

# **Savitribai Phule Pune University**

## **Faculty of Science & Technology**



**Revised Structure**

**For**

**First Year**

**Bachelor of Engineering**

**(Choice Based Credit System)**

**(2019 Course)**

**(With Effect from Academic Year 2019-20)**

**TABLE -1 First Engineering Structure for Semester-I**

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107001	Engineering Mathematics-I	03	--	01	30	70	25	--	--	125	03	--	01	04
107002/ 107009	Engineering Physics / Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
102003	Systems in Mechanical Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
111006	Workshop <sup>@</sup>	--	02	--	--	--	--	25	--	25	--	01	--	01
Total		16	10	01	150	350	25	125	--	650	16	05	01	22
101007	Audit Course 1 <sup>&amp;</sup>	02	Environmental Studies-I											

**Induction Program :** 2 weeks at the beginning of semester-I and 1 week at the beginning of semester-II

**TABLE -2 First Engineering Structure for Semester-II**

[illegible]

## Instructions:

- PR/Tutorial must be conducted in three batches per division.
  - Minimum number of required Experiments/Assignments in PR/ Tutorial shall be carried out as mentioned in the syllabi of respective subjects.
  - Every Student should appear for Engineering Physics, Engineering Chemistry, Engineering Mechanics, Basic Electrical Engineering, Basic Electronics Engineering, Programming and Problem solving during the year.
  - College is allowed to distribute Teaching workload of subjects Engineering Physics, Engineering Chemistry, Basic Electrical Engineering, Basic Electronics Engineering, Engineering Mechanics, Programming and Problem solving in semester I and II dividing number of FE divisions into two appropriate groups.
  - Assessment of tutorial work has to be carried out as term-work examination. Term-work Examination and Practical Examination at first year of engineering course **shall be internal continuous assessment only.**
- Ω 1 Credit for Engineering Graphics theory has to be awarded on the basis of End semester examination of 50 marks while 1 credit of tutorial and practical **shall be awarded on internal continuous assessment only.**
- @ Credit for the course of workshop practical is to be awarded on the basis of continuous assessment / submission of job work.
- § Project based learning (PBL) requires continuous mentoring by faculty throughout the semester for successful completion of the tasks selected by the students per batch. While assigning the teaching workload a load of 2 Hrs/week/batch needs to be considered for the faculty involved. The Batch needs to be divided into sub-groups of 5 to 6 students. Assignments / activities / models/ projects etc. under project based learning is carried throughout semester and Credit for PBL has to be awarded on the basis of internal continuous assessment and evaluation at the end of semester.
- & Audit course for Environmental Studies and II (As per D.O.No.F.13-1/2000 (EA/ENV/COS-I) dated 14 May, 2019) is mandatory but non-credit course. Examination has to be conducted at the end of Sem I & II respectively for award of grade at college level. Grade awarded for audit course shall not be calculated for grade point &CGPA.
- Audit course for Physical education is mandatory non-credit course. Examination has to be conducted at the end of Semester for award of grade at college level. Grade awarded for audit course shall not be calculated for grade point &CGPA.
-

**SIDDHANT COLLEGE OF ENGINEERING SUDUMBARE, PUNE.****Academic Calendar for First Year Engineering****AY 2022-23 SEM - I**

Date:- 10/11/2022

Sr. No.	Details of Activities	Day & Dates
1	FE Induction Programme	17/11/2022 To 22/11/2022
2	Commencement of Teaching	Thursday, 23/11/2022
3	Unit test /Class Test on ( unit 1 and 2 )	Wednesday, 28/12/2023 To Friday, 06/01/2023.
4	Display of First (Monthly) defaulter student list on notice board.	Friday, 30/12/2023
5	SPPU In- semester Examination	Monday, 09/01/2023 to Friday, 13/01/2023 as per SPPU circular.
6	Display of Second defaulter student list on notice board.	Friday 31/01/2023
7	Unit test/ class test ( on unit 3 and 4 )	Tuesday, 02/02/2023 to Wed, 09/02/2023
8	First Parent meet	Thursday, 16/02/2023
09	Preliminary examination	27/02/2023 To 03/03/2023
	Display of Third defaulter student list on notice board.	Friday, 10/ 03/2023
10	Term work submission and Term End	06/03/2023 To 07/03/2023
11	SPPU End semester Theory Examination	20/03/2023 To 30/03/2023( tentative date)

**Note: -**

1. Dates for above activities may changes depending upon list of Holidays. These will be discussed from time to time in the meeting with Principal, Academic Director, Academic Co-ordinator and Head of the Departments.
2. Slot of departmental students activities will be declared in due to course.

Prepared by-  
Prof. R. S. More

FE Coordinator  
Dr. U. V. Shinde  
First Year Co-ordinator

Principal  
Dr. R. L. Khandagle

**Copy to:-**

1. Executive Director CAYMET
2. Finance Director CAYMET
3. All Co-ordinators and HOD's
4. CEO
5. Librarian
6. Student Section
7. Establishment section

Siddhant College of Engineering,  
Sudumbare, Tal. Sudumbare - 412 100.



**SIDDHANT COLLEGE OF ENGINEERING SUDUMBARE, PUNE.****Academic Calendar for First Year Engineering Dept.****AY 2022-23 SEM - II**

Date:- 31/03/2023

Sr. No.	Details of Activities	Day & Dates
1	Commencement of Teaching	Monday, 10/04/2023
2	Technical Event	Monday, 24/04/2023 To Tuesday, 25/04/2023
3	Sport	Wednesday, 26/04/2023 To Friday, 28/04/2023
4	Cultural Event	Saturday, 29/04/2023
5	Display of First (Monthly) defaulter student list on notice board.	Monday, 01/05/2023
6	Unit test /Class Test-I on ( unit 1 and 2 )	Monday, 8/05/2023 to Friday, 12/05/2023
7	SPPU In-semester Examination	Monday, 15/05/2023 To Friday, 19/05/2023
8	Display of Second (Month) defaulter student list on notice board.	Wednesday, 31/05/2023
9	Unit test /Class Test-II on ( unit 3 and 4 )	Wednesday, 28/05/2023 To Friday, 07/06/2023
10	Parents meet	Thursday, 15/06/2023
11	Guest lectures (Subject Experts )	Monday, 26/06/2023 To Friday, 30/06/2023
12	Display of Third (Month) defaulter student list on notice board.	Friday 31/06/2023
13	Preliminary examination	Monday, 17/07/2023 To Friday, 21/07/2023
14	Students Feedback	Friday, 21/07/2023
15	Remedial Classes	Monday, 17/07/2023 To Friday, 21/07/2023
16	Display of Final defaulter student list on notice board.	Thursday, 20/07/2023
17	Term work submission and Term End	Friday, 21/07/2023 To Monday, 24/07/2023
18	SPPU End semester Theory Examination	Tuesday, 01/08/2023 To Thursday, 10/08/2023 ( tentative date)

**Note: -**

1. Dates for above activities may changes depending upon list of Holidays. These will be discussed from time to time in the meeting with Principal, Academic Director, Academic Co-ordinator and Head of the Departments.
2. Slot of departmental students activities will be declared in due to course.

Prepared by:  
Prof. R. S. MoreFE Coordinator  
Dr. C. V. ShindePrincipal  
Dr. L. V. Kamble**Principal****Siddhant College of Engineering,  
Sudumbare, Pune - 412 106**

Copy to:-

1. All Co-ordinators and HOD's
2. CEO
3. Librarian





CAVMEET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING  
**MASTER TIME-TABLE**

SEM I

A.Y.-2022-23

WITH EFFECT FROM : 16/01/2023

DAY / TIME	MONDAY				TUESDAY				WEDNESDAY				THURSDAY				FRIDAY			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
8:45 - 9:45	EM	CHE M	BLX	PPS	M-I	BEE	C1 PPS C2SME C3 WS	PHY	SME	EM	PHY	D1 BLX D2 PPS D3 SME	BEE	M-I	BLX	D1 PPS D2 SME D3 WS	EM	M-I	PHY	BLX
9:45 - 10:45	EVS	SME	PHY	SME	SME	CHEM		BLX	M-I	BEE	M-I		CHEM	EM	PHY		CHEM	SME	M-I	PPS
10:45 - 11:00	S	H	O	R	T	B	R	E	A	K										
11:00- 12:00	CHEM	B1 BEE B2 EM B3 WS	C1 BLX C2 PPS C3 SME	M-I	A1 CHE M A2 BEE A3 EM	M-I	SME	D1 PHY D2 BLX D3 PPS	EM	B1 WS B2 SME B3 CHE M	SME	PHY	A1 EM A2 WS A3 SME	BEE	SME	PPS	M-I	B1 CHE M B2 BEE B3 EM	BLX	D1 SME D2 WS D3 PHY
12:00- 01:00	SME			PHY		SME	M-I		BEE		PPS	M-I		CHEM	EVS	BLX	SME		M-I	
1:00 - 1:30	L	U	N	C	H	B	R	E	A	K										
1:30 - 2:30	M-I	LIB. Hr.	SME	M-I	M-I	CHEM	PHY	SME	CHEM	M-I	M-I	LIB. Hr.	LIB. Hr.	M-I	PPS	PHY	BEE	EVS	LIB. Hr.	SME
2:30-3:30	A1 SME A2 CHE M A3 BEE	EM	PPS	D1 WS D2 PHY D3 BLX	BEE	B1 EM B2 WS B3 SME	BLX	M-I	A1 BEE A2 EM A3 WS	SME	C1 SME C2 WS C3 PHY	PPS	EM	B1 SME B2 CHE M B3 BEE	C1 WS C2 PHY C3 BLX	M-I	A1 WS A2 SME A3 CHE M	EM	C1 PHY C2 BLX C3 PPS	EVS
3:30-4:30		M-I	M-I		CHEM		PPS	PHY		CHEM		BLX	M-I			SME		BEE		M-I





*[Signature]*  
 Time Table In-charge  
**PROF.R.S.MORE**














*[Signature]*  
**DR.U.V.SHINDE**  
 Shinde U. V.  
 First Year Co-ordinator  
 Siddhant College of Engineering,  
 Sudumbare, Tal. Maval, Pune - 412 109.

