Department of Engineering Science

Innovative Teaching Method (Activity Based Learning) - Report

Academic Year: 2025-26	**Class: F. Y. B. Tech (IT, Computer & AI&DS)**
Semester–I	**Date: 10/12/2025**
CO: CO5	**PO:PO1, PO2, PO7, PO12**

Title of Innovation method/activity: Activity based learning (Unit 5 Corrosion and its prevention)

Name of Faculty: Dr. S.J.Kokate, Ms. G.B. Bahare, Ms. R.B.Thkare and Mrs.V.P.Ushir, Ms.S.S.Jadhav

Course : Engineering Chemistry (100202)

Objectives:

1. To study electrochemical corrosion.
2. To demonstrate the effect of medium on metals.
3. Clear the concept.
4. It helps students to think individually.
5. More involvement of students.

Instructions of Activity

1. The activity is to be performed in group
2. Group consists of 5 students.

Procedure

1. Each group needs to collect 3 similar metal articles easily available.
2. Keep the metals in 3 different media i.e.Water, acidic solution and basic solution for 7 days.
3. For acidic medium students can use citric acid or vinegar.
4. For basic mediums make use of soap solution or detergent solution.
5. Observe and note the changes in metal daily (click pic and record note).
6. Prepare a 5–6-page report which includes daily observation with pictures, your group details, and also suggest a suitable method for prevention of corrosion.

6. Description of Method with Benefits (8 –10 lines)

Description of Method: Monitor and support students for performing Activity:

By using this method, we are able to check the concept understand by students. Also, students get engage & show their creativity while preparing activity. Students are able to revise topic very easily.

Benefits of Method

- It helps students to think individually about a topic and clear their concept.
- It helps students to develop their creativity.
- It helps students to understand the concepts and revise the topic.
- Students know the application which increase the interest of students in learning Engineering Chemistry.

7. Roles and Responsibilities

Teacher

- Elaborate regarding activity.
- Provide the study material on Topic.
- Remain available during the completion of task.
- Prepare assessment methodology.

Student

- Go through the concept of the topic.
- Understand the concept and show their creativity independently while preparing the activity.
- Actively participate in activity and contribute their knowledge regarding the topic covered.

8. Assessment Tools: Maximum Marks 8

Observations & Collecting Information	3	2	1
	Very Good	Good	Developing
	All the information is collected.	Some information is collected	Few information is collected
Completing Task	3	2	1
	Very Good	Good	Developing
	Neat and clean report prepared and presented.	Neatness is OK and with less creativity	less Neatness and with no creativity or file of other student is uploaded
	Very Good	Good	Developing
Contribution	-	2	1
	Excellent	Good	Poor
	Active participation and maximum contribution	Less participation and moderated contribution	Passive participation and less contribution

9. Evaluation Sheet of Attendee:

Activity Based Assessment Engineering Chemistry (100202) AY-2025-2026

Semester-1 (Sample Sheet: Information & Technology)

IT-B

Roll No.	Name of student	R1: Observations & Collecting Information (3)	R2: Completing Task (3)	R3: Contribution (2)	CO5 Marks
70	KADAM SHRUTI NITIN	3	3	1	7
71	KAKALIJ MAYUR SHARAD	3	3	1	7
72	KALAMKAR ANJALI NANDU	3	3	1	7
73	KALE ARYAN SHANTARAM	3	3	1	7
74	KALE RAHUL HEMANT	3	3	1	7
75	KANDE PAVAN MANIK	3	3	2	8
76	KANDE SUSHANT SANTOSH	3	3	1	7
78	KARPE SARTHAK SUNIL	3	3	0	6
79	KEDAR GAURAV RAVINDRA	3	3	0	6
80	KHADKE PRANJAL MANOJ	3	3	1	7
81	KHAIRE AKSHADA SURESH	3	3	0	6
82	KHAIRNAR NAMRATA SANJAY	3	3	1	7
83	KHAIRNAR TANMAY KAILAS	3	3	0	6
84	KHALKAR OM SUNIL	3	3	1	7
85	KHANDVE SARANG SUJIT	3	3	1	7
86	KHODE MALATI YOGESH	3	3	1	7
87	KINHIKAR JYOTIRADITYA RHISHIKESH	3	3	0	6
88	KIRKIRE ASHWINI BHAURAO	3	3	1	7
89	KOKATE KARTIK JAGANNATH	3	3	0	6
90	KOLHE TUSHARS AHEBRAO	3	3	0	6
91	KOTHAWADE AARNAV SACHIN	3	3	1	7
92	KOTHAWADE SHRAVANI HARISH	3	3	1	7
93	KSHIRSAGAR HARSHADA YOGESH	3	3	0	6
94	KULKARNI SHREYAS SACHIN	3	3	1	7
95	KULKARNI SHUBHAM MAHESH	3	3	0	6
96	KUSHARE AADITYA DILIP	3	3	0	6
97	LABHADE YOGESH DATTATRAY	3	3	0	6

