



**Course Title: DC Machines and Transformers Lab** 

Following documents are available in Course File.

S.No.	Points	Yes	No
1	Institute and Department Vision and Mission Statements	V	
2	PEO & PO Mapping	√	
3	Academic Calendar	√	
4	Subject Allocation Sheet	V	
5	Class Time Table, Individual Timetable (Single Sheet)	V	
6	Syllabus Copy	V	
7	Course Handout	√	
8	CO-PO Mapping	√	
9	CO-Cognitive Level Mapping	V	
10	Lecture Notes		NA
11	Tutorial Sheets With Solution		NA
12	Soft Copy of Notes/Ppt/Slides		NA
13	Sessional Question Paper and Scheme of Evaluation		NA
14	Best, Average and w eak Answer Scripts for Each Sessional Exam. (Photocopies)	V	
15	Assignment Questions and Solutions		NA
16	Previous University Question Papers		NA
17	Result Analysis	V	
18	Feedback From Students	V	
19	Course Exit Survey		V
20	CO Attainment for All Mids.		V
21	Remedial Action.		V

**Course Instructor / Course Coordinator** 

**Course Instructor / Course Coordinator** 





# **COURSE OBJECTIVES**

Academic Year

: 2022-23

Semester

: I

Name of the Program: **B.Tech** 

Year: II

Course/Subject: **DCMT Lab**.

Course Code: GR20A2029

Name of the Faculty: V Vijaya Rama Raju (Assoc.Prof), M.Rekha(Asst.Prof) Dept: EEE.

On completion of this Subject/Course the student shall be able:

S.No	Objectives							
1	Strong background in different types of DC generators, Motors and Transformers, their							
	construction, operation and applications							
2	Understanding the various lab experiments connected with dc generators and there by achieve the							
	design concepts.							
3	Knowledge on application of dc motor concepts with respect to the performance characteristics							
	of dc motors.							
4	Knowledge on application of dc generator concepts with respect to the performance							
	characteristics of dc generators.							
5	Concept of back-to-back connection of a transformer and three phase to two phase conversion by							
	Scott connection.							





# **COURSE OUTCOMES**

Academic Year : 2022-23

Semester : I

Name of the Program: B.Tech Year: II

Course/Subject: DCMT Lab. Course Code: GR20A2029

Name of the Faculty: V Vijaya Rama Raju (Assoc.Prof), M.Rekha(Asst.Prof) Dept: EEE.

On completion of this Subject/Course the student shall be able:

S.No	Outcomes
1	Identify various parts of electrical DC machines and Transformers.
2	Develop knowledge helpful for application of DC machines and Transformers.
3	Demonstrate control of different DC Machines.
4	Illustrate the performance of dc machines using different testing methods.
5	Determine the parameters of equivalent circuit of single phase transformer and performance.

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## **Department/Program-EEE**

### VISION OF THE INSTITUTE

To be among the best of the institutions for engineers and technologists with attitudes, skills and knowledge and to become an epicenter of creative solutions.

### MISSION OF THE INSTITUTE

To achieve and impart quality education with an emphasis on practical skills and social relevance.

### VISION OF THE DEPARTMENT

To impart technical knowledge and skills required to succeed in life, career and help society to achieve self sufficiency.

### MISSION OF THE DEPARTMENT

- To become an internationally leading department for higher learning.
- To build upon the culture and values of universal science and contemporary education.
- To be a center of research and education generating knowledge and technologies which lay groundwork in shaping the future in the fields of electrical and electronics engineering.
- To develop partnership with industrial, R&D and government agencies and actively participate in conferences, technical and community activities.





# **Programme Educational Objectives (B.Tech. – EEE)**

This Programme is meant to prepare our students to professionally thrive and to lead. During their progression:

#### Graduates will be able to

- PEO 1: Have a successful technical or professional careers, including supportive and leadershiproles on multidisciplinary teams.
- PEO 2: Acquire, use and develop skills as required for effective professional practices.
- PEO 3: Able to attain holistic education that is an essential prerequisite for being a responsible member of society.
- PEO 4: Engage in life-long learning, to remain abreast in their profession and be leaders in ourtechnologically vibrant society.