*[Signature]*  
 Principal  
**DR.L.V.KAMBLE**  
 Principal  
 Siddhant College of Engineering  
 Sudumbare, Maval, Pune - 412 109

## LOAD DISTRIBUTION

CLASS	ROOM NO	CLASS COORDINATOR	SIGN
A	A-12	Prof. R.S. More	
B	A-11	Prof. Sonali V. Ghuge	
C	A-10	Prof. Ashwini Bhosale	
D	A-13	Prof. Avinash Tekale	

FACULTY INITIALS	NAME OF FACULTY	SUBJECT NAME	SUBJECT INITIALS	TH	PR(TU)	DEPT. EMP. WORK LOAD	TOTAL	SIGN
UVS	Dr. Uttam V. Shinde	ENGINEERING CHEMISTRY	CHEM	10	12		22	
BBK	Prof. Bhagwat B. Kedar	SYSTEMS IN MECHANICAL ENGINEERING (C&D)	SME	8	0	19	27	
BDG	Prof. B.D. Garje	SYSTEMS IN MECHANICAL ENGINEERING (C&D)	SME	0	12	13	25	
RSM	Prof. R.S. More	SYSTEMS IN MECHANICAL ENGINEERING (A&B)	SME	8	12		20	
SVG	Prof. Sonali V. Ghuge	BASIC ELECTRICAL ENGINEERING	BEE	8	12		20	
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS	PHY	10	12		22	
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS I (C&D)	M-I	10	2	8	20	
SMC	Prof. Shilpa Charaple	ENGINEERING MATHEMATICS I (A&B)	M-I	10	2		12	
AKB	Prof. Ashwini Bhosale	PROGRAMMING AND PROBLEM SOLVING	PPS	8	12		20	
DAP	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING	BLX	8	12		20	
PAP	Prof. Pooja Patil	ENGINEERING MECHANICS	EM	8	12		20	
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-I	EvS	4	0	16	20	

  
Time Table In-charge  
PROF. R.S. MORE



  
HOD  
DR. U.V. SHINDE  
Shinde U. V.  
First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare, Tel. Maval, Pune - 412 109.

  
Principal  
DR. L.V. KAMBLE  
Principal  
Siddhant College of Engineering  
Sudumbare, Maval, Pune - 412 109





CAYMET'S  
SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE PUNE-412109  
DEPARTMENT OF FIRST YEAR ENGINEERING

**TIME-TABLE**

**DIVISION - B**

SEM I (A.Y.2022-23)

WITH EFFECT FROM : 16/01/2023

WITH EFFECT FROM 10/01/2021

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:45 - 9:45	CHEM	BEE	EM	M-I	M-I
9:45 - 10:45	SME	CHEM	BEE	EM	SME
10:45 - 11:00	SHORT BREAK				
11:00- 12:00	B1- BEE B2- EM B3- WS	M-I	B1- WS B2- SME B3- CHEM	BEE	B1- CHEM B2- BEE B3- EM
12:00- 01:00		SME		CHEM	
1:00 - 1:30	LUNCH BREAK				
1:30 - 2:30	EVS	CHEM	M-I	M-I	EVS
2:30-3:30	EM	B1- EM B2- WS B3- SME	SME	B1- SME B2- CHEM B3- BEE	EM
3:30-4:30	M-I		CHEM		BEE



*[Signature]*  
Time Table In-charge  
PROF.R.S.MORE

*[Signature]*  
HOD  
DR.L.V.SHINDE  
Siddhant U. V.  
First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare, Tal. Maval, Dist. Solapur

*[Signature]*  
Principal  
DR.L.V.KAMBLE  
Principal  
Siddhant College of Engineering  
Sudumbare, Maval, Pune - 412 109

CAYMET'S  
SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE PUNE-412109  
DEPARTMENT OF FIRST YEAR ENGINEERING

**TIME-TABLE**

**DIVISION - C**

SEM I (A.Y. 2022-23)

WITH EFFECT FROM : 16/01/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:45 - 9:45	BLX	C1 -PPS C2-SME C3- WS	PHY	BLX	PHY
9:45 - 10:45	PHY		M-I	PHY	M-I
10:45 - 11:00	SHORT BREAK				
11:00- 12:00	C1 -BLX C2- PPS C3- SME	SME	SME	SME	BLX
12:00- 01:00		M-I	PPS	EVS	M-I
1:00 - 1:30	LUNCH BREAK				
1:30 - 2:30	SME	PHY	M-I	PPS	EVS
2:30-3:30	PPS	BLX	C1 -SME C2- WS C3 -PHY	C1- WS C2- PHY C3- BLX	C1 -PHY C2- BLX C3 -PPS
3:30-4:30	M-I	PPS			



*Prof. R.S. More*  
9.1.23  
Time Table In-charge  
PROF.R.S.MORE

*Dr. U.V. Shinde*  
HOD  
DR.U.V.SHINDE  
Shinde U. V.

First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare, Tal. Naval, Pune - 412 109

*Dr. L.V. Kamble*  
Principal  
DR.L.V.KAMBLE  
Principal

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Sudumbare, Naval, Pune - 412 109

CAYMET's  
SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE PUNE-412109  
DEPARTMENT OF FIRST YEAR ENGINEERING

**TIME-TABLE**  
**DIVISION - D**

SEM I (A.Y.2022-23)

WITH EFFECT FROM - 16/01/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:45 - 9:45	PPS	PHY	D1 -BLX D2- PPS D3- SME	D1 -PPS D2 -SME D3- WS	BLX
9:45 - 10:45	SME	BLX			PPS
10:45 - 11:00	SHORT BREAK				
11:00- 12:00	M-I	D1- PHY D2 - BLX D3- PPS	PHY	PPS	D1 -SME D2- WS D3 -PHY
12:00- 01:00	PHY		M-I	BLX	
1:00 - 1:30	LUNCH BREAK				
1:30 - 2:30	M-I	SME	EVS	PHY	SME
2:30-3:30	D1 -WS D2- PHY D3 -BLX	M-I	PPS	M-I	EVS
3:30-4:30		PHY	BLX	SME	M-I



*[Signature]*  
3.1.23  
Time Table In-charge  
PROF.R.S.MORE

*[Signature]*  
HOD  
DR.U.V.SHINDE  
Shinde U. V.

First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare, Tal. Maval, Pune - 412 109.

*[Signature]*  
Principal  
DR.L.V.KAMBLE  
Principal

Siddhant College of Engineering  
Sudumbare, Maval, Pune - 412 109

CAYNET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING  
**MASTER TIME-TABLE**

SEM II				A.Y.-2022-23								WITH EFFECT FROM : 25/06/2023								
DAY / TIME	MONDAY				TUESDAY				WEDNESDAY				THURSDAY				FRIDAY			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
08:45 - 09:45	EGR	BLX	CHE M	M-II	M-II	PPS	BEE	EGR	PHY	EGR	EM	CHE M	BLX	M-II	M-II	BEE	PPS	BLX	EGR	M-II
09:45 - 10:45	M-II	PPS	BEE	EGR	BLX	PHY	M-II	EM	M-II	BLX	BEE	M-II	PPS	EGR	EGR	CHE M	PHY	M-II	EM	BEE
10:45 - 11:00	S	H			O	R			T	B			R	E			A	K		
11:00 - 12:00	PHY	EGR	EM	CHE M	EGR	BLX	CHE M	M-II	EGR	PPS	CHE M	EGR	PHY	BLX	EM	M-II	EGR	PPS	CHE M	EGR
12:00 - 01:00	PPS	M-II	EGR	BEE	PHY	M-II	EM	BEE	BLX	PHY	M-II	EM	M-II	PPS	BEE	EGR	BLX	PHY	M-II	EM
01:00 - 01:30	L	U			N	C			H	B			R	E			A	K		
01:30 - 02:30	BLX	PHY	M-II	EM	PPS	EGR	EGR	CHE M	PPS	M-II	EGR	BEE	EGR	PHY	CHE M	EM	M-II	EGR	BEE	CHE M
REMEDIAL CLASSES																				
02:30 - 03:30	EGR	PPS	CHE M	EGR	M-II	PHY	BEE	EM	BLX	EGR	M-II	CHE M	PPS	M-II	EGR	BEE	PHY	BLX	EM	M-II
03:30 - 04:30																				

*Prof. R. S. More*  
 Time-Table In-charge  
 PROF. R. S. MORE



*Dr. U. V. Shinde*  
 HOD  
 DR. U. V. SHINDE  
 Shinde U. V.














First Year Coordinator  
 Department of First Year Engineering  
 Siddhant College of Engineering,  
 Sudumbare, Pune-412109

*Dr. L. V. Kamble*  
 Principal  
 DR. L. V. KAMBLE



CAYMET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING

**LOAD DISTRIBUTION**

FACULTY INITIALS	NAME OF FACULTY	SUBJECT NAME	SUBJECT INITIALS	TH+TU	REM			TOTAL	SIGN
EVS	Dr. Uttam V. Shinde	ENGINEERING CHEMISTRY (C)	CHEM	5	2			7	
NSK	Prof. Nanda Kulkarni	BASIC ELECTRICAL ENGINEERING	BEE	10	4			14	
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (A&B)	EGR	10	4			14	
RSM	Prof. R. S. More	ENGINEERING GRAPHICS (C&D)	EGR	10	4			14	
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (A&B)	M-II	10	4			14	
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS	PHY	10	4			14	
PAP	Prof. Pooja Patil	ENGINEERING MECHANICS	EM	10	4			14	
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING	BLX	10	4			14	
HDD	Prof. Harshada Dabhade	ENGINEERING CHEMISTRY (D)	CHEM	5	2			7	
DGC	Prof. Dhanashree Chaudhari	PROGRAMMING AND PROBLEM SOLVING	PPS	10	4			14	
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (C&D)	M-II	10	4			14	
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-II	EvS-II					0	
		PROJECT BASED LEARNING	PBL						
		PHYSICAL EDUCATION	PEd						
<b>TOTAL</b>				<b>100</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>140</b>	

  
 Time Table In-charge  
 PROF. R. S. MORE

  
 HOD  
 DR. U. V. SHINDE

  
 Principal  
 DR. L. V. KAMBLE



**Shinde U. V.**  
 First Year Co-ordinator  
 Siddhant College of Engineering,  
 Sudumbare, Tal. Neval, Pune - 412 109

**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION A - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 25/06/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	EGR	M-II	PHY	BLX	PPS
09:45 - 10:45	M-II	BLX	M-II	PPS	PHY
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	PHY	EGR	EGR	PHY	EGR
12:00 - 01:00	PPS	PHY	BLX	M-II	BLX
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	BLX	PPS	PPS	EGR	M-II
REMEDIAL CLASSES					
02:30 - 03:30	EGR	M-II	BLX	PPS	PHY
03:30 - 04:30					

INITIALS	NAME OF FACULTY	SUBJECT NAME
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (EGR)
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (M-II)
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS (PHY)
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING (BLX)
DGC	Prof. Dhanashree Chaudhari	PROGRAMMING AND PROBLEM SOLVING (PPS)

