



NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING & RESEARCH
Block - FC, Sector - III, Salt Lake City, Kolkata - 700 106

Prog. Code	: ICT04
Prog. Title	: Assessment and Evaluation under Outcome Based Education
Prog. Co-ordinator	: Dr. Urmila Kar
Name of the Instt.	: Sri Vasavi Engineering college, Tadepalligudem-534101 (Andhra Pradesh)
Date	: From: 10.06.2019 To: 14.06.2019

REGISTRATION SHEET

Sl. No.	Name of the Participants (in Block Letter)	Designation	Dept	Caste				Gender		Contact No.	e-mail Address	Signature	
				SC	ST	OBC	Gen	Male	Female				
1	E. KRISHNA KUMARI	Professor	ECE						✓	Female	8247648672	hod_ece@svivasaviengg.ac.in	
2	SRI R. R. LOKESH BABU	Assistant Professor	ECE	✓					✓	Male	8801933292	lalraj432@gmail.com	
3	SRI A. R. S. BALAJI	Assistant Professor	ECE			✓			✓	Male	8555806913	balu434@gmail.com	
4	SRI M. VINOD KUNJAR	Assistant Professor	ECE			✓			✓	Male	9014640210 7901369994	mvkumar465@gmail.com	
5	D. SUDHA KANI	Associate Professor	EEE			✓			✓	Female	9440122061	hod_eee@svivasaviengg.ac.in	
6	D. JAYVA KUMARI	Professor	CSE						✓	Female	9885066229	hod_cse@svivasaviengg.ac.in	
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8	CH JAGADESH BABU	Assistant Professor	CIVIL						✓	Male	8886249033	jaga.rgnkt@gmail.com	
9	D. NARENDRA BABU	Assistant Professor	MECH	✓					✓	Male	9908873424	michtynarendra@gmail.com	
10	PURNIMA K SHARMA	Associate Professor	ECE			✓			✓	Female	8901101640	Purnima.kadali@gmail.com	
11	M. Nageswararao	Assistant Professor	CSE						✓	Male	9949388386	Nagau10@svivasaviengg.ac.in	
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Signature of Head of the Institute



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Attendance sheet

Sl. No.	Name of the Participants	Designation	Dept.	10.06.2019		11.06.2019		12.06.2019		13.06.2019		14.06.2019	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	E. KUSUMA KUMARI	Professor	ECE	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK
2	SRI R.L.R LOKESH BABU	Assistant Professor	ECE	RLR	RLR	RLR	RLR	RLR	RLR	RLR	RLR	RLR	RLR
3	SRI A.R.S BALAJI	Assistant Professor	ECE	ARS	ARS	ARS	ARS	ARS	ARS	ARS	ARS	ARS	ARS
4	SRI M. VINOD KUMAR	Assistant Professor	ECE	LV	LV	LV	LV	LV	LV	LV	LV	LV	LV
5	D. SUDHA RANI	Associate Professor	EEE	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
6	D. JAYA KUMARI	Professor	CSE	JH	JH	JH	JH	JH	JH	JH	JH	JH	JH
7	Y. RAVI RAJU	Assistant Professor	CSE	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR
8	CH. JAGADEESH BABU	Assistant Professor	CIVIL	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB
9	D. NARENDRA BABU	Assistant Professor	MECH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10	PURNIMA K SHARMA	Associate Professor	ECE	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK
11	M. NAGESWARA RAO	Assistant Professor	CSE	MN	MN	MN	MN	MN	MN	MN	MN	MN	MN
12	U. CHANDRA RAO	SrAssistant Professor	EEE	UC	UC	UC	UC	UC	UC	UC	UC	UC	UC
13	M T V L RAVI KUMAR	Assistant Professor	EEE	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT
14	G. ANAND KUMAR	Assistant Professor	EEE	GA	GA	GA	GA	GA	GA	GA	GA	GA	GA
15	K. RAMESH BABU	Assistant Professor	EEE	KR	KR	KR	KR	KR	KR	KR	KR	KR	KR
16	SVS VAS PULAKHANDAM	Assistant Professor	BSH	SV	SV	SV	SV	SV	SV	SV	SV	SV	SV
17	M.R.RAJA RAMESH	Associate Professor	CSE	MR	MR	MR	MR	MR	MR	MR	MR	MR	MR
18	N. PRAVEEN KUMAR	Assistant Professor	CSE	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

Signature of Head of Department

Assessment and Evaluation under Outcome Based Education

Presenter:

Urmila Kar,
Prof. & Head, E&M,
NITTTR, Kolkata

Date of Presentation:

12th June 2019

DAY 3 - PART 2(1)



Elements of ??

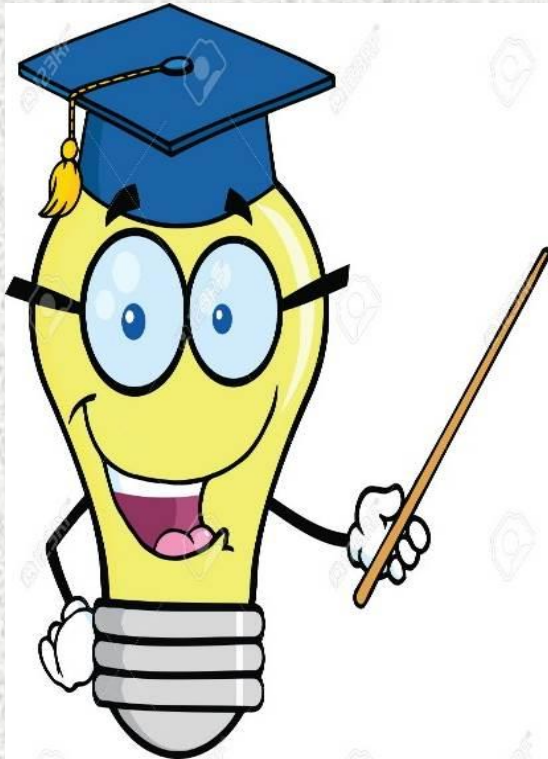
CRITERIA	LEVEL OF PERFORMANCE		
	SCORE		
		DESCRIPTOR	



**We use Rubric –
an authentic assessment tool in
criterion-referenced evaluation
system.**



- ✓ **Use scoring rubric (holistic / analytic) for assessment of any specific skill.**
- ✓ **Rubrics for assessment of active learning.**
- ✓ **Rubrics for Assessment under OBE.**



RUBRICS

It has two major **elements** –

1. Criteria (It shows the characteristics of good performance on a task)

2. Level of performance (to what degree the learner has met the criterion)

The **third** element of rubric is **descriptor** which informs what is expected of learners at each level of performance for each criterion.

The **fourth** element is **score** which indicates the points needed to describe the range of the performance levels.



Components of Rubric

	Unsatisfactory 1	Developing 2	Satisfactory 3	Exemplary 4
Performance criteria				
Performance criteria				
Performance criteria				
Performance criteria				

Types of Rubrics

1. Holistic Rubrics

2. Analytic Rubrics

3. Generic Rubrics

4. Task-specific Rubrics



1. Holistic Rubrics

Generally, when a quick or overall judgement needs to be made, holistic rubrics are used.

2. Analytic rubrics

Analytic rubrics are commonly used in assessing engineering assessment which involves judgement of complex performances involving several significant criteria.



3. Generic rubrics

It contains criteria that are general across tasks and can be used for similar tasks or performances.

4. Task-specific rubric

This is for assessing specific task.

However, it may not be always possible to consider each and every criterion involved in a particular task.



Holistic Rubric

Objective/ Learning Outcome	4 Applied skills strongly demonstrated	3 Some applied skills demonstrated	2 Little applied skills demonstrated	1 Minimal applied skills
Establish Ohm's law	<p>Design a circuit to establish the relationship between voltage, current and resistance.</p> <p>Build a circuit to achieve a specific current, resistance or voltage.</p>	<p>Describe the relationship between voltage current and resistance.</p> <p>Measure voltage current and resistance in a simple circuit.</p>	<p>Explain Ohm's law.</p> <p>Calculate current, voltage and resistance in a simple circuit.</p>	<p>State Ohm's law.</p>



SAMPLE : Rubric for PO assessment

PO1 :

Graduates will be able to **apply knowledge of mathematics**, biology, physiology physical sciences and engineering principles to **biomedical engineering applications.**



Rubric for PO1 assessment

For Mathematics : Criteria can be based on

1. Mathematical modelling
2. Application of mathematical principles to solve engineering problems
3. Interpretation of mathematical terminologies
4. Application of software tools for mathematical calculation
5. Statistical analysis of engineering data



Criteria/scale	5	3	1
Mathematical Modeling	Combines mathematical and/or scientific principles to formulate models of chemical, physical and/or biological processes and systems relevant to engineering	Chooses a mathematical model or scientific principle that applies to an engineering problem, but has trouble in model development	Does not understand the connection between mathematical models and chemical, physical, and/or biological processes and systems in Engineering
Application	Applies concepts of integral and differential calculus and/or linear algebra to solve engineering problems	Shows nearly complete understanding of applications of calculus and/or linear algebra in problem-solving	Does not understand the application of calculus and linear algebra in solving engineering problems
Terms	Shows appropriate engineering interpretation of mathematical and scientific terms	Most mathematical terms are interpreted correctly	Mathematical terms are interpreted incorrectly or not at all
Theory	Translates academic theory into engineering applications	Some gaps in understanding the application of theory to the problem	Does not appear to grasp the connection between theory and the problem
Calculation	Executes calculations correctly by hand and using mathematical software	Minor errors in calculations by hand and applying math software	Calculations not performed or performed incorrectly by hand or does not know how to use math software
Statistical Analysis	Correctly analyses data sets using statistical methods	Minor errors in statistical analysis of data	No application of statistics to analysis of data



PO9 :

Graduates will be able to function on multi-disciplinary teams



Criteria/scale	5	3	1
Attendance/Contribution	Routinely present at team meetings or work sessions. Contributes a fair share to the project workload	Absent occasionally, but does not inconvenience group. Sometimes depends on others to complete the work.	Contributes less than fair share. Is absent from team meetings or work sessions >50% of the time
Preparation	Prepared for the group meeting with clearly formulated ideas	Prepares somewhat for group meetings, but ideas are not clearly formulated	Routinely fails to prepare for meetings
Cooperation	Cooperates with others (outside of the discipline)	Occasionally works as a loner or interacts to a minor extent with extra disciplinary team members	Does not contribute to group work at all or submits own work as the group's
Credit Sharing	Shares credit for success with others and accountability for team results	Makes subtle references to other's poor performance or sometimes does not identify contributions of other team members	Claims work of group as own or Frequently blames others
Information Sharing	Shares information with others and provides assistance to others	Sometimes keeps information to himself/herself; not very willing to share.	Does work on his/her own; does not value team work
Designated Role Acceptance	Demonstrates the ability to assume a designated role in the group.	Takes charge when not in the position to lead. Hides in the background; only participates if Strongly encouraged.	background; only participates if Strongly encouraged. Does not willingly assume team roles
Valuation of Others' Ideas	Values alternative perspectives and Encourages participation among all team members	Persuades others to adopt only his/her ideas or grudgingly accepts the ideas of others	Does not consider the ideas of others
Demeanor	Remains non judgmental when disagreeing with others/seek conflict resolution does not "point fingers" or blame others when things go wrong	Sometimes criticizes ideas of other team members or blames others for errors.	Is openly critical of the performance of others
Courtesy	Is courteous group member	Is not always considerate or courteous towards team members	Is discourteous to other group members
Knowledge of Other Disciplines	Has knowledge of technical skills, issues and approaches germane to disciplines outside own discipline	Has some knowledge of other disciplines, but gets lost in discussions with extra disciplinary Team members	Has no knowledge of disciplines outside of engineering



We need to evaluate the rubric each time it is used as we need to ensure that the rubric developed is a valid and reliable tool for evaluation of specific performance.



Guideline for developing Rubrics : A sample

Criterion : Presentation		Level of performance				
		Below Expectation 1	Approachi ng Expectatio n 2	Satisfactory 3	Good 4	Excellen t 5
1. Presentatio n Mechanics	a)Delivery					
	b)Q&A					
2. Presentatio n Content	a)Organisation					
	b)Supporting Material					



Criterion : Presentation		Level of performance				
		Below Expectation 1	Approaching Expectation 2	Satisfactor y 3	Good 4	Excellent 5
3. Technical Competency	a)Level of Technical Understanding					
	b) Design concept					
4. Initiative- in this context, it means originality and independent drive in problem solving						
5.Scope Fulfilment						



GROUP TASK - VI

**Suggest Rubrics
for assessment of
presentation skills**



Thank you

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND
RESEARCH (NITTTR)**

(Established by Ministry of Human Resource Development, Govt. of India)

SHORT TERM COURSE ON
Outcome Based Curriculum(ICTO-47)

May 25-29, 2020

PROGRAMME SCHEDULE

DATE	11:00 a.m. to 12:30 0.m.	3:00 p.m. to 4:30 p.m.
25-05-2020	Outcome based Education	Educational Objectives-Blooms Taxonomy
26-05-2020	Curriculum development and overview	Taxonomy of Psychomotor and Affective Domain
27-05-2020	NSQF aligned curriculum	Framing of Program Objectives and Program Educational Objectives
28-05-2020	Rubrics Design	Inculcation Entrepreneurship in OBE
29-05-2020	Evaluation System in outcome based curriculum	Examination reforms in OBE Valediction

Coordinator: Dr. Meenakshi Sood (MS) _____ meenakshi@nitttrchd.ac.in



**National Institute of
Technical Teachers Training and Research
Chandigarh**

MINISTRY OF HUMAN RESOURCE DEVELOPMENT, GOVERNMENT OF INDIA

Certificate

This is to certify that

PURNIMA K SHARMA

**SRI VASAVI ENGINEERING COLLEGE, TADEPALLIGUDEM
ANDHRA PRADESH**

Participated in the Online AICTE Recognized Faculty Development Programme

on

Outcome Based Curriculum

from

25-05-20 to 29-05-20 (One Week)

Organized by

Curriculum Development Centre Department

NITTTR, Chandigarh



Coordinator

Director