# **Programme Outcomes (B.Tech. – EEE)**

### At the end of the Programme, a graduate will have the ability to

- PO-1: Ability to apply knowledge of mathematics, science, and engineering.
- PO-2: Ability to identify, formulate, analyze engineering problems using engineering sciences.
- PO-3: Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety.
- PO-4: Ability to design and conduct experiments, as well as to analyze and interpret data with valid conclusions.
- PO-5: Ability to utilize experimental, statistical and computational methods and tools necessary for modelling engineering activities.
- PO-6: Ability to apply reasoning informed by the relative knowledge to evaluate societal, health, safety, legal and cultural issues and tasks applicable to the professional engineering practice.
- PO-7: Ability to adapt broad education necessary to understand the impact of engineering solutions and obtain sustainability in a global, economic, environmental, and societal context.
- PO-8: Ability to discover ethical principles and bind to professional and ethical responsibility.
- PO-9: Ability to function as an individual and in multi-disciplinary teams.
- PO-10: Ability to communicate effectively on complex activities in engineering community and society.
- PO-11: Ability to develop Project management principles and apply in various disciplinary environments.
- PO-12: Recognition of the need for, and an ability to engage in life-long learning.

# **Program Specific Outcomes(PSOs):**

- PSO-1: Graduates will interpret data and able to analyze digital and analog systems related to electrical and programming them.
- PSO-2: Graduates will able to demonstrate, design and model electrical, electronic circuits, power electronics, power systems and electrical machines.





# **DCM LAB RUBRIC**

**OBJECTIVE**: Strong background in different types of DC generators, Motors and Transformers, their construction, operation and applications

STUDENT OUTCOME: Identify various parts of electrical DC machines and Transformers.

S.No.	Student Name	Performance Criteria	Unsatisfactory	Developi ng	Satisfactor y	Exemplary	Scor e
			1	2	3	4	
1.		Research & Gather Information	Does not collect any information that relates to the topic.	Collects very little informati onsome relates to the topic	Collects some basic informatio nmost relates to the topic.	Collects a great deal Of informationall relates To the topic.	3
		Fulfill team role's duty	Does not perform any Duties of assigned team role.	Performs very little duties.	Performs nearly all duties.	Performs all duties of Assigned team role.	3
		Share Equally	Always relies on others to do the work.	Rarely does the assigned workoften needs remindin g.	Usually does the assigned work-rarely needs reminding .	Always does the Assigned Work Without having to Be reminded.	3
		Listen to other team Mates	Is always talkingnever allows anyone else to speak.	Usually doing most of the talking-rarely allows	Listens, but sometimes talks too much.	Listens and speaks a Fair amount.	4

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and the last			others to			
(SGRet)		RAJU RAN	Gp&aRAJ (	J		
Dep		F ENGINEERING AN ctrical & Electr	onics Engi		Average score	3.5
2.	Research & Gather Information	Does not collect any information that relates to the topic.	Collects very little informati onsome relates to the topic	Collects some basic informatio nmost relates to the topic.	Collects a great deal of informationall relates to the topic.	3
	Fulfill team role's duty	Does not perform any duties of assigned team role.	Performs very little duties.	Performs nearly all duties.	Performs all duties of assigned team role.	3
	Share Equally	Always relies on others to do the work.	Rarely does the assigned work-often needs remindin g.	Usually does the assigned workrarely needs reminding .	Always does the assigned work without having to be reminded.	4
	Listen to other team mates	Is always talkingnever allows anyone else to speak.	Usually doing most of the talking-rarely allows others to speak.	Listens, but sometimes talks too much.	Listens and speaks a fair amount.	3
					Average score	4
3	Research & Gather	Does not	Collects	Collects some	Collects a great deal	3

Information collect any very little basic of	
GOKARAformation information information	
institute of that relates to onsome nmostall relates	
Department of Electrical & Electronics Engineerings to	
to the to the the topic.	
topic topic.	
Fulfill teamDoes notPerformsPerformsPerforms	3
role's duty perform any very little nearly all all duties of	:
duties duties. duties. assigned	
of assigned team role.	
team role.	
Share Always relies Rarely Usually Always	4
<b>Equally</b> on others to does the does the	
do assigned assigned assigned	
the work.   work   work	
often rarely without	
needs needs having to	
remindin reminding be	
g. reminded.	
Listen to Is always Usually Listens, Listens and	3
other team talkingnever doing but speaks a	
mates most of sometimes fair	
allows anyone the	
else to speak. talks too amount. talking much.	
rarely	
allows	
others to	
speak.	
Average	4
score	4





### GUIDELINES TO STUDY THE COURSE / SUBJECT

Academic Year : 2022-23

Semester : I

Name of the Program: B.Tech Year: II

Course/Subject: DCMT Lab. Course Code: GR20A2029

Name of the Faculty: V Vijaya Rama Raju (Assoc.Prof), M.Rekha(Asst.Prof) Dept: EEE.

