# GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING FOR WOMEN

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(Approved by AICTE, New Delpit, Affiliated to Andhra University, Visanhadatnam ) (ACCREDITED BY NATIONAL BOARD OF ACCREDITATION [NBA] FOR B.TECH CSE, ECE AND IT - VALID FROM 2019-22 AND 2022-23) (ACCREDITED BY NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL [NAAC] WITH A GRADE- VALID FROM 2022-27) (Phone: +91-891-2739144, 2739124, 2719125, 2719127 Email Id: gypcew@gmail.com , info@gypcew.ac.in)

# Assessment and Evaluation procedures

The mechanism of internal assessment is as per the regulations issued by the affiliating university.

- 1. JNTUK
- 2. AU

As per the JNTUK University, R19 regulations distribution and weightage of marks is as follows:

a.) There are 2 MID-term Internal tests (each MID-term Internal test consists of 25 marks and it comprises of descriptive tests (10M), Online quiz (10) and assignment (5M). 80% of the best and 20% of the other is considered under R19 regulation. The university conducts External Semester End Examination that carries a weightage of 75 marks.

The subjective examination is for 90 minutes duration conducted for 10 marks. Each subjective type test question paper shall contain 3 questions and all questions need to be answered. The Objective examination conducted for 10 marks(Conducted at College level with 20 Multiple choice question with a weightage of ½ Mark each). The objective examination is for 20 minutes duration. As the syllabus is framed for 5 units, the 1st mid examination (both Objective and Subjective) is conducted from first two and half units and second test on the rest of the syllabus of each subject in a semester. The Objective examination conducted for 10 marks and subjective examination conducted for 10 marks are to be added to the assignment marks of 5 for finalizing internal marks for 25.

For ensuring the quality of the question paper of subjective examination, each departments Department Advisory Committee (DAC) checks the levels of questions given from each unit for the midterms. The Objective examination paper is given by the JNTUK and to evaluate the assignment marks, the following are the rubrics followed by all the departments:



#### **ASSIGNMENT RUBRICS**

DIMENSIONS	SCALES							
	4	3	2	1				
Understanding the Topic (1M)	Complete Understanding of the topic.	Part of the topic is misunderstood.	Most of the topic is misunderstood.	Complete misunderstanding of the topic.				
Organization / Logic / Relevance (3M)	The solution is well written statements are mutually supporting and followed from one another to address the question. Achieves the Learning Objective.	Some parts are not clear, statements are usually mutually supporting and follow from one another but does not address the question explicitly to achieve the Learning Objective.	Most of the parts are not clear, statements hang together but other parts are unclear to address the question. Achieves Learning Objectives minimally.	It is hard or impossible to understand since answers of the question are either too vague or filled with trivial details. Fails to achieve the Learning Objectives.				
On Time Submission (1M)	Submission of Assignment on time.	Submission of Assignment almost on time.	Submission of Assignment with little delay.	Submission of Assignment is late.				

The end semester examination is conducted by JNTUK covering the topics of all Units for 75 marks. End Exam Paper contains five questions for 15 marks each. For each question there will be an "either" "or" choice, which means that there will be two questions from each unit and the student should answer either of the two questions.

#### b.) Practical Examination

For the subjects having practical examinations, the maximum marks are 50 and is distributed as follows:

#### Internal Evaluation

- i. Day to Day Evaluation (5M)
- ii. Record work (5M)
- iii. Internal Lab examination (10M)