98	LONDHE JAYESH ASHOK	3	2	1	6
99	MAHAJAN RIYA SANKALP	3	2	1	6
100	MAHALE KAVERI SHIVDAS	3	2	1	6
101	MAHALE PRASANNA PANDIT	3	2	1	6
102	MAHALE KHUSHI VINOD	3	3	0	6
103	MALI VIRAJ SANTOSH	3	3	1	7
104	MALVE SARVESHA KIRAN	3	3	1	7
105	RANDIVE OM MANIK	3	3	0	6
106	MANIYARARSHINRAUF	3	3	1	7
107	MARATHE KUNDAN SATISH	3	3	0	6
108	MEDHI VEDANT VIVEK	3	3	0	6
109	MISAL AIDTYA BALU	3	3	0	6
110	MISAR VAISHNAVI RUPCHAND	3	3	1	7
111	MOGARE RUTUJA VILAS	3	3	0	6
112	MORE SHRAVANI UTTAM	3	3	1	7
113	MORE VAISHNAVI VIJAY	3	3	1	7
114	MUSMADE HARSHAL KAILAS	3	3	1	7
115	NAGARE ASMITA RAVI	3	3	1	7
116	NAIDOO RIYA MAHESH	3	3	1	7
117	NARUKA PARAMVEERSINGH S.	3	2	0	5
118	NAVPUTE ADITYA KARBHARI	3	3	2	8
119	NIKAM SHREERAJ ANAND	2	3	0	5
120	NIKAM PARTH BAPU	3	3	1	7
121	NIKUMBHE ANKITA BHARAT	3	3	1	7
122	PAGAR PRANJAL CHANDRASHEKHAR	3	3	2	8
123	PAGAR PRACHI PARASHRAM	3	3	2	8
124	PAGAR SWARAJ BALWANT	3	3	0	6
125	PAGARE PRIYASH YOGESH	3	3	0	6
126	PAGARE SUYASH ANNA	3	3	1	7
127	PAIKRAO GOURAV RAHUL	3	3	1	7
128	PANSARE SHUBHANGI NITIN	3	3	1	7
129	PATEL KRISHNA VIJAY	3	3	2	8
130	PATHAK PARTH CHETAN	3	2	0	5
131	PATIL KOMAL PANKAJ	3	3	1	7
132	PATIL VAISHNAVI DNYANESHWAR	3	3	1	7
133	PATIL CHAITANYA BHAGWAN	3	3	1	7

134	PATIL CHAITALI DILIP	3	3	1	7
135	PATIL NIKHIL NANDKUMAR	3	3	1	7
136	PATIL HITESH VINOD	3	3	2	8
137	PATIL HITEKSHA LUBHANSING	3	3	2	8
138	PATIL RUDRAKSH PANKAJ	3	2	0	5

