MARATHA VIDYA PRASARAK SAMAJ'S
KARMAVEER ADV. BABURAO GANPATRAO THAKARE
COLLEGE OF ENGINEERING
Permanently Affiliated to Savitribai Phule Pune University Vide Letter No: CA/1542
& Approved by AICTE New Delhi Vide Letter No: 740-89-32 (E) ET/98
AISHE Code - C-41622
KBTCOE
NAAC
www.kbtcoe.org

Department of Engineering Science

Innovative Teaching Method - Report

Academic Year –2020-21	Class -FE
Semester–II	Date:30/7/2021
CO:CO1,CO2,CO3,CO4,CO5,CO6	PO:PO1, PO2, PO9, PO12

1. **Title of Innovation method/activity: Mind map** by using Google Classroom
2. Link shared to the students:
3. Name of Faculty: Ms .J. J. Nerkar, Ms.J.V.Pagar, Ms.V.A.Tamboli
4. Course :Engineering Mathematics-II (C108)
5. Objective of Method
    a. Clear the concept.
    b. It helps students to think individually.
    c. More involvement of students.

6. Topic Covered through Activity

Engineering Mathematics-II

7. Description of method with Benefits (8 –10lines)

Description of method

Monitor and support students for performing Activity:
By using this method we are able to check the concept understand by the students. Also students get engage and show their creativity while preparing Mind Map. Students are able to revise the 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 revised the topic.
- Students know the application which increase the interest of students in Mathematics

8. Roles and Responsibilities

- **Teacher**
    - Elaborate regarding activity.
    - Encourage students to prepare Mind Map and upload it on Google Classroom.
    - 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 Mind Map and upload the PDF on or before the given time.
    - Actively participate in Mind Map activity and contribute their knowledge

regarding the topic covered.

9. Assessment Tools :Maximum Marks 25

Involvement , Understanding and performance	10	7	4
	Excellent	Good	poor
	All topics are covered with correct procedure and application	some topics are covered with correct procedure and application	Few topics are covered with some error in procedure and application is missing
Presentation and Organization	10	7	4
	Excellent	Good	poor
	Neatness is Good and with creativity	Neatness is OK and with less creativity	less Neatness and with no creativity or file of other student is uploaded
Timely submission	5	3	0
	Excellent	Good	poor
	submitted within deadline	late Submitted	not submitted

10. Evaluation sheet of attendee:

A-Involvement , Understanding and Performance (10)

B- Presentation and Organization (10)

C- Timely submission (5)

Div-F

Roll No.	Name of student	A	B	C	Total(25)
01	Aditya Patil	7	10	5	22
02	Divya Patil	7	10	5	22
04	Shruti Patil	7	10	5	22
05	Vineet Patil	7	10	5	22
06	Shweta Pawar	7	10	5	22
16	Tajane Vaishnavi	10	7	5	22
18	Rutuja Thakare	10	10	5	25
36	Vedant Pingale	7	7	5	19
38	Shardul Jiten	10	7	5	22
23	Pagar Tanuja	7	10	5	22
40	Patil Pranav	7	7	5	19
43	Salunke Pranav	7	7	5	19
44	Shinde Aayush	7	10	5	22
45	Rayate Gaurav	4	10	5	19
30	Shinde Geeta	4	10	5	19
46	Shinde Mansi	4	7	5	16

50	Sonawane Saurabh	4	7	5	16
52	Thete Tejashree	7	10	5	22
54	Wadje Vedant	10	7	5	22
55	Zinjurde Pratik	10	7	5	22
57	Rokade Tejas	7	10	3	20
66	Wani Nandini	7	10	5	22
57	Patil Aditi	10	7	5	22
39	Shelake Jaydip				
17	Tambat Eshwari	10	10	5	25
24	Patil Manish	10	7	5	22
26	Rane Pratik	7	10	5	22
53	Wadgaonkar Samaruddhi	10	7	5	22
42	Pawar Vaibhav	10	7	5	22

Div-C

Roll No.	Name of student	A	B	C	Total
06	Pawar Shantanu	7	7	5	19
08	Potdar Ojaswini	7	10	5	22
11	Sathe Prathamesh	7	7	5	19
15	Sutrave Aishwarya	10	7	5	22
20	Shaikh Sajid	7	10	5	22
21	Vaishnav Pragati	10	7	5	22
34	Shirsath Roshani	10	7	3	20
36	Sonawane Abhishekh	10	10	3	23
45	Patil Harshali	7	7	5	19
47	Patil Yashwardhan	7	7	5	19
48	Rajole Om	7	10	5	22
49	Randhir Pranjal	10	10	5	25
50	Salunkhe Janavhi	10	10	5	25
51	Sangale Hemant	7	7	3	17
52	Sangale Sakshi	10	10	5	25
55	Singh Arjun	7	7	3	17
58	Suryawanshi Aniket	7	7	5	19
16	Takne Chetana	7	7	5	19
02	Yashwant Patil	10	10	5	25
03	Pawar Aishwarya	10	7	3	20
04	Pawar Kushal	7	7	5	19
07	Pawar Vaishnavi	10	7	5	22
10	Rane Umesh	10	7	5	22
12	Shewale Pranjal	7	7	5	19
13	Shrivastav Sayali	10	10	5	25
17	Tandale Siddhi	10	10	5	25
19	Thombare Geeta	10	10	5	25
01	Patil Vedant	7	7	5	19
20	Uphade Abhishek	10	7	5	22
22	Vispute Prajwal	7	10	5	22
49	Udmale Harshad	10	7	3	20
05	Pawar Sanket	7	7	5	19

Div-A

Roll No.	Name of student	A	B	C	Total
12	Bhamare Yogita	10	7	3	20
13	Borave Vineet	7	7	3	17
15	Chavan Divya	10	7	5	22
19	Deshmukh Vaibhav	10	7	5	22
20	Wankhede Suraj	10	7	3	20
04	Avhad Rupali	7	7	5	19
16	Duseja Siddhi	10	7	5	22
50	Bankar Abhishek	7	7	5	19
54	Aher Shravani	10	7	3	20
07	Bhavsar Ekta	7	7	5	19
12	Dash Rohan	7	7	5	19
02	Aher Arpita	7	7	3	17
22	Sakshi Jadhav	10	7	5	22
23	Joshi Aaditya	7	7	3	17
03	Ahire Mansi	10	7	5	22
06	Bhandare Samruddhi	7	7	5	19
08	Borase Raina	7	7	5	19
09	Borse Riddhi	10	10	3	23
48	Bagul Aditya	7	7	3	17
44	Aher Atharv	7	7	3	17
51	Benake Avintika	7	7	5	19
14	Deshmukh Sudhanshu	7	7	3	17
18	Gandhalikar Tejas	7	7	3	17
01	Biju Abin	7	7	3	17
15	Dhanavate Madhuri	7	7	3	17
45	Ahirrao Harshali	7	7	5	19
13	Deore Pratik	7	7	3	17
10	Chavhan Sakshi	10	7	5	22
19	Golesar Shruti	10	7	5	22
55	Rajkule Sohan	10	7	3	20
34	Bhadane Yash	7	7	3	17

Div-E

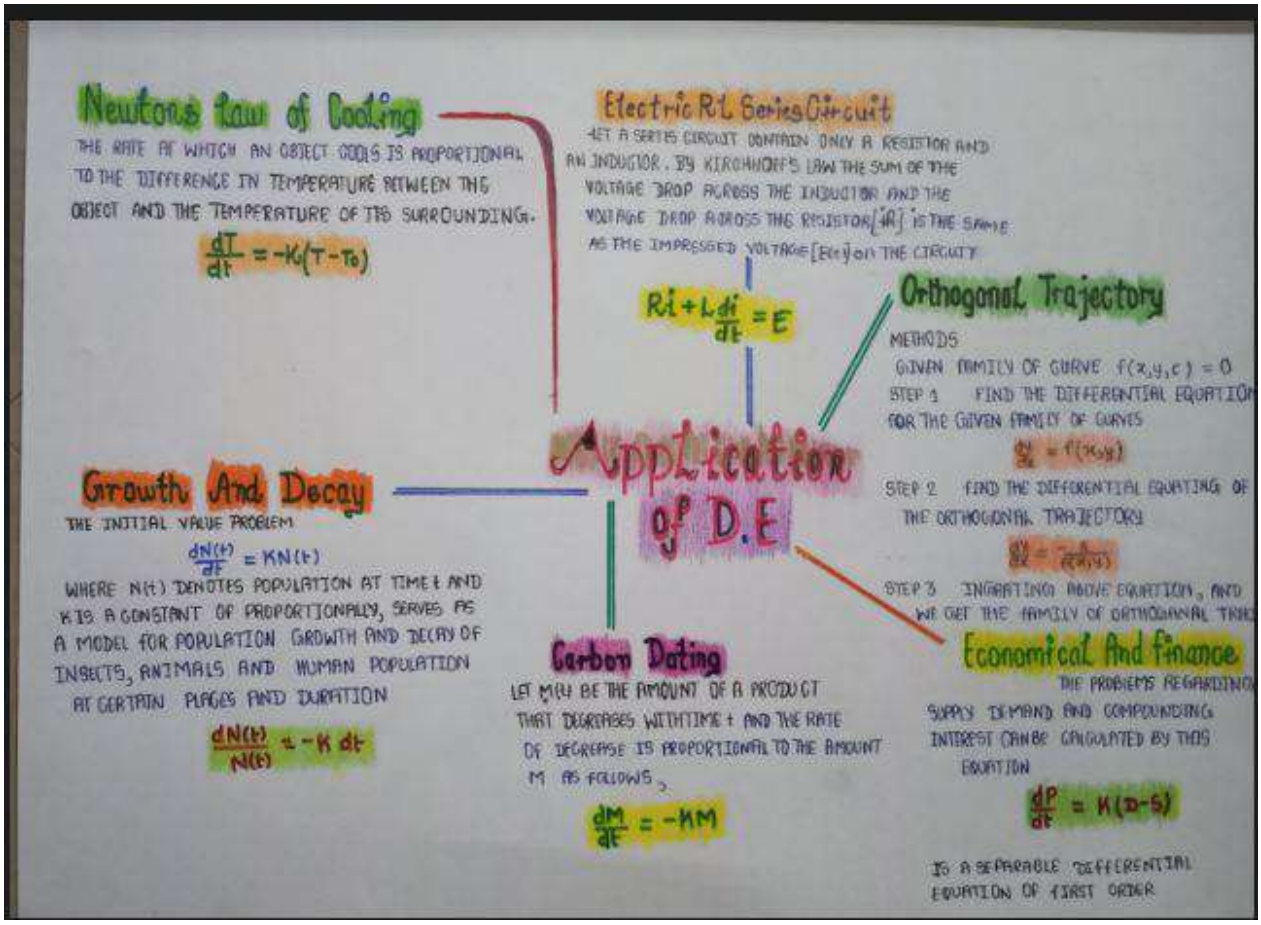
Roll No.	Name of student	A	B	C	Total(25)
01	Kshirsagar Vedika	10	7	3	20
19	Junghare Yogita	10	7	5	22
20	Gharte Sakshi	10	7	5	22
44	Kakade Devendra	10	7	5	22
22	Sarthak	7	7	5	19
24	Mahajan Rohit	10	7	5	22
25	Mahajan Aniket	10	7	3	20
26	Mali Kunal	10	7	5	22
28	Khan Farhan	10	7	3	20
04	Lajurkar Shravani	10	7	5	22
29	Mahajan Jayesh	7	7	3	17
34	Khule Sahil	10	7	5	22
54	Patil Gaurav	7	7	3	17

09	Mishra Vishvesh	7	7	5	19
35	Magar Aarti	10	7	3	20
37	Musale Sakshi	10	7	5	22
38	Muthal Shubham	7	7	3	17
39	Ozha Ankita	10	7	5	22
26	Mali Manas	7	7	3	17
32	Patil Kunal	7	7	3	17
12	Muthal Bhawna	10	7	5	22
14	Nikam Ashwini	10	7	5	22
10	More Nandini	10	7	5	22
11	Mulane Janhavi	7	10	3	20
16	Nimse Uday	10	7	5	22
20	Patel Janhvi	10	7	5	22
21	Patel Srushti	10	7	5	22
18	Pande Kunjal	7	7	5	19
17	Pal Rohit	7	10	3	20
07	Mahajan Rudra	7	7	3	17
57	Ikhe Rushikesh	7	7	3	17
22	Pathak Sakshi	10	7	5	22
23	Gangure Tejas	10	10	5	25

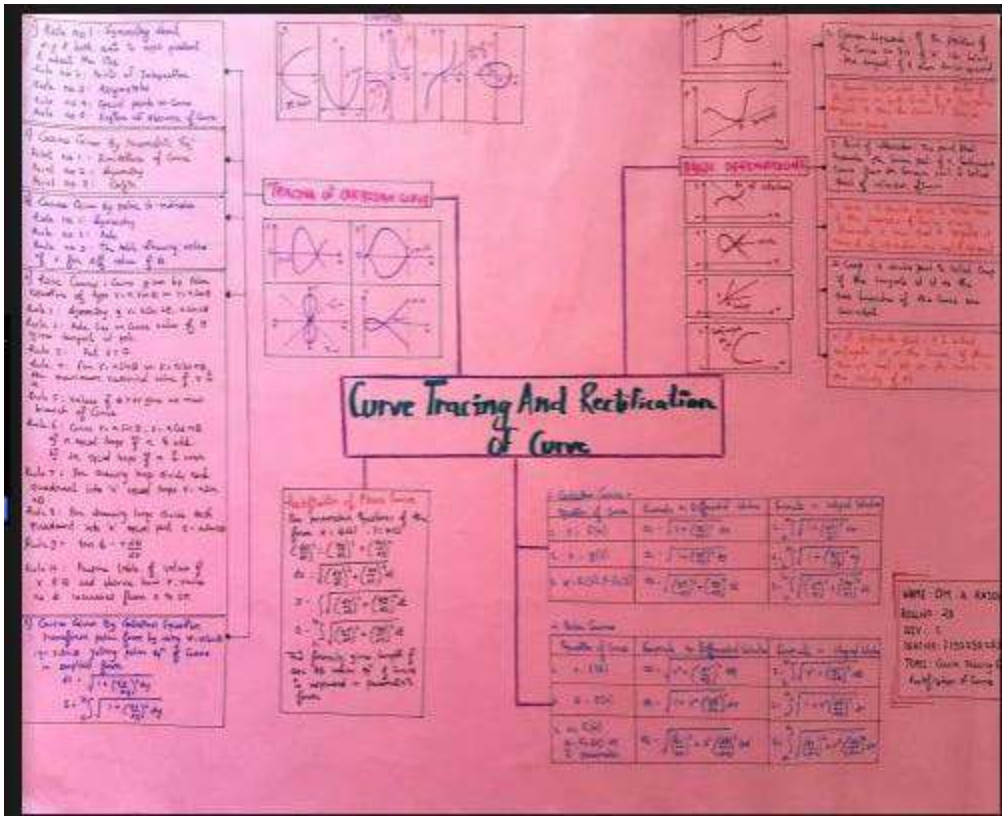
11. Impact Analysis

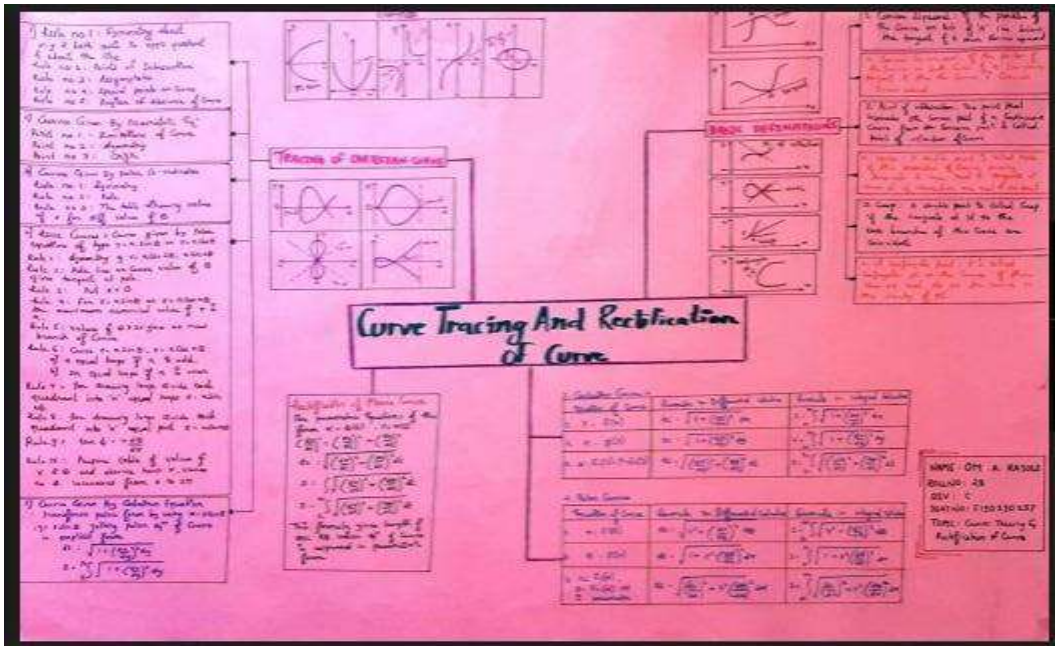
Sr. No.	3-High/Excellent	2-Moderate /Average	1-Slight/Poor
1. Did you understand and cover the objective of the activity?	81%	18.5%	-
2. Do you find that methodology is helpful to Revised the content of syllabus?	75.6%	24.4%	
3. Does the content covered are relevant and will be helpful as a Life-long learning?	75.6%	23.2%	1.2%
4. Can you want to conduct such activity again?	68.5%	29.8%	1.8%

12. Activity Picture




APPLICATIONS OF FIRST ORDER DIFFERENTIAL EQUATIONS
Orthogonal Trajectory
Orthogonal Trajectory
Trajectory
Orthogonal Trajectories
The Temperature of a body changes at a rate which is proportional to the difference in temp btw that of the surrounding medium and that of the body itself
Newton's Law of Cooling
Algebraic sum of the forces acting on a body along a given direction is equal to the product of
Kirchhoff's Law:
The algebraic sum of the voltage drops around any closed circuit is equal to the resultant electromotive force in the circuit
The algebraic sum of the currents flowing into any node is zero
HEAT FLOW
The quantity of heat in a body is proportional to its mass and temperature
Heat flows from a higher temperature to the lower temperature.
Simple Electric Circuits
Voltage drop across Inductance
Voltage drop ACROSS resistors
Voltage drop across Inductance


Curve Tracing And Rectification of Curve


Curve Tracing And Rectification of Curve

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

nerkar.jyoti@kbtcoe.org , pagar.jayashri@kbtcoe.org

tamboli.vaishali@kbtcoe.org , hod.enggsci@kbtcoe.org

Ms. V.A.Tamboli
Ms. J.V.Pagar

Ms. J. J. Nerkar Subject Incharge	Ms. J. V. Pagar Module Coordinator	Ms. J. J. Nerkar HOD