  
Class Teacher  
Prof. Deepak A. Kute

  
Time Table In-charge  
PROF. R.S. MORE

  
HOD  
DR. U.V. SHINDE

First Year Co-ordinator  
Siddhant College of Engineering  
Sudumbare, Tal. Maval, Pune - 412109



**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION B - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 25/06/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	BLX	PPS	EGR	M-II	BLX
09:45 - 10:45	PPS	PHY	BLX	EGR	M-II
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	EGR	BLX	PPS	BLX	PPS
12:00 - 01:00	M-II	M-II	PHY	PPS	PHY
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	PHY	EGR	M-II	PHY	EGR
REMEDIAL CLASSES					
02:30 - 03:30	PPS	PHY	EGR	M-II	BLX
03:30 - 04:30					

INITIALS	NAME OF FACULTY	SUBJECT NAME
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (EGR)
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (M-II)
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS (PHY)
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING (BLX)
DGC	Prof. Dhanshree Chaudhari	PROGRAMMING AND PROBLEM SOLVING (PPS)

*Avinash Tekale*  
Class Teacher  
Prof. Avinash Tekale

*Prof. R.S. More*  
Time Table In-charge  
PROF.R.S.MORE

*DR. U.V. Shinde*  
HOD  
DR. U.V. SHINDE

*Shirish H. V.*  
First Year Coordinator  
Siddhant College of Engineering  
Sudumbare, Tal. Ulhas, Pune - 412





**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION B - TIMETABLE**


SEM II

A.Y:-2022-23

WITH EFFECT FROM : 25/06/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	BLX	PPS	EGR	M-II	BLX
09:45 - 10:45	PPS	PHY	BLX	EGR	M-II
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	EGR	BLX	PPS	BLX	PPS
12:00 - 01:00	M-II	M-II	PHY	PPS	PHY
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	PHY	EGR	M-II	PHY	EGR
REMEDIAL CLASSES					
02:30 - 03:30	PPS	PHY	EGR	M-II	BLX
03:30 - 04:30					

INITIALS	NAME OF FACULTY	SUBJECT NAME
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (EGR)
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (M-II)
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS (PHY)
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING (BLX)
DGC	Prof. Dhanshree Chaudhari	PROGRAMMING AND PROBLEM SOLVING (PPS)

  
Class Teacher  
Prof. Avinash Tekale

  
Time Table In-charge  
PROF.R.S.MORE

  
HOD  
DR.U.V.SHINDE

Shinde U. V.  
First Year Co-ordinator  
Siddhant College of Engineering  
Sudumbare, Tal. Maval, Pune - 412





**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION C - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 25/06/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	CHEM	BEE	EM	M-II	EGR
09:45 - 10:45	BEE	M-II	BEE	EGR	EM
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	EM	CHEM	CHEM	EM	CHEM
12:00 - 01:00	EGR	EM	M-II	BEE	M-II
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	M-II	EGR	EGR	CHEM	BEE
REMEDIAL CLASSES					
02:30 - 03:30	CHEM	BEE	M-II	EGR	EM
03:30 - 04:30					

INITIALS	NAME OF FACULTY	SUBJECT NAME
UVS	Dr. Uttam V. Shinde	ENGINEERING CHEMISTRY (CHEM)
NSK	Prof. P.S. Futane	BASIC ELECTRICAL ENGINEERING (BEE)
RSM	Prof. R. S. More	ENGINEERING GRAPHICS (EGR)
PAP	Prof. Nilima Patil	ENGINEERING MECHANICS (EM)
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (M-II)

*[Signature]*  
Class Teacher  
Prof. R.S. More

*[Signature]*  
Time Table In-charge  
PROF.R.S.MORE

*[Signature]*  
HOD  
DR. U.V. SHINDE  
Shinde U.V.

First Year Coordinator  
Siddhant College of Engineering  
Sudumbare, Tal. Malav, Pune - 412



**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION D - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 25/06/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	M-II	EGR	CHEM	BEE	M-II
09:45 - 10:45	EGR	EM	M-II	CHEM	BEE
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	CHEM	M-II	EGR	M-II	EGR
12:00 - 01:00	BEE	BEE	EM	EGR	EM
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	EM	CHEM	BEE	EM	CHEM
<b>REMEDIAL CLASSES</b>					
02:30 - 03:30	EGR	EM	CHEM	BEE	M-II
03:30 - 04:30					

INITIALS	NAME OF FACULTY	SUBJECT NAME
NSK	Prof. P.S. Futane	BASIC ELECTRICAL ENGINEERING (BEE)
RSM	Prof. R.S. More	ENGINEERING GRAPHICS (EGR)
PAP	Prof. Nilima Patil	ENGINEERING MECHANICS (EM)
HDD	Prof. Harshada Dabhade	ENGINEERING CHEMISTRY (CHEM)
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (M-II)

*Harshada*  
Class Teacher  
Prof. Harshada Dabhade

*R.S. More*  
Time Table In-charge  
PROF. R.S. MORE

*U.V. Shinde*  
HOD  
DR. U.V. SHINDE



*U.V. Shinde*  
First Year Coordinator  
Siddhant College of Engineering  
Pune - 412109

CAYMET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING

**MASTER TIME-TABLE**

A.Y:-2022-23

WITH EFFECT FROM : 10/04/2023

SEM II																				
DAY / TIME	MONDAY				TUESDAY				WEDNESDAY				THURSDAY				FRIDAY			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
08:45 - 09:45	BLX	PPS	EGR C1 PBL C2	BEE	BLX	PHY	EGR	CHE M	PHY	EGR	CHE M	EGR	EGR	PHY	EM	BEE	PPS	M-II	BEE	EGR D1 PBL D2
09:45 - 10:45	EnV II	M-II	CHE M C3	EM	M-II	EnV II	EGR	EM	BLX	EGR	BEE	EGR	EGR	BLX	CHE M	PEd (APT)	PEd (APT)	PHY	M-II	CHE M D3
10:45 - 11:00	S	H	O	R	T	B	R	E	A	K										
11:00 - 12:00	BLX A1 PPS A2	PHY	BEE	EGR	EGR	PHY B1 BLX B2	CHE M	EM D1 EGR D2	EGR A1 PBL A2	PPS	CHE M C1 BEE C2	M-II	PPS	EGR B1 PBL B2	EGR	CHE M D1 BEE D2	PHY A1 BLX A2	EGR	EM C1 EGR C2	BEE
12:00 - 01:00	EGR A3	PHY	EM	EGR	EGR	PPS B3	BEE	PBL D3	PHY A3	PPS	EM C3	M-II	BLX	PHY B3	EGR	EM D3	PPS A3	EGR	PBL C3	CHE M
01:00 - 01:30	L	U	N	C	H	B	R	E	A	K										
01:30 - 02:30	M-II	BLX	CHE M	EnV II	PHY	M-II	EM	M-II	M-II	BLX	M-II	CHE M	M-II	PPS	M-II	CHE M	PHY	M-II	M-II	EM
02:30 - 03:30	PHY	PPS B1 EGR B2	M-II	PBL D1 CHE M D2	PPS A1 EGR A2	BLX	PBL C1 CHE M C2	EM (TU)	PPS	PBL B1 PHY B2	M-II (TU)	BEE D1 EM D2	PBL A1 PHY A2	M-II	BEE C1 EM C2	CHE M	M-II	BLX B1 PPS B2	CHE M	M-II
03:30 - 04:30	PHY	PBL B3	EM (TU)	BEE D3	PBL A3	PEd (HDD)	BEE C3	M-II (TU)	PPS	BLX B3	EnV II	EGR D3	BLX A3	M-II (TU)	EGR C3	M-II	M-II (TU)	EGR B3	PEd (SNK)	BEE (TU)

Time Table In-charge  
**PROF.R.S.MORE**



HDD  
**DR. U. V. SHINDE**  
 First Year Co-ordinator  
 Siddhant College of Engineering,  
 Sudumbare, Tal. Naval, Pune - 412109

Principal  
**DR. V. KAMBLE**  
 Siddhant College of Engineering,  
 Sudumbare, Pune - 412109




CAYMET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING


**LOAD DISTRIBUTION**

FACULTY INITIALS	NAME OF FACULTY	SUBJECT NAME	SUBJECT INITIALS	TH+TU	PR	PBL	PEd	TOTAL	SIGN
UVS	Dr. Uttam V. Shinde	ENGINEERING CHEMISTRY (C)	CHEM	5	6	2		13	
NSK	Prof. Nanda Kulkarni	BASIC ELECTRICAL ENGINEERING	BEE	8	12	2		22	
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (A&B)	EGR	8	12	2		22	
RSM	Prof. R .S. More	ENGINEERING GRAPHICS (C&D)	EGR	8	12	2		22	
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (A&B)	M -II	12		2	2	16	
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS	PHY	10	12	2		24	
PAP	Prof. Pooja Patil	ENGINEERING MECHANICS	EM	8	12	2		22	
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING	BLX	8	12	2		22	
HDD	Prof. Harshada Dabhade	ENGINEERING CHEMISTRY (D)	CHEM	5	6	2	1	14	
DGC	Prof. Dhanashree Chaudhari	PROGRAMMING AND PROBLEM SOLVING	PPS	8	12	2		22	
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (C&D)	M -II	12		4	1	17	
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-II	EvS - II	4				4	
		PROJECT BASED LEARNING	PBL						
		PHYSICAL EDUCATION	PEd						
<b>TOTAL</b>				<b>96</b>	<b>96</b>	<b>24</b>	<b>4</b>	<b>220</b>	

  
 Time Table In-charge  
 PROF. R.S. MORE



  
 HOD  
 DR. U.V. SHINDE  
 Shinde U. V.  
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 DR. V.Y. KAMBLE  
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 Sudumbare, Pune - 412 109



CAYMET'S  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**  
 DEPARTMENT OF FIRST YEAR ENGINEERING

CLASS	ROLL NO	GFM	SIGN
<b>A</b>	101 - 130	Prof. Deepak.A. Kute - CT	
	131 - 159	Prof. Dhanshri Chaudhari	
<b>B</b>	201 - 230	Prof. Avinash Tekale - CT	
	231- 257	Prof. Deepali Bajare	

CLASS	ROLL NO	GFM	SIGN
<b>C</b>	301 - 330	Prof. R.S. More - CT	
	331 - 357	Prof. Pooja Patil	
<b>D</b>	401 - 430	Prof. Harshada Dabhade - CT	
	431 - 455	Prof. Santosh Karle	