IT-C

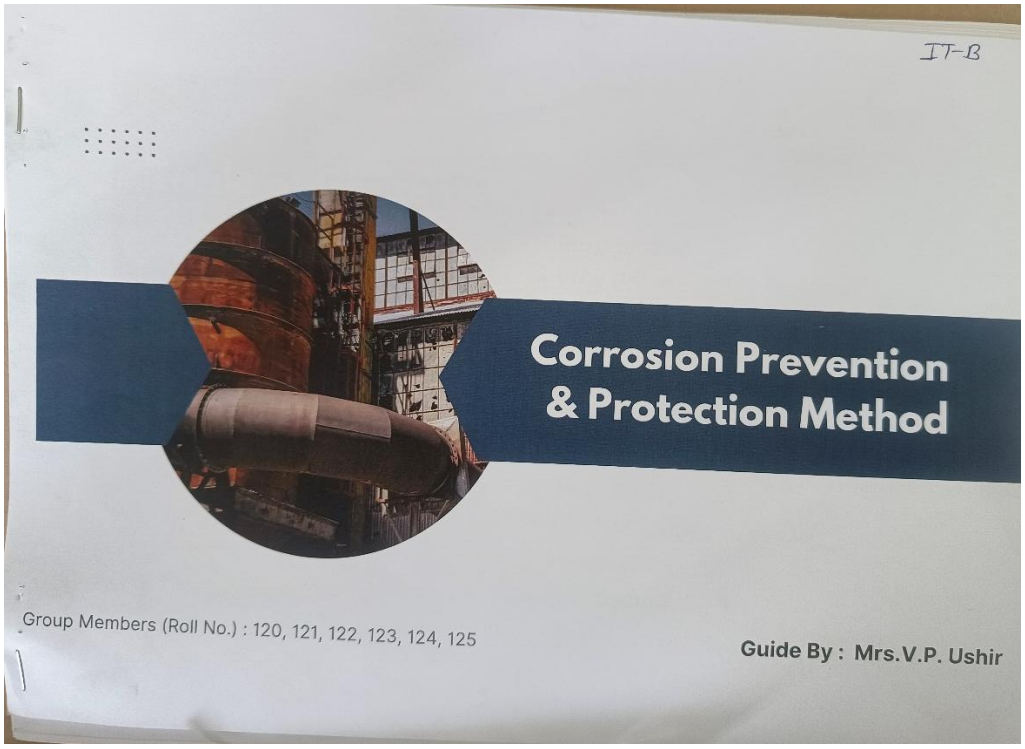
Roll No.	Name of student	R1: Observations & Collecting Information (3)	R2: Completing Task (3)	R3: Contribution (2)	CO5 Marks
139	PAWAR PRANAV NAMDEV	3	2	1	6
140	PAWAR PRANJAL KISHOR	3	3	1	7
141	PAWAR TANMAY NANDKISHOR	3	3	1	7
142	PAWAR MANESH RAVINDRA	3	3	1	7
143	PAWAR YASH PRADIP	3	3	0	6
144	PAWAR DIVYANKA PRAKASH	3	3	1	7
145	PAWAR YASH NARENDRA	3	2	0	5
146	PAWAR RIYA KIRAN	3	3	0	6
147	PUND RIDDHI DATTATRAY	3	3	2	8
148	PUND SANKET AMBADAS	3	3	0	6
149	RAJPUT RITESH RAJENDRA	3	3	0	6
150	RASAL RUTUJA NARAYAN	3	3	0	6
151	RAY ANIKET RAMANAND	3	3	0	6
152	ROKADE PRIYA ARUN	3	3	1	7
153	ROKADE SARTHAK SANTOSH	3	3	0	6
154	ROTE ADITYA SANTOSH	3	3	1	7
155	SANAP VIVEK BALKRISHNA	3	3	0	6
156	SANGALE BHUSHAN DATTU	2	3	0	5
157	SANGALE ABHISHEK MADHAV	3	3	0	6
158	SARADA PURVA PURUSHOTTAM	3	3	2	8
159	SAVANDRE ANJALI DHRUVESH	3	3	2	8
160	SAXENA SESHANGI SANDEEP	3	3	2	8
161	SAYYAD ALFIYA EKABAL	3	3	0	6
162	SAYYED MADIHA ARIF ALI	3	3	0	6
163	SHELKE SHUBHAM DEVIDAS	3	3	2	8
164	SHENDGE SRUSHTI VILAS	3	3	1	7

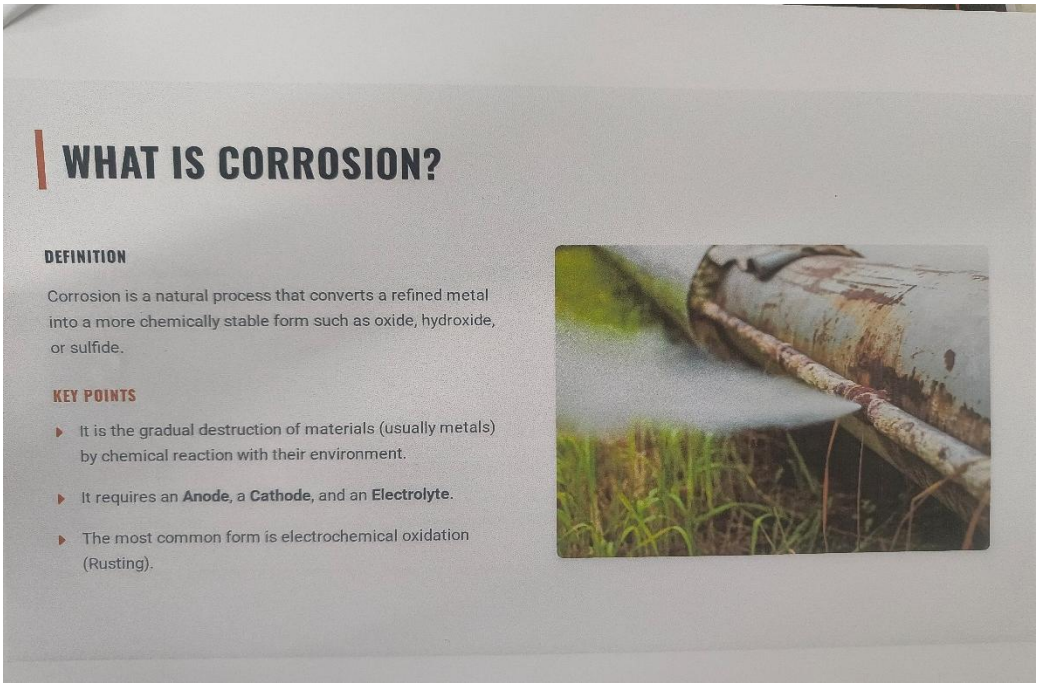
165	SHEWALE DARSHAN MAHENDRA	3	3	2	8
166	SHEWALE PRATIKSHA MADHUKAR	3	3	2	8
167	SHINDE PRACHI BHAGWAN	3	3	2	8
168	SHINDE ANIKET KAILAS	3	3	2	8
169	SHINDE SANSKRUTI DEEPAK	3	3	0	6
170	SHINDE PRANIT MADHUKAR	3	3	1	7
171	SHINDE ANUSHKA SOMNATH	3	3	2	8
172	SHINDE VEDANT HEMRAJ	3	3	0	6
173	SHIVADE PARTH KAILASNATH	3	3	1	7
174	SOMWANSHI SHREYA MAHENDRA	3	3	2	8
175	SONAWANE VAISHNAVI VILAS	3	3	2	8
176	SONAWANE HEMANGI GANGADHAR	3	3	0	6
177	SONAWANE YASHODEEP SATISH	3	3	2	8
178	SONAWANE ADITYA SUNIL	3	3	2	8
179	SONAWANE VEDANT MARUTI	3	3	1	7
180	SONAWANE VIVEK VITHOBA	3	3	0	6
181	SONAWANE TUSHAR SHARAD	3	3	1	7
182	SONAWANE SHREEVARDHAN SUNIL	3	3	1	7
183	SONONE HARSH NITIN	3	3	0	6
184	SUKLE SWASTI AMOL	3	3	0	6
185	SURYAVANSHI TANESH SITARAM	3	3	2	8
186	SURYAWANSHI LAKHAN TUKARAM	3	3	0	6
187	SURYAWANSHI YUVRAJ VINAYAK	3	3	0	6
188	TAMBE RAHUL EKNATH	3	3	1	7
189	TAMHANKAR CHAITANYA N.	3	3	1	7
190	TAMKHANE KOMAL SANTOSH	3	3	1	7
191	TAYADE ROHAN VITTHAL	3	3	1	7
192	THORAT PRANAV YOGESH	3	3	1	7
193	WAGH ROHIT SANDIP	3	3	1	7
194	WAGH SHARAVANI PRAVIN	3	3	2	8
195	WAGH SHANTANU PRAMOD	3	2	0	5
196	WAGHCHAOURE JANHVI GURUDEEP	3	3	1	7
197	WAGHMODE ANIKET BAPURAO	3	3	1	7
198	YADAV VEDANT DIPAK	3	3	1	7
199	YEOLA UTKARSHA GIRISH	3	3	2	8
200	YEOLE ATHARV VILAS	3	3	2	8
201	ZANWAR HARSH SATYANARAYAN	3	3	2	8

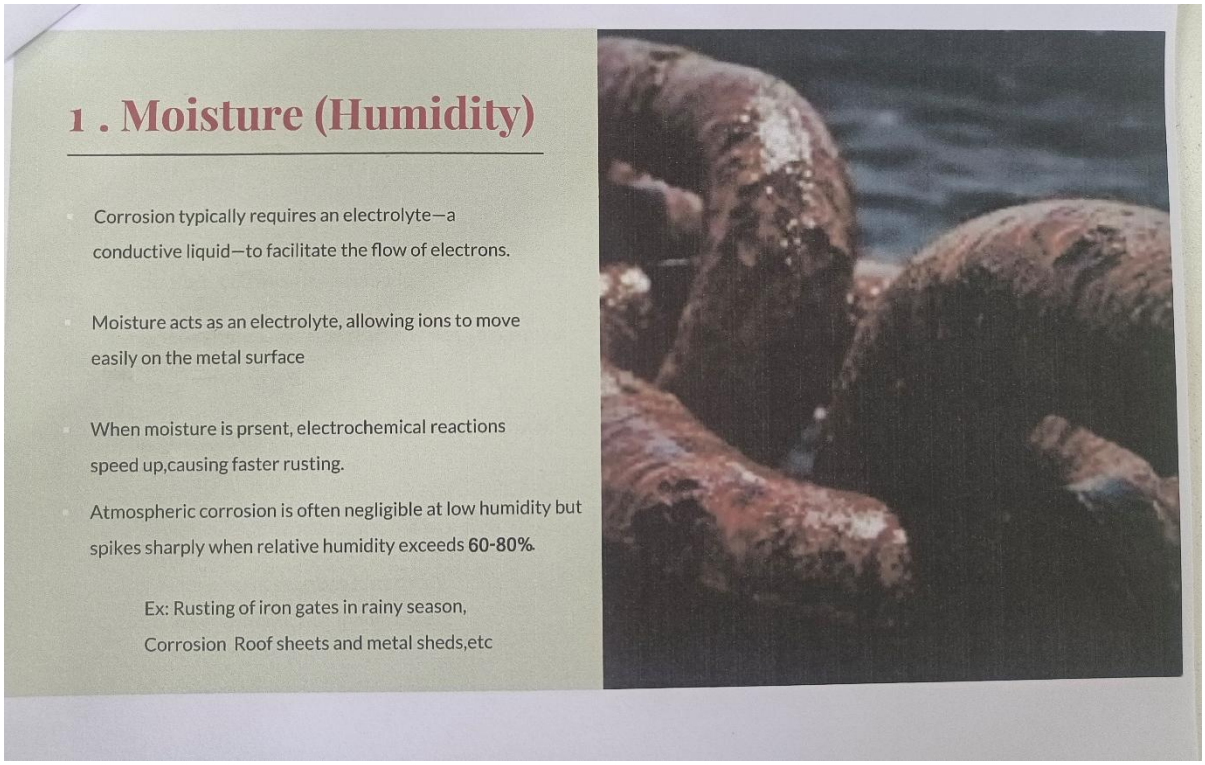
10. Rubrics for Evaluation

Rubrics	Very Good (3)	Good (2)	Developing (1)
Observations & Collecting Information (3)	3	2	1
Completing Task (3)	3	2	1
Contribution (2)	-	2	1

11. Activity Picture







12. For review and critique contact: e-mail address of faculty and HOD

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