Supporting Documents:

- **Vision, Mission Statement of Institute**
- **Vision, Mission Statement of Department**
- > Academic Calendar of Institute and Department
- **Term Commencement Notice**
- > CO
- ▶ PO
- ➢ PEO
- > PSO
- Google Classroom Learning
- > Teaching Plan
- > Internal Assessment Question Paper
- **Continuous Internal Evaluation Sheet**
- Mini Project Report
- > Industrial Visit Report
- Workshop Report
- **Expert Lecture Report**
- > Project Presentation
- **Evaluation Sheet of Slow and Advanced Learners**
- **Remedial Classes for Slow Learners**
- Faculty Feedback by students



Shri. Gopinath Mahadeo Vedak Pratishthan's G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

VISION

To create the best environment for transforming the young generation in to Engineering professionals with good human values for betterment of society.

MISSION

- To be a student centric Institute with quality education.
- To advance professional development of the learner through Industry-Institute interaction.
- To make the student job ready and fulfill their career aspirations.
- To provide assistance for placement & entrepreneurship development.
- To enhance socio economic development of the individuals.



Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering

Vision

The vision of the Civil Department is to get the global recognition as an outstanding engineering institute, continuously striving in pursuit of excellence in teaching, learning, research and entrepreneurship and which will produce the quality engineers to meet the ever changing needs of the industry and the society.

Mission

- To provide a platform to the students to enrich the technical and social skills to make them ready for global competition.
- To encourage to the students to use the different modern tools and multidisciplinary approach for solving real life problems.
- To create the awareness about the social and environmental responsibilities.
- To support them to enhance analytical and logical skills for problem solving.
- To develop coalition with other leading institutes of learning and research, industry and alumni for excellence in teaching, research and entrepreneurship.





Shri. Gopinath Mahadeo Vedak Pratishthan's

G.M. Vedak Institute of Technology, Tala, Raigad. (College of Engineering)

							ACADEMIC CALENDER : ACADEMIC YEAR :	Employ States Section.		
MONTH	М	7	w	T	F	5	S	GMVIT EVENT	MUMBAI UNIVERSITY EVENT	PUBLIC HOLIDAYS
					1	2	ů.			
	4	5	6	7	8	9	1			
JANUARY	11	12	13	14	15	16	1			
	18	19	20	21	22	23	2	Workload Distribution to Teaching & Non-Teaching Staff		
	25	26	27	28	29	30	3:	25 Jan-Commencement of Term	25 Jan-Commencement of Term	26 Jan - Republic Day
	1	2	3	4	5	6	100	1 Feb-Elective Subject Finalization for BE		
FEBRUARY	8	9	10	11	12	13	14			
	15	16	17	18	19	20	21			
	22	23	24	25	26	27	28			
	1	2	3	5 A				4-6 March- Internal Assessment 1 (Sem- I & III)		
	8	9	10	11	12	13	14	9 March- Display of IA-I Results (Sem I &III)		11 March- Maha Shivratri
MARCH	15	16	1	18	19	20	21	17-19 March-Internal Assessment - I (Sem IV, VI&VIII)		
_	22	23	24	25	26	27	28	23 March- Display of IA-I Results (Sem IV, VI&VIII)		,
	29	30	3					30-31 March- Internal Assessment II(5em-III)		29 March- Holi
				1	2	3	_	2 April- End of term for DSE (Sem-III)		2 April -Good Friday
2.25	5	6			9	10		2 April- Display of IA-II Results Sem-III)	10-17 April - University theory exam (DSE SEM-III)	13 April- Gudi Padwa
APRIL	12	13	14	15	16	17	18	7-9 April- Internal assessment -II (Sem-I)	10 April- End of Term (Sem-I)	14 April- Ambedkar Jayanti
	19	20	21	22	23	24	25	12 April- Display of IA-II Results (Sem-I)	15-20 April -Oral/ Practical exam (FE SEM-I)	21 April- Ram Navami
	26	27	28	29	30			edak Institut	24-30 April -University theory exam (FE SEM-I)	25 April-Mahavir Jayanti

Page 1/

MONTH	м	T	w	Т	F	S	S	GMVIT EVENT	MUMBAI UNIVERSITY EVENT	PUBLIC HOLIDAYS
ţ.									1 - 7 -	1 May- Maharashtra Day
	3	4	5	6		7		11-13 May- Internal Assessment - II (Sem - IV, VI & VIII)		
MAY	10		,		1	1		11-19 May- Submission of termwork	5 May -Commencement of Term (Sem-II)	14 May- Eid al-Fitr
	17	18	5	20	2:	2	2 23	17 May- Display f IA-II Marks (Sem - IV, VI & VIII)		
	24	25	26	27	28	29	30	19 May - End of term (Sem - IV, VI & VIII)	19 May - End of term (5em - IV, VI & VIII)	26 May- Buddha Purnima
	31					The	3.77	31 May-Submission of Course Files	20-29 May- Oral/ Practical Exam	
		1					6	2-4 June- Internal Assessment I (Sem-II)	1-14 June - University theory exam (Sem IV, VI, VIII)	
	7	8	9	10	17	12	13	7 June Display of IA-I Marks(Sem-II)	the second secon	
JUNE	14	15	16	17	18	19	20		E /	
	21	22	23	24	25	26	27	=		
	28	29	30				經		1.	
				1	2	3	4			
	5	6	7	8	9	10	11		* 2	
JULY	12	13		1	16	17	18	14-16 July- Internal Assessment-II(Sem-II)	12 July- Commencement of new Term (Sem-V & VII)	21 July–Eid al-Adha
	19	20	1000	22	23	-455EE		19 July Display of IA-II Marks(Sem-II)	24 July- End of term(Sem-II)	
	26	27	28	29	30	31	编数 3		26-31 July Oral/ Practical Exam (Sem-II)	
1:7							1	,	5-17 August - University theory exam (Sem II)	
	2	3	4	5	6	7	8		_	
	9	10	11	12	13	14	15			15 Aug-Indian Independence Day
AUGUST	16	17	18	19	20	STATE OF	Francisco.			16 Aug- Parsi New Year
	23	24	25	26	27	28	影響。			19 Aug- Muharam
	30	31					27.2	9, 34, W F 91	23 Aug- Commencement of new Term (Sem -III)	

Public Holidays

Oral/ Practical examination

Theory Examination

Weekends

Unit Tests

Sports and Gathering

Dringland

Page 2/



Shri. Gopinath Mahadeo Vedak Pratishthan's

G.M. Vedak Institute of Technology, Tala, Raigad.



Department of Mechanical Engineering

TENTATIVE ACADEMIC CALENDER: ACADEMIC YEAR 2020-21 (FIRST HALF 2021)

Sr. No.	Activity	Type of activity	Tentative week/Date	Time period	Instructor/Mentor/Tutor	Topic/ subject	Benefits (Outcomes)	Tentative Budget
1	National Conference	Extra curricular	3rd week of April	1 Day	Dr. O. S. Patil	National Conference on recents trends in enginering	Helps students to get the knowledge of recent trends in engineering	
2	Project presentation	Curricular	1st week of May	1 Day	Mech. Dept. GMVIT	BE Project presentation phase -II		
3	Departmetal Program	Extra curricular	4th week of April	1 day	Mech. Dept. GMVIT	Farewell function for BE students	Refreshment activity for students	
4	Alumni meet	Extra curricular	3rd week of April	1 DAy	Mech. Dept. GMVIT		Alumni meeting of passout students	ALA COMPANIES

Mr. A. A. Khot
Departmental Academic co-ordinator

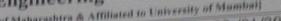
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Mr. A. R. Ghadage HOD



Shri. Gopinath Mahadeo Vedak Pratishthan's G.M.Vedak Institute of Technology, Tala-Raigad

College of Engineering



[Approved by AICTE & DTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai] Date: - 22 /01/2021

NOTICE

Dear Students.

Hope all of you and your loved ones are safe and well.

We will be starting the term with online classes from January 25, 2021. The timetable for the same will be posted shortly on the respective departmental official Whatsapp group. Based on the Government and University directives, we will keep you updated on the mode of continuation of the semester.

Even though the method of teaching & learning has altered, learning should continue in earnest. We urge each one of you to adapt to this new situation and do full justice to the online classes.

The institute stands with you at every step of this way and you can approach your Subject faculty / Class coordinator / HOD / Principal in case of any issues.

Dr. D.N.Jaiswal Principal



Shri. Gopinath Mahadeo Vedak Pratishthan's G.M.Vedak Institute of Technology, Tala-Raigad

College of Engineering



[Approved by AICTE & DTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai]

Date:-02/08 /2020

NOTICE

Dear Students,

Hope all of you and your loved ones are safe and well.

We will be starting the academic year 2020-21, with online classes from August 04, 2020. The timetable for the same will be posted shortly on the respective departmental official Whatsapp group. Based on the Government and University directives, we will keep you updated on the mode of continuation of the semester.

Even though the method of teaching & learning has altered, learning should continue in earnest. We urge each one of you to adapt to this new situation and do full justice to the online classes.

The institute stands with you at every step of this way and you can approach your Subject faculty / Class coordinator / HOD / Principal in case of any issues.

> Dr. D.N.Jaiswal Principal

Shri. Gopinath Mahadeo Vedak Pratish than's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Academic Year 2020-21 (First Half 2021)

Year / Sem -BE /VIII

Subject/ Course -Design of Mechanical System (MEC801)

Course Outcomes

CO No.	Course Outcome (CO)		
CO1	Students should be able to apply the concept of system design.		
CO 2 Students should be able to design handling systems such as hoisting mechanism of crane			
CO 3	Students should be able to use design belt conveyor systems.		
CO 4	Students should be able to design engine components such as cylinder, piston, connecting rod and crankshaft		
CO 5	Students should be able to design pumps for given applications.		
CO 6	Students should be able to design machine tool gear box.		



Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA Department of Civil Engineering

Program Outcomes

PO No.	Program Outcome (PO)
PO 1	Engineering Knowledge: Engineering graduate will be able to apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2	Problem Analysis: Engineering graduate will be able to identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering
PO 3	Design/ Development of Solutions: Engineering graduate will be able to design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural societal and environmental considerations.
PO 4	Conduct Investigations of Complex Problems: Engineering graduate will be able to use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO 5	Modern Tool Usage: Engineering graduate will be able to create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations
PO 6	The Engineer and Society: Engineering graduate will be able to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO 7	Environment and Sustainability: Engineering graduate will be able to understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	Ethics: Engineering graduate will be able to apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO 9	Individual and Team Work: Engineering graduate will be able to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	Communication: Engineering graduate will be able to communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO 11	Project Management and Finance: Engineering graduate will be able to demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO 12	Life-long Learning: Engineering graduate will be able to recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Shri. Gopinath Mahadeo Vedak Pratishthan's G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering

Program Educational Objectives

PE	O No.	Program Educational Objective (PEO)
P	EO 1	To prepare the student with a sound foundation in the mathematical, scientific and engineering fundamentals.
PEO 2 To motivate the student in the art of self-learning and to use morproblems.		To motivate the student in the art of self-learning and to use modern tools for solving real life problems.
P	EO 3	To inculcate a professional and ethical attitude, good leadership qualities and commitment to social responsibilities in the student's thought process.
P	EO 4	To prepare the student for a successful career in Indian and Multinational organizations.



Shri. Gopinath Mahadeo Vedak Pratishthan's G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering

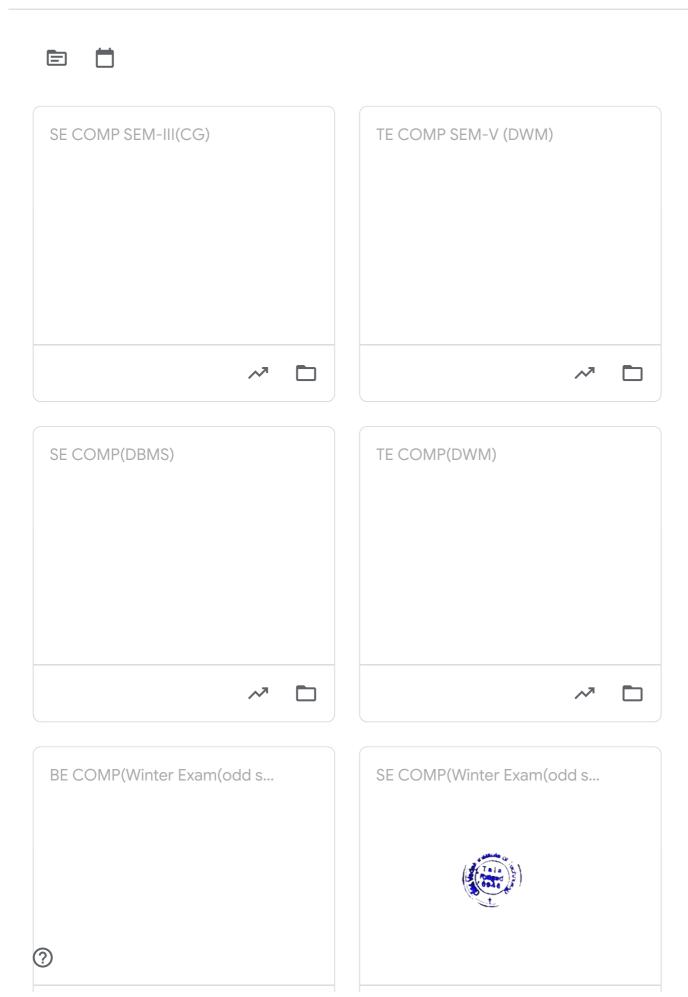
Program Specific Outcomes

PSO No.	Program Specific Outcome (PSO)					
PSO 1	Engineering graduate will be able to solve complex problems in the field of Design, Environmental, Transportation and Executing.					
PSO 2	Engineering graduate will be able to analyze and stimulate Designing and Analysis Systems by conducting experimental studies and using software to validate systems.					
PSO 3	Engineering graduate will be able to apply technical and management skills to manage different Projects.					



9/30/21, 12:01 PM Classes

≡ Google Classroom



9/30/21, 12:01 PM Classes



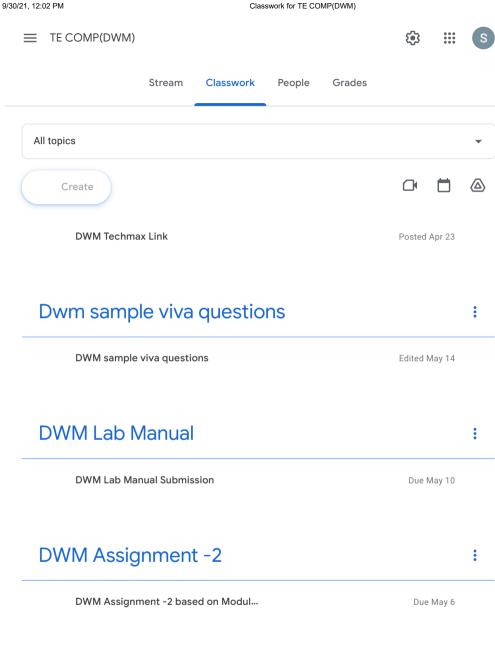
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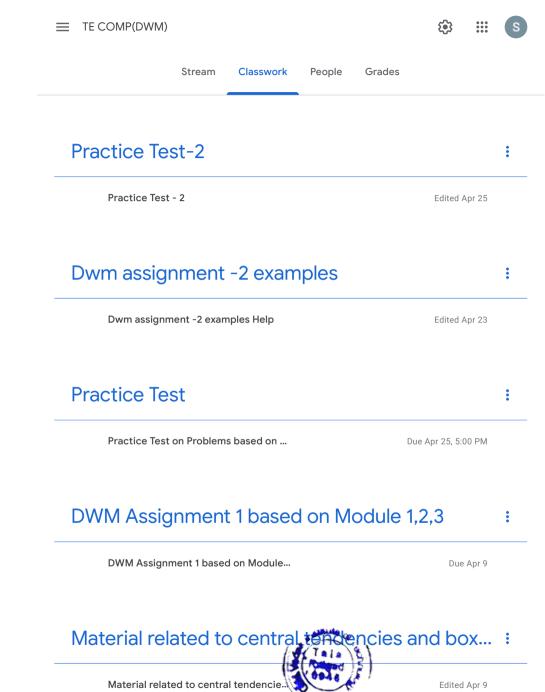




TE COMP(Winter Exam(odd s
<i>~</i> □







Practice Test on Problems based on ...

Practice Test

?

Due May 2, 5:00 PM







Stream

Classwork

People Grades

Practice Test -1

Practice Test -1

Due Mar 1, 5:00 PM

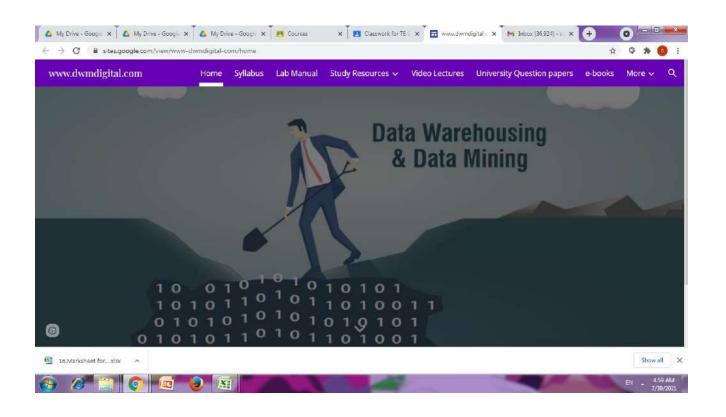
DWM WEBSITE LINK

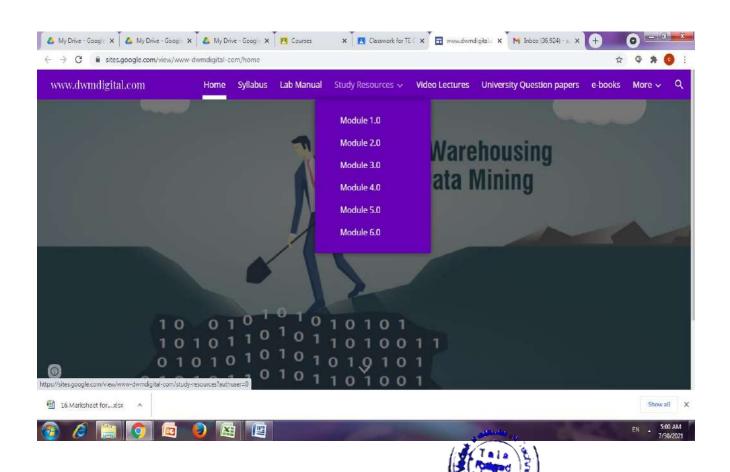
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Posted Jan 29









Instructions





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DWM Assignment 1 based on Module 1,2,3

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Assigned

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DWM assignment 1.... Turned in late



Student work

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DWM Assignment n... Turned in





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Instructions

Student work





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Amol Kode



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Aditya Natalkar



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Reena Pawar

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Pooja Prasad



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Sajit Patekar



Pallavi

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DWM Manoj Assign... Turned in late



ABHISHEK GOTHAL





















Instructions

Student work





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2 attachments Graded

FOR EDUCATIONAL ...
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DWM Lab Manual Submission

31

3

Turned in Assigned

ΑII







DWM_lab manual.pdf Turned in late



Instructions



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Student work

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Riddhi Gonji

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Lab Manual DWM(B.. Turned in late



2 attachments



Turned in



7 attachments Turned in











Experiments1.pdf Turned in late



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Student work

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DWM lab Manual.pdf Turned in late





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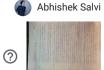
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Sajit Patekar

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Instructions

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Lab manual DWM.pdf Turned in

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DWM EXPERIMENT...