\* CT - CLASS TEACHER

FACULTY INITIALS	NAME OF FACULTY	PBL (BATCH)	PEd (Div)
UVS	Dr. Uttam V. Shinde	C3	
NSK	Prof. Nanda Kulkarni	D3	
BBK	Prof. Bhagwat B. Kedar	B1	
RSM	Prof. R .S. More	D1	
APT	Prof. Avinash Tekale	A2	<b>A &amp; D</b>
DAK	Prof. Deepak Kute	A3	
PAP	Prof. Pooja Patil	D2	
DAB	Prof. Deepali Bajare	B3	
HDD	Prof. Harshada Dabhade	C1	<b>B</b>
DGC	Prof. Dhanashree Chaudhari	A1	
SNK	Prof. Santosh Karle	B2,C2	<b>C</b>

PR BATCH	A1	:-	101	to	120
PR BATCH	A2	:-	121	to	140
PR BATCH	A3	:-	141	to	159
PR BATCH	B1	:-	201	to	219
PR BATCH	B2	:-	220	to	238
PR BATCH	B3	:-	239	to	257
PR BATCH	C1	:-	301	to	319
PR BATCH	C2	:-	320	to	338
PR BATCH	C3	:-	339	to	357
PR BATCH	D1	:-	401	to	418
PR BATCH	D2	:-	419	to	436
PR BATCH	D3	:-	437	to	455

  
 Time Table In-charge  
**PROF.R.S.MORE**



  
**DR.U.V.SHINDE**  
**Shinde U. V.**  
 First Year Co-ordinator  
 Siddhant College of Engineering,  
 Sudumbare, Tal Maval, Pune - 412 109

  
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**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION A - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 10/04/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	BLX	BLX	PHY	EGR	PPS
09:45 -10:45	EnV-II	M-II	BLX	EGR	PEd (APT)
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	BLX A1 PPS A2 EGR A3	EGR	EGR A1 PBL A2 PHY A3	PPS	PHY A1 BLX A2 PPS A3
12:00 - 01:00		EGR		BLX	
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	M-II	PHY	M-II	M-II	PHY
02:30 -03:30	PHY	PPS A1 EGR A2 PBL A3	PPS	PBL A1 PHY A2 BLX A3	M-II
03:30 - 04:30	PHY		PPS		M-II (TU)

ROLL NO.	GFM
101 - 130	Prof. Deepak.A. Kute
131 - 159	Prof. Dhanashree Chaudhari

PR BATCH A1	101 to 120
PR BATCH A2	121 to 140
PR BATCH A3	141 to 159

INITIALS	NAME OF FACULTY	SUBJECT NAME
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (EGR)
APT	Prof. Avinash Tekale	ENGINEERING MATHEMATICS II (M-II)
		PROJECT BASED LEARNING (PBL) PR BATCH A2
DAK	Prof. Deepak Kute	PHYSICAL EDUCATION (PEd)
		ENGINEERING PHYSICS (PHY)
DAB	Prof. Deepali Bajare	PROJECT BASED LEARNING (PBL) PR BATCH A3
DGC	Prof. Dhanashree Chaudhari	BASIC ELECTRONICS ENGINEERING (BLX)
		PROGRAMMING AND PROBLEM SOLVING (PPS)
PK	Prof. Prashant Kumar	PROJECT BASED LEARNING (PBL) PR BATCH A1
		ENVIRONMENTAL STUDIES-II (EnV-II)

*Prof. Deepak.A. Kute*  
Class Teacher  
Prof. Deepak.A. Kute



*Prof. R.S. More*  
Time Table In-charge  
PROF.R.S.MORE

*Dr. U.V. Shinde*  
HOD  
DR.U.V.SHINDE  
**Shinde U. V.**  
First Year Co-ordinator  
Siddhant College of Engineering  
Sudumbare, Tal Maval, Pune - 412109



**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION B - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 10/04/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	PPS	PHY	EGR	PHY	M-II
09:45 -10:45	M-II	EnV-II	EGR	BLX	PHY
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	PHY	PHY B1 BLX B2 PPS B3	PPS	EGR B1 PBL B2 PHY B3	EGR
12:00 - 01:00	PHY		PPS		EGR
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	BLX	M-II	BLX	PPS	M-II
02:30 -03:30	PPS B1 EGR B2 PBL B3	BLX	PBL B1 PHY B2 BLX B3	M-II	BLX B1 PPS B2 EGR B3
03:30 - 04:30		PEd (HDD)		M-II (TU)	

ROLL NO.	GFM
201 - 230	Prof. Avinash Tekale
231 - 257	Prof. Deepali Bajare

PR BATCH B1	201 to 219
PR BATCH B2	220 to 238
PR BATCH B3	239 to 257

INITIALS	NAME OF FACULTY	SUBJECT NAME
BBK	Prof. Bhagwat B. Kedar	ENGINEERING GRAPHICS (EGR)
APT	Prof. Avinash Tekale	PROJECT BASED LEARNING (PBL) PR BATCH B1
DAK	Prof. Deepak Kute	ENGINEERING MATHEMATICS II (M-II)
DAK	Prof. Deepak Kute	ENGINEERING PHYSICS (PHY)
DAB	Prof. Deepali Bajare	BASIC ELECTRONICS ENGINEERING (BLX)
DAB	Prof. Deepali Bajare	PROJECT BASED LEARNING (PBL) PR BATCH B3
DGC	Prof. Dhanashree Chaudhari	PROGRAMMING AND PROBLEM SOLVING (PPS)
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-II (EnV-II)
SNK	Prof. Santosh Karle	PROJECT BASED LEARNING (PBL) PR BATCH B2
HDD	Prof. Harshada Dabhade	PHYSICAL EDUCATION (PEd)

*Avinash*  
Class Teacher  
Prof. Avinash Tekale

*Prof. R.S. More*  
Time Table In-charge  
PROF. R.S. MORE

*Shinde U. V.*  
HOD  
DR. U. V. SHINDE  
Shinde U. V.

First Year Co-ordinator  
Siddhant College of Engineering  
Sudumbare, Tal. Muval, Pune - 41



**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION C - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 10/04/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	EGR C1 PBL C2 CHEM C3	EGR	CHEM	EM	BEE
09:45 -10:45		EGR	BEE	CHEM	M-II
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	BEE	CHEM	CHEM C1 BEE C2 EM C3	EGR	EM C1 EGR C2 PBL C3
12:00 - 01:00	EM	BEE		EGR	
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	CHEM	EM		M-II	M-II
02:30 -03:30	M-II	PBL C1 CHEM C2 BEE C3	M-II (TU)	BEE C1 EM C2 EGR C3	CHEM
03:30 - 04:30	EM (TU)		EnV-II		PEd (SNK)

ROLL NO.	GFM
301 - 330	Prof. R.S. More
331 - 357	Prof. Pooja Patil

PR BATCH C1	301 to 319
PR BATCH C2	320 to 338
PR BATCH C3	339 to 357

INITIALS	NAME OF FACULTY	SUBJECT NAME
UVS	Dr. Uttam V. Shinde	ENGINEERING CHEMISTRY (CHEM)
NSK	Prof. Narida Kulkarni	PROJECT BASED LEARNING (PBL) PR BATCH C3
RSM	Prof. R. S. More	BASIC ELECTRICAL ENGINEERING (BEE)
PAP	Prof. Pooja Patil	ENGINEERING GRAPHICS (EGR)
		ENGINEERING MECHANICS (EM)
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (M-II)
		PROJECT BASED LEARNING (PBL) PR BATCH C2
		PHYSICAL EDUCATION (PEd)
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-II (EnV-II)
HDD	Prof. Harshada Dabhade	PROJECT BASED LEARNING (PBL) PR BATCH C1

*[Signature]*  
Class Teacher  
Prof. R.S. More

*[Signature]*  
Time Table In-charge  
PROF. R.S. MORE

*[Signature]*  
HOD  
DR. U. V. SHINDE  
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First Year Co-ordinator  
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Sudumbare, Tal. Maval, Pune - 412





**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE-412109**

DEPARTMENT OF FIRST YEAR ENGINEERING

**DIVISION D - TIMETABLE**

SEM II

A.Y:-2022-23

WITH EFFECT FROM : 10/04/2023

DAY / TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:45 - 09:45	BEE	CHEM	EGR	BEE	EGR D1 PBL D2 CHEM D3
09:45 -10:45	EM	EM	EGR	PEd (APT)	
10:45 - 11:00	SHORT BREAK				
11:00 - 12:00	EGR	EM D1 EGR D2 PBL D3	M-II	CHEM D1 BEE D2 EM D3	BEE
12:00 - 01:00	EGR		M-II		CHEM
01:00 - 01:30	LUNCH BREAK				
01:30 - 02:30	EnV-II	M-II	CHEM	CHEM	EM
02:30 -03:30	PBL D1 CHEM D2 BEE D3	EM	BEE D1 EM D2 EGR D3	CHEM	M-II
03:30 - 04:30		M-II (TU)		M-II	BEE

ROLL NO.	GFM
401 - 430	Prof. Harshada Dabhade
431 - 455	Prof. Santosh Karle

PR BATCH D1	401 to 418
PR BATCH D2	419 to 436
PR BATCH D3	437 to 455

INITIALS	NAME OF FACULTY	SUBJECT NAME
NSK	Prof. Nanda Kulkarni	BASIC ELECTRICAL ENGINEERING (BEE)
		PROJECT BASED LEARNING (PBL) PR BATCH D3
RSM	Prof. R .S. More	ENGINEERING GRAPHICS (EGR)
		PROJECT BASED LEARNING (PBL) PR BATCH D1
PAP	Prof. Pooja Patil	ENGINEERING MECHANICS (EM)
		PROJECT BASED LEARNING (PBL) PR BATCH D2
HDD	Prof. Harshada Dabhade	ENGINEERING CHEMISTRY (CHEM)
SNK	Prof. Santosh Karle	ENGINEERING MATHEMATICS II (M-II)
APT	Prof. Avinash Tekale	PHYSICAL EDUCATION (PEd)
PK	Prof. Prashant Kumar	ENVIRONMENTAL STUDIES-II (EnV-II)

*Harshada*  
Class Teacher  
Prof. Harshada Dabhade



*R.S. More*  
Time Table In-charge  
PROF. R.S. MORE

*Dr. U. V. Shinde*  
HOD  
DR. U. V. SHINDE  
First Year Co-ordinator  
Siddhant College of Engin  
Sudumbare, Tal. Maval, Pune

22/4/22

Handwritten  
11/5/22

## Assignment No-1



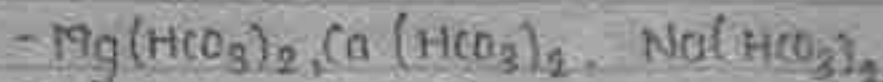
Q-1) What is hardness of water? Explain temporary and permanent hardness of water.