## **Course Design and Delivery System (CDD):**

The Course syllabus is written into number of learning objectives and outcomes. These learning objectives and outcomes will be achieved through lectures, assessments, assignments, experiments in the laboratory, projects, seminars, presentations, etc. Every student will be given an assessment plan, criteria for assessment, scheme of evaluation and grading method.

The Learning Process will be carried out through assessments of Knowledge, Skills and Attitude by various methods and the students will be given guidance to refer to the text books, reference books, journals, etc.

## The faculty be able to –

- Understand the principles of Learning
- Understand the psychology of students
- Develop instructional objectives for a given topic
- Prepare course, unit and lesson plans
- Understand different methods of teaching and learning
- Use appropriate teaching and learning aids
- Plan and deliver lectures effectively
- Provide feedback to students using various methods of Assessments and tools of Evaluation
- Act as a guide, advisor, counselor, facilitator, motivator and not just as a teacher alone





# **COURSE SCHEDULE**

Academic Year : 2022-23

Semester : I

Name of the Program: B.Tech Year: II

Course/Subject: DCMT Lab. Course Code: GR20A2029

Name of the Faculty: V Vijaya Rama Raju (Assoc.Prof), M.Rekha (Asst.Prof) Dept: EEE.

S.No	No.of	Date	Experiment
<b>51</b> 10	hours	2400	2per.menv
1	3	A1:25/10/22	Swinburne's Test and Speed Control of a DC Shunt Motor
		A2:27/10/22	•
2	3	A1:1/11/22	Brake Test on a DC Shunt Motor
		A2:3/11/22	
3	3	A1:8/11/22	Brake Test on a DC Compound Motor
		A2:10/11/22	
4	3	A1:15/11/22	Open Circuit Characteristics of a DC Shunt Generator and Load
		A2:17/11/22	Test on a DC Shunt Generator
5	3	A1:22/11/22	Load Test on a DC Series Generator
		A2:4/11/22	
6	3	A1:29/11/22	Load Test on a DC Compound Generator
		A2:1/12/22	
7	3	A1:6/12/22	Hopkinson Test
		A2:8/12/22	
8	3	A1:13/12/22	Fields Test
		A2:15/12/22	
9	3	A1:13/12/22	Separation of Core Losses of DC machine
		A2:15/12/22	
10	3	A1:27/12/22	OC,SC and Load test on single phase transformer
		A2:29/12/22	
11	3	A1:3/1/23	Sumpner's Test
		A2:5/1/23	
12	3	A110/1/23	Scott connection
		A2:12/1/23	



# Department of Electrical & Electronics Engineering ILLUSTRATIVE VERBS FOR STATING INSTRUCTIONAL OBJECTIVES

#### These verbs can also be used while framing questions for Continuous Assessment Examinations as well as for End – Semester (final)Examinations ILLUSTRATIVE VERBS FOR STATING GENERAL OBJECTIVES/OUTCOMES Know Understand Analyze Generate Comprehend Design **Evaluate** ILLUSTRATIVE VERBS FOR STATING SPECIFIC OBJECTIVES/OUTCOMES: A. COGNITIVE DOMAIN (KNOWLEDGE) 5 Comprehension Application Analysis Evaluation Knowledge of knowledge & **Synthesis Understanding** Of whole w .r.t. its comprehension constituents Judgment Define Convert Change Breakdown Categorize Appraise Identify Defend Compute Differentiate Combine Compare Describe (a Discriminate Label Demonstrate Compose Conclude List Procedure) Deduce Distinguish Compose Contrast March Distinguish Manipulate Separate Create Criticize Reproduce Modify Subdivide **Estimate** Devise Justify Explain why/how Predict Select Design Interpret State Extend Prepare Generate Support Generalize Relate **Organize** Give examples Show Plan Illustrate Solve Rearrange Infer Reconstruct Summarize Reorganize Revise