## **External Evaluation**

iv. External Lab Examination carries a weightage of 30M



## The following rubric is used to evaluate Lab internal Evaluation marks:

Internals	Dimensions		S	cales	
		4	3	2	1
	Attendance (1)	Attended and completed on the same day	Attended and partially completed on the same day	Attended but completed in the extra lab	Not attended but completed in the extra lab
	Understanding of the Experiment (1)	Complete understanding of the experiment with learning objectives	Partial understanding of the experiment with learning objectives	Most of the experiment misunderstood	Complete misunderstanding of the experiment
Day to Day Performance	Implementation with result analysis (2)	Complete implementation with result analysis and interpretation	Complete implementation with result analysis only	Complete implementation with result analysis and interpretation in extra lab	Complete implementation with result analysis only in extra lab
	Observation submission on time (1)	Submission of the observation on time	Submission of the observation almost on time	Submission of the observation immediately after the extra lab	Submission of the observation after the extra lab
Record	Comprehensiveness & Legible (3)	Write all the elements of the experiments which can be easily readable	Write all the elements of the experiments with poor handwriting	Some elements are missing but presented clearly	Some elements are missing and poor handwriting
	Timely Submission (2)	Submission of the record on time Submission of the record almost on time		Submission of the record immediately after the extra lab	Submission of the record after the extra lab
	Aim of the experiment (2)	Complete understanding of the learning objectives and outcomes	Complete understanding of the learning objectives only	Partial understanding of the learning objectives	Misunderstanding of the learning objectives
Internals	Write up (3)	Write all the elements of the experiments which can be easily readable	Write all the elements of the experiments with poor handwriting	Some elements are missing but presented clearly	Some elements are missing and poor handwriting
	Implementation & result analysis (3)	Complete implementation with result analysis and interpretation	Complete implementation with result analysis only	Partial implementation with result analysis only	Partial implementation only
	Viva- Voce (2)	Experiment and subject knowledge with good oral presentation	Experiment and subject knowledge with poor oral presentation	Partial experiment knowledge with poor oral presentation	Partial subject knowledge with poor oral presentation



The end examination shall be conducted by the teacher concerned and external examiner.

- c.) For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 25 marks for internal evaluation (15 marks for day to day work, and 10 marks for internal tests) and 75 marks for end examination. There shall be two internal tests in a Semester and the Marks for 10 can be calculated with 80% weightage for best of the two tests and 20% weightage for other test and these are to be added to the marks obtained in day to day work.
- d.) The Project work I carries a total of 50 marks and of which 20 marks are internal and the rest 30 marks are awarded by the External.
  - The project internal mark of 20 is distributed as follows: Out of 20 marks, 10 marks are given by the internal guide according to the following parameters:
  - 1) Day-to-Day Work (5 Marks)
  - 2) Report (5 Marks)

The remaining 10 marks are allotted by conducting two internal reviews:

- 5) Review-1 (10 Marks)
- 6) Review-2 (10 Marks)
- The Final External Review carries 30 Marks and is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee.

#### The following rubric is used to evaluate Project Work I:

Project Internals	Dimensions	Scales							
Internals		4	3	2	1				
Day to Day Performance	Day to Day work (2M)	Successfully completed the work in time with result analysis and interpretation with required learning objectives	Successfully completed the work in time with validation of results and required learning objectives	Successfully completed the work in time but validations are used at some places only	Successfully completed the work with changes as suggested with delay				
by Guide	Team work & Time Management (3 M)	Contribution towards completion of the assigned work in the team for timely submission	Contribution towards completion of the assigned work in the team with a delay	Independently completed the assigned work in the team but accepted with modifications	Independently completed the assigned work but team usually rejects				
	Report	The work is organised with clear	The work is organised with clear	Sometime uses effective strategy but	The work appears unorganised,				



	(5M)	diagrams and	diagrams and	with inconsistent		
		sketches using efficient strategy and/or procedures	sketches using almost effective strategy and/or procedures	diagrams and sketches	rarely uses effective strategies with inconsistent diagrams and sketches	
	Selection of area (2 M) CO1	Excellent literature survey and high demand in societal need.	Understanding of the literature survey and high demand in societal need.	Minimum Understanding of the literature survey and high demand in societal need.	Lack of understanding of the literature survey and high demand in societal need.	
Project Review I	Defining the Problem  (3 M)  CO2 & CO3  Excellent identification of Gap, Timeframe, Impact, and high Importance of the problem		identification of Gap, Timeframe, Impact, and moderate Importance of the problem	identification of Gap, Timeframe, Impact, and moderate less Importance of the problem	Lack of identification of Gap, Timeframe, Impact, and moderate less Importance of the problem	
	Teamwork & Presentation (5 M) CO4 & CO5	Able to answer with precision & completeness; confident and professional	Able to answer with precision & completeness; almost confident and professional	Able to answer with precision but lack of confidence and professional behaviour	Missing conceptual information with lack of confidence and professional behaviour	
Project Review	Submission of Abstract (5 M)	Excellent understanding of the problem and interpretation with required project outcomes	Understanding of the problem and lack of interpretation with required project outcomes	Minimum Understanding of the problem with required project outcomes	Lack of understanding of the problem and project outcomes	
П	Teamwork & Presentation (5 M)	Able to answer with precision & completeness; confident and professional	Able to answer with precision & completeness; almost confident and professional	Able to answer with precision but lack of confidence and professional behaviour	Missing conceptual information with lack of confidence and professional behaviour	

- e.) The Project work II carries a total of 150 marks and of which 60 marks are internal and the rest 90 marks are awarded by the External.
  - The project internal mark of 60 is distributed as follows: Out of 60 marks, 30 marks are given by the internal guide according to the following parameters:
  - 1) Day-to-Day Work (15 Marks)
  - 2) Report (15 Marks)

The remaining 30 marks are allotted by conducting two internal reviews:

5) Review-1 (10 Marks)



### 6) Review-2 ( 20 Marks)

• The Final External Review carries 90 Marks and is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee.

The following rubric is used to evaluate Project Work II:

Project	Dimensions	Scales						
Internals	Dimensions	4	3	2	1			
Continuous	Day to Day work (5M)	Successfully completed the work in time with result analysis and interpretation with required learning objectives	Successfully completed the work in time with validation of results and required learning objectives	Successfully completed the work in time but validations are used at some places only	Successfully completed the work with changes as suggested with delay			
assessment by guide	Team work (5M)	Able to handle all work-related questions with illustrative explanation	Answered most questions correctly and with less illustrative explanation	Answered most questions correctly but sometimes needed clarifications	Answered few questions			
	Regularity (5M)	Students having more than 85% in the project attendance	Students having 80%- 85% in the project attendance	Students having 75%- 80% in the project attendance	Students having 65%- 75% in the project attendance			
Report Writing (15M)	Documentation (10M)	The work is organised with clear diagrams and sketches using efficient strategy and/or procedures	The work is organised with clear diagrams and sketches using almost effective strategy and/or procedures	Sometime uses effective strategy but with inconsistent diagrams and sketches	The work appears unorganised, rarely uses effective strategies with inconsistent diagrams and sketches			
	Involvement (5M)							
	Presentation (10M) CO4 & CO5	Excellent preparation, Well delivered and organised	Good delivery and preparation, presents idea in an effective manner	Preparation, organisation and delivery satisfactory	Lack of delivery and organisation, minimum preparation			
Project Review I & II	Analysis, Design and Implementation with valid results (10M) CO1, CO2 & CO3	Able to analyze, Design and implement with valid results of the given problem statement	Able to analyze, Design and implement with results of the given problem statement	Able to analyze and Design the given problem statement	Able to analyze the given problem statement			
	Viva (10M) CO1—5	Able to answer with precision & completeness; confident and professional	Able to answer with precision & completeness; almost confident and professional	Able to answer with precision but lack of confidence and professional behaviour	Missing conceptual information with lack of confidence and professional behaviour			



The following rubric is used to evaluate Best Project:

Factors	3	•	
r actors	3	2	1
Objective and Problem Definition ( 10 M )	Objective and problem definitions are well defined.  Extensive explanation on the limitations of the existing system.  Advanced or Innovative idea.	Objective and problem definitions are well defined.  Extensive explanation on the limitations of the existing system.	Objective and problem definitions are well defined.  Good/ moderate explanation on the existing system.
Implementation and Results (30 M)	Implemented and obtained valid results.  Comparison of the results with results of existing system.	Implemented and obtained valid results.  Extensive Analysis and description of the obtained results.	Implemented and obtained valid results.  Good/Moderate Analysis and description of the obtained results.
Usage of Modern Tools (25 M)	Effective usage of modern Software/Hardware for implementation	Moderate usage of modern Software/Hardware for implementation	usage of conventional Software/Hardware for implementation
Technical Report Writing (25 M)	Thesis is well written and organized as per the given template with clear diagrams and equations using toolboxes	Thesis is well written and organized as per the given template with clear diagrams and equations	Thesis is well written and appears unorganized as per the given template with inconsistent diagrams and equations
Useful for society (5 M)	Prototype is developed and can be upgraded for real time usage in society and recognized by external agencies	Prototype is developed and can be upgraded for real time usage in society	Prototype is developed and need further improvement to meet real time usage in society
Scope for publication (5 M)	The results and discussions presented are better than the existing system with use of new methods.	The results and discussions presented can be extended to improve the results than the existing system.	Need more analysis on results and discussions to know the derived results are better than the existing systems.

- f.) Engineering Exploration Project carries a total of 50 marks out of which 20 are internal marks and 30 external marks.
  - Two internal evaluations in the form of presentations are conducted. For a total of 20 marks, 80% of best one of the two evaluation and 20% of the other evaluation are added and finalized.
  - For external carries 30 marks and is conducted by External Faculty nominated by JNTUK together with Internal Review Committee.
- g.) Mini Project with Hardware development carries 50 external marks. It is conducted by External Faculty nominated by JNTUK together with Internal Review Committee.



## Distribution and Weightage of Marks (R19)

SI. No.	Distribution	Frequency				Descrip	otion
1	Internal Tests	Twice in a semester	Q. No. Marks Q. No. Marks  • DAC w evaluation	) <b>11</b>	2 08 test 2 2 08 re the		of question and scheme of
2	Assignment	Twice in a semester	Assignment before the in Assignment	1 ques nternal t 2 ques	tions co est1 to e tions co	overing valuate j overing	Unit 1-3 is given to students for 5 marks as per the rubric. Unit 3-5 is given to students for 5 marks as per the rubric.
3	Online quiz	Twice in a semester	Quiz 1 of students du marks. Quiz 2 of	20 ques ring the 20 ques	tions co interno tions co	overing al test1 overing	unit 1-3 is conducted for the by JNTUK to evaluate for 10 unit 3-5 is conducted for the by JNTUK to evaluate for 10
• The	total marks secured by marks secured by the s finally considered as 80 al internal Marks = (Bes	students from th 0% of the best a	he above inter nd 20% of the	rnal tests other	1 & 2	(Descrip	otive + Objective + Assignment)
4	Internal Laboratory Tests	Twice in a semester	<ul> <li>Experim and Reconstruction</li> <li>5 and 5 in Two intentions</li> <li>the list of</li> </ul>	ent wise ord work espective rnal test f experin rics dev	evaluatifor each ely s are contents as eloped	tion/ We h experi nducted per JNI for eval	eekly evaluation of Day-to-Day ment is evaluated for the marks for 10 marks each covering all TUK syllabus uation of Day-to-Day, Record
5	Semester-End Examinations (Theory / Practical)	Once in a semester	The exte covering	rnal theo all 5 un ernal lab	ory exan its exam	n is cond	ducted by JNTUK for 75 marks uled by JNTUK for 30 marks
6	Seminar	Once in a curriculum	<ul> <li>Each students any lates slides</li> <li>The Semulation department</li> <li>The rubi</li> </ul>	dent ha t topic v inar rep ent comn ics devel	s to be ovith repo port is e nittee loped for	ort of 16 valuated r evalua	d based on the presentation of 0-15 pages and a ppt of min 10 l for 50 marks by the internal tion of ppt and report is used for Seminar
7	Project work	Twice in a curriculum	<ul> <li>The Proj marks as External</li> </ul>	ect work re intern	I carri al and	es a tota the rest	of 50 marks and of which 20 30 marks are awarded by the al of 150 marks and of which 60

			marks are internal and the rest 90 marks are awarded by the External  • project work I evaluation
			Internal Guide Evaluation
			Rubrics Day-to-Day Work Report
			Marks 05 05
			Internal Review
			10
			project work II evaluation
			Internal Guide Evaluation
			Rubrics Day-to-Day Work Report
			Marks 15 15
			Internal Review
			30
			The rubrics developed for evaluation of Guide and Review is used
			<ul> <li>Final External Review is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee</li> </ul>
			The rubrics are also developed for choosing the best projects by considering the total marks
8	Engineering	Once in a	
	drawing	curriculum	• Final internal Marks = (Best of (Mid-1/Mid-2) marks x 0.8 + Least of (Mid-1/Mid-2) marks x 0.2)
			External exam is conducted by JNTUK for 75 marks
9	For Socially	Once in a	<ul> <li>Two internal evaluations are conducted for 20 marks</li> <li>Final Marks = (Best of evaluation marks x 0.8 + Least of evaluation marks x 0.2)</li> </ul>
	Relevant Project	curriculum	• External Review is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee for 30 marks
10	Engineering Exploration Course	Once in a curriculum	<ul> <li>Two internal evaluations are conducted for 20 marks</li> <li>Final Internal Marks = (Best of evaluation marks x 0.8 + Least of evaluation marks x 0.2)</li> <li>External Review is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee for 30</li> </ul>
11	Mini Project/Internship/In dustrial Training/Skill Development programmes/Researc h Project guidelines	Once in a curriculum	External Review is conducted by External Faculty nominated by JNTUK together with Internal Project Review Committee for 50 marks



# Distribution and Weightage of Marks (R20)

SL. No.	Distribution	Frequency				Descri	ption
			Internal test 1				
			Q. No.	1	2	3	
			Marks	12	12	06	
1	Internal Tests	Twice in a		Interna	test 2		
	i internal Tests	semester	Q. No.	1	2	3	
			Marks	06	12	12	
			evaluat	ion			of question and scheme of sare evaluated for 15 marks
2	Assignment	Twice in a semester	Assignment before the rubric. Assignment before the rubric.	interna interna it 2 que interna	stions c al test1 stions c al test2	overing to eval overing to eval	Whit 1-3 is given to students luate for 5 marks as per the Unit 3-5 is given to students luate for 5 marks as per the
3	Online quiz	Twice in a semester	students de 10 marks. Quiz 2 of 2	uring tl 20 ques	ie inter	nal tesi overing	unit 1-3 is conducted for the 11 by JNTUK to evaluate for unit 3-5 is conducted for the 12 by JNTUK to evaluate for
• The	e marks secured by t ignment) are finally o	he students fro considered as &	om the abov 80% of the b	ve inter est and	nal test 20% of	s 1 & . the oth	evaluated for 30 marks 2 (Descriptive + Objective + er d-1/Mid-2) marks x 0.2)
4	Engineering drawing		<ul> <li>Internal</li> <li>15 mark</li> <li>Two into</li> <li>Final in</li> <li>+ Least</li> </ul>	l marks as for co ernal ex eternal l of (Mid	are eva entinuoi cams are Marks = -1/Mid-	luated j is Asses e condu = (Best ( 2) mari	for 30 marks ssment (day–to–day work) acted for 15 marks of (Mid-1/Mid-2) marks x 0.8
5	Internal Laboratory Tests	Twice in a semester	<ul> <li>Experimal Day and the mark</li> <li>Two into all the li</li> <li>The rule</li> </ul>	ient wis l Record ks 5 and ernal tes ist of ex brics a	se evalu d work j d 5 resp sts are o perimen levelope	ation/) for each ectively conduct its as po	Weekly evaluation of Day-to- h experiment is evaluated for
6	Semester-End Examinations (Theory /	Once in a semester	marks c	overing	all 5 ui	rits	conducted by JNTUK for 70 cheduled by JNTUK for 35



	Practical)		marks covering all experiments.  The Project work carries a total of 200 marks and of 60 marks are internal and the rest 140 marks are as by the External Internal project work evaluation  Internal Guide Evaluation							
				Rubrics	Day- to-Day Work	Involve ment in Project	Team and Manag	Work Time ement	Regul arity	
			$\parallel$	Marks	10	10	05		05	
		0		Internal Review						
7	Project work	oject work Once in a			Review 1	!		Review	2	
		curricuium			30			30		
				Total Int Review 2		iew marks=	1/3 <sup>rd</sup> * 1	Review 1	+ 2/3 <sup>rd</sup> *	
			•	<ul> <li>The rubrics developed for evaluation of Guide 1 &amp;2 is used</li> </ul>						
			•	<ul> <li>Final External Review is conducted by External Facult nominated by JNTUK together with Internal Proje</li> </ul>						
				Review Committee						
				The rubrics are also developed for choosing the be projects by considering the total marks						

#### **Andhra University**

As per the University regulations

- a.) There are 2 MID-term Internal tests (each MID-term Internal test consists of 30 marks and it comprises of descriptive tests (20M), Continuous assessment (10M). The university considers best of the two. The Descriptive examination is for 90 minutes duration conducted for 20 marks. Each subjective type test question paper shall contain 3 questions and all questions need to be answered.
- b.) Practical Examination

For the subjects having practical examinations, the maximum marks are 100 and is distributed as follows:

Internal Evaluation

- i. Day to Day Evaluation (30M)
- ii. Record work (5M)
- iii. Internal Lab examination (15M)

#### **External Evaluation**

- iv. External Lab Examination carries a weightage of 50M
- c) The university conducts External Semester End Examination that carries a weightage of 70 marks. End Exam Paper: Part-A 1st Question is mandatory covering all the syllabus which contains seven 2 marks questions for 14 marks and in Part-B 4 Questions out of 7 Questions are to be answered with each carrying 14 marks. Part-A & Part-B put together gives for 70 marks.