⇒ Hardness of water:-

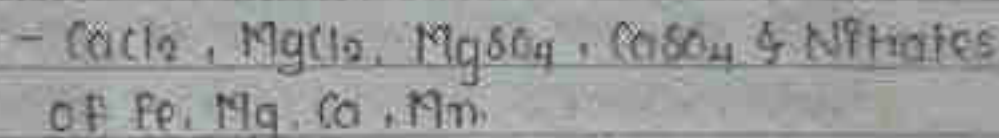
The water which will not give foam formation but will give precipitate on addition of soap solution is called hardness of water.

The hardness of water is due to dissolved salts.

For Eg:- Carbonate salts.



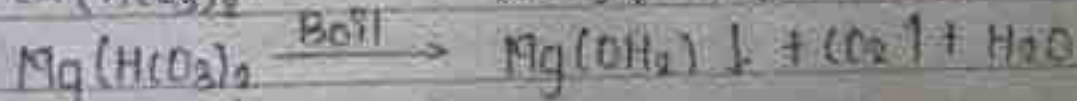
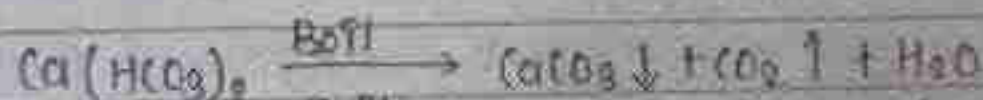
Non-Carbonate salts.



i) Temporary Hardness:-

The hardness which we can remove by boiling the water is called as temporary hardness.

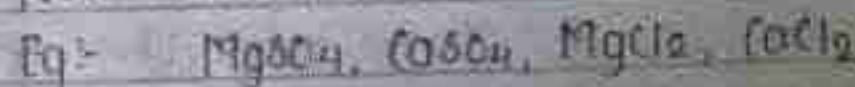
Carbonate hardness / Alkaline hardness



ii) Permanent Hardness:-

The hardness which cannot be removed by boiling is called as permanent hardness.

Non-Alkaline Hardness





Q. a) What is alkalinity of water? State the types of alkalinity. How alkalinity of water is described?

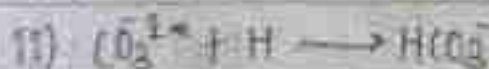
→ i) Alkalinity of water is ability of water to neutralise the acids.

ii) Alkalinity is due to presence of  $\text{HCO}_3^-$ ,  $\text{H}_2\text{CO}_3^*$  or of sodium, potassium, calcium and magnesium.

iii) Depending on types of anions present alkalinity is classified as bicarbonate alkalinity, carbonate alkalinity and hydroxide alkalinity.

\* The type of and amount of alkalinity <sup>present</sup> in water sample may be determined by titrating water sample with the standard acid using phenolphthalein and methyl orange indicators.

\* The determination of is based on following reactions:



Procedure for determination

i) Fill the burette with 0.5 N  $\text{H}_2\text{SO}_4$ .

ii) Take in conical flask water sample.

iii) Add 2-3 drops of phenolphthalein indicator (the pink colour is due to presence of strong alkali  $\text{OH}^-$  and  $\text{CO}_3^{2-}$ ).

iv) Add drop wise acid solution from burette with continuous stirring till pink colour gets



disappear

i) Add 2-3 drops of methyl orange indicator and get faint yellow color.

ii) Continue the titration till yellow + faint orange

Formula to find alkalinity of water

$$\text{ppt alkalinity (P)} = \frac{V_1 \times \alpha \times 50 \times 1000}{V} \text{ mg/lit}$$

$$\text{methyl orange (M)} = \frac{V_2 \times \alpha \times 50 \times 1000}{V} \text{ mg/lit}$$

$V_1$  = volume of acid consumed for ppt

$V_2$  = volume of acid consumed for m

$\alpha$  = Normality of acid in burette

$V$  = volume of water

Q.8] State the ~~the~~ types of boiler and explain the ill effects of boiler.

⇒ 1) The most important use of water in industries of steam generation using boilers. The boilers feed water should be free from impurities in order to avoid troubles inside the boiler.

a) Types of Boiler:

i) low Pressure boiler  $\rightarrow$  10-80 ppm

ii) Medium Pressure boiler  $\rightarrow$  10-40 ppm

iii) High Pressure boiler  $\rightarrow$  0-3 ppm

ii) Ill effects of boiler: If the boiler feedwater is not up to the standard limit it gives rise to number of problems or ill effect of

09/06/2023

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Date

## Assignment No-2

Page No.

Q-1] What is wet corrosion? Explain the H<sub>2</sub> evolution and H<sub>2</sub> absorption corrosion mechanism.

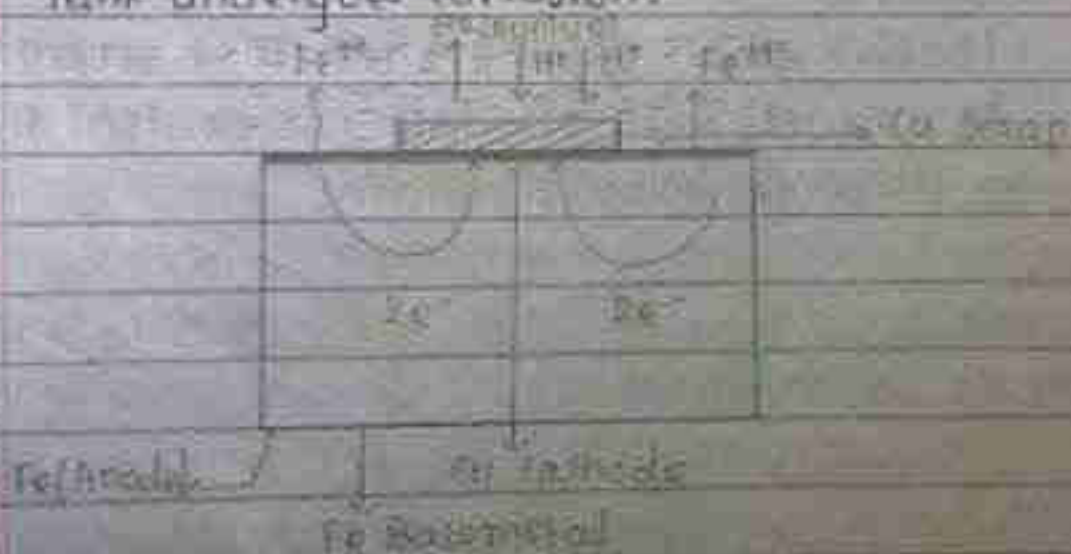
Wet corrosion is also known as indirect or immersed corrosion. Wet corrosion occurs due to following two conditions:-

- When conducting liquid is in contact with metals
- When two dissimilar metals are in contact in presence of conducting medium.

1) ~~H<sub>2</sub>~~ H<sub>2</sub> evolution corrosion: (Corrosion in Acidic medium)

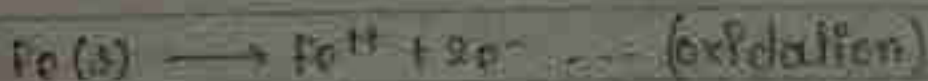
- These type of electrochemical corrosion always occurs in acid medium, acidic environment like industrial waste.

- Suppose steel tank containing acidic industrial waste and a small copper scrap are in contact with electrolyte, at that time Cu scrap acts as a cathode and steel tank acts as anode & steel tank undergoes corrosion.



- The oxidation and reduction reaction takes place at anode and cathode is as follows.

At anode,





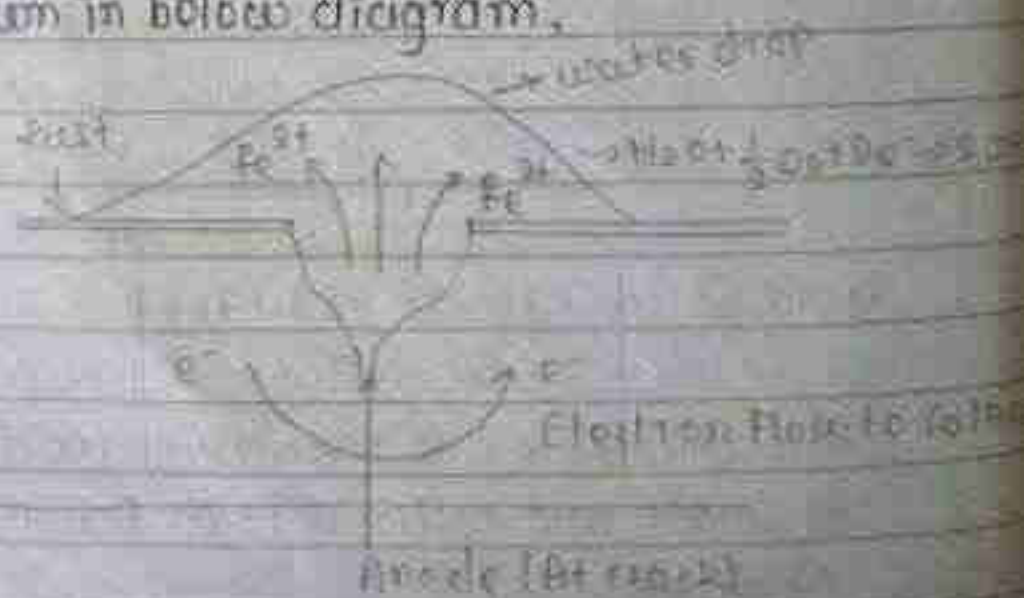
At cathode  $2H^+ + 2e^- \rightarrow H_2 \uparrow$  (Reduction)

- At anode, Iron passes into electrolyte in the form of  $Fe^{2+}$  two ions while, at cathode  $H_2$  ion form. Acidic electrolyte combines with electron and evolution of  $H_2$  gas takes place at cathode.

2) Corrosion in alkaline or neutral medium or O<sub>2</sub> absorption corrosion mechanism:-

- These type of electrochemical corrosion occurs when electrolyte is neutral or alkaline containing dissolved O<sub>2</sub>.

- Consider A steel plate lying on the ground and exposed to atmosphere. The MO film is formed on the surface of steel plate and it is ruptured at one place (having small plate and it is ruptured at one place [having small crack] & whole assembly is contact with alkaline or neutral medium as shown in below diagram.





- This type of protection method is used for such a metal which shows passivity phenomenon & the passivity is nothing but metals have corrosion resistance tendency even though they are placed in higher position in galvanic series.

\* Application of Protective coating:-

- chemical reactors, tanks.
- pipes carrying corrosive liquids.

\* Advantages:-

- Anodic protection has greater throwing power than cathodic protection hence quite complex structures can be protected.
- it requires low current density hence its operation cost is low.

Q-8] What is cathodic and anodic coating?  
Which is more protective & why?

⇒ • Cathodic coating:-

Cathodic coating is a type of electrochemical process in which we can protect a metal surface by making it the cathode in the electrochemical cell.

• Anodic coating:- it is a type of electrochemical process in which we can protect a metal surface by making it the anode in the

electrochemical cell

- In these base metal remains same until unless and until there is a proper metal coat but if coat get ruptured or having crack the corrosion of base metal start because base metal is anode and in presence of oxygen and moisture it undergoes oxidation. Therefore anodic coating is more effective than cathodic coating.

SUDHANT COLLEGE OF ENGINEERING  
 DEPARTMENT OF FIRST YEAR ENGINEERING  
 DIVISION - D  
 Subject Name: Engineering Chemistry  
 ASSIGNMENT RECORD

Date: 27/4/18

Sl. No.	Assignment No. Candidate Name	1	2	3	4	5	6
		(1-4-18)	24-4-18				
1	ANURAG TILAK						
2	ANANT DUDHANE	✓	✓	P			
3	ANURAG TILAK	✓	✓	P			
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UNIT-TEST-1



8/12/22

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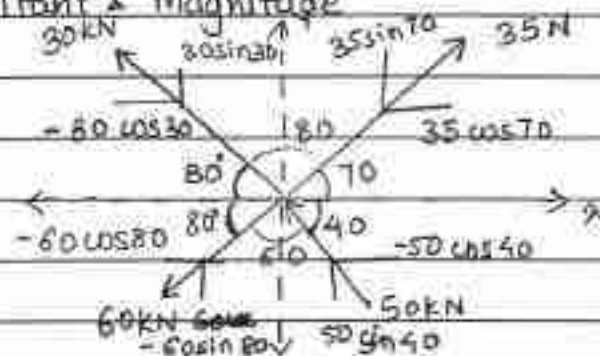
Engineering Mechanics

Sanket R. W

Div - (B) BE (FY)

Roll no: 254

Q 1) Find resultant & magnitude



$$\Sigma F_x = R_x = 35 \cos(70^\circ) - 30 \cos(30^\circ) - 60 \cos(80^\circ) - 50 \cos(40^\circ)$$

$$= -62.73 \text{ kN}$$

$$\Sigma F_y = R_y = 35 \sin(70^\circ) + 30 \sin(30^\circ) - 60 \sin(80^\circ) + 50 \sin(40^\circ)$$

$$= 21 \text{ kN}$$

$$R = \sqrt{(R_x)^2 + (R_y)^2} = \sqrt{(-62.73)^2 + (21)^2}$$

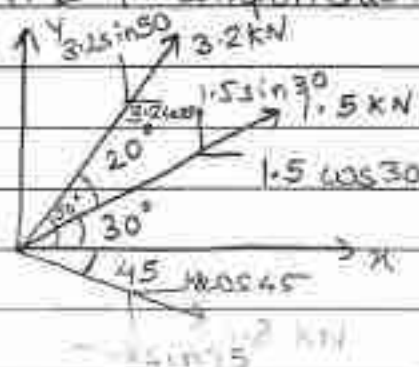
$$R = 66.15 \text{ kN}$$

$$\tan \theta = \frac{R_y}{R_x}$$

$$\therefore \theta = \tan^{-1}\left(\frac{R_y}{R_x}\right) = \tan^{-1}\left(\frac{21}{62.73}\right)$$

$$\theta = 18.5^\circ$$

Q2) Determine x & y components for each force F.B.D

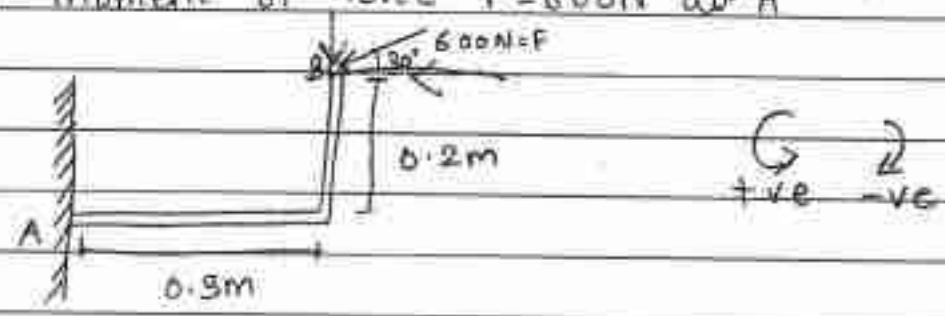


For force 1.5 kN The components are

1  
 for force 3.2 kN The components are  
 $x = 3.2 \cos 50^\circ = 2.058 \text{ kN}$   
 $y = 3.2 \sin 50^\circ = 2.45 \text{ kN}$

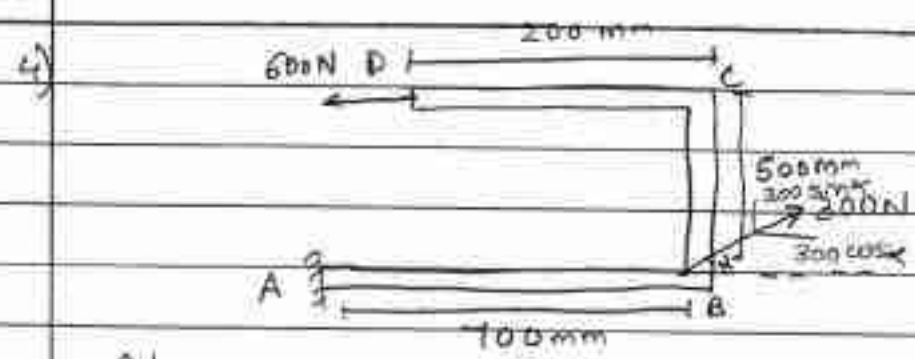
65.  
 for force 1.8 kN the components are  
 $x = 1.8 \cos 45^\circ = 1.272 \text{ kN}$   
 $y = -1.8 \sin 45^\circ = -1.272 \text{ kN}$

(3) Find moment of force  $F = 600 \text{ N}$  about A



Moment at A ( $M_A$ ) =  $(600 \times 0.3)$   
 $M_A = 1800 \text{ N.m}$

$\therefore$  The moment ~~at~~ <sup>about</sup> A of force 600 is 180 N.m



Given :-

$M_A = 405 \text{ N.m}$

Find 2 value of  $\alpha$  ( $0 \leq \alpha \leq 180$ )

$M_A = (600 \times 0.5) + (300 \sin \alpha \times 0.7)$   
 $405 = 300 + 210 \sin \alpha$   
 $\therefore 405 - 300 = 210 \sin \alpha$   
 $\therefore 210 \sin \alpha = 105$



$$\alpha = 30$$

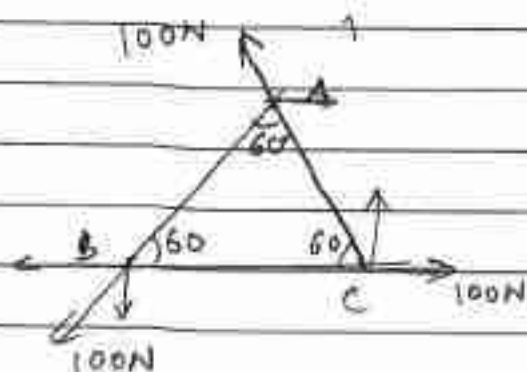
$$\therefore 0 \leq \alpha \leq 180$$

$$\therefore 180 - \alpha = 180 - 30$$

$$= 150^\circ$$

$$\therefore \boxed{\alpha = 30}, \boxed{\alpha = 150}$$

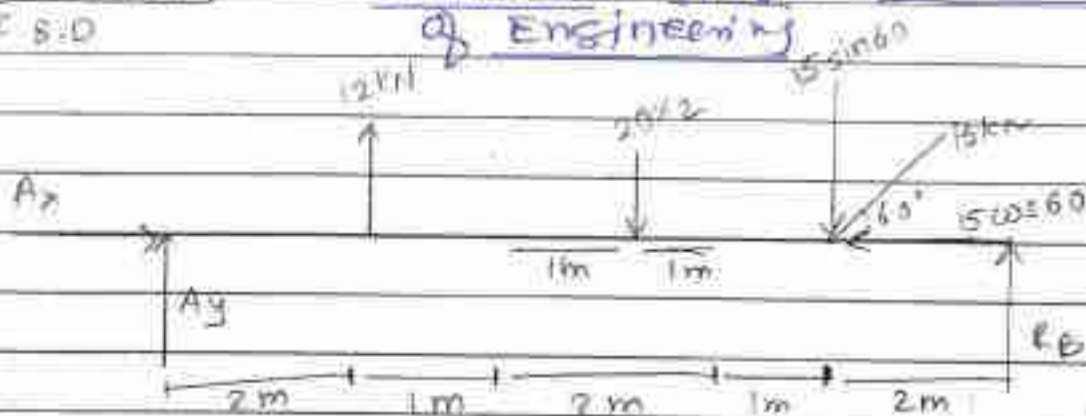
Q5 Determine magnitude & Direction.





Engineering  
Question  
F.S.DSiddhant College of Engineering  
UNIT TEST-II

3]



$$\sum f_x = 0$$

$$= A_x - 15 \cos 60$$

$$[A_x = 7.5] \text{ N}$$

$$\sum f_y = 0$$

$$\Rightarrow A_y + 12 - 40 - 15 \sin 60 + R_B$$

$$A_y + R_B = 40 + 15 \sin 60 - 12$$

$$A_y + R_B = 41$$

$$[A_y = 14.25] \text{ N}$$

$$\sum M_A = (12 \times 2) - (40 \times 4) - (15 \sin 60 \times 6) + (R_B \times 8)$$

$$8R_B = (40 \times 4) + (15 \sin 60 \times 6) - (12 \times 2)$$

$$R_B = \frac{214}{8}$$

$$[R_B = 26.75] \text{ N}$$

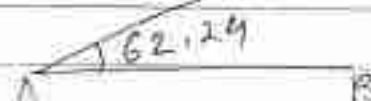
$$R_A = \sqrt{(7.5)^2 + (14.25)^2}$$

$$[R_A = 16.10] \text{ N}$$

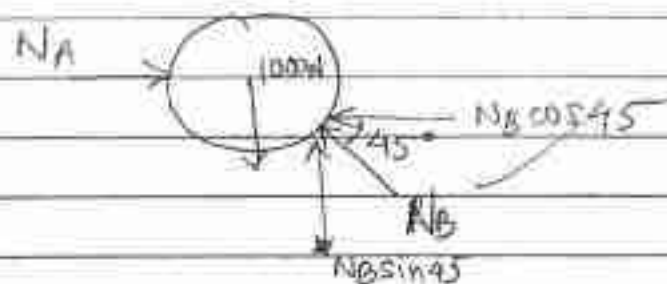
Q7.

$$\therefore \theta_A = \tan^{-1} \left( \frac{14.25}{7.5} \right)$$

$$\theta_A = 62.24$$



F.B.D



$$\sum f_x =$$

$$N_A - N_B \cos 45$$

$$N_A = 1000 \text{ N}$$

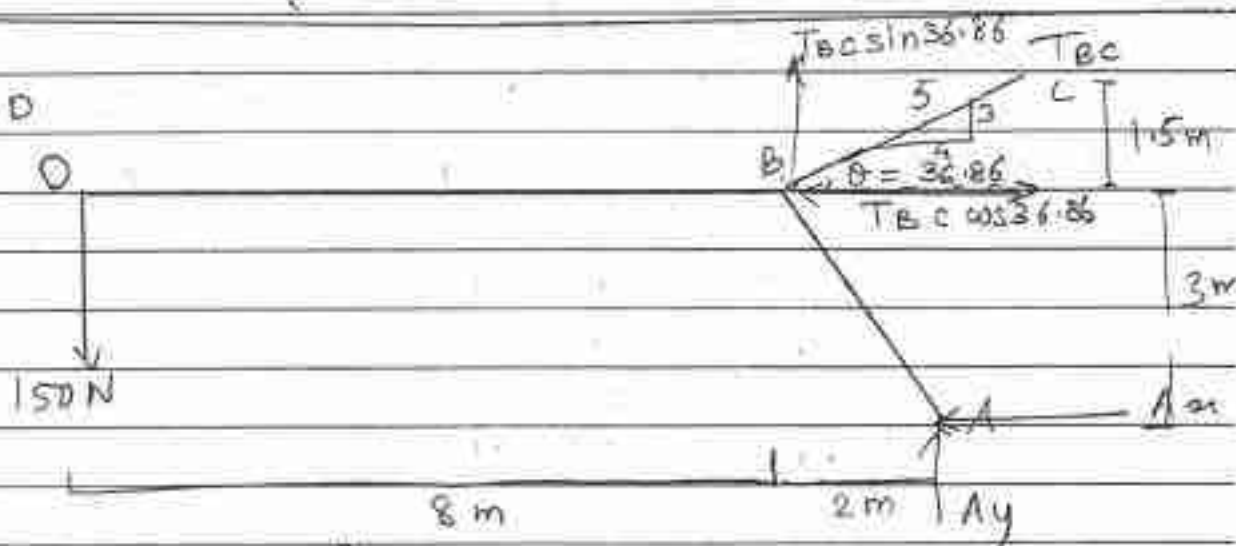
$$\sum f_y = -1000 + N_B \sin 45$$

$$N_B = \frac{1000}{\sin 45}$$

or

$$N_B = 1414.21 \text{ N}$$

27 F.B.D



$$\theta = \tan^{-1}\left(\frac{3}{4}\right)$$

$$\therefore \sum f_x = -A_x + T_{BC} \cos 36.86 = 0$$

$$A_x = T_{BC} \cos 36.86 = 0$$

or

$$\sum f_y = -150 + A_y + T_{BC} \sin 36.86$$

$$A_y + T_{BC} \sin 36.86 = 150$$

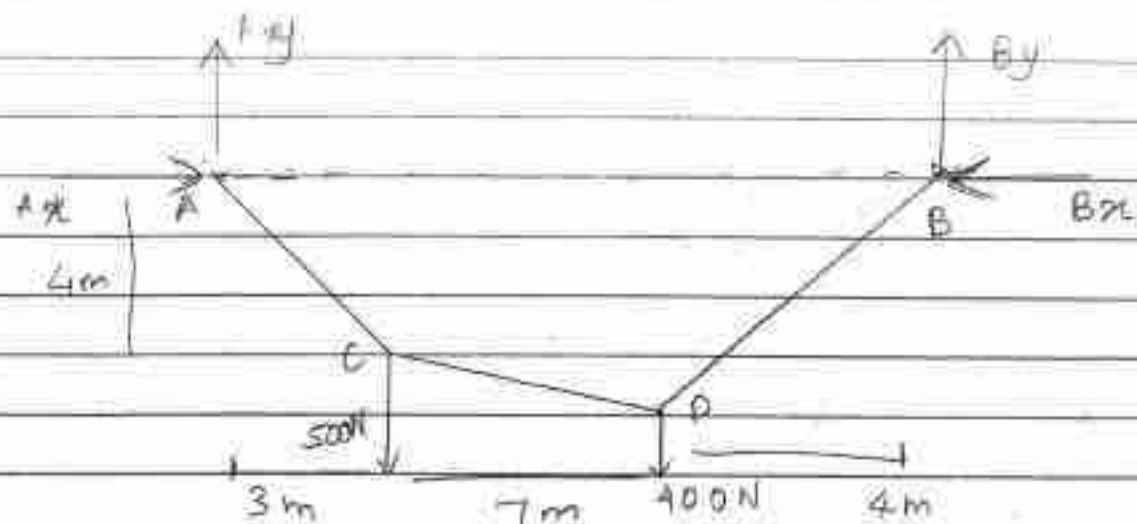
$$\sum M_A = (150 \times 10) - (T_{BC} \cos 36.86 \times 3) = 0$$

$$T_{BC} \cos 36.86 = +1500$$

$$T_{BC} = 1874.75$$



5)



$$\sum F_x = 0$$

$$\Rightarrow A_x - B_x = 0$$

$$\therefore A_x = B_x$$

$$B_x = 380.36$$

$$\sum F_y = 0 + A_y + B_y - 500 - 400$$

$$A_y + B_y = 900$$

$$A_y = 507.15$$

$$\sum M_A = (-500 \times 3) - (400 \times 10) + (B_y \times 14)$$

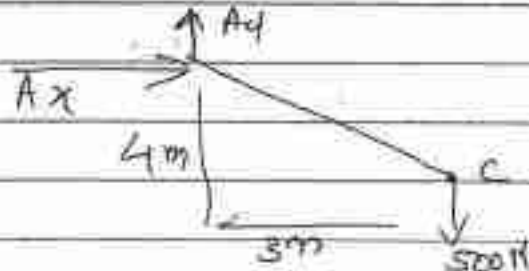
$$14B_y = (500 \times 3) + (400 \times 10)$$

$$= 1500 + 4000$$

$$B_y = \frac{5500}{14}$$

$$B_y = 392.85$$

F.B.D of AC



$$\sum M_C = (-A_x \times 4) + (A_y \times 3)$$

$$4A_x = 3A_y$$

$$4A_x = 3 \times 507.15$$

$$A_x = 380.36$$





$$R_A = \sqrt{(380.36)^2 + (507.15)^2}$$

$$\underline{R_A = 633.93 \text{ N}}$$

$$\theta_A = \tan^{-1} \left( \frac{A_y}{A_x} \right)$$

$$= \tan^{-1} \left( \frac{507.15}{380.36} \right)$$

$$\underline{\theta_A = 53.13}$$

$$R_B = \sqrt{(380.36)^2 + (392.85)^2}$$

$$R_B = 546.81$$

$$\theta_B$$

$$\theta_B = \tan^{-1} \left( \frac{392.85}{380.36} \right) = \underline{\theta_B = 45.92}$$

Maximum Tension is at  $R_A$

$$\underline{T_{AC} = 633.93 \text{ N}}$$



SIDDHANT COLLEGE OF ENGINEERING  
KADWANE CHAUHAN SURVEILLANCE  
DEPARTMENT OF FIRST YEAR ENGINEERING  
A.Y. 2022-23

DIVISION - A  
SUBJECT NAME- ENGINEERING MECHANICS  
CLASS TEST LIST

Roll No.	Candidate Name	08/12/22	08/02/23	08/02/23	08/02/23
		Unit Test-I Students Sign	Unit Test-I Marks	Unit Test-II Students Sign	Unit Test-II Marks
101	AMBRE SWAPNIL DEEPAK	AS		AS	
102	BACCHE VAISHNAVI CHANDRAKANT	AS	10	AS	17
103	BAGADI CHANCHAL RAJU	Chanchal	12	AB	17
104	BARU AYUSH SUNIL	AS	09	AB	
105	BIDKAR DUKYESH DINESH	AS	03	AS	09
106	BISWAS BISRAXHA BASUDEB	Biswas	09	Biswas	04
107	BOROLE SAKSHI GHANASHYAMDAS	AS	11	AS	09
108	CHAUDHAN SUMERSINGH Z.	AS	06	AS	13
109	CHORAGE SAYALI SANJAY	Sanjay	06	Sanjay	16
110	DHONAGE SAPNA SUBHASH	Dhona	06	Dhona	13
111	DESHMUKH HARSHAL DILIP	AS	09	AB	
112	DESHMUKH JYANAVI DILIPRAO	Deshmukh	06	Deshmukh	05
113	DESHMUKH OM SHANKAR	AS	06	AB	
114	DIVEKAR SANDRA SUNIT	AS	03	AS	11
115	GADEKAR OM PRATAP	AS	09	AS	15
116	GADHAVE PREM RAJENDRA	AS	09	AB	
117	GAIGOLE GAUR NANDKISHOR	AS	06	AS	06
118	HUNASNALE SNEHA RAJKUMAR	AS	09	AB	
119	INGALE MOTILAL BABARAO	AS	10	AS	14
120	JOSHI SUJAL ANIL	AS	09	AB	
121	KADAM RUTURAJ RAMBESH	AS	13	AS	04
122	KAKADE ADITYA DATTATRAYA	AS	10	AS	07
123	KALE GAURAV SANJAY	AS	11	AS	07
124	KAMBLE ISHA RAJESH	AB		AB	
125	KARDE AARYA MURLIDHAR	AS	10	AS	05
126	KAROLDE SANSKRUTI SHIVAJI	AS	08	AS	04
127	KHABRE SIDDHI RAJENDRA	AS	14	AS	18
128	KHARCHE JYOTIRAJ GANESH	AS	06	AS	10
129	KOTHAWALE MANISH MAHESH	AS	08	AS	13
130	KURLEKAR ATHARVA SATISH	AS		AS	05



131	MAHADEVI MOHIT SANTOSH	<del>AB</del>	10	<del>AB</del>	
132	NARATHE HISHIKESH SANTOSH	<del>AB</del>	09	<del>AB</del>	00
133	MURTHY RAVIDIRAN KRISHNA	<del>AB</del>	03	<del>AB</del>	06
134	NAYAKODI LAXMI BHAGANTEPPA	<del>AB</del>	11	<del>AB</del>	16
135	PASHILKAR TANMAY KIRAN	<del>AB</del>	12	<del>AB</del>	16
136	PATIL NICHOL SHIVKI	<del>AB</del>		<del>AB</del>	
137	PATIL OMKAR JOTIBA	<del>AB</del>	06	<del>AB</del>	08
138	PATIL SAHELKUMAR ANANDRAO	<del>AB</del>	07		
139	PAWADE SAURABH VIVEK	<del>AB</del>		<del>AB</del>	11
140	PAWARI MANDI NAVNEET	<del>AB</del>	08	<del>AB</del>	12
141	PAWARI RISHABH RAJENDRA	<del>AB</del>	09	<del>AB</del>	
142	PHALKE UDAY NAVNATH	<del>AB</del>		<del>AB</del>	04
143	RASKAR SAKSHI PRASHANT	<del>AB</del>	09	<del>AB</del>	10
144	SAMRUDDHI MOHAN BHOR	<del>AB</del>	07	<del>AB</del>	09
145	SARAWADE ROHIT SUNIL	<del>AB</del>	10	<del>AB</del>	
146	SARTAPE SHIVKUMAR VINAYAK	<del>AB</del>		<del>AB</del>	13
147	SATAY MOKSHNATH PRAMOD	<del>AB</del>	09	<del>AB</del>	12
148	SAWANT SUSHANT HANUMANT	<del>AB</del>	02	<del>AB</del>	23
149	SHARMA AISHAY MANOJ	<del>AB</del>	06	<del>AB</del>	
150	SHIWALE SONAL RAJENDRA	<del>AB</del>	05	<del>AB</del>	06
151	SINGH SANDEEP UDAY	<del>AB</del>	06	<del>AB</del>	
152	SONAWANE DIVYA RAJESH	<del>AB</del>	12	<del>AB</del>	10
153	SURIYAWANSHI SHASHIWATI S.	<del>AB</del>	09	<del>AB</del>	07
154	THAKUR PRINCE SATISH	<del>AB</del>	10	<del>AB</del>	16
155	TULPE SHWETA NAVNATH	<del>AB</del>	06	<del>AB</del>	19
156	VARE PRATIK BALU	<del>AB</del>	05	<del>AB</del>	10
157	VARE SHRIDHAR LANKU	<del>AB</del>	06	<del>AB</del>	10
158	WALUNI NICHIL KUNDAN	<del>AB</del>	06	<del>AB</del>	09
159	AKASH GANGADHAR SHELKE	<del>AB</del>	04	<del>AB</del>	10

PROF. POOJA A. PATIL  
SUBJECT TEACHER

DR. A. TRINOB  
PRINCIPAL





**SIDDHANT COLLEGE OF ENGINEERING**

TALJENDON-CHAKAN RD. BILGAON, PUNE-411004  
DEPARTMENT OF FIRST YEAR ENGINEERING  
A.Y. 2022-23

**DIVISION - B**

**Subject Name- Engineering mechanics (EM)**

**CLASS TEST LIST**

		02/12/22		08/02/23	
Roll No.	Candidate Name	Unit Test-I Students Sign	Unit Test-I Marks	Unit Test-II Students Sign	Unit Test-II Marks
201	DHANGAR PAVAN SANTOSH	AB		AB	
202	ALHAT CHENMAY PRAMOD	Alhat	14	Alhat	12
203	VISHAL BAPU WAGHMODE	Vishal	13	AB	
204	AYUSH BAO	Ayush	05	Ayush	12
205	BHAGAT KSHITIZ KUNDLIK	Bhagat	15	Bhagat	12
206	BHANGE DIPALI ACHYUT	Bhange	15	Bhange	09
207	BIRADAR ANJALI RAMESH	Biradar	15	AB	
208	BOCHARE AISHWARYA SANJAY	Bochare	15	AB	
209	CHAUDHARY VAISHNAVI BALISTER	Chaudhary	15	Chaudhary	15
210	CHAVAN VISHAL PRAVIN	Chavan	12	Chavan	09
211	CHELEKAR MAMESH RAJARAM	Chelekar	13	Chelekar	12
212	DEOKAR SNEHA SURESH	Deokar	13	Deokar	07
213	DHANOKAR SAKSHI JAYDEO	Dhanokar	15	AB	12
214	DHOLE ADITYA SANJAY	Dhole	01	Dhole	15
215	GADSE KARTIK ARUN	Gadse	11	AB	
216	GAIKAR ABHISHEK ROHIDAS	Gaikar	05	Gaikar	15
217	GAIKWAD POOJA RAM	AB	12	Pooja	14
218	GHULE YOGRAJ HARISHCHANDRA	AB		Ghule	09
219	GOLE AYTHARV BHARAT	Gole	10	AB	06
220	HAJARE SANJAY SADASHIV	Hajare	13	Hajare	11
221	HINGE KSHITIZ GOKUL	Hinge	03	Hinge	09
222	KAD SAI SANTOSH	Kad	15	AB	
223	KALANGE PRATHAMESH VIKAS	Kalange	10	AB	
224	KANASE ATHARVA JEETENDRA	Kanase	08	AB	
225	KARANDE JAY ANAND	Karande	10	Karande	04
226	KHANDE RAMESHWAR SANJAY	Khande	05	Khande	11
227	LAKSHMALE ASHISH ANANT	Lakshmale	11	Lakshmale	13
228	MANE SNEHAL BABAN	S.B. Mane	15	S.B. Mane	21
229	MOHITE APEKSHA DATTATRAYA	MoHITE	14	AB	
230	NAGARGOPE ABHISHEK DEVIDAS	AB		AB	



231	NAIK VILAS MALKHAN	<del>Nikol</del>	10	<del>Nikol</del>	05
232	PADWAL SAHIL DATTATRAY	<del>Spandan</del>	02	<del>Spandan</del>	14
233	PANDEY HEMANGI UMESHCHANDRA	<del>Hemangp.</del>	15	<del>Hemangp</del>	22
234	PATIL AYUSH SANJAY	<del>Anshul</del>	02	<del>AB</del>	
235	PATIL SHREYA SANTOSH	<del>Shreya</del>	15	<del>Shreya</del>	13
236	PATOLE SUJAL NAVNATH	<del>Shubha</del>	15	<del>Shubha</del>	20
237	PAWAR HARSHAL VILAS	<del>Pawar</del>	06	<del>AB</del>	
238	SARTHAK SHASHIKANT WAGHMARE	<del>AB</del>		<del>AB</del>	
239	SAYYAD SAMEER JAMEER	<del>Sameer</del>	13	<del>Sameer</del>	14
240	SEWLIKAR HARSHIT KULDEEP	<del>Harsh</del>	14	<del>Harsh</del>	13
241	SHELKE DNYANESHWAR SANJAY	<del>Shelke</del>	02	<del>Shelke</del>	09
242	SHITOLE VAISHNAVI RAMDAS	<del>Shitole</del>	15	<del>Shitole</del>	16
243	SOMASE ADITYA PANDURANG	<del>Sum</del>	11	<del>Sum</del>	09
244	SURYAWANSHI ANIKET TANAJI	<del>Aniket</del>	06	<del>Aniket</del>	10
245	SURYAWANSHI PRASAD DILIP	<del>Suryawanshi</del>	12	<del>AB</del>	
246	SUYASH KACHAKU NICHIT	<del>Suyash</del>	09	<del>Suyash</del>	14
247	TAMBE ARJUN ASHOK	<del>Arj</del>	11	<del>Arj</del>	09
248	TASHALE RAJESHWAR GAJANAN	<del>Raj</del>	11	<del>Raj</del>	09
249	TEKALE YASH MUKUNDA	<del>Yash</del>	10	<del>Yash</del>	09
250	THORAWADE ASHWINI TANAJI	<del>Ashwini</del>	15	<del>Ashwini</del>	10
251	TLIRE SHAHAR SANJAY	<del>Shahar</del>	11	<del>AB</del>	
252	VAIDYA SURAJ DATTATRAY	<del>S.D Vaidya</del>	06	<del>S.D Vaidya</del>	11
253	WAGHMARE TANUJA SHRAVAN	<del>Tanuja</del>	15	<del>Tanuja</del>	10
254	WAROLE SANKET RATNAKAR	<del>Sanket</del>	15	<del>Sanket</del>	23
255	YADAV PRITHVIRAJ SACHIN	<del>Yadav</del>	12	<del>Yadav</del>	12
256	YEDKE YOUTA ASHUBA	<del>Yedke</del>	03	<del>Yedke</del>	08
257	YSOLE SHREYA KINHOR	<del>Shreya</del>	15	<del>Shreya</del>	12
258	WALING NIKHIL KUNDAN				
259	AKASH CHANDAN SHILKE				

PROF. POOJA A. PATIL  
SUBJECT TEACHER

DR. U. S. HINDE





**C.A.Y.M. Education Trust's  
SIDDHANT COLLEGE OF ENGINEERING.**

*(Approved by AICTE, Recognized by Government of Maharashtra and Affiliated to University of Pune)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109*

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**Shri R. S. Yadav**  
President


**Dr. L. V. Kamble**  
Principal

Date:- 20/02/2023

## **NOTICE**

All FE students are hereby informed that the Prelim Examination of SEM- I have been scheduled from **Wednesday, 01/03/2023 to Wednesday 08/03/2023**. The question paper pattern will be as per SPPU norms. All students are instructed that attendance is compulsory for the examination. The detailed schedule will be displayed on the notice board.



  
**Dr. U.V. Shinde**  
**FE-HOD**





# SIDDHANT COLLEGE OF ENGINEERING

## F.E. PRELIMINARY EXAMINATION

SEMESTER - I A.Y.2022-23

PROGRAMME OF F.E.(2019 COURSE)(CREDIT SYSTEM)

### INSTRUCTIONS FOR CANDIDATES

- Candidates are required to be present at the examination centre, **THIRTY MINUTES** before the stipulated time.
- Candidates are forbidden from taking any material into the examination hall that can be treated as a malpractice.
- Candidates are requested to see the Notice Board at their center of examination regularly for changes if any that may be notified later in the program.
- No request shall be granted for change in time or date for the University Examination on any ground.
- Candidates are requested to note the Day, Date and Time of Paper.
- Candidates are permitted to use stencils at the time of examination.
- The exchanges of side-rules, drawing instruments of other materials used in the examination hall is not permitted at the time of examination. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
- Use of non-programmable battery operated electronic pocket size Calculator is allowed. The exchange of Calculators is not allowed. Electronics Devices including mobile are not allowed at the time of examination.
- The written examination will be conducted in the following order.





# SIDDHANT COLLEGE OF ENGINEERING

## F.E. PRELIMINARