	CO Statement	Marks % Weightage
1.	Prepare the model of transmission line, generator and transformer of power system for single line diagram representation and per unit quantity calculation.	15
2.	Evaluate performance of short, medium and long transmission lines.	25
3.	Analyze symmetrical and unsymmetrical faults in power system.	40
4.	Describe various aspects of over-voltages and corona in power transmission.	12
5.	Describe travelling wave and transients in power system.	08

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

Theory Course Outcome	MID/PAT Marks	(A) MID/PAT weighted marks	(B) Assignments weighted marks	(C) Total (A)+(B)
CO-1	08	3.5	1.0	4.5
CO-2	10	6.0	1.5	7.5
CO-3	12	9.5	2.5	12
CO-4	--	--	3.5	3.5
CO-5	--	--	2.5	2.5

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

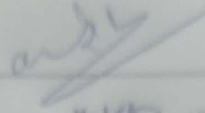
Course Outcome	Weightage Marks of Laboratory Experiments [@]									
	1	2	3	4	5	6	7	8	9	10
CO-1	2									
CO-2		3	3							
CO-3					2	2	2		2	2
CO-4										
CO-5				1				1		

@ In lab manual having rubric, each experiment will be assessed and given marks out of 20 marks. The marks obtained in each experiment will be converted as per above CO weightage marks and finally summed and then scaled to 20 marks for the purpose of calculation of PA (I) marks.

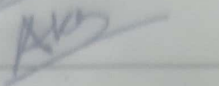
Assessment Type	Attainment Level	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

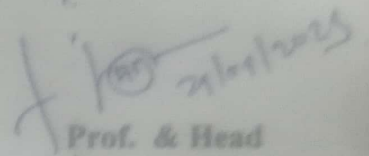
Name and Signature of Faculty

1. Prof. V. B. Pandya



2. Prof. Dr. A. K. Dhandhia




Prof. & Head