Diksha Khopkar



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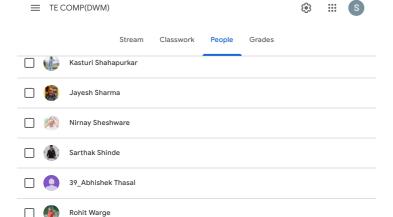
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Ξ	BE Computer 2021-22, SH-21, Sem-VII, R-2016,	CBCGS		Strea	m Classwork	< People	Marks		
		22 Oct Assignme nt No.06	20 Oct Assignme nt No.05	20 Oct Assignme nt No.4	17 Oct Lab Manual	8 Sept Assignme nt No.3	22 Aug Assignme nt No.2	19 Aug Assignme nt No. 1	
	Sort by surname 🔻	out of 10	out of 10	out of 10	out of 10	out of 10	out of 10	out of 10	
	Class average	9.17	8.86	8.86	8.95	8.84	7.39	8.82	
	OM BELOSE	10	9	9	10	7 Done late	7 Done late	7 Done late	
	Shreyash Bhagat	7 Done late	7 Done late	6 Done late	8 Done late	6 Done late	6 Done late	6 Done late	
	Amol Bhostekar	7 Done late	7 Done late	6 Done late	7 Done late	6 Done late	6 Done late	6 Done late	
No.	Nidhi Chandorkar	10	10	10	10	10	10	10	
3	Tazeen Chogle	10	10	10	9 Done late	10	7	10	
V	Dhanshri Dandekar	10	10	10	10	10	7 Done late	10/10	
	Satyen Deshpande	9	9	9	10	7 Done late	7 Done late	8 Done late	
	Saroj Dharve	10	10	10	8 Done late	10	7	9 Do ne late	





Sandeep Yadav

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code: EN 3447

DEPARTMENT OF COMPUTER ENGINEERING

Academic Year 2020-21 (First Half 2021)

Teaching Plan cum Execution

and Mining S	Subject Code: CSC 603		Weekl	y Load	
: Ms. S.K.Thakur		TH	TUT	PR	TOTAL
		4	NIL	4	8
EXAM	IINATION SCHEME				
THEORY	TERMWORK	TEST	PRATICAL/	ORAL	TOTAL
80	25	20	25		150
Contents to be Covered	Content Delivery Method (CDM) Used	Pla	anned Date	Con	ducted Date
MODULE NO 1: Introduction to	Data Warehouse and Dim	ensiona	I modelling		
Introduction toStrategic Information, Need for				100	1-2021
Strategic Information		2	5-01-2021	25	-1-2021
Features of Data Warehouse, Data warehouses		_	7.01.2021	02	-1-2021
versus Data Marts	0	2	7-01-2021		
Top-down versus Bottom-up approach	Online lecture through ppt on	2	8-01-2021	28	1-2021
Data warehouse architecture, metadata	Online lecture through ppt on Google meet platform	2	9-01-2021	_	1-2021
E-R modelling versus Dimensional	Online lecture through ppt on	(01-02-2021	2-	2-2021
	Google meet platform			_	
STAR schema, STAR schema keys	Google meet platform		03-02-2021		2-2021
Cartless East tables	Google meet platform		04-02-2021		2-2021
Update to the dimension tables, Aggregate fact	Google meet platform		05-02-2021 5		2-2021
MODULE NO			11 11 11		
	Online lecture through ppt on		08-02-2021	8-	-2-2021
Major steps in ETL process	Online lecture through ppt on		10-02-2021	10	-2-2021
Data extraction Techniques Data extraction Techniques Data extraction Techniques	Online lecture through ppt on		11-02-2021	15	5-3-303
transformation types	Online lecture through ppt or		12-02-2021	15	-2-202
Data Loading: Applying Data	Online lecture through ppt or		15-02-2021		7-2-202
OLTP Vs OLAP, OLAP definition	Online lecture through ppt of		17-02-2021		8-2-202
	through DDI O	n	18-02-2021		12-2-20
OLAP operations: Drill down, no.	Online lecture through ppt of	n	22-02-2021	2	2-2-20
	EXAM THEORY 80 Contents to be Covered MODULE NO 1: Introduction to Introduction toStrategic Information, Need for Strategic Information Features of Data Warehouse,Data warehouses versus Data Marts Top-down versus Bottom-up approach Data warehouse architecture, metadata E-R modelling versus Dimensional Modelling Information Package Diagram STAR schema, STAR schema keys SnowflakeSchema, Fact Constellation Schema, Factless Fact tables Update to the dimension tables, Aggregate fact tables MODULE NO Major steps in ETL process Data extraction Techniques Data transformation: Basic tasks, Major transformation types Data Loading: Applying Data OLTP Vs OLAP, OLAP definition Dimensional Analysis, Hypercubes, OLAP operations: Drill down, Roll up, Slice, Dice and OLAP operations: Drill down, Roll up, Slice, Dice and	Contents to be Covered Content Delivery Method (CDM) Used MODULE NO 1: Introduction to Data Warehouse and Direction to Strategic Information, Need for Strategic Information Features of Data Warehouse, Data warehouses versus Data Marts Top-down versus Bottom-up approach Data warehouse architecture, metadata E-R modelling versus Dimensional Modelling, Information Package Diagram STAR schema, STAR schema keys SnowflakeSchema, Fact Constellation Schema, Factless Fact tables Update to the dimension tables, Aggregate fact tables MODULE NO 2: ETL Process and OLA Major steps in ETL process MODULE NO 2: ETL Process and OLA Major steps in ETL process Data extraction Techniques Data transformation: Basic tasks, Major transformation types Data Loading: Applying Data OLTP Vs OLAP, OLAP definition Dimensional Analysis, Hypercubes, Olaine lecture through ppt on Google meet platform Online lecture through ppt on Google meet platform	EXAMINATION SCHEME THEORY TERMWORK TEST 80 25 20 Contents to be Covered Content Delivery Method (CDM) Used MODULE NO 1: Introduction to Data Warehouse and Dimensiona Introduction to Strategic Information, Need for Strategic Information Features of Data Warehouse, Data warehouses versus Data Marts Top-down versus Bottom-up approach Data warehouse architecture, metadata E-R modelling versus Dimensional Modelling Information Package Diagram STAR schema, STAR schema keys SnowflakeSchema, Fact Constellation Schema, Factless Fact tables Update to the dimension tables, Aggregate fact tables MODULE NO 2: ETL Process and OLAP Major steps in ETL process Data extraction Techniques Data transformation: Basic tasks, Major transformation types Data Loading: Applying Data OLTP Vs OLAP, OLAP definition Dimensional Analysis, Hypercubes, Oline lecture through ppt on Google meet platform Online lecture through ppt on Google meet platform	EXAMINATION SCHEME THEORY EXAMINATION SCHEME TREMWORK TEST PRATICAL/ 80 25 20 25 Contents to be Covered Content Delivery Method (CDM) Used MODULE NO 1: Introduction to Data Warehouse and Dimensional modelling Introduction to Strategic Information, Need for Strategic Information Features of Data Warehouse, Data warehouses of Data Warehouse, Data warehouses versus Data Marts Top-down versus Bottom-up approach Data warehouse architecture, metadata E-R modelling versus Dimensional Modelling Information Package Diagram STAR schema, STAR schema keys SnowflakeSchema, Fact Constellation Schema, Factless Fact tables Update to the dimension tables, Aggregate fact tables MODULE NO 2: ETL Process and OLAP Major steps in ETL process Online lecture through ppt on Google meet platform Online lecture through ppt on Oline lecture through ppt on Google meet platform Online lecture through ppt on Oline lecture through ppt on Oline lecture through ppt on Google meet platform Online lecture through ppt on Oline lecture through ppt on Oline lecture through ppt on Oline lecture through ppt on Google meet platform Online lecture through ppt on Oline lect	EXAMINATION SCHEME THEORY TERMWORK TEST PRATICAL/ORAL SO 25 Contents to be Covered Content Delivery Method (CDM) Used MODULE NO 1: Introduction to Data Warehouse and Dimensional modelling Introduction toStrategic Information, Need for Strategic Information Features of Data Warehouse, Data warehouses oversus Data Marts Top-down versus Bottom-up approach Data warehouse architecture, metadata E-R modelling versus Dimensional Modelling Information Package Diagram STAR schema, STAR schema keys SnowflakeSchema, Fact Constellation Schema, Factless Fact tables Update to the dimension tables, Aggregate fact Update to the dimension tables, Aggregate fact Aggregate Fact Aggregate fact Data extraction Techniques MODULE NO 2: ETL Process and OLAP Major steps in ETL process MODULE NO 2: ETL Process and OLAP Major steps in ETL process Online lecture through ppt on Google meet platform Online lecture through ppt on 11-02-2021 Second meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-2021 Coogle meet platform Online lecture through ppt on 11-02-20



		MODULE NO 3: Introduction to		No.	
1	17	MODULE NO 3 : Introduction to Data Mining Task Primitives	Online lecture through put on	tion and Preprocessin	ı
	18	Architecture, Techniques	Changele theret platform Chalcoe lecture through par on	24-02-2021	24-2-2021
1	19	KDD princess	County meet platform Recorded herror posted on	25-02-2021	25-2-2021
1	20		A CHANGE AND	26-02-2021	26-2-2021
1	21	beauting in these Mining, Applications of trata Mining	Recorded lecture posted on Google classroom	01-03-2021	1-3-2021
+	22	Costa Exploration Types of Attributes	Recorded lecture posted on Google classroom	03-03-2021	3-3-2021
1	and the second second second second	Statistical Description of Data	Google classroom	04-03-2021	5-3-2021
1	23	Data Visualization	Online lecture through out on	05-03-2021	8-3-2021
1	24	Data Preprocessing: Cleaning Integration, Reduction Attribute subset selection, Histograms, Clustering	Online lecture through put on		
+	25	Data Transformation & Data Discretisation	Google meet platform	08-03-2021	10-3-2021
1		Normalization, Binning, Concept hierarchy generation, Concept Description	Online lecture through ppt on Google meet platform	10-03-2021	12-3-2021
1	26	Attribute oriented Induction for Data Characterization	Online lecture through ppt on	12-03-2021	15 2 2000
H			Google meet platform		15-3-2021
H		MODULE NO 4 : Clas	sification, Prediction and C	Clustering	
L	27	Basic Concepts, Decision Tree using Information Gai	Online lecture through ppt on Google meet platform	15-03-2021	22-3-2021
L	28	Decision Tree using Information Gain	Online lecture through ppt on Google meet platform	22-03-2021	24-3-2021
L	29	Induction: Attribute Selection Measures, Tree pruning	Online lecture through ppt on Google meet platform	24-03-2021	25-3-204
L	30	Bayesian Classification: Naive Bayes	Recorded lecture posted on Google classroom	25-03-2021	263-2021
	31	Classifier Rule - Based Classification: Using IF THEN Rules for classification	Online lecture through ppt on Google meet platform	26-03-2021	31-3-2021
	32	Prediction: Simple linear regression, Multiple linear regression	Online lecture through ppt on Google meet platform	31-03-2021	1-4-2021
	33	Model Evaluation & Selection: Accuracy and Error measures, Holdout Random Sampling, Cross Validation, Bootstrap	Online lecture through ppt on Google meet platform	01-04-2021	5-4-2021
	34	Clustering: Distance Measures	Online lecture through ppt on Google meet platform	05-04-2021	7-4-2021
	35	Partitioning Methods: k-Means	Recorded lecture posted on Google classroom	07-04-2021	8-4-2021
		k-Medoids	Online lecture through ppt on Google meet platform	08-04-2021	9-4-2021
	37	Hierarchical Methods Agglomerative	Online lecture through ppt on Google meet platform	09-04-2021	12-4-2021
	38	Divisive	Online lecture through ppt on Google meet platform	12-04-2021	15-4-2021
_		MODULE NO 5: Mining F	requent Patterns and Asso	ciation Rules	
	39	Market Basket Analysis, Frequent Item sets	Online lecture through ppt on Google meet platform	15-04-2021	16-4-2021
	40	Gosed Item sets, and Association Rule, Frequent Pattern Mining	Online lecture through ppt on Google meet platform	16-04-2021	194-2021
	41	Efficient and Scalable Frequent Item set Mining Methods: Apriori Algorithm	Recorded lecture posted on Google classroom	19-04-2021	20-4-2021
	42		Recorded lecture posted on	22-04-2021	22-4-2021
	43	Association Rule Generation	Google classroom Online lecture through ppt on	23-04-2021	
	44	Improving the Efficiency of Apriori	Google meet platform Recorded lecture posted on		23-4-202/
_		FP growth	Google classroom Online lecture through ppt on	26-04-2021	27-4-2021
_	45	Mining frequent Itemsets using Vertical Data Format	Google meet platform	28-04-2021	29-4-2021
		ntroduction to Mining Multilevel Association Rules	Online lecture through ppt on	29-04-2021	30-4-2021

	MODULE NO	6 : Spatial and Web Mining	NAME OF STREET	No. of the Contract of the Con		
47	INDICATION COSTS, SECRETARI MA CREATE AND ADDRESS OF THE PERSON	Online lecture on Google				
48	Spatial Data Structures, Mining Spatial Association and Co-location Patterns	Meet platform Online lecture on Google	04-2021	3-5-2021		
49	Spatial Clustering Techniques: CLARANS Extension	Online lecture through video	63	05-2021	5-5-2021	
50	William 2 Changle	gentionstration	05	-05-2021	6-5-2021	
	Web Mining: Web Content Mining	Online lecture through video demonstration	06	-05-2021	7-5-2021	
51	Web Structure Mining	Online lecture through video demonstration	07	-05-2021	10-5.2021	
52	Web Usage mining, Applications of Web Mining	Online lecture through video demonstration	10	-05-2021	12-5-2021	
		SUMMARY				
Module No	Title	Total No of Lectures		ned Date of ompletion	Actual Date of Completion	
1	Module No 01	8		2-2021	5-2-2021	
2	Module No 02	8	22	-2-202	22-2-2021	
3	Module No 03	10	12	-3-2021	15-3-2021	
4	Module No 04	12		-4-2021	15-4-2021	
5	Module No 05	8	29-4-2021		304-2021	
6	Module No 06	6	10	1-5-2021	12.5-2021	
	SUMMARY TO BE SUBMITTED T	O HOD/ PRINCIPAL AT THE	E END O	F SEMESTER		
ANALYSIS	NO. OF PERIOD PLANNED = 52	NO. OF PERIOD ENGAED =	52	% SYLLABUS C	OVERED = 00 %	
					WOOD WITH DATE	
ESIGNATION	COMMENT (I	(F ANY)			URE WITH DATE	
FACULTY				(otho	
CLASS				V	X X	
HOD				8,	_	
EAN ACADEMICS						
PRINCIPAL	5-2024 Subject in Charge				R	



IA-I Theory of Reinforced Concrete Structure

Mumbai University

G. M. Vedak Institute of Technology, Tala.

Branch- BE Civil Engineering Subject- Theory of Reinforced Concrete Structure Semester- VII (CBCGS) Pattern- Revised 2016 Date- 09/11/2020

Exam Time- 03.00 PM TO 03.30 PM

Instructions-

- 1. Enter your details in correct manner (Name)(Capital & In English only)
- 2. Read All questions carefully.
- 3. Link will get deactivated at 03:30 PM, submit your response before 03:30 PM.
- 4. Once the form is submitted, answers can not be changed.
- 5. No negative marking.
- 6. All questions are compulsory.
- 7. Each question carries 1 or 2 Marks (Means 1 or 2 points).
- 8. Use of unfair means is prohibited
- 9. Avoid multiple logins.

* Doguisad

3.

	Required
1.	Email address *
2.	Name of Student (In Capital & English only) * (SURNAME) (NAME) (FATHER'S NAME)
3.	WhatsApp Number *



Instructions-

- 1. Read All questions carefully.
- 2. Link will get deactivated at 03:30pm, submit your response before 03:30pm.
- 3. Once the form is submitted, answers can not be changed.
- 4. No negative marking.
- 5. All questions are compulsory.

IA-I Quantity Survey

Estimation & Valuation

4.	Which of the following is correct criteria to be considered while designing?	1 point
	Mark only one oval. Structure should be aesthetically pleasing but structurally unsafe Structure should be cheap in cost even though it may be structurally unsafe Structure should be structurally safe but less durable Structure should be adequately safe, should have adequate serviceability	
5.	Analysis is referred to* Mark only one oval. determination of cost of structure determination of axial forces, bending moment, shear force etc. determination of factor of safety drafting architectural plans and drawings	1 point
6.	The acceptable limit for the safety and serviciability requirements before failure occurs is called * Mark only one oval. Working stress method Ultimate Strength method Limit state method None of the above	1 point

	The state of the s				
7.	The maximum strain in concrete at the outermost compression fibritaken as in bending *	re is 1 point	11.	The stresses in concrete and steel reach to permissible values at the stime is called as *	ame 1 point
	Mark only one oval.			Mark only one oval.	
	0.002			Balapced Section	
	0.0035			Under Reinforced Section	
	O.87			Over Reinforced Section	
	D 0:05			Steel Section	
8.	Lever arm is the distance between*	1 point	12.	Singly reinforced section means *	1 point
	Mark only one oval.			Mark only one oval.	
	Resultant compressive force to Resultant tension force			9ply tension reinforcement provided in tension side	
	Top of beam to steel reinforcement			Only compression reinforcement provided in compression side	
	Bottom of beam to top of beam			Only tension reinforcement provided in compression side	
	Neutral axis to bottom fiber of beam			Single bar provided only	
9.	Moment of resistance is the resistance offered by *	1 point	13.	In which condition we use Doubly reinforced section *	
	. Mark only one oval.	.,			1 point
	, married and the second and the sec			Mark only one oval.	
	beam against external load beam against internal load			If depth is restricted	
	Distributed load			If we have more steels bars available	
	Point load			If less concrete area	
				If zero moment at center of beam	
0.	Mr (moment of resitance) =*	1 point	14.	j (depth Factor) = *	1 point
	Mark only one oval.			Mark only one oval.	
	Rbd^2				
	DROP2	Lituie		√W3-1	
	Rbd^3	San I		1-3/k	
	Rbd	igad St		1+3/k	
		12			

15.	Effective depth of beam = *	1 point	19.	IS 1893 used for *	1 point
	Mark only one oval.			Mark only one oval.	
	D - C - Stirrups size - half of Main bar			Earthquake Design	
	D - C- B- A			RCC Design	
	D + C - Main Bar			Steel Design	
	Depth of beam			Wind Design	
16.	If beam provided 5 bars of 20mm diameter, find Ast=mm^2 *	1 point	20	IS 457 december 115 de	
	Mark only one oval.	Гронц	20.	IS 456 does not used for *	1 point
				Mark only one oval.	
	1570.79			Steel girder design	
	1750.79 1790.96			RC Beam Design	
	1970.69			RC column Design	
				RC Slab Design	
17.	Area of steel = 1500mm^2, find the numbers of 12mm diameter bars *	1 point	21	Angharharan idada	
	Mark only one oval.	· point	21.	Anchor bar provided at of beam *	1 point
				Mark only one oval.	
	14 bars 11 bars			Тор	
	17 bars			Side	
	12 bars			Bottom	
	12 0813			□ End	
18.	Percentage of steel = *	1 point	20	Miles of Administration of the Control of the Contr	
	Mark only one oval.	pont	22.	Which Method is used for RCC Design as per IS 456:2000 *	1 point
				Mark only one oval.	
	100* Ast/bD			Limit State Method	
	100* Ast/bd			Slope Deflection Method	
	TUU-DD/Ast			Moment Distribution Method	
	100*bd/Ast	3		Kani's Method	

23.	What is mean by R.C.C *
	Mark only one oval.

Reinforced Cement Concrete

Reinforced Concrete in Compression

Rate of Cement in Compression

Reinforced Component Concrete

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Google Forms



1 point

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G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code : EN 3447

DEPARTMENT OF COMPUTER ENGINEERING

Academic Year 2020-21 (First Half 2021)

Marksheet for Assignments

Year: SE Sem: IV Subject: Database Management System Subject Code: CSC 403

Name Of Faculty: Ms S. K. Thakur

Roll	Name of Student	Marks for Each	Assignment out of 05	Average (0
No.	Name of Student	1	2	Marks)
1	BAKKAM NIKHIL NITIN	4	4	4
2	BURTE SHUBHAM VIVEK	2	2	2
3	CHAVAN PRANALI RAJESH	4	5	5
4	CHORGE VISHAL SURESH	4	4	4
5	CHORGHE DARSHIL RAJENDRA	3	4	4
6	DEB HILLOL HIRA	3	4	4
7	DESHMUKH VEDANT VIJAY	3	3	3
8	GAIKWAD AADESH SURESH	4	4	1
9	GAIKWAD POURNIMA MADHUKAR	4	4	4
10	GHARAT DIPTIKSHA BALKRISHNA	4	6	4
11 F	HUJARE APURVA AVINASH	i i	5	5
12 J	ADHAV PRAJWAL DINESH	5	4	5
13 K	CADAM ASHWINI ASHOK	4	3	L
14 K	ELASKAR PRATIK VIJAY	3	3	7
15 M	MADHAVI NEHA JITENDRA	4	4	10
16 M	IOKAL SHANTANU RAJESH	1.	1	7
17 M	ORE NANDINI RAMESH	L	3	7
8 M	UKADAM NABEEL JALIL	3	4	1.
9 PA	ALKAR SUSHMITA RAVJI	4	3	4.
0 PA	NSARE KAMESH KRIHNA	1	3	7.
1 PA	TIL BHAKTI MADHUKAR	7	Ť.	4 4
2 PA	TIL MANSI MAHENDRA	1.	9	4
ROTHERS COMMISSION	WILKAR SUSHANT MAHESH	2	. 1.	4
DISCRETE SPRINGER	NE SAHIL GANESH	3	9	4
CHECKING CHECKING	NDANE DIVYA GORAKH	7.	4	4
STATE OF THE PERSON	NAP RIDDHI VIJAY	9	5	5
STATE STREET	NDE JIDDHESHWAR KESHAV	3	5	5
COCCO DECIMAL	NDE SUSHANT SANJAY	4	5	5
STREET, SHIPPERSON	RKE PRANAV RAJENDRA	7	4	4
DESCRIPTION OF THE PERSONS	GH MANJIT RANJIT	4	4	4
STATE OF THE PERSON NAMED IN		3	4	4
NAME AND ADDRESS OF THE OWNER, OR OTHER	ATE ANIKET RAMDAS	3	2	3
BORN HARMONINE	KUR SIDDHESH SUBHASH	4	4	4
STATE STATEMENT OF THE PERSON NAMED IN	KAR ARMAN MUBIN	3	4	4
VISH	IAKHA SANTOSH WAGHMARE	4	4	

Date: 19-5-204

Subject in Charge

HOD

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code: EN 3447

DEPARTMENT OF COMPUTER ENGINEERING

Academic Year 2020-21 (First Half 2021)

Marksheet for Experiments

Year :SE Sem : IV

Name of Practical in Charge : Ms.S.K.Thakur

Subject Name: Database Management System

Subject Code: CSC 403

D.11		Marks for Each Experiment out of 15							Average (15						
Roll No.	Name of Student	1	2	3	4	5	6	7	8	9	10	11	12	13	marks)
	BAKKAM NIKHIL NITIN	13	13	12	12	13	13	12	12	13	13	13	13	13	13
1	BURTE SHUBHAM VIVEK	7	7	7	7	6	6	6	7	6	7	7	7	7	7
3	CHAVAN PRANALI RAJESH	14	14	14	16	14	13	14	14	13	14	14	14	14	14
4	CHORGE VISHAL SURESH	12	12	11	11	12	12	12	12	11	12	12	12	12	12
THE RESERVE OF THE PERSON NAMED IN	CHORGHE DARSHIL RAJENDRA	13	13	12	12	13	13	13	13	12	13	13	13	13	13
	DEB HILLOL HIRA	14	14	13	13	14	14	14	14	13	14	14	14	14	14
-	DESHMUKH VEDANT VIJAY	12	12	11	Ú	12	12	12	12	11	12	12	12	12	12
8	GAIKWAD AADESH SURESH	13	13	12	13	13	13	13	13	12	13	13	13	13	13
-	GAIKWAD POURNIMA MADHUKAR	12	12	11	12	12	12	12	12	11	12	12	12	12	12
NA RECORDER OF	GHARAT DIPTIKSHA BALKRISHNA	13	12	13	12	13	13	13	13	12	13	13	13	13	13
-	HUJARE APURVA AVINASH	13	13	13	13	13	13	13	13	12	13	13	13	13	13
BERTHAD BOOK	JADHAV PRAJWAL DINESH	14	14	14	14	14	14	14	14	13	14	14	14	14	14
Name and Address of the Owner, where	KADAM ASHWINI ASHOK	13	13	13	13	13	12	13	13	12	13	13	13	13	13
MANAGEM I	KELASKAR PRATIK VIJAY	9	0	9	9	9	8	9	9	8	9	9	9	9	9
U SECOND	MADHAVI NEHA JITENDRA	13	13	13	13	13	12	13	13	12	13	13	13	13	13
Name of the last	MOKAL SHANTANU RAJESH	16	14	14	14	13	14	14	14	13	14	114	14	14	14
STATE OF THE PARTY OF	MORE NANDINI RAMESH	13	13	13	13	12	13	13	13	12	13	13	13	13	13
AND DESCRIPTION OF	MUKADAM NABEEL JALIL	11	11	11	11	10	11	11	11	10	11	11	11	11	11
CONTRACTO IN	PALKAR SUSHMITA RAVJI	13	12	12	13	12	13	13	13	12	13	13	13	13	13
STATE OF THE PARTY OF	PANSARE KAMESH KRIHNA	12	1.1	11	12	11	12	12	12	11	12	12	12	12	- 12
DESCRIPTION OF	PATIL BHAKTI MADHUKAR	13	12	12	13	13	13	13	13	12	13	13	13	13	13
MARCHINE ME	PATIL MANSI MAHENDRA	13	13	13	13	13	12	13	13	12	13	13	13	13	13
	PILWILKAR SUSHANT MAHESH	12	12	12	12	12	13	12	12	10	12	12	12	12	THE PERSON NAMED AND POST OFFICE ADDRESS OF THE PERSON NAMED AND POST OFFI THE PERSON NAMED A
	ANE SAHIL GANESH	12	12	12	12	13	11	12	12	12	12	12	12	12	10
107/00/10 (0)	AINDANE DIVYA GORAKH	13	13	13	13	12	13	13	13	13	13	CO CONTRACTOR OF THE PARTY OF T	1.12	13	
DEBISERY RO	ANAP RIDDHI VIJAY	13	13	13	13	13	12	13	13	13	OFFICE ASSESSED.	13	13	13	13
STREET, ST.	HINDE JIDDHESHWAR KESHAV	12	12	12	12	11	12		12	12	13	12	12	12	12
COUNTY SEE	HINDE SUSHANT SANJAY	10	10	COUNTY BOOK	STATE OF THE PERSON NAMED IN		9	12	DESCRIPTION OF THE PERSON	THE RESIDENCE AND ADDRESS OF THE PERSON NAMED IN COLUMN 1	12	NAME OF TAXABLE PARTY.	10	10	HATTON SECTIONS AND ADDRESS AN
	HIRKE PRANAV RAJENDRA	13	13	10	13	10	3	10	13	10	10	13	113	13	1 -
15000	INGH MANJIT RANJIT	8	8	13	-	12	13	13	STATE OF THE PERSON NAMED IN		13	10	10		
SCHOOL SCHOOL	AWATE ANIKET RAMDAS	8	0	8	8	7	8	8	8	8	-	8	1 %	8	8
STATE OF THE PERSON		-	8	8	0	- /	0	8	8	8	8	8	10	8	18
	HAKUR SIDDHESH SUBHASH	114	14	14	14	14	13	14	14	14	14	114	14	14	
DOVED BEEN	ASKAR ARMAN MUBIN	12	12	12	12	11	12	12	12	12	12	12	12	12	
- [VI	SHAKHA SANTOSH WAGHMARE	14	14	14	14	13	14	14	14	13	14	114	114	16	1 14

Date: 19-5-204

Practical in Charge



G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code: EN 3447

DEPARTMENT OF COMPUTER ENGINEERING

Academic Year 2020-21 (First Half 2021)

Marksheet for Attendance

Year: SE Sem: IV

Subject : Database Management System

Subject Code: CSC 403

Name of Faculty: Ms.S.K.Thakur

Name of Practical in Charge: Ms.S.K.Thakur

	Range of Attendance	75%-80%	75%-80% 80%-85%		85%-90%	90%-95%		95 %-100 %	
	Marks	1		2	3	4		5	
Roll No.	Name of Student	Total Lectures Attended (39)	Theory Attendance	Marks out of 05	Total Practicals Attended (10)	Practical Attendan ce %	Marks out of 05	Average (05 Marks)	
1	BAKKAM NIKHIL NITIN	38	97	5	10	100	5	5	
2	BURTE SHUBHAM VIVEK	30	79	1	8	80	1	1	
3	CHAVAN PRANALI RAJESH	38	97	5	10	100	5	5	
4	CHORGE VISHAL SURESH	37	94	4	9	90	4	4	
5	CHORGHE DARSHIL RAJENDRA	37	94	4	9	90	4	4	
6	DEB HILLOL HIRA	37	94	4	9	90	4	4	
7	DESHMUKH VEDANT VIJAY	37	94	4	9	90	4	4	
8	GAIKWAD AADESH SURESH	38	97	5	10	100	5	5	
9	GAIKWAD POURNIMA MADHUKAR	37	94	4	8	80	2	3	
10	GHARAT DIPTIKSHA BALKRISHNA	37	94	4	9	90	4	4	
11	HUJARE APURVA AVINASH	38	97	5	10	100	5	5	
12	JADHAV PRAJWAL DINESH	38	97	5	10	100	5	5	
13	KADAM ASHWINI ASHOK	38	97	5	10	100	5	5	
14	KELASKAR PRATIK VIJAY	30	77	1	8	80	1	1	
15	MADHAVI NEHA JITENDRA	38	97	5	10	100	5	5	
16	MOKAL SHANTANU RAJESH	38	97	5	10	100	5	5	
	MORE NANDINI RAMESH	37	94	4	8	80	2	3	
	MUKADAM NABEEL JALIL	32	82	2	8	80	2	2	
	PALKAR SUSHMITA RAVJI	36	92	4	9	90	4	4	
	PANSARE KAMESH KRIHNA	36	92	4	8	80	2	3	
Market State of State	PATIL BHAKTI MADHUKAR	38	97	5	10	100	5	5	
	PATIL MANSI MAHENDRA	38	97	5	10	100	5	5	
	PILWILKAR SUSHANT MAHESH	36	92	4	9	90	4	4	
	RANE SAHIL GANESH	36	92	4	9	90	4	4	
THE STREET STREET	SAINDANE DIVYA GORAKH	38	97	5	10	100	5	5	
THE RESERVE OF THE PERSON NAMED IN	SANAP RIDDHI VIJAY	38	97	5	10	100	5	5	
CONTRACTOR OF	SHINDE JIDDHESHWAR KESHAV	PROPERTY CONTRACTOR OF THE PROPERTY OF THE PRO	97	5	10	100	5	5	
CONTRACTOR OF STREET	SHINDE SUSHANT SANJAY	38	77	1	8	80	1	1	
		30	97	5	10	100	5	5	
DESCRIPTION OF	SHIRKE PRANAV RAJENDRA	38	NAME AND PERSONS ASSOCIATIONS	2	8	80	2	2	
	SINGH MANJIT RANJIT	32	82	4	9	90	4	CONTRACTOR DESCRIPTION OF THE PARTY OF THE P	
CONTRACTOR OF THE PARTY OF THE	FAWATE ANIKET RAMDAS	36	92	CONTRACTOR OF STREET		S CONTRACTOR AND ADDRESS OF THE PARTY OF THE	N ATTOCACOUNTY	4	
STATEMENT OF STREET	THAKUR SIDDHESH SUBHASH	38	97	5	10	100	5	5	
CONTROL CONTROL CO	VASKAR ARMAN MUBIN	36	92	4	8	80	2	3	
34	VISHAKHA SANTOSH WAGHMARE	36	92	4	9	90	4	4	

Date: 19-5-2011

Subject in Charge

Practical in Charge

HOD

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code: EN 3447

DEPARTMENT OF COMPUTER ENGINEERING

Academic Year 2020-21 (First Half 2021)

Marksheet for Termwork

Year: SE Sem: IV Subject : Database Management System Subject Code: CSC 403

Name of Faculty: Ms.S.K.Thakur

Name Of Practical in Charge: Ms.S.K.Thakur

Roll No.	Name of Student	Marks for Experiments (15)	Marks for Assignments (05)	Marks for Attendance (05)	Total Termwork Marks (25)
1	BAKKAM NIKHIL NITIN	13	4	5	22
2	BURTE SHUBHAM VIVEK	7	2	1	10
3	CHAVAN PRANALI RAJESH	14	5	5	24
4	CHORGE VISHAL SURESH	12	4	4	20
5	CHORGHE DARSHIL RAJENDRA	13	4	4	21
6	DEB HILLOL HIRA	14	4	4	22
7	DESHMUKH VEDANT VIJAY	12	3	4	19
8	GAIKWAD AADESH SURESH	13	4	5	22
9	GAIKWAD POURNIMA MADHUKAR	12	4	3	19
10	GHARAT DIPTIKSHA BALKRISHNA	13	4	4	21
11	HUJARE APURVA AVINASH	13	5	5	23
12	JADHAV PRAJWAL DINESH	14	5	5	24
13	KADAM ASHWINI ASHOK	13	4	5	22
14	KELASKAR PRATIK VIJAY	9	3	1	13
15	MADHAVI NEHA JITENDRA	13	4	5	22
16	MOKAL SHANTANU RAJESH	14	4	5	23
17	MORE NANDINI RAMESH	13	5	3	21
18	MUKADAM NABEEL JALIL	11	4	2	17
19	PALKAR SUSHMITA RAVJI	13	4	4	21
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21	PATIL BHAKTI MADHUKAR	13	4	5	22
22	PATIL MANSI MAHENDRA	13	4	5	22
23	PILWILKAR SUSHANT MAHESH	12	4	4	20
24	RANE SAHIL GANESH	12	4	4	20
25	SAINDANE DIVYA GORAKH	13	5	5	23
26	SANAP RIDDHI VIJAY	13	5	5	23
27	SHINDE JIDDHESHWAR KESHAV	12	5	5	22
28	SHINDE SUSHANT SANJAY	10	4	1	15
	SHIRKE PRANAV RAJENDRA	13	4	5	22
30	SINGH MANJIT RANJIT	8	4	2	14
31	TAWATE ANIKET RAMDAS	8	3	4	15
32	THAKUR SIDDHESH SUBHASH	14	4	5	23
33	VASKAR ARMAN MUBIN	12	4	3	19
34	VISHAKHA SANTOSH WAGHMARE	14	4	4	22

Date: 195 ross

Practical in Charge

HOD

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. Vedak Institute of Technology, Tala

At. post & Taluka - Tala, Mumbai-Goa Highway, Near Indapur, Raigad, Maharashtra-402 111

Department of Computer Engineering

Academic Year 2020-21 (First Half 2021)

Markshoot for Internal Association

Marksheet for Internal Assessment I

Year / Sem : TE / VI Subject : Data Warehousing and Mining (CSC 603) Subject in charge : Ms.S.K.Thakur

Date: 17 / 03 / 2021 Max Marks : 20 Min Marks : 08

Roll	Name of Student	1		STIONS		L			
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Subject in Charge

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Department of Computer Engineering

Academic Year 2020-21 (First Half 2021)

Marksheet for Internal Assessment II

Year / Sem : TE / VI Subject : Data Warehousing and Mining (CSC 603) Subject in charge : Ms.S.K. Thakur

Date: 22 / 05 / 2021 Max Marks: 20 Min Marks : 08

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G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA DEPARTMENT OF COMPUTER ENGINEERING

IA MARKSHEET FIRST HALF - 2021

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Total no. of students: 42

42

PROF.S.K.THAKUR SUBJECT INCHARGE

PROCK. R. METHA HOD

G. M. VEDAK INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

THIRD YEAR ENGINEERING STUDENT
OF CIVIL ENGINEERING DEPARTMENT
HAS SUCESSFULLY COMPLETED THE MINI PROJECT ON TOPIC

"CONSTRUCTION & DEMOLITION WASTE MINIMISATION TECHNIQUE"

UNDER GUIDANCE OF

PROF. AJEET KUMAR

SUBMITTED BY
AKSHAY SANJAY THAKUR (T.E.C.E. ROLL NO. 61)



DEPARTMENT OF CIVIL ENGINEERING

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

UNIVERSITY OF MUMBAI (ACADEMIC YEAR 2018-2019)

IN PARTIAL FULFILMENT FOR THE COMPLETION OF THE TERM WORK OF SUBJECT ENVIRONMENTAL ENGINEERING-II OF SEM-VI THIRD YEAR CIVIL ENGINEERING IN ACADEMIC YEAR 2018-2019

CERTIFICATE

THIS IS TO CERTIFY THAT STUDENT HAS SATISFACTORILY THE PROJECT ON

"CONSTRUCTION & DEMOLITION WASTE MINIMISATION TECHNIQUE"

IN PARTIAL FULFILMENT FOR THE COMPLETION OF THE TERM WORK SUBJECT ENVIRONMENTAL ENGINEERING-II OF SEM-VI THIRD YEAR CIVIL ENGINEERING IN ACADEMIC YEAR 2018-2019

SUBMITTED BY
AKSHAY SANJAY THAKUR (T.E.C.E. ROLL NO. 61)

HEAD OF DEPARTMENT
SUBJECT IN-CHARGE & PROJECT GUIDE
(PROF. AJEET KUMAR)

PRICIPAL

(DR. D.N. JAISWAL)

DECLARATION

We declare that this written submission represents our ideas in own words and where others ideas or words have been included; we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Date:

Place: G.M.V.I.T. Tala, Raigad

Akshay Sanjay Thakur (T.E.C.E. Roll No. 61)

A.S. Thakur



ACKNOWLEDGEMENT

The successful completion of our Project within stipulated time frame is a result of collective efforts of our project group as well as many people who help us in the course of completing this project. Here we would like thanks all peoples for their help & guidance.

We are very much thankful to Our Guide & Head of Civil Engineering Department Prof. Ajeet Kumar of Civil Engineering Department, G. M. Vedak Institute of Technology, Tala, Raigad for provide us valuable guidance & support & we are also thankful to all staff of our Civil Engineering Department for their valuable support & help.

We are also thankful to all the Faculties of Civil Engineering Department & Principal Prof. Dr. D. N. Jaiswal of G.M. Vedak Institute of Technology for giving us valuable guidance, inspiration and affectionate encouragement to embark this project.

Last but not least we are also thankful to all our family members & friends without them the successful completion of this project would not have been possible.

Thanking You,

A.S. Thakur

Akshay Sanjay Thakur

(T.E.C.E. Roll No.61)



ABSTRACT

The construction industry has gained very fast growth in recent decades due to the increase in the population, increase in the IT sector and increase in the industrialization and also introduction of new infrastructure projects resulted in the increase of construction industry drastically. Due to which the demand for construction materials is huge for the construction activities which results in the generation of huge amount of construction waste. Construction material wastage resulted in the huge financial setbacks to builders, contractors, regionals authorities and also to the country. The production of waste due to the demolition of structures is more than the wastage which occurs during construction of structures, so there is need of management of Construction and Demolition (C&D) wastes, as distinct from Municipal Solid wastes, is a relatively new subject in India. To begin with the issue there is no proper estimate regarding the quantity of waste occurs in India. The primary reason is being in disciplinary and less focused in this issue. In this problem there is absence of regulatory framework and strict enforcement. Specific recommendations have made in this report to overcome the loop holes in the issue. In this report current global status of construction and demolition waste management is overviewed and also the sustainable waste management hierarchy is studied so to overcome the waste problem.



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NOMENCLATURE

Notations Abbreviations

C&D Construction & Demolition

MoEF Ministry of Environment and Forest

Rs Indian Rupees (Currency of India)

HDPE High Density Polyethylene

LDPE Low Density Polyethylene

% Percentage

MT Million Tonnes

ULBs Urban Local Bodies

PPP Public- Private-Partnership



1. INTRODUCTION

1.1 WHAT IS WASTE?

Waste is the unwanted or useless solid materials generated from combined residential, industrial and commercial activities in a given area.

It may be categorized

- ✓ According to Origin (Domestic, Industrial, Commercial, Construction or Institutional)
- ✓ According to Contents (Organic Material, Glass, Metal, Plastic Paper etc.)
- ✓ According to Hazard Potential (Toxic, Non-Toxin, Flammable, Radioactive, Infectious etc.)

1.2 INTRODUCTION TO CONSTRUCTION & DEMOLITION WASTE

Due to the increase in the economic growth after development and redevelopment projects in the country and subsequent increase in the urbanization in the cities has made construction sector to increase drastically, but also environmental impacts from construction and demolition (C & D) waste are increasingly becoming a major issue in urban solid waste management. Environmental issues such as increase in the flood levels due to the illegal dumping of construction and demolition waste into the rivers, resource depletion, shortage of landfill and illegal dumping on hill slopes are evident in the metro cities.

For the purpose of management of C&D Wastes in India, Construction and demolition waste has been defined as 'waste which arises from construction, renovation and demolition activities. Also included within the definition are surplus and damaged products and materials arising in the course of construction work or used temporarily during the course of on-site activities. The various streams of wastes to be considered will include;

- ✓ Excavated Materials,
- ✓ Concrete
- ✓ Tiles, Brick, Ceramics, Asphalt Concrete,
- ✓ Plaster,
- ✓ Glass,
- ✓ Metal & Steel,
- ✓ Plastics.



- ✓ Wood, Asphalt, &
- ✓ Concrete Rubbles, etc.

Due to the increase in the economic growth after development and redevelopment projects in the country and subsequent increase in the urbanization in the cities has made construction sector to increase drastically, but also environmental impacts from construction and demolition (C & D) waste are increasingly becoming a major issue in urban solid waste management. Environmental issues such as increase in the flood levels due to the illegal dumping of construction and demolition waste into the rivers, resource depletion, shortage of landfill and illegal dumping on hill slopes are evident in the metro cities. The primary method is adopted in waste handling is carried through by interviewing professionals like project managers, architects, civil engineers, contractors and government officials like city engineers, solid waste management officials.

Secondary information is gathered by compiled data from secondary source like various research papers, various international journals, various international reports on construction and demolition waste management. And also proceedings of waste management organizations and also some reports of surveys did by various agencies and institution. Some information is collected thorough waste management and national authorities' websites in construction waste and demolition management.

1.3 WASTE MINIMISATION

Waste minimisation is a set of processes and practices intended to reduce the amount of waste produced. By reducing or eliminating the generation of harmful and persistent wastes, waste minimisation supports efforts to promote a more sustainable society. Waste minimisation involves redesigning products and processes and/or changing societal patterns of consumption and production.

The most environmentally resourceful, economically efficient, and cost effective way to manage waste often is to not have to address the problem in the first place. Managers see waste minimisation as a primary focus for most waste management strategies. Proper waste treatment and disposal can require a significant amount of time and resources; therefore, the benefits of waste minimisation can be considerable if carried out in an effective, safe and sustainable manner.



Traditional waste management focuses on processing waste after it is created, concentrating on re-use, recycling, and waste-to-energy conversion. Waste minimisation involves efforts to avoid creating the waste during manufacturing. To effectively implement waste minimisation the manager requires knowledge of the production process, cradle-to-grave analysis (the tracking of materials from their extraction to their return to earth) and details of the composition of the waste.

The main sources of waste vary from country to country. In the UK, most waste comes from the construction and demolition of buildings, followed by mining and quarrying, industry and commerce. Household waste constitutes a relatively small proportion of all waste. Industrial waste is often tied to requirements in the supply chain. For example, a company handling a product may insist that it should be shipped using particular packing because it fits downstream needs.

1.4 WASTE MINIMISATION BENEFITS

Waste minimisation can protect the environment and often turns out to have positive economic benefits. Waste minimisation can improve:

- 1. Efficient production practices. Waste minimisation can achieve more output of product per unit of input of raw materials.
- 2. Economic returns. More efficient use of products means reduced costs of purchasing new materials improving the financial performance of a company.
- Public image. The environmental profile of a company is an important part of its overall reputation and waste minimisation reflects a proactive movement towards environmental protection.
- 4. Quality of products produced. New innovation and technological practices can reduce waste generation and improve the quality of the inputs in the production phase.
- 5. Environmental responsibility. Minimising or eliminating waste generation makes it easier to meet targets of environmental regulations, policies, and standards. The environmental impact of waste will be reduced.



2. OVERVIEW OF CONSTRUCTION & DEMOLITION WASTE MANAGEMENT

Asian institute of technology, Thailand had conducted a survey in various Asian countries and prepared a report regarding the construction and demolition waste management in May 2008. The study includes Asian countries like Bhutan, Japan, Hong-Kong SAR, China, Thailand and others including India. The following i.e., chart shows the status of construction and demolition waste in Asian countries. Figure 2.1 shows the status of construction waste in Asian countries.

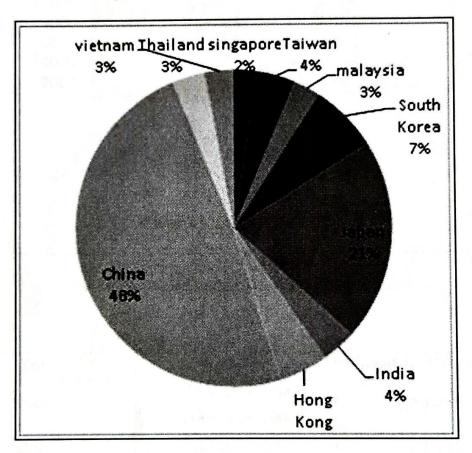


Figure-2.1 Estimates of C&D Wastes in Some Asian countries



INDIA

At the beginning the it is said that there is no adequate or satisfactory data for accessing to this issue. This is because there is no separate regulatory frame work for handling the construction and demolition waste management in India, as it is considered in the municipal solid waste management. Due to which it is getting difficult to access the information or to handle the construction and demolition waste management. As report prepared by the MoEF (Ministry of Environment and Forest) in 2008 estimated that 0.53 million tonnes/day of waste is generated

in the country. On that basis the 210 million tonnes of MSW is produced annually, Table 2.1 shows the estimate prepared by central government of India. But as per the world bank report says Asian countries produces around about 1000kg per capita per year, it means the figure which stated by the MoEF is very less than the world bank report figure. This show in India is underestimating the construction and demolition waste handling. The Figure 2.2 with graphical representation shows construction and demolition waste production per day in Indian cities.

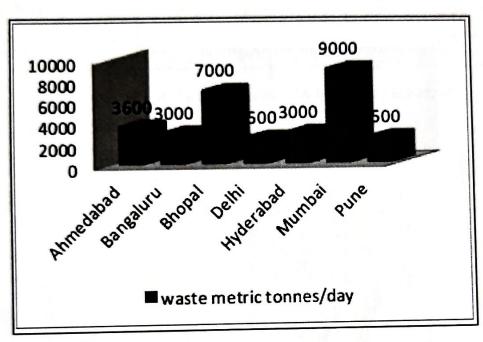


Figure-2.2 Waste Generated in Indian Cities Source

Year	Authority	Estimate in Million Ton
2000	Ministry of Urban Development(2000)	10—12
2001	TIFAC (2000)	12—15
2010	Ministry of Environment and Forest	10—12
2014	Ministry of Urban Development(2014)	no estimate exist

Table-1: Estimate Prepared by Central Government

Construction & Demolition Waste Minimisation Technique

Country	Amount Of Waste Per Year In MT	Year
Germany	223	2005
Australia	19	2008- 09
China	200	2005
_	85	2000
Japan	77	2012
South Korea	61.7	2013

Table-2: Quantity of Waste Production by Developed Countries



3. THE '3R' CONCEPT

Until last two decades, landfill was considered as the cheapest and convenient method of C&D waste disposal. But land filling is considered to be undesirable due to environmental and ecosystem hazards. Now most of the landfills are at the verge of arriving at its full capacity. Hence, more valuable lands may have to be employed in the future, which increase cost for C&D Waste disposal.



Figure-3: 3R Logo

REDUCE

Potential wastes can be identified early in the design process itself and measures should be taken during design stage to minimize the waste that may generate. Waste reduction can be achieved by design with standard sizes for all building materials, design spaces to be flexible and adaptable to changing uses and design for deconstruction.

REUSE

This involves identification of waste that can be salvaged for reuse on the current project or another project or that can be donated. A comparison of the value of the materials "as it is" for salvage and to their value as materials for recycling may be considered prior to reuse in many cases. Some of these materials may be valuable to reuse on-site; others may be sold to be used building material in another site or donated to a charitable organization

RECYCLE

After adopting all the options to prevent waste, salvage and reuse materials, the next step is to recycle as much of the remaining debris as possible. Recycling saves money by minimizing disposal costs.



4. CONSTRCTION & DEMOLITION WASTE

The management of construction waste is important today. The scarcity in the availability of aggregate for the production of concrete is one of the important problems facing by the construction industry. Appropriate use of the construction waste is a solution to the fast degradation of virgin raw materials in the construction industry.

LIFE CYCLE AND WASTE

Life cycle assessment of waste streams indicates that significant energy savings can be achieved at little or no cost by considered construction and demolition waste management and planned recycling.

Materials with high embodied energy (e.g. metals, especially aluminium) or with high environmental cost in extraction can have their life cycle impact reduced by end use recycling. The environmental impact of most materials can be substantially reduced with each reuse.

RECYCLING - WHO TO CONTACT

- Local Councils
- Regional Waste Authorities
- local waste station or landfill operator
- Waste Recycling Contractors

4.1 WHAT CAN BE RECYCLED?

Most materials can be recycled. The following list demonstrates some cuse options. There are many more and the list is growing rapidly.

Steel - Electric arc furnaces produce reinforcing bar, mesh and sections from 100% steel scrap. Conventional blast furnaces can incorporate up to 30% steel scrap. Recycling steel reduces embodied energy by 72%.

Aluminium - Aluminium is 100% recyclable; recycling aluminium reduces embodied energy by 95%.

Gypsum Plasterboard - CSR recycles clean plasterboard offcuts from material ordered from them; other companies are considering doing so. Check with your supplier to see if they offer this service. Plasterboard disposed of in landfill produces poisonous hydrogen sulphide, which has a foul odour.

Timber - Most timber (except treated timber) can be reprocessed into horticultural mulch. A particleboard manufacturer in Australia is developing a recycling facility that requires little or no pre-treatment of the waste.

Concrete - Un-set concrete can be 'washed' out at the plant to remove cement. Sand and stone can be reused. Set concrete can be crushed and recycled as aggregate for new concrete or road base and fill. Rapidly developing markets for this product mean the material is now in demand and disposal costs are significantly reduced.

Glass - Most glass can be recycled. Construction glass must be separated from other glass such as drink bottles. Glass may be cut and reused or recycled as aggregate for concrete. Some patterned glass incorporates all types of recycled building glass. Recycling glass reduces embodied energy by 20%.

Carpet - In good condition, carpet can be sold and reused. It can also be recycled into secondary carpets. Some manufacturers offer a recycling or take-back service on their products.

Some carpet can be recycled as a weed barrier or a covering and food for worm farms.

Bricks & Tiles - These materials can be reused where appropriate or crushed on site for backfill, aggregate and gravel with portable crushing plants.

Plastics - Many plastics can be granulated and reused to make new plastic products and include:

- High Density Polyethylene (HDPE): Rubbish Bins, Buckets and Traffic Cones
- Low Density Polyethylene (LDPE): Shrink Wrap and Bubble Wrap
- Polystyrene Containers, Insulation, PVC pipes, Fittings, and Vinyl Flooring.

4.2 CONCEPT DESIGN

- ✓ Choose construction to minimise cut and fill.
- Plan for end use and deconstruction.
- ✓ Select building systems with low waste rates.



- Choose prefabricated products.
- Identify recycled materials that can be used.
- Source recycled materials.

Early decisions have a major impact on waste stream quantity and quality.

4.3 DESIGN DEVELOPMENT

- ✓ Dimension to suit standard modular construction sizes and minimise waste and create fewer plasterboard and wall lining offcuts.
- ✓ Select materials with known minimum waste rates; consider manufacturers' waste recycling schemes and recycled content or other life cycle benefits.
- Engage like-minded design professionals (e.g. engineer, interior designer).
- ✓ State and agree key waste goals before engagement (team building).

4.4 SPECIFICATIONS

Specify:

- ✓ Materials with known Minimum Wastage rates, e.g. Plywood, finger-jointed timber
- ✓ Materials with known Recycled Content, e.g. Paper and polyester insulation
- ✓ Durable Materials and Finishes
- ✓ Waste Handling and Recycling Contractors
- ✓ Waste Streams to be Recycled.

4.5 THE CONSTRUCTION STAGE

*** SITE OPERATIONS GENERALLY**

- ✓ Plan locations for depositing and stacking of materials before delivery.
- ✓ Separate waste for recycling wherever possible. Provide recycling skips and ensure compliance with waste stream sorting by all trades.
- ✓ Where this is not possible engage a reputable waste disposal contractor who will take
 mixed waste bins, sort it on their site and provide you with a report.
- ✓ Form a compound to contain plastic film, cardboard, glue and paint tins.
- ✓ Use bins with lids to reduce windblown litter.



- ✓ Use reputable waste service providers.
- Negotiate recycling paybacks with local resource recovery firms.
- Use waste aware subcontractors.
- Use written contracts with all trades including clauses requiring waste minimisation practice.
- ✓ Require trades to dispose of their own waste.
- Back charge for sorting of waste streams not sorted by each subcontractor.
- Colour code or label waste skips and protect them from contamination, rain and wind.
- Provide regular waste bins for food scraps and household waste during construction.
- ✓ Lock special skips at night and weekends to prevent others dumping rubbish in them.
- ✓ Tidy up the site often. This encourages your trades to do the same and reduces the
 potential for windblown litter and safety hazards on site.



Figure-4: Separate Collection of Waste on Site



*** SUPERVISION**

- ✓ Monitor recycling rates and on-site sorting and storage of various waste streams.
- Verify contractor performance or certification.

MATERIALS STORAGE & HANDLING

- Minimise the time between delivery and installation to reduce the risk of damage or theft.
- ✓ Does packaging adequately protect goods? Is there too much? Can you eliminate some?
- Ask suppliers to collect or recycle packaging.
- ✓ Have fragile materials and fixtures delivered and installed close to completion date.
- ✓ Use prefabricated framing and trusses to reduce time on site before installation.
- Check quantity, condition and quality of goods on delivery. Report discrepancies immediately.
- ✓ Reject inferior goods or materials if their quality will result in additional waste.
- ✓ Refuse oversupply as compensation for inferior quality or condition.
- ✓ Report careless delivery staff to the supplier.

***** CONCRETING

- ✓ Use concrete with recycled aggregate in all viable applications.
- ✓ Use reinforcement made from recycled steel.
- ✓ Form up accurately and fine-tune estimating to minimise waste. Up to 10% is often wasted.
- ✓ Return surplus to the plant for recycling.
- ✓ Buy from plants that wash out cement to allow recycling of sand and aggregate.
- ✓ Break remnants into small pieces before final set to allow later use as backfill or recycling.
- ✓ Always form up a small area of path or low grade slab ready to accept remnants.

CARPENTRY & JOINERY

- ✓ Use engineered timber products that make efficient use of materials where possible.
- ✓ Use sustainably sourced timber.
- ✓ Encourage your supplier to find sustainable sources.
- ✓ Prepare accurate cutting lists before ordering.
- ✓ Give joiners a copy of the cutting list.
- ✓ Ensure that carpenters have a complete cutting list to allow efficient

- Use joinery profiles that can be easily and invisibly joined to reduce offcuts.
- ✓ Use offcuts wherever possible.
- Measure it twice cut it once.

BRICKLAYING

- Have bricks delivered around the perimeter to minimise the chance of damage from subsequent movement to place of use.
- Mortars with lower cement content are usually softer, thus helping in recycling as well as saving on cement.

ELECTRICAL SERVICES

- Use sub-boards and plan wiring to reduce wiring distances, quantities, waste and cost.
- Recycle offcuts. Strip insulation from copper.
- Consider pulse switching and intelligent controls to reduce cabling and energy use.
- Use cable products that are highly recyclable and be aware that some PVC coatings used to contain heavy metals.

PLASTERING

- Buy plasterboard from suppliers who recycle.
- ✓ Sort offcuts and store on site for return to recycler. Keep offcuts clean and dry.
- Carry useful sized offcuts to the next job.

GLAZING

- ✓ Separate construction glass from other glass such as drink bottles. Most glass can be melted down and recycled but requires sorting.
- Glass can also be recycled as aggregate.



5. MANAGEMENT PLANS & COMMON PRATICES

5.1 WASTE MANAGEMENT PLANS

Many local councils require waste management plans before granting development consent. They usually require the builder or designer to estimate the total waste stream volumes from both demolition and construction and nominate the means of disposal including the recycling contractor, recycling waste station or landfill site.

The site plan is often required to show waste storage facilities on site during construction and provide a schedule for delivery or pickup.

The time and cost of waste plan preparation is usually recouped through reductions in waste disposal costs or dividends from the sale of salvaged resources. If this is not possible (low tipping fee areas), charge a fee for the service to ensure that plans are properly prepared.

5.2 COMMON PRACTICES

The management practices of waste from construction activities are endorsed with the goal of conserving the ecosystem recognizing the fact that wastes from C & D works subsidize considerably to the polluted surroundings. This booming consciousness of effects of C & D wastes on environment has led to the growth of waste management as a valuable function of construction project management. Currently, C & D waste is regarded as a part of MSW. Except for a few isolated cases, C & D waste is not managed properly in India by Urban Local Bodies (ULBs). The common practices of C & D waste management include:

- 1. Reuse of valuable materials (by informal sector dealers)
- Illegal open dumping: Debris consisting of concrete, brick and mortar. Excavated earth is
 dumped illegally on roadsides, low-lying areas and river beds. This causes the waste to pile
 up on roads causing inconvenience, choking surface drains, disrupting traffic and is an
 eyesore on the urban landscape.
- 3. Use as filler materials in low-lying areas especially before new construction.
- 4. Use in sub-base layer in roads.
- 5. Dumped in ULB designated dump yards (in a few cities only).



6. METHODS FOR TREATMENT & DISPOSAL

Treatment and disposal of waste Several methods are used for treatment and disposal. These are:

- 1. Incineration
- 2. Landfilling
- 3. Pyrolysis
- Recycling

6.1 INCINERATION

- ✓ Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials.
- ✓ Incineration and other high temperature waste treatment systems are described as "thermal treatment".
- ✓ Incineration of waste materials converts the waste into ash, flue gas, and heat.
- ✓ Incinerators are used for this process.
- ✓ Important points regarding incineration
- ✓ Supplying of solid waste should be continuous.
- ✓ Waste should be proper mixed with fuel for complete combustion.
- ✓ Temp. should not less than 670 °C.



Figure-6.1: Incineration

Advantages

- 1. Most hygienic method.
- 2. Complete destruction of pathogens.
- 3. No odour trouble.
- 4. Heat generated may be used for steam power.
- 5. Clinkers produced may be used for road construction.
- 6. Less space required.
- 7. Adverse weather condition has no effect.

Disadvantages

- 1. Large initial expense.
- 2. Care and attention required otherwise incomplete combustion will
- 3. Increase air pollution.
- 4. Residues required to be disposed which require money.
- 5. Large no of vehicles required for transportation.0

6.2 LANDFILLING

A landfill site is a site for the disposal of waste materials by burial and is the oldest form of waste treatment.

- ✓ Historically, landfills have been the most common methods of organized waste disposal
 and remain so in many places around the world.
- ✓ The dumping is done with layers of 1-2 m.
- ✓ The layer is covered with soil of 20 cm thickness.

Advantages

- 1. Simple method.
- 2. No costly plant required.
- 3. No residues or by products need to be disposed.
- 4. Separation not required.
- 5. Unused land can be used.
- 6. Methane gas can be used as fuel.



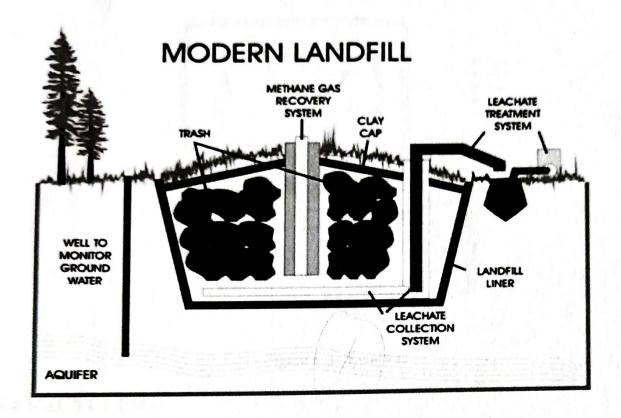


Figure-6.2: Landfilling

Disadvantages

- 1. Large land required.
- 2. Proper dumping site may not be available.
- 3. Odour problem.
- 4. Use of insecticides required.
- 5. Leachate should be collected regularly.
- 6. Methane gas should be collected properly.
- 7. Greenhouse gas problem.

6.3 PYROLYSIS

- ✓ Heating of the solid waste at very high temp. in absence of air.
- ✓ Carried out at temp. between 500 °C 1000 °C.
- ✓ Gas, liquid and chars are the by-products.

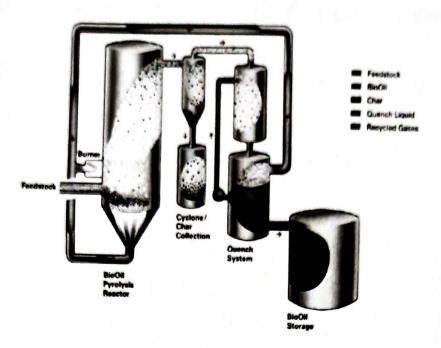


Figure-6.3: Pyrolysis

6.4 RECYCLING

Recycling is processing used materials into new products.

- ✓ It reduces the consumption of fresh raw materials, reduce energy usage, reduce air pollution (from incineration) and water pollution (from landfilling).
- ✓ Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse, Recycle" waste hierarchy.
- ✓ Recyclable materials include many kinds of glass, paper, metal, plastic, textiles, and electronics.
- ✓ Although similar in effect, the composting or other reuse of biodegradable waste such as food or garden waste is not typically considered recycling.
- ✓ Materials to be recycled are either brought to a collection centre or picked up from the curb side, then sorted, cleaned, and reprocessed into new materials.



7. WASTE MINIMISATION TECHNIQUES

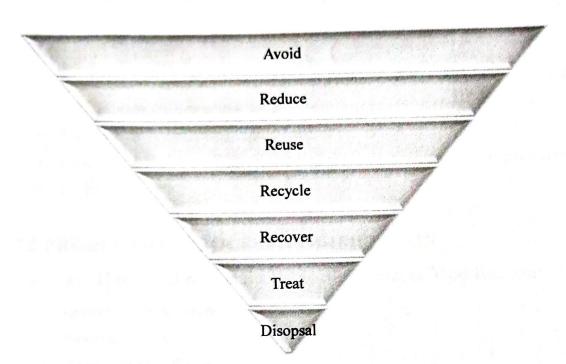


Figure-7: Reduce Waste from Disposal

- 1. Inventory Management
- 2. Production Process Modification
- 3. Volume Reduction
- 4. Recovery

7.1 INVENTORY MANAGEMENT

Inventory management is divided into two:

- 1. Inventory Control
- 2. Materials Control



1. Inventory Control

- ✓ Involves techniques to reduce inventory size and hazardous chemical use while increasing inventory turnover.
- ✓ proper inventory control helps to reduce wastes.

✓ method that can be used are purchasing in small quantities, purchasing in appropriate container sizes and just-in-time purchasing

2. Materials Control

- ✓ Proper control over the storage of raw materials, products and process waste and the transfer of these items within the process and around the facility.
- ✓ Minimize the losses through spills, leaks or contamination
- Ensure the material is efficiently handled and used in the production process and does not become waste

7.2 PRODUCTION PROCESS MODIFICATION

There are Three Techniques for Production Process Modification:

- 1. Operation & Maintenance Procedures
- 2. Material Change
- 3. Equipment Modifications

1. Operation & Maintenance Procedures

- ✓ Corrective and preventive maintenance can reduce waste generation caused by equipment failure.
- ✓ Can help spot potential sources of release and correct a problem before any material is lost.

2. Material Change

✓ The replacement of materials used in either a product formulation or in a production process, can either result in elimination of a hazardous waste or facilitate recovery of a

Example: In pharmaceutical company - replace solvent based tablet coating process with a water based process.

3. Equipment Modifications

✓ Installation of more efficient equipment or modification of equipment can reduce the generation of waste.

✓ Installation of completely new equipment may be involved.

7.3 VOLUME REDUCTION

- 1. Source Segregation
- 2. Concentration

1. Source segregation

Segregation of wastes allows them to be more readily removed or recovered.

2. Concentration

concentrate waste through separation processes such as filtration, centrifugation, membrane separations and evaporations

7.4 RECOVERY

On-Site Recovery

- ✓ Reduce possible handling losses and allow the management of the waste to remain within the compass of the producer.
- ✓ Recovered material can be reused as raw material
- ✓ Example: In Printing Industry, Use Vapour Recovery System to Recover Solvents

Off-Site Recovery

- ✓ If On-Site Recovery is not feasible, for economic or other reasons, Off-Site recovery should be considered.
- ✓ Waste may be transferred to other company for use as a raw material in the other company's manufacturing process.



8. SUGGESTIONS & RECOMMENDATIONS

Based on the various surveys conducted related with the C&D Waste Management, the following recommendations and suggestions are proposed:

- Detailed waste management strategy should imitate the magnitude and complications involved with the project's waste issues.
- Constantly amending the waste management strategy to report how waste is handled and review where waste is captured.
- 3. Environment-friendly technologies should be utilized for C & D waste management.
- 4. Offer training about the waste management strategy to the people concerned.
- Building activities may deteriorate flora on site and in its surroundings. As trees are important natural elements of urban landscape, utmost care must be taken to guarantee their protection.
- 6. Assessment of the level of noise generated by construction locations will absolutely be established in the future owing to the requirement to follow the rules and regulations and to evade any undue claims from the neighbourhood. Distinctive site organizational measures must be adopted.
- Lean construction techniques must be adopted outlining the procedures relate to the elimination of waste.
- Sustainable or green building practice must be adopted to reduce, re-use, and recycle the C
 D waste. Advocating 'deconstruction' in place of 'demolition' and developing designs which aid 'deconstruction'.
- Waste recycling strategies should be promoted for C&D projects prior to the commencement of the construction activity.
- 10. Statutory orders, action plans and voluntary agreements must be carried out.
- Banning of landfills with C & D waste must be done to reduce air/land pollution and hence help the environment from toxic waste and gases.
- 12. Promoting recycling and developing market for recycled products



- 13. Awareness circulars or notices can be issued to communicate the citizens about the new C & D waste assortment and dumping system and the locations of the bins and direct the citizens to discard the C & D waste in the designated bins only or directly to the C & D facility site. The civic authority must alert that no person should discard C & D waste on the pavements, streets, open land, drainage (storm) or areas associated with the municipality or the government. If such waste is disposed on a private property, the owner of that property would be obligated for the disposed waste and would be held accountable for any kind of deterioration of the surrounding area or causing pollution.
- 14. Mandating compliance of a C & D Waste management plan by massive generators of C & D waste (>400sqm of construction)
- 15. Enforce a construction waste charge on developers and the revenue generated can be utilized to support and subsidize C & D waste recycling centres.
- 16. Consistently dismantle the structure or the building instead of destroying them.
- 17. It can also be suggested that the Government can offer tax concessions to C & D recycling centres and bring out various tax policies to minimize waste production and avoid hazardous disposal.
- 18. Barricading the area, cleaning the vehicles before leaving the construction site, covering vehicles carrying construction material, using of wet jet for grinding and stone cutting and sprinkling recycled water at the site can be some of the measures to minimize the pollution at construction sites.

Thus, there must be an appropriate institutional system to take utmost care of the assortment, transportation, transitional storage (if necessary), utilization and discarding of C & D wastes. Rightful rules and regulations should be formulated and instigated at each level. Segregation of C & D waste must be encouraged at source of waste and private enterprise can be advantageously engaged for the assortment and transportation of that waste. In India, Public-Private-Partnership (PPP) schemes can be a potential system of utilizing of C & D waste management.



7

9. CONCLUSION

Waste minimization is important because it helps protect the environment and it makes good business sense. In fact, businesses can simultaneously manage both business and environmental objectives by focusing on waste minimization. For example, companies have discovered that waste minimization:

- ✓ Saves money through avoided disposal and raw materials purchase costs;
- ✓ Reduces regulatory burdens and compliance costs;
- ✓ Builds better community relations;
- ✓ Minimizes short and long term liability;
- ✓ Creates safer working conditions for employees;
- ✓ Protects human health and the environment:
- ✓ Demonstrates environmental leadership;
- ✓ Improves competitiveness through greater efficiencies and deceased overhead costs.



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Department of Civil Engineering

30/03/2019

To,

The Principal

GMVIT, Tala.

Sub-Request for site visit on Thakur Infraprojects Pvt. Ltd, Indapur-Tala road. On 2/04/2019

Respected Sir,

I am Pranit Pandharinath Sathe working as assistant professor in Civil Engineering Department. We have Advanced Construction Equipment subject and in this subject we have different construction equipment related topics. As per syllabus it is mandatory to have site visit and by visiting this site students may get practical knowledge that will help for academic subject.

So kindly accept my request and issue the permission.

forwarded to principal

place do the meditul.

April Rama.

Thank You Sir

ours Faithfully,

Pranit Sathe

Asst. Professor

Civil Engineering Dept.

CERTIFICATE

THIS IS TO CERTIFY THAT STUDENT HAS SATISFACTORILY COMPLETED THE SITE VISIT REPORT ON

"DOLWAHAL HYDRO-POWER PROJECT"

IN PARTIAL FULFILMENT FOR THE COMPLETION OF THE SUBJECT ADVANCED CONSTRUCTION EQIPMENT IN CIVIL ENGINEERING OF SEM-VI THIRD YEAR CIVIL ENGINEERING

SUBMITTED BY

Dhanshree Bhaskar Tapkire

(T.E.C.E. ROLL NO. 59)

SUBJECT IN-CHARGE (PROF. P. P. SATHE) HEAD OF DEPARTMENT (PROF. AJEET KUMAR)





G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

Educational-Industrial Site Visit At

DOLWAHAL HYDRO-POWER PROJECT, KOLAD

Visit Date: 2nd April 2019

All the students of Third Year Civil Engineering of G. M. Vedak Institute Of Technology Tala, Raigad, were very much thankful to our Principle Dr. D. N. Jaiswal & H.O.D. Of Civil Engineering Department Prof. Ajeet Kumar, & Subject Teacher Prof. P. P. Sathe respectively to support an Educational-Industrial Visit at Dolwahal Hrdro-Power Project, Kolad-Raigad.

Visit At Dolwahal Hrdro-Power Project, Kolad-Raigad On 2nd April 2019 At 2:30 P.M. Along With Faculty members Prof. P.P. Sathe & Prof. Akash Lanke & Students Of Third Year Civil Engineering of G.M.V.I.T. Tala Raigad.



IMPORTANCE OF HYYDRAULIC POWER GENERATION STRUCTURES

In hydroelectric power station the kinetic energy developed due to gravity in a falling water from higher to lower head is utilised to rotate a turbine to produce electricity. The potential energy stored in the water at upper water level will release as kinetic energy when it falls to the lower water level. This turbine rotates when the following water strikes the turbine blades. To achieve a head difference of water hydroelectric power structure are generally constructed in hilly areas. In the way of the river in hilly areas, an artificial dam is constructed to create required water head. From this dam water is allowed to fall toward downstream in a controlled way to turbine blades. As a result, the turbine rotates due to the water force applied to its blades and hence the alternator rotates since the turbine shaft is coupled with alternator shaft. The main advantage of an electric power plant is that it does not require any fuel. It only requires water head which is naturally available after the construction of the required dam.

OBJECTIVE OF VISIT

Technical Exposure of Hydro-Power Project & its Operation Process & other engineering aspects of Subject – (CE-CDLO6061) Advanced Construction Equipment, Subject as per University of Mumbai Syllabus.

WHAT HAPPEN WHEN WE REACH AT HYDRO-ELECTRIC POWER GENERATION STRUCTURE?

First A Technical Explanation by Manager & Engineer. First, they explained us regarding the General Hydraulic Engineering Knowledge-Base things & After Different Types of Turbines, Blades of Turbine & Technical Explanation of the Hydro-Electric Power Generation Structure. They also shared some Experience of their Working Journey an Engineer.

DOLWAHAL HYDRO-POWER PROJECT



Figure: Information Board at Power Plant

INFORMATION OF DOLWAHAL HYDRO-POWER PROJECT

- → Name of the Project : Dolwahal Hydro-Power Project
- → Name of the River: Kundalika River
- → Location : At Post. Dolwahal, Tal. Roha, Dist. Raigad
- → Dam Type : Stone Bhandhara
- → Height of Dam: 12.50 meter
- → Turbine Used for Electricity Geneeration: S Type Full Kaplan Turbine
- → RPM of Generator: 750 RPM



COMPONENTS OF HYDRO-ELECTRIC POWER GENERATION STRUCTURE

Water flowing in the river is comprised of kinetic energy and potential energy. In hydroelectric power plants the potential energy of water is utilized to produce electricity. There several important components of the hydroelectric power plant which are as following:

1.DAM

The dam is the most important component of hydroelectric power plant. The dam is built on a large river that has abundant quantity of water throughout the year. It should be built at a location where the height of the river is sufficient to get the maximum possible potential energy from water.

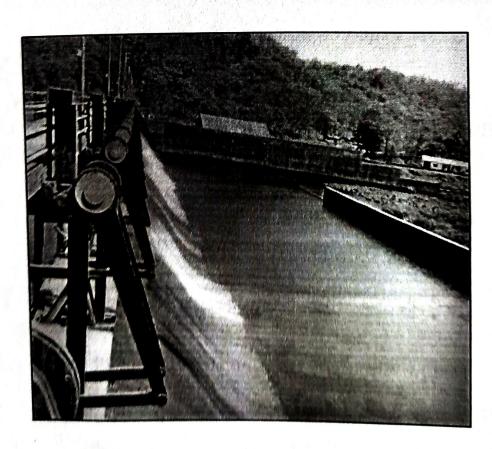


Photo: Dam



2. WATER RESERVOIR

The water reservoir is the place behind the dam where water is stored. The water in the reservoir is located higher than the rest of the dam structure. The height of water in the reservoir decides how much potential energy the water possesses. The higher the height of water, the more its potential energy. The high position of water in the reservoir also enables it to move downwards effortlessly. The height of water in the reservoir is higher than the natural height of water flowing in the river, so it is considered to have an altered equilibrium. This also helps to increase the overall potential energy of water, which helps ultimately produce more electricity in the power generation unit.

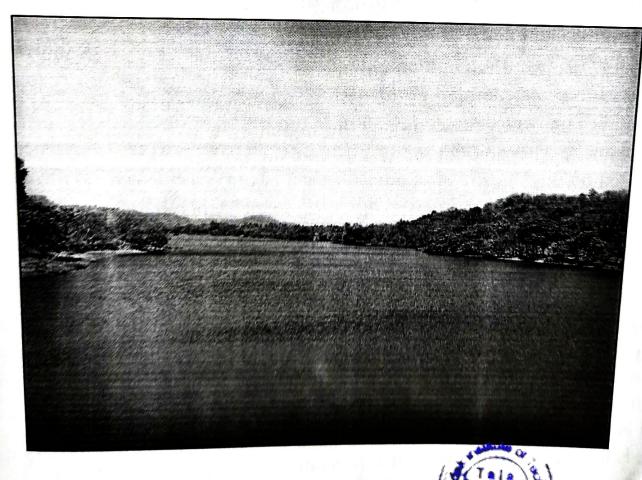


Photo: Reservoir

3. INTAKE OR CONTROL GATES

These are the gates built on the inside of the dam. The water from reservoir is released and controlled through these gates. These are called inlet gates because water enters the power generation unit through these inlet gates. When the control gates are opened the water flows due to gravity gates. When the penstock and towards the turbines. The water flowing through the gates possesses potential as well as kinetic energy.

4. THE PENSTOCK

The penstock is the long pipe or the shaft that carries the water flowing from the reservoir towards the power generation unit, comprised of the turbines and generator. The water in the penstock possesses kinetic energy due to its motion and potential energy due to its height. The total amount of power generated in the hydroelectric power plant depends on the height of the water reservoir and the amount of water flowing through the penstock. The amount of water flowing through the penstock is controlled by the control gates.

5. WATER TURBINES

Water flowing from the penstock is allowed to enter the power generation unit, which houses the turbine and the generator. When water falls on the blades of the turbine the kinetic and potential energy of water is converted into the rotational motion of the blades of the turbine. The rotating blades causes the shaft of the turbine to also rotate. The turbine shaft is enclosed inside the generator. In most hydroelectric power plants there is more than one power generation unit.



Photo: Turbine

There is large difference in height between the level of turbine and level of water in the reservoir. This difference in height, also known as the head of water, decides the total amount of power that can be generated in the hydroelectric power plant.

There are various types of water turbines such as Kaplan turbine, Francis turbine, Pelton wheels etc. The type of turbine used in the hydroelectric power plant depends on the height of the reservoir, quantity of water and the total power generation capacity.



6. GENERATOR

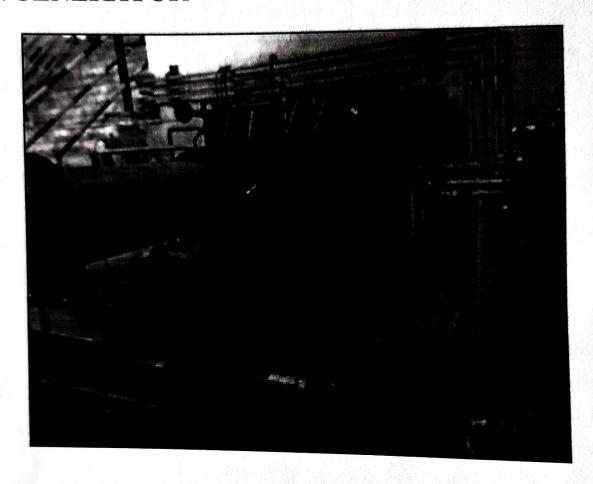


Figure: Shaft of Generator

It is in the generator where the electricity is produced. The shaft of the water turbine rotates in the generator, which produces alternating current in the coils of the generator. It is the rotation of the shaft inside the generator that produces magnetic field which is converted into electricity by electromagnetic field induction. Hence the rotation of the shaft of the turbine is crucial for the production of electricity and this is achieved by the kinetic and potential energy of water. Thus in hydroelectricity power plants potential energy of water is converted into electricity.



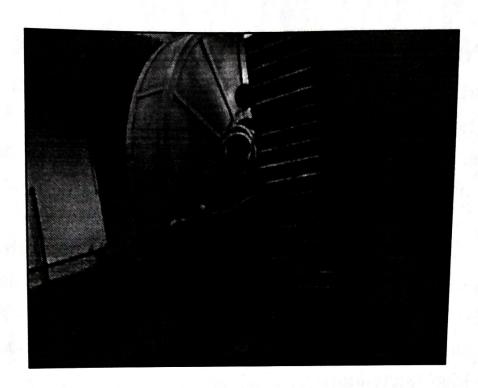


Figure: Generator

GROUP PHOTO



Photo: Group Photo at Hydro-Power Plant



WORKING OF HYDROPOWER POWER PLANT

- 1. Water harvested from the catchment area is stored in the reservoir which is then used to generate the electricity.
- 2. It is made in the path of the river to make the reservoir to hold the rain water.
- 3. Spillways are made to make the dam safe. When level of water is exceeding some defined point, it will discharge through these spillways.
- 4. When there is sudden change in the turbine load, in such cases there is need of temporary storage of water. This temporary storage of water near turbine is called as forebay.
- 5. Surge tank is built in between dam and the valve house. It is used to take care of the system load fluctuations.
- 6. It is water pipeline carrying water from dam to turbine.
- 7. Prime mover or turbine is the main part of the power station. It is coupled with the generator. Turbine is rotated by the flow of water. As it is coupled with the generator, generator also rotates which produces electricity.
- 8. Powerhouse consists of turbine, alternator and electrical equipment.
- 9. Tail races outlet water of the turbine is discharged to the river trough tail races.

ADVANTAGES

- > No fuel is required as potential energy is stored water is used for electricity generation
- > Neat and clean source of energy
- > Very small running charges as water is available free of cost
- > Comparatively less maintenance is required and has longer life
- > Serves other purposes too, such as irrigation

DISADVANTAGES

- > Very high capital cost due to construction of dam
- > High cost of transmission as hydro plants are located in hilly areas which are quite away from the consumers



CONCLUSION

Students have learned what are the components of Hydro-Power Plant & How actual working of the plant. The process of Electric Power generation at Hydro-Power Plant is properly get to know after Visiting this Power Plant. Which types of Turbines are used in Power Plant is also get to know; with this kind of Educational-Industrial Visit we gain much more knowledge on Hydro-Power Plant, Applications aside from theoretical aspect learned from classroom.



G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA DEPARTMENT OF CIVIL ENGINEERING

Site Visit (2018-2019) Attendance Sheet

SR.	TE(CIVIL) Subject- ACE (Sem V	VI) Date- 2/04 Students Sign	
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26	KHANDAGALE HARSHAL JAYENDRA	Village	
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G. M. HEDAR Dustitute of Technology

(College of Engineering)

Tala, Taluka - Tala, Dist - Raigad, Tel.: 02140-269004 / 269008 E-mail: gmvedakit@gmail.com



Approved by AICTE, Recognized by Gov. of Maharashtra & Affiliated to University of Mumbal

Outward No:GMVIT/COMP/53 N2020-21

Date: 27th Oct 2020.

To,
Prof. P. R. Kunekar.
Assistant Professor,
Atharva College of Engineering. Mumbai.

Subject: Invitation to deliver a Webinar on "Innovation and Design Thinking".

Dear Sir.

Our Institute, G. M. Vedak Institute of Technology, Tala approved by AICTE, Recognized by DTE and Govt. of Maharashtra and Affiliated to University of Mumbai is offering Four years Degree Course in Engineering & Technology for the following disciplines.

- 1. Computer Engineering
- 2. Electronics and Telecommunication Engineering
- Civil Engineering
- 4. Mechanical Engineering

It is our immense pleasure to announce that the Department of computer Engineering is organizing a webinar on "Innovation and Design Thinking" on 29th October 2020 from 4:00 PM. This event is intended to train our students for "Digital India Aatma Nirbhar Bharat Innovate Challenge", launched by MeitY, Gol.

We would like to invite you as a Guest speaker to provide your talks on "Innovation and Design Thinking".

Your knowledge and expertise will be highly valuable and will contribute to successful conduction of the event.

Your early response in this regard will be highly appreciated.

Heine

Prof. Thakur S. K.
Event coordinator

Prof. Metha K. R.

Dr. Jaiswal D. N.
Principal



Gmail

kadambari metha <kadambarimetha@gmail.com>

Invitation to deliver a Webinar on innovation and design Thinking

Imessagi

kadambari metha <kadambarimetha@gmail.com> To: pankaj kunekar <kunekarpankaj30@gmail.com> Wed, Oct 28, 2020 at 12:08 PM

Dear Sir,

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Your knowledge and expertise will be highly valuable and will contribute to successful conduction of the event.

Your early response in this regard will be highly appreciated. For confirming your participation, please revert to the mail.

Thanks and Regards, Prof.Metha K.R Asst.professor, GMVIT, Tala.



Date: 29/10/2020

Professional Activity Innovation and Design Thinking"

Program: Innovation and Design Thinking

Date conducted on: 29/10/2020

Platform: Google Meet



G.M. VEDAK INSTITUTE OF TECHNOLOGY

TALA-RAIGAD (MAHARASHTRA) DEPARTMENT OF COMPUTER ENGINEERING



Webinar on "Innovation and Design Thinking"

Date: 29/10/2020 Time: 4.00 PM to 5.00 PM Platform: Google Meet



Anyone who converts a challenge into an opportunity through innovation creates wealth. He or she indeed is a Leader, Are You?

- Dr. A.P.J. Abdul Kalam

Speaker:

Prof. Pankaj Kunekar

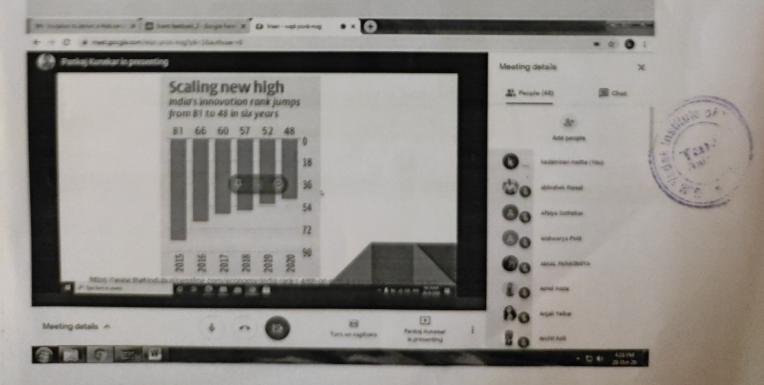
Asst. Professor, Atharva College of Engineering,

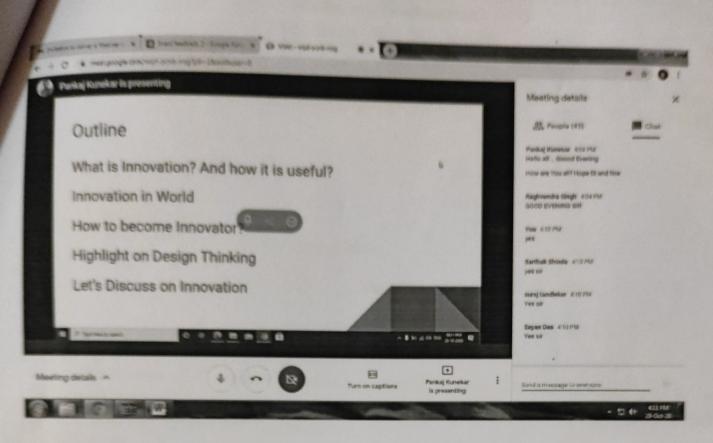
Mumbai

Innovation Ambassador, IIC MHRD, GOI

Coordinators: Mrs.K.R.Metha, Ms.S.K.Thakur

Principal: Dr.D.N.Jaiswal









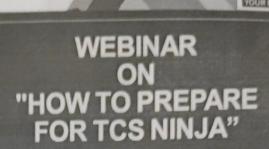


Organize by



TestGrad

Resource Person:
Mr. Pankaj Dharigouda,
B.Tech, M.Tech (Mech.)
Walachand College of
Engineering [An
Autonomous Govt College
], GATE Qualified, CAT
Qualified



14TH AUGUST 2021 AT 11 AM

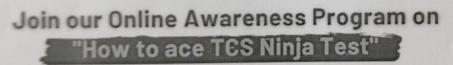
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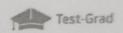
IN-CHARGE HOD DEPARTMENT OF COMPUTER ENGG. PROF. SINGH R.O

TPO AND

EVENT COORDINATOR

Are you a TCS Ninja aspirant?



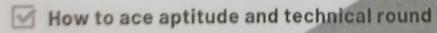






Mr. Pankaj Dharigaouda

B.Tech, M.Tech(Mech.)Walchand College of Engineering
[An Autonomous Govt College] GATE Qualified, CAT
Qualified



Best tips & practices to crack test

Saturday | 14th Aug 2021

11:00 AM

www.testgrad.com



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TRAINING AND PLACEMENT DEPARTMENT



DEPARTMENT OF COMPUTER ENGINEERING

Report on Webinar

Webinar Topic: - How to Prepare for TCS Ninja

Date: - 14th August 2021

Time: - 11:00 am TO 12:40 pm (IST)

Organized by: - Training & Placement Cell and Department of Computer Engineering G.M.V.I.T.

Speaker Name: - Mr. Pankaj Dharigouda

(B.Tech, M.Tech (Mech.)

Walachand College of Engineering [An Autonomous Govt College], GATE Qualified, CAT Qualified

TestGrad Solutions

Zoom Meet Link: -

https://us02web.zoom.us/i/87166120527?pwd=dnZWSmQyZXEyQXduaE9yYzhURUVwdz09

The Training & Placement Cell and Department of computer Engineering of G.M. Vedak Institute of Technology Tala of Engineering, Nashik arranged the webinar series to utilize the pandemic days of Covid-19. This webinar which is conducted on 14th August 2021 is very useful for students who belongs to the IT/ CSE/ MECH Department.

Today's Webinar was on "How to Prepare for TCS Ninja". In Today's Webinar we have discussed Guidance about the aptitude test. What is a career guidance aptitude test? These are psychometric assessment tests that help an individual to decide the best career to opt. These tests assess people on logic, reasoning, problem solving, management, communication, judgment, interest, thinking, physical and senses.

An aptitude test is a systematic means of testing a job candidate's abilities to perform specific tasks and react to a range of different situations. The tests each have a standardized method of administration and scoring, with the results quantified and compared with all other test takers. No prior knowledge is assumed, as the tests seek to determine innate ability at a particular competency.

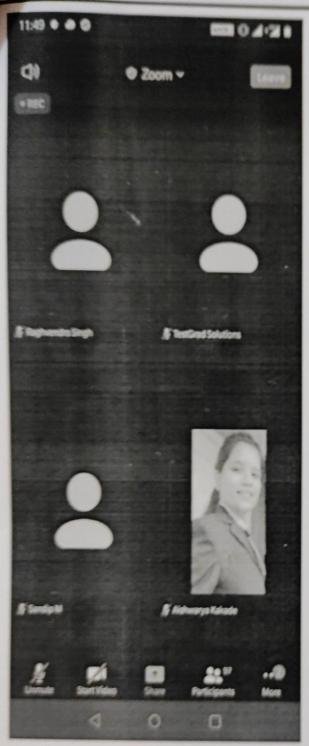
These are the most common types of aptitude test that you will encounter:

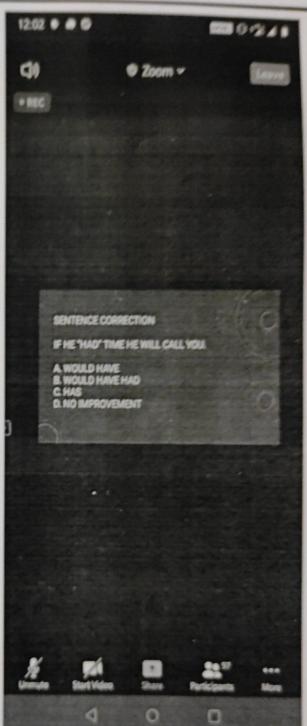
- Numerical reasoning tests: These tests require you to answer questions based on statistics, figures and charts.
- Verbal reasoning tests: A means of assessing your verbal logic and capacity to quickly digest information from passages of text.
- In-tray exercises: A business-related scenario that assesses how well you can priorities tasks.
- Diagrammatic tests: Tests that measure your logical reasoning, usually under strict time conditions.
- Situational judgement tests: Psychological tests that assess your judgement in resolving work-based problems.
- Inductive reasoning tests: Tests that identify how well a candidate can see the underlying logic in patterns, rather than words or numbers.
- Cognitive ability tests: A measurement of general intelligence, covering many categories of aptitude test.
- Error checking tests: An unusual type of aptitude test that focuses on your ability to identify errors in complex data sets.

 Top 13 Tips to Pass your Aptitude Test
- · Practice aptitude test online
- Get all the right tools
- · Preparation is the key
- · Do your research
- · Get comfortable taking tests
- Use the assessor's resources
- Take test on your own
- · Carefully read the instructions
- Avoid focusing on just one question
- Keep moving forwards
- · More speed, Less haste
- Use the correct tool
- Use good calculator
- They have solved some mathematical aptitude questions and told how to solved it.

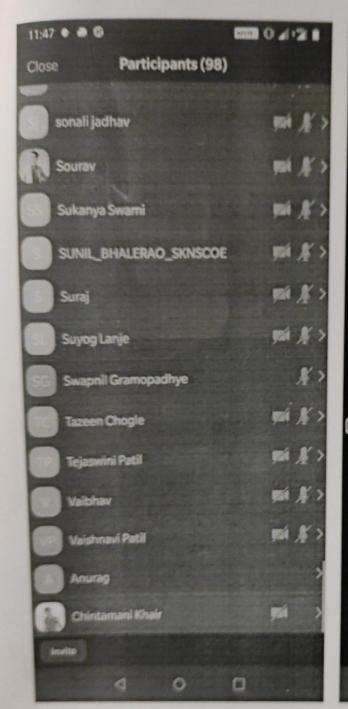
Some Screenshots of Webinar:-

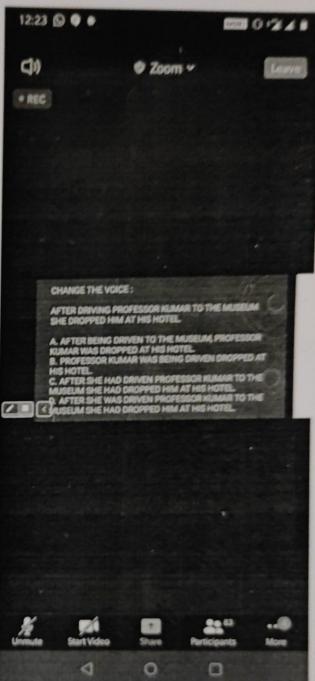




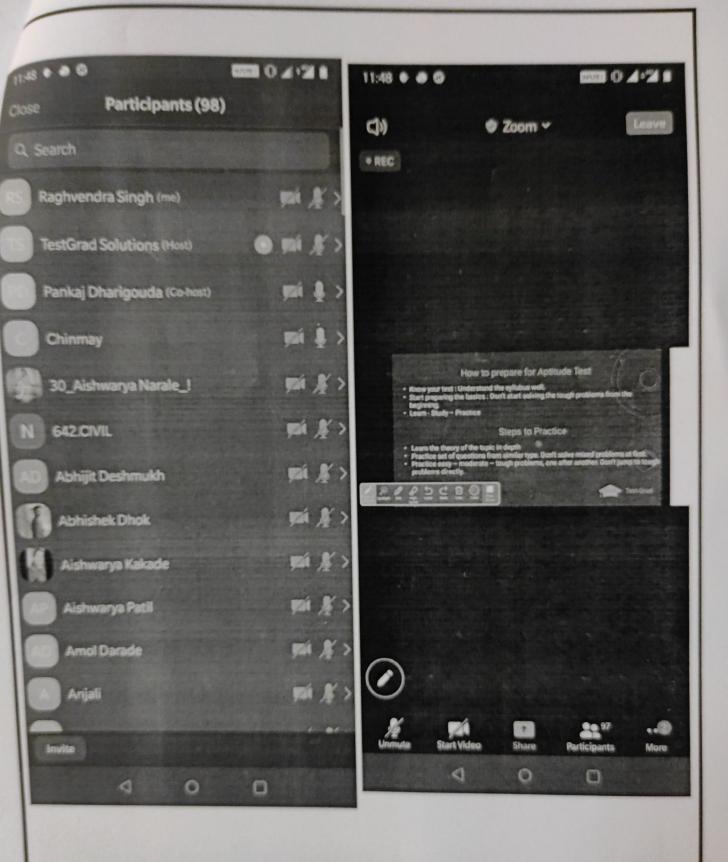


















G.M.VEDAK INSTITUTE OF TECHNOLOGY, TALA DEPARTMENT OF CIVIL ENGINEERING

ONE DAY WORKSHOP ON TOTAL STATION BY

MR.VASANT KATARE

VENUE:B1-007 (G1 & ON FIELD)

DATE:29/03/2019







G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

One day Total Station workshop

Date: 29th March 2019

All the students of Second Year Civil Engineering of G. M. Vedak Institute of Technology Tala, Raigad, were very much thankful to our Principle Dr. D. N. Jaiswal & H.O.D. Of Civil Engineering Department & Subject Teacher Prof. Y.R.Galinde respectively for conduction of one day total station workshop.



G.M.V.I.T. Tala - University of Mumbai



Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. Vedak Institute of Technology

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai.

Institute code: EN 3447

At post &Taluka: Tala, Dist.-Raigad, Off Indapur on Mumbai-Goa Highway (NH-17), Maharashtra-402 111 E-mail: gmvedakit@gmail.com

Web: www.gmvit.com

Department of Civil Engineering

Date: 20/3/2019

To

The Principal

GMVIT, Tala

Subject: Seeking permission for conduction of one day workshop on Total Station.

Respected Sir,

As the part of curriculum of second year, Project based on Total station and practicals are mandatory for second year students.

I, Mrs Y.R.Galinde as subject In charge of Surveying II request you to please give permission for conduction of one day workshop on Total Station Instrument in our college campus. 28 march 2019 from 9,30 +05.30.

Thanking you,

Yours faithfully,

Y.R.Galinde.

Forwarded to poincipal please do the needful Afaillume





G. M. Vedak Institute of Technology, Tala

Approved by AICTE, Recognized by Govt. of Maharashtra & Affillated to University of Mumbai. Institute code: EN 3447

E-mail:gmvedakit@gmail.com

Web: www.gmvit.com

(Department of Civil Engineering) Academic Year 2017-18(Second Half)

Date: 25/3/2019

NOTICE

All Faculties are here by informed that, Workshop on Total station will be held on Friday 29th March 2019. I request you to please give your second year schedule.

Venue: Institute Campus

Time: 9.30-5.30

Prof. M.M. Pabil

PODF. K.B. Meshran

Prof. Alcash Lanke

Prof. Mali - 1 3.36-5.30- practical

G. M. VEDAK TUTE OF TECHNOLOGY, TALA



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At - Post - Taluka - Tala, Mumbai - Goa highway, Near Indapur, Dist. Raigad, Maharashtra - 402 111 Tel.: 02140 - 269004, 269088 Website :- www.gmvit.com, Email :- gmvedakit@gmail.com

Ref. No. GMVIT/2018-19/540

Date:29/03/2019

To,

Mr. Vasant Katare

Surveyor

Dear Sir,

We would like to extend our warm thanks to you for delivering a One day Workshop on "Total Station". The valuable information shared by you has inspired our students and faculties.

We sincerely thank for the support and the valuable time given by you and we hope that you would continue to extend your support in our future initiatives as well.

Thanking You.

Principal

G M Vedak Institute of Technology

Tala Dist.Raigad



Date - 29/8/2019

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF CIVIL ENGINEERING

Total Station workshop attendance sheet (FIRST HALF 2019)

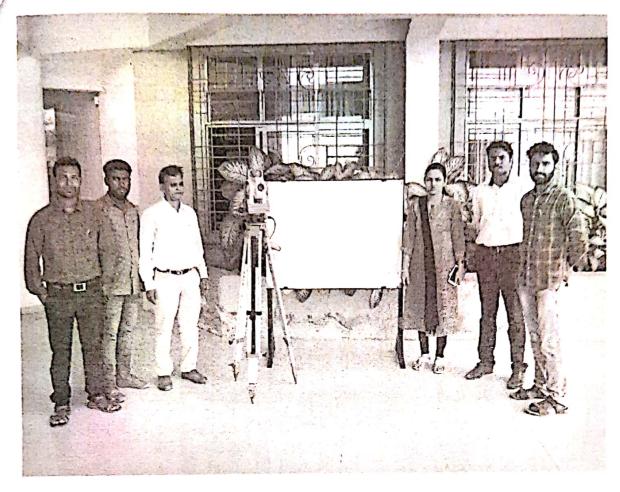
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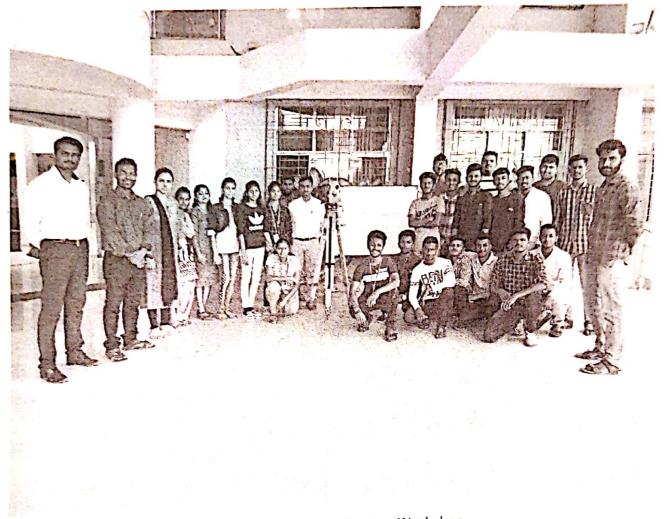
Guest of Total station workshop

OBJECTIVE OF VISIT

To learn more knowledge of modern surveying instruments like total station

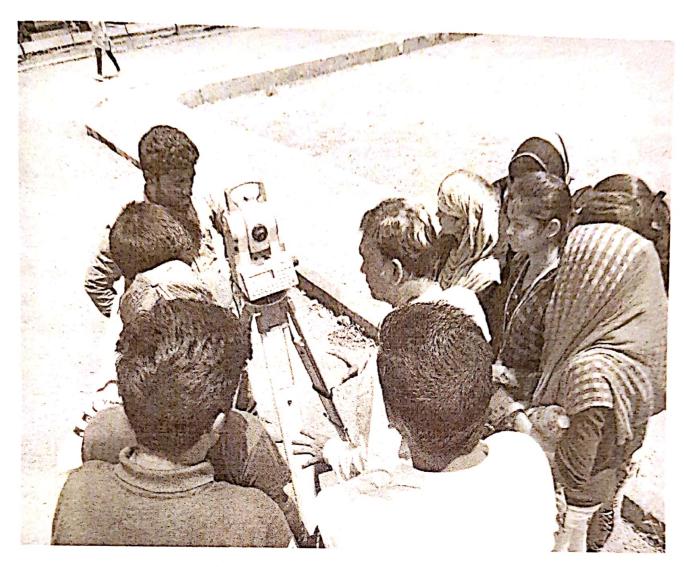


G.M.V.I.T. Tala – University of Mumbai



SE students for Total Station Workshop





Students performed practical's on Total Station





Practical Performed by students



ate: 5/4/19	Event Name: Notal Station 2 2) Survey comp,
order to fulfill your education of the control of t	onal, co-curricular, extra-curricular needs, GMVIT would like to uture events. Please help us by completing the following
. Content of the event: Comments:	☑Excellent □Good □Average □Poor
2. Was the event beneficial for Comments:	or you? Did you receive the information expected? Ves No
3. What did you like most all Comments: Atrangement good. 4. What did you like least a Comments:	was good, and spearter was also
5. Please rate the following Date and time Speakers Event arrangement Comments:	✓Excellent □Good □Average □Poor □Excellent □Good □Average □Poor
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Comments:	ie event?
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Speakers	Excellent Good Average Poor
Event arrangement	Excellent Good Average Poor
Comments:	
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Any suggestions for future events	incutate or
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Date: 2) 5/4/2019	Event Name: 2) survey can	np.
In order to fulfill your educating get your input about this and fulformation.	onal, co-curricular, extra-curricular ne future events. Please help us by compl	eds, GMVIT would like to eting the following
1. Content of the event: Comments:	Excellent Good	Average Poor
2. Was the event beneficial for	r you? Did you receive the information ☑Yes ☐No	expected?
Comments:	/	
4. What did you like least about Comments:	was good, so the fast.	WOLK GELINC
5. Please rate the following asp Date and time Speakers Event arrangement	Dects of the event Excellent Good Excellent Good Excellent Good]Average
6. How could the event be impo The event wa	roved? s nice lgood noth	ing improvement
7. Any suggestions for future ex	vents	Raigad &

Date: <u>51 4119</u>	Event Name: 1) Total Station 11) survey Camp	
In order to fulfill your educatio get your input about this and fu information.	onal, co-curricular, extra-curricular needs, GMVIT would like to ature events. Please help us by completing the following	
1. Content of the event: Comments:	☑Excellent ☐Good ☐Average ☐Poor	
2. Was the event beneficial for Comments:	you? Did you receive the information expected? ☐ Yes ☐ No	
3. What did you like most about Comments: Arrang 4. What did you like least about	ement and explanation was go	<u>od</u>
Comments:		
5. Please rate the following aspo Date and time Speakers Event arrangement	ects of the event Excellent	
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Date: 29-03-19 & 5-04-19 Event Name: 1 day Total Station workshop & surrey camp

In order to fulfill your educational, co-curricular, extra-curricular needs, GMVIT would like to get your input about this and future events. Please help us by completing the following information.

Excellent Sood Average Poor Comments:	
2. Was the event beneficial for you? Did you receive the information expected? ☐ Yes ☐ No Comments:	
3. What did you like most about the event? Comments:	-
4. What did you like least about the event? Comments: No get knowledge about total Station instrument By how to handle it. 5. Please rate the following aspects of the event Date and time Speakers Speakers Event arrangement Excellent Good Average Poor Excellent Good Average Poor	- -
Comments:	
6. How could the event be improved?	
You take 2-3 days events. There is only one day ex	EDF
7. Any suggestions for future events	Talk Sol Ralgad
We want more events	To the second

Date: 29-03-19 & 5-04-19 Event Name: 1day Total station Workshop & Survey Comp In order to fulfill your educational, co-curricular, extra-curricular needs, GMVIT would like to

get your input about this and future events. Please help us by completing the following information. 1. Content of the event: Excellent
☐Good
☐Average
☐Poor Comments: 2. Was the event beneficial for you? Did you receive the information expected? ₩Yes Comments: 3. What did you like most about the event? Comments: 4. What did you like least about the event? We get knowledge about instrument & how 5. Please rate the following aspects of the event Poor Average Good Excellent Date and time □Excellent □Good □Average □Poor Speakers ☐Excellent ☐Good ☐Average ☐Poor Event arrangement Comments: 6. How could the event be improved? 2-3 days events. There is only one day event so we didn't get more knowledge. Any suggestions for future events We want more events



Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering

Report

On

"Expert Lecture on Applied Mathematics III"

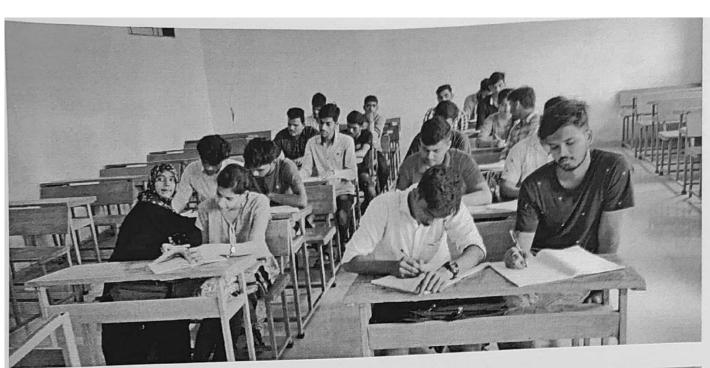
By

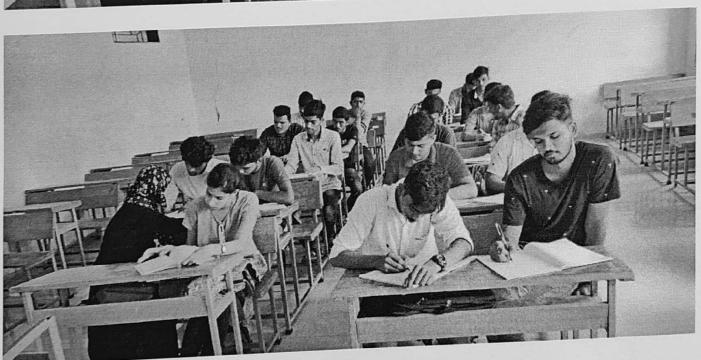
Mr. Aakash Rumade

Expert lectures in Applied Mathematics III were organized for SE Civil student of GMVIT, Tala on 8th November 2019. Schedule of lecture on the first day was from 10.00pm to 1.30 pm. Mr.Aakash Rumade, Assistant Professor in GDTP, Gove, Kolad was the expert in the subject.

Applied Mathematics are Applied mathematics is the application of mathematical methods by different fields such as science, engineering, business, computer science, and industry. Thus, applied mathematics is a combination of mathematical science and specialized knowledge. This was the ultimate aim of expert lectures.







Students attending AM III Lecture



Shri. GopinathMahadeoVedakPratishthan's

G. M. Vedak Institute of Technology

At Post & Taluka: Tala, Mumbai-Goa Highway, Near Indapur, Raigad, Maharashtra – 402111.

Tel.: 02140-269004/269088 www.gmvit.org.in

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai.

Ref. No. GMVIT/CIVIL/ 264-#2019-20

Date: 6/11/2019

From, Ms. Y.R.Galinde Asst.Professor & HOD Civil Department GMVIT, Tala

To,
Mr.Akash Rumade,
Associate Professor
Civil Department
GDTP,Kolad

Sub: Invitation for Expert Lectures in Applied Mathematics III

Respected Sir,

On behalf of Civil Engineering Department, I would like to cordially invite you to our college GMVIT, Tala on 8th November 2019 for Expert Lectures in Applied Mathematics III to our S.E.Civil Students.

Sir, I am sure that our students would be benefitted by your expertise and experience as I am aware of your thorough knowledge in subject of Applied Mathematics III.

Looking forward for a continual and progressive interaction. Waiting for your favorable reply.

Thanking You.

Yours Sincerely,

Class Coordinator



lead of HODepartment
Civil Engineering
G.M. Vedak Institute of Technology
Tala, Raigad

LOffice: 410, Moraya Shalimar Park, Andheri-Link Road, Andheri (W), Mumbai- 400053.

Shri. GopinathMahadeoVedakPratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering Academic Year 2019-20 (Second Half 2019)

Attendance Sheet

Event: Expert Lecture on Applied Mathematics III

Date: 8/11/2019

	pate. of 11.12			
	Class	Signature		
r. Name of the students	((((((((((((((((((((Axhandeshi		
1 Humera Khandesh	S. E (Chi)	Saacl		
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3. Dhairya votsaray	S. E (civil)	22.27		
4. Rashid Shaikh 5 Nikam Frathamesh 6 Manthan R Kadam	SF (ivi)	TO A		
5 Nikam Fratamesh	SE Civi	ela		
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10. tejoskumar geikar 11. sarvesh poti	CF CIVII	A-Pandy		
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Shri. GopinathMahadeoVedakPratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Civil Engineering

Academic Year 2019-20 (Second Half 2019)

Expert Lectures in "Applied Mathematics III"

Expert's Details

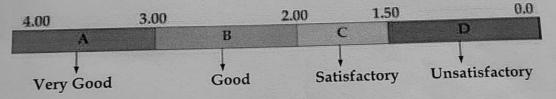
Expert's Details
Name: Akash YPlas Rumade
Contact number: 9145 268396
Email id:
Name of the company / college G. D. Tattare Polytechnic, kolad.
Knowledge Domain: Applied Mathematics, Engineering mechanics
Designation: Assistant foot.
Total work experience: 2 year
Topics of lectures conducted:
i
iiiii
iv.
Details of lecture to be conducted in our college:
i. Name of the topic: Applied Mathematics - 111
i. Name of the topic
ii. Date: 8 11 2019 iii. Time: 9,30 - 1,80 Raigad
situte of Teo.
Raigad & Subject Expert
Subject in Charge

As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

A Kash Rumburte Rumade Name of Speaker:

Program:

Civil Enginee & Department/Subject:



Parameter	A	В	С	D
Your perception of his/her knowledge	-			
Communication skills	~			
Sincerity/commitment	~			
Stimulating interest in subject	~			
Ability to make the subject relevant to profession and life	\			
Eliciting feedback	~			
Overall rating	~			



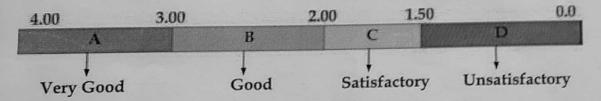
As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Speaker: Akash Rumade

Program: expert lecture.

Department/Subject: Civil

Date: 8/11/19



Parameter	A	В	C	D
Your perception of his/her knowledge				
Communication skills	1			
Sincerity/commitment	L-			
Stimulating interest in subject				
Ability to make the subject relevant to profession and life				
Eliciting feedback	V			
Overall rating	1			



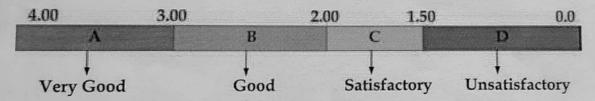
As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Speaker: Akash Rumde

Program: expert lecture.

Department/Subject: CIVIL

Date: 08/11/2019



Parameter	A	В	С	D
Your perception of his/her knowledge	~			
Communication skills	~			
Sincerity/commitment	~			
Stimulating interest in subject	/			
Ability to make the subject relevant to profession and life	~			
Eliciting feedback	~			
Overall rating	V			



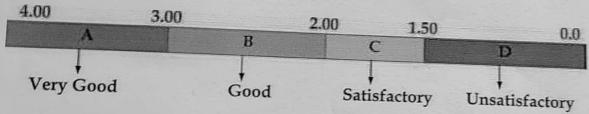
As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Speaker: Acikush Rumade

Program: Civil Enjineer

Department/Subject: AM -TTT

Date: 8/11/2019



Parameter	A	В	C	D
Your perception of his/her knowledge	-	8		
Communication skills	_			
Sincerity/commitment				
Stimulating interest in subject	/			
Ability to make the subject relevant to profession and life	-			
Eliciting feedback	V			
Overall rating	V			

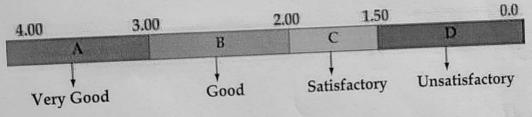


As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Speaker: Akoush sir Program: Curest recture

Department/Subject: ((vi) / M3

8/11/2019 Date:



	A	В	C	D
Parameter	**			
Your perception of his/her knowledge	/			
Communication skills	/			
Sincerity/commitment	/			
Stimulating interest in subject	/			
Ability to make the subject relevant to profession and life	V			
Eliciting feedback	/			
Overall rating	V			



As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Speaker: Alcosh sir.

Program: M3 (expect: lecture)

Department/Subject: Civil

Date: 8/11/2019

4.00	3.00		2.00	1.50		0.0
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Parameter	A	В	С	D
Your perception of his/her knowledge	/			
Communication skills				
Sincerity/commitment	~			
Stimulating interest in subject	/			
Ability to make the subject relevant to profession and life	.~			
Eliciting feedback	/			
Overall rating	/			



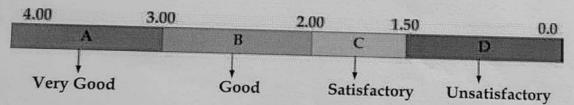
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Name of Speaker:

Program:

Department/Subject:

Date:



Parameter	A	В	C	D
Your perception of his/her knowledge				
Communication skills	1/			
Sincerity/commitment				
Stimulating interest in subject				
Ability to make the subject relevant to profession and life				
Eliciting feedback				
Overall rating				



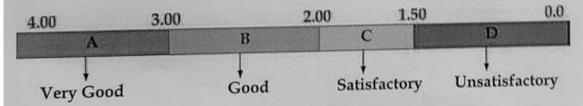
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Name of Speaker:

Program:

Department/Subject:

Date:



Parameter	A	В	C	D
Your perception of his/her knowledge				
Communication skills				
Sincerity/commitment				
Stimulating interest in subject				
Ability to make the subject relevant to profession and life				
Eliciting feedback				
Overall rating				



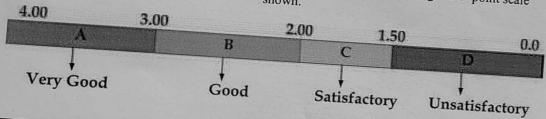
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Name of Speaker:

Program:

Department/Subject:

Date:



Parameter		No.		
	A	В	C	D
Your perception of his/her knowledge				
Communication skills				
Sincerity/commitment	-			
timulating interest in subject	1			
bility to make the subject relevant to rofession and life				
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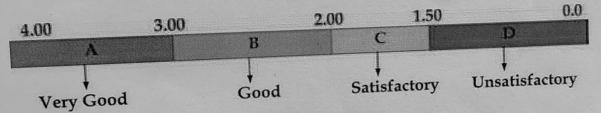
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Name of Speaker:

Program:

Department/Subject:

Date:



	A	В	C	D
Parameter	A			
Your perception of his/her knowledge				
Communication skills				
Sincerity/commitment				
Stimulating interest in subject	1			
Ability to make the subject relevant to profession and life				
Eliciting feedback				
Overall rating				to of r
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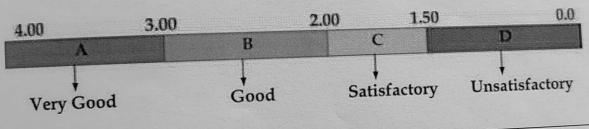
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Name of Speaker:

Program:

Department/Subject:

Date:



			С	D
Parameter	A	В		
Your perception of his/her knowledge				
Communication skills				
Sincerity/commitment				
Stimulating interest in subject				
Ability to make the subject relevant to profession and life	V			
Eliciting feedback	1	,		
Overall rating	V		and the second	
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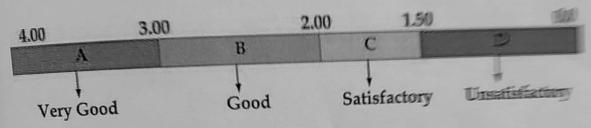
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Name of Speaker:

Program:

Department/Subject:

Date:



Parameter	A	В	С	The state of the s
Your perception of his/her knowledge	~			
Communication skills	~			
Sincerity/commitment				
Stimulating interest in subject				
Ability to make the subject relevant to profession and life				
Eliciting feedback				
Overall rating				

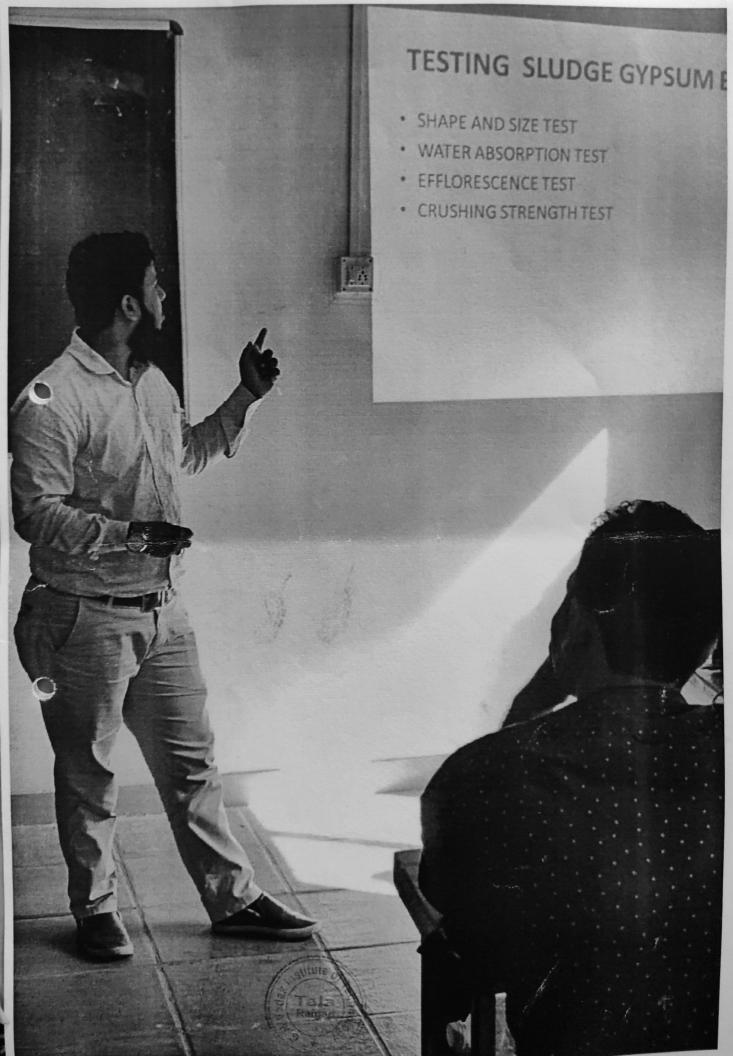


Project Presentation









Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem - TE / V

Subject/ Course - Dynamics of Machinery (MEC504)

List of slow learners and advanced Learners

(Evaluation Cycle 01)

Reference used: Result of Internal Assessment I dated 10/11/2020

Criteria: Relow 14 ----

SR.NO	a: Below 14 marks slow learner stud SLOW LEARNER NAME	ADVANCED LEARNER NAME
1	Amenalia Mila a ann	
2	Amroskar Mitesh Milind	Angre Nitesh Sonu
3	BHAGAT AKASH ASHOK	Atharva Vijay kadu
4	INGALE SHUBHAM DINKAR	BHAYTANDEL HRISHIKESH RAMANTH
5	JADHAV MAYUR DINANATH	bhoir vishal
6	JANGAM SIDDHANT SUDHAKAR	Chavarkar Vinit
7	KADAM VINAYAK GAJANAN	Chogle Tawqeer Abdul.Rehman
8	MARAVADE PRAJYOT EKNATH	DAKHNI SAALIM LIYAKAT
9	MOKAL PARAG SUBHASH	DAROGE SHABIN MUBIN
10	PATIL GAURAV YASHWANT	DHANSE FARMAN SHAKEEL FARHAT
11	PATIL OMKAR BALKRISHNA	DHAVDEKAR SUYOG SANTOSH
	PATIL PRAJOT SUDHAKAR	GAVIT AMOL NETHU SUMAN
12	PATIL RAHUL RAMESH	GIJE MANDAR MANOHAR
13	PATIL SAURAV YASHWANT	GORE RAJU NARAYAN
14	PAWAR ANIKET NITIN	GURAV JAYESH SUNIL
15	PAWAR SWAPNIL GAJANAN	HALDE DHIRAJ YASHWANT
16	PUNKAR OMKAR ARJUN	KAMBLE KARAN MOHAN
17	SAYYED ARBAZ MURAD SHAMSHAD	KARNIK YASH SANJAY
18	SHIGHREKAR USAMA ISHTIYAQUE	KAZI ZEESHAN ABIDEEN
19	Shinde Suyog Mahendra	KOTAWADEKAR NARENDRA RAMAKANT
20	Jadhav sushil	LAD ROSHAN CHANDRAKANT
21	Karambat Varun Anand	LOGDE SAAD MOHAMAD SAB
22		MAHADAN PRADIP PRAKASH
23		MAHADIK SANKET SANTOSH
24		MALUSARE YOGESH LILADHAR
25	Mule of a	MANVAL JAY MORESHWAR
26	18(10)81	MHATRE HRUTIK DAYARAM
27	The second secon	mhatre surendra mahadu
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1		NIVATE PRABHAT GANESH
2		PARTE VAIBHAV VITTHAL Pathan ammar rashid

33	PATIL ACHUT DEVIDAS
34	PATIL ROHAN JAGDISH
35	PATIL ROHIT KESARINATH
36	PAWAR SHANTANU SANDEEP
37	RAHATWILKAR ARMAN AYYUB
38	SOLKAR SAFWAN MUSHTAQUE
39	TELANGE MANISH KHANDU
40	UPADHYE MANAS YOGENDRA
33 34 35 36 37 38 39 40 41	Waghmare Rohit Rajendra
12	Shedge Hritik Sudarshan

Analysis

(Evaluation Cycle 01)

Total No. of students in class = 63

Total No. of Slow learners = 09 Percentage of slow learners = (21/63) *100 = 33.33 %

Total No. of Advanced learners = 38 Percentage of advanced learners = (42/63) *100

= 66.67%

Subject inCharge



HOD

Shri, GopinathMahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

A.Y.2020-21 (Second Half 2020)

Date: 21/11/2020

NOTICE

All the Slow learner and Advanced Learner students of TE (DOM) are here by informed that Extra lectures for the subject (DOM) were recorded on online platform. Link for the recorded video lectures as well Playlist for the subject DOM is available on you tube. Watch it there and ask doubts if any in doubts solving session.

Links for Recorded Video Lecture series subject (DOM) are available here just click on given bellow links

https://www.youtube.com/playlist?list=PLvIGUG0guKd-4HDuki1fk5Q8xNNQYzlT-

https://www.youtube.com/playlist?list=PLvIGUG0guKdwyuTX34xi9duI0w t2Nuu



https://www.youtube.com/channel/UC1nXklivwHf6eK8d5H3Pkkw

G. M. VEDAK INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

A.Y.2020- 21 (Second Half 2020)

Schedule for the Doubts Solving Lectures will be as follows.

Sr.No.	Date	Time	Topic	
1	28/11/2020	10.00-11.00 am	Governors and Gyroscopes	
, 1	29/11/2020	10.00.11.00	Basic Concepts of Vibration	
4	29/11/2020	10.00-11.00 am	Dynamically Equivalent System	

Attendance for the same is compulsory.

Subject in charge



G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem - TE / V

Subject/ Course - DYNAMICS OF MACHINERY (MEC 504)

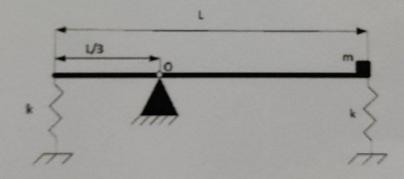
List of Assignments for Advanced Learners

Assignment No.01

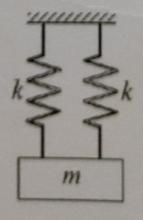
Date of Issue: 21/11/2020

Date of Submission: 27/11/2020

Q1) A thin uniform rigid bar of length L and mass M is hinged at point O, located at a distance of L/3 from one of its ends. The bar is further supported using springs, each of stiffiness k, located at the two ends. A partical of mass m=M/4 is fixed at one end of the bar, as shown in the figure. For small rotation of the bar about O, the natural frequency of the system is



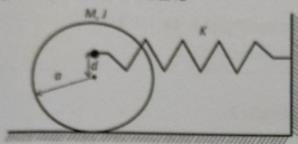
Q2) A mass m is attached to two identical springs having constant k as shown in the figure. The natural frequency ω of this single degree of freedom system is

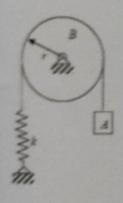




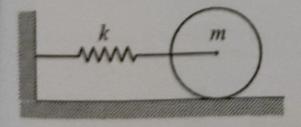
Q3) The radius of gyration of a compound pendulum about the point of suspension is 100 mm. The distance between the point of suspension and the center of mass is 250 mm. Considering the acceleration due to gravity as 9.81 m/s^2 , the natural frequency (in radian/s) of the compound pendulum is

Q4) A solid disc with radius a is connected to a spring at a point d above the center of the disc. The other end of the spring is fixed to the vertical wall. The disc is free to roll without slipping on the ground. The mass of the disc is M and the spring constant is K. The polar moment of inertia for the disc about its centre is J=Ma²/2





Q6) A disc of mass m is attached to a spring of stiffness k as shown in the figure. The disc rolls without slipping on a horizontal surface. The natural frequency of vibration of the system is





G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem - TE / V

Subject/ Course - DYNAMICS OF MACHINERY (MEC 504)

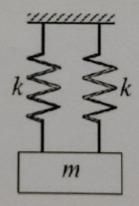
List of Assignments for Slow Learners

Assignment No.01

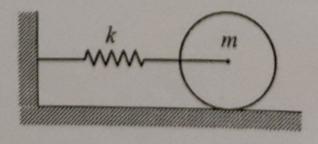
Date of Issue: 21/11/2020

Date of Submission: 27/11/2020

Q1) A mass m is attached to two identical springs having constant k as shown in the figure. The natural frequency ω of this single degree of freedom system is



Q2) A disc of mass m is attached to a spring of stiffness k as shown in the figure. The disc rolls without slipping on a horizontal surface. The natural frequency of vibration of the system is





Q3) Define And Explain the terms:

- 1) Sensitiveness of Governor
- 2) Stability of Governor
- 3) Isochronous Governor
- 4) Hunting of Governor
- Q4) Derive Expression for angle of heel for two wheeler negotiation a turn
- Q5)Define dynamically equivalent system. State the condition is necessary to make two systems dynamically equivalent



G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (First Half 2021)

Attendance Sheet of Lectures for Slow Learners

Clas	ss:BE Sem:VIII	Subject / Course: Design of Mechanical System (MEC 801)					
Ven	ue:	Name of Faculty: Asst.Prof. A.R.Ghadge					
		Lecture No.	1	2	3		
Sr. No.	Name of the Student	Date	3.30-4.30	01/09/2	·4/04/2		
110.		Time	3.30-4.30	4.30-5.30	3.30 -430		
1 .	Chavarekar pratik sudhakar sadhna		P	1	A		
2	KARDAME ABDUL AHAD AZHAR NASREEN		6	?	P		
3	KATLE VIKRANT HEMANT UJJWALA		8	P	1		
4	MHATRE AKSHAY PRADIP PRATIKSHA		1	P	A		
5	NARVEKAR PRATIK HARISHCHANDRA HA	RSHALI	K	A	•		
6	SANAP SAMIR SANDIP		•	₩-	P		
7	TAWATE VIVEK VASANT VAISHALI		P	P	-6		
8	PATIL MAHESH DINKAR SANDHYA		A	A	P		

Subject Incharge





G. M. Vedak Institute of Technology, Tala - Raigad

Academic Year 2020-2021

Faculty Feedback (by students) Analysis Final Sheet
Department: ASH Dept. Sem: I Date: 02/04/2021

Sr. No.	Faculty name	Class	Subject	Feedback (%)	Feedback grade	Student choice of faculty in
01	Mr. V. D. Pathan	FE	EM	67.61%	V. Good	67.77%
02	Mr. K. P. Risbud	FE	EC	89.93%	Excellent	89.91%
03	Ms. V. N. Satpute	FE	EP	62.22%	Poor	CONTRACTOR AND AND ADDRESS OF THE PARTY OF T
04	Ms. P. N. Kaninde	FE	PCE		The state of the s	61.67%
05		-		67.78%	V. Good	67.89%
0.5	Mr. K. D. Gawade	FE	EP	89.87%	Excellent	87.67%

Note:

1. Excellent: above 80%

3. Good: 60% to 70%

2. Very good: 70% to 80%

4. Poor: Below 60%

Prof. P. N. Kaninde ASH Dept. Coordinator

Prof. Y. R. Galinde Chief Coordinator

Dr. D. N. Jaiswal Principal



G. M. Vedak Institute of Technology, Tala - Raigad

Academic Year 2020--2021

Faculty Feedback (by students) Analysis Final Sheet Department: ASH Dept. Sem: II Date: 03/08/2021

Sr. No.	Faculty name	Class	Subject	Feedback (%)	Feedback grade	Student choice of faculty in
01	Mr. V. D. Pathan	FE	EM	80.81%	Excellent	89.56%
02	Mr. K. P. Risbud	FE	EC	90.76%	Excellent	91.90%
03	Ms. V. N. Satpute	FE	EP	87.67%	V. Good	84.78%
04	Ms. P. N. Kaninde	FE	PCE	76.65%	V.Good	73.74%
05	Mr. K. D. Gawade	FE	EP	79.89%	V. Good	79.46%

Note:

1. Excellent: above 80% 3. Good: 60% to 70%

2. Very good: 70% to 80%

4. Poor: Below 60%

Prof. P. N. Kaninde ASH Dept. Coordinator

Prof. Y. R. Galinde Chief Coordinator

Dr. D. N. Jaiswal Principal