B. <u>AFFE</u> (	<u>E)</u> C.	C. PSYCHOMOTOR DOMAIN (SKILLS)				
Adhere	Resolve	Bend	Dissect	Insert	Perform	Straighten
Assist	Select	Calibrate	e Draw	Keep	Prepare	Strengthen
Attend	Serve	Compres	s Extend	Elongate	Remove	Time
Change	Share	Conduct	Feed	Limit	Replace	Transfer
Develop		Connect	File	Manipulate	Report	Туре
Help		Convert	Grow	Move Precisely	Reset	Weigh
Influence		Decrease	Increase	Paint	Set	





# SCHEDULE OF INSTRUCTIONS COURSE PLAN

Academic Year : 2022-23

Semester : I

Name of the Program: B. Tech Year: II

Course/Subject: DC Machines Lab Course Code: GR20A2036

Name of the Faculty: V Vijaya Rama Raju (Assoc.Prof),

M.Rekha(Asst.Prof) Dept.: EEE.

S .No	No. of Periods	Experiment	Date	Objectives & Outcomes Nos.
1	3	Swinburne's Test and Speed Control of a DC Shunt Motor	25/10/22 27/10/22	1,2,3,4&1,3
2	3	Brake Test on a DC Shunt Motor	1/11/22 3/11/22	1,2,3,4&1,3
3	3	Brake Test on a DC Compound Motor	8/11/22 10/11/22	1,2,3,4&1,3
4	3	Open Circuit Characteristics of a DC Shunt Generator and Load Test on a DC Shunt Generator	15/11/22 17/11/22	1,2,3,4&1,2,4
5	3	Load Test on a DC Series Generator	22/11/22 24/11/22	1,2,3,4&1,2,4
6	3	Load Test on a DC Compound Generator	29/11/22 1/12/22	1,2,3,4&1,2,4
7	3	Hopkinson Test	6/12/22 8/12/22	1,2,3,4&1,3
8	3	Fields Test	13/12/22 15/12/22	1,2,3,4&1,3
9	3	Separation of Core Losses of DC machine	13/12/22 15/12/22	1,2,3,4&1,3
10	3	OC,SC and Load test on single phase transformer	27/12/22 29/12/22	1,2,5&1,5
11	3	Sumpner's Test	3/1/23 5/1/23	1,2,5&1,5
12	3	Scott connection	10/1/23 12/1/23	1,2,5&1,5



# **Department of Electrical & Electronics Engineering**

### **SYLLABUS**

Academic Year: 2022-23

Course: B.Tech Year: II-I

Branch: EEE Code: GR20A2036

**Subject: DC Machines Lab** 

### **LIST OF EXPERIMENTS:**

- 1. Swinburne's Test and Speed Control of a DC Shunt Motor
- 2.Brake Test on a DC Shunt Motor
- 3.Brake Test on a DC Compound Motor
- 4.Open Circuit Characteristics of a DC Shunt Generator and Load Test on a DC Shunt Generator
- 5.Load Test on a DC Series Generator
- 6.Load Test on a DC Compound Generator
- 7. Hopkinson Test
- 8.Fields Test
- 9. Separation of Core Losses of DC machine
- 10.OC,SC and Load test on single phase transformer
- 11.Sumpner,s Test
- 12.Scott connection
- 13. Heat run test on transformer.
- 14. Seperation of core losses of a single phase transformer.
- 15. Hysterisis loss determination Parallel operation of Transformers.



# **Department of Electrical & Electronics Engineering**

GRIET/DAA/1H/G/22-23

09 May 2022

## Academic Year 2022-23

### II B.Tech. - First Semester

S. No.	EVENT	PERIOD DURATION				
1	Commencement of First Semester class work	10-10-2022				
2	I Spell of Instructions	10-10-2022 to 07-12-2022	9 Weeks			
3	I Mid-term Examinations	08-12-2022 to 12-12-2022	3 Days			
4	II Spell of Instructions	13-12-2022 to 07-02-2023	8 Weeks			
5	II Mid-term Examinations	08-02-2023 to 10-02-2023	3 Days			
6	Preparation/Break	11-02-2023 to 17-02-2023	1 Week			
7	End Semester Examinations (Theory/ Practical) Regular/ Supplementary	20-02-2023 to 11-03-2023	3 Weeks			
8	Commencement of Second Semester, AY 2022-23	13-03-2023				

# II B.Tech. - Second Semester

S. No.	EVENT	PERIOD DURATION				
1	Commencement of II Semester class work	13-03-2023				
2	I Spell of Instructions	13-03-2023 to 29-04-2023	7 Weeks			
3	Summer Vacation	01-05-2023 to 13-05-2023	2 Weeks			
4	I Spell of Instructions Contd	15-05-2023 to 27-05-2023	2 Weeks			
5	I Mid-term Examinations	29-05-2023 to 31-05-2023	3 Days			
6	II Spell of Instructions	01-06-2023 to 31-07-2023	8 Weeks			
7	II Mid-term Examinations	01-08-2023 to 03-08-2023	3 Days			
8	Preparation	04-08-2023 to 10-08-2023	1 Week			
9	End Semester Examinations (Theory/ Practical) Regular / Supplementary	11-08-2023 to 31-08-2023	3 Weeks			
10	Commencement of III B.Tech First Semester, AY 2023-24	01-09-20	)23			

J. Barrens

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Dean Academic Affairs

Copy to Principal, All HoDs, CoE





Day/Hour	9:00 - 9:5 0	9:50 - 10:40	10:40 - 11:3 0	11:30- 12:00	12:00- 12:45	12:45 - 1:30	1:30 - 2:15	2:15 - 3:0 0	Ro	oom No.
MONDAY					DCMT Lab(A1)			Theory	4401	
TUESDAY									Lab	2106/07
WEDNESDAY				BREA K					Lab	
THURSDAY				EΑ		DCMT :	Lab(A2	)	Class	D Karuna Kumar
FRIDAY									Incharge:	
SATURDAY								_		

HOD Co-ordinator





2022 -23 I sem Subject allocation sheet

II YEAR( GR20)	Section-A			
Electrical Circuit Analysis	G Sandhya Rani			
Principles of Analog Electronics	P R	avikanth		
DC Machines and Transformers	Dr Phan	eedra Babu B		
Electromagnetic Fields	Dr T Sı	ıresh Kumar		
Power Generation and Transmission	V Vijay	a Rama Raju		
Java Programming for Engine	CSE l	Dept. Staff		
Constitution of India	D Kar	una Kumar		
Value Ethics and Gender Culture	M F	rashanth		
Principles of Analog Electronics Lab	U Vijaya Lak	shmi/ M Prashanth		
DC Machines and Transformers Lab	V Vijaya Rama Raju / M Rekha			
III YEAR (GR20)	Se	ction-A		
Power System Analysis	Dr J Sridevi			
Power Electronics	Dr Pakkiraiah B			
Microproces sors and Microcontrol lers	Dr D Raveedhra			
Electrical and Hybrid Vehicles (PE-1)	Dr D G Padhan			
Cloud Computing (NPTEL)	P R	avikanth		
Power Systems Lab	Dr J Sridevi / V Usha	a Rani/ U Vijaya Lakshmi		
Power Electronics Lab	Dr Pakkiraiah	B/ G Sandhya Rani		
Microproces sors and Microcontrol lers Lab	Dr P Srividya De	vi/ M N Sandhya Rani		
IV YEAR(GR18)	Section-A	Section-B		
Power Systems – III	Dr P Srividya Devi	P Prashanth Kumar		
Electronics Design	Dr D S N M Rao	Dr D S N M Rao		
Electrical and Hybrid Vehicles (PE-III)	D Srinivasa Rao	D Srinivasa Rao		
High Voltage Engineering (PE-IV)	A Vinay Kumar	A Vinay Kumar		
Robotics	Anitha (Mech)			
Database Management Systems	D Sw	athi (CSE)		
Electronics Design Lab	P Ravikanth /Dr DSNM Rao	D Karuna Kumar/ V Usha Rani		





Project work - ( Phasel)	A Vinay Kumar/ D Srinivasa Rao	M N Sandhya Rani / G Sandhya Rani		
I/I BEE(GR20)	Theory	LAB		
EEE (1) BEE				
ECE (3) BEE	R Anil Kumar/ P Praveen Kumar / P			
IT (3) BEE	Prashanth Kumar/ K Sudha			
CSBS (1) PEE				
Design Thinking	Dr D	G Padhan		
Mech II/I (GR20)		А		
BEEE	M N Sa	andhya Rani		

Dr Phaneendra Babu B HOD,EEE





# **EVALUATION STRATEGY**

Academic Year : 2022-23		
Semester : I		
Name of the Program: B.Tech	Year: II	Section: A,B.
Course/Subject: DC Machines Lab	D 6	Course Code: GR20A2036
Name of the Faculty: V Vijaya Rama Raju (A M.Rekha(Asst.Prof)	.ssoc.Prof),	Dept.: EEE.
1. TARGET:		
A) Percentage for pass: 100%		
2. COURSE PLAN & CONTENT DELIVERY		
(Please write how you intend to cover the contents: solving numerical problems, demonstration of massignments, etc.)		
3. METHOD OF EVALUATION		
3.1 ☐ Daily Attendance		
3.2  Lab Record and Observation		
3.3 Projects		
3.4 ☐ Viva Voce		
3.5  Internal Examination		



# Department of Electrical & Electronics Engineering Result Analysis

Academic Year: 2022-23 Total No. of Students Registered: 69

 $Arrears\ Position-II\ year\ /\ I\ Semester$ 

Course		Total No Students		Total N Studen		No. of Student		Count o	of Students	with Grad	de Point		
		appea	red	Passed	l	Failed		<b>GP</b> (10)	GP (9)	GP (8)	GP (7)	<b>GP</b> (6)	GP (5)
VEGC		69		67		02		20	33	09	03	01	01
CI		69		67		02		14	22	19	09	02	01
ECA		69		50		19		00	03	04	14	17	12
PAE		69		66		03		01	14	24	13	10	04
DCMT		69		57		12		00	00	06	15	20	16
EMF		69		57		12		00	02	11	19	18	07
JPE		69		66		03		00	05	23	22	11	05
PAE La	ıb	69		65		04		16	09	15	13	07	05
DCMT	Lab	69		60		09		06	09	08	08	18	11
PGT		69		65		04		00	02	15	30	13	05
No.of tudents	All Pa		One Arrear		wo		Three Arrears		More than three arrear	s	Ov	verall % of	pass
<b>i</b> 9	46	C	)7	07	7		04		05		66.	.67%	

Performance overall Class Three Toppers

ROLL NO.	NAME	SGPA
	Siripuram Manisree	
21241A0257		8.93
	Divya Namani	
22245A0202		8.50
	Palleti Sri Padma Latha Reddy	
21241A0245		8.40

Class coordinator HOD, EEE





II B.Tech - I Sem (EEE)

SEC TIO		VEGC	CI	ECA	PAE	DCMT	EMF	JPE	PAE LAB	DCMT LAB	PGT
N	Course codes	GR20A200 2	GR20A200 3	GR20A202 3	GR20A202 4		GR20A202 6	GR20A202 8	GR20A202 9	GR20A2030	GR20A203 3
	TOTAL	69	69	69	69	69	69	69	69	69	69
	PASS	67	67	50	66	57	57	66	65	60	65
	PASS(%	97.1	97.10	72.46	95.65	82.60	82.60	95.65	94.20	86.95	94.20
			D. Karuna Kumar		Kanth	Dr B Phaneendra Babu	Dr T Suresh Kumar		Lakshmi/ M.	Vijayarama	V. Vijayarama Raju
	FACUL TY ID	1279	760	888	1178	1563	1494		692/1279	361/933	361



# Department of Electrical & Electronics Engineering Feedback



# GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

# Summation of Teacher's Appraisal by Students

Name of the Instructor	M. Rekha
Faculty ID	933
Branch	EEE
Class and Semester	II-A SEM I
Academic Year	2022-23
Subject Title	DC Machines and Transformers Lab
Total No. of Responses/class strength	67/69

Average rating on a scale of 4 for the responses considered:

S.No.	Questions	Average
4	How does the teacher explain the subject?	3.19
7	Knowledge and Preparation of teacher	3.63
3	The language and communication skills of the teacher is	3.31
4	Overall, how were the online classes conducted?	3.21
5	Rate your teacher's ability in interaction and clarifying the doubts	3.27
6	Rate your teacher's commitment in completing the syllabus	3.37
7	Rate your teacher's punctuality, usage of Audio, Visuals in online classes	3.40
8	Usage of teaching aids, real time examples and applications	3.25
9	Study material, PPTs, Conducting activities like quiz, etc.,	2.84
10	What is your overall opinion about the teacher?	3.12
10	What is your distance	3.26

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3.26



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Rem	аги	(54	DV I	131	ж	(P)

5- pr- a

Remarks by Principal:

Remarks by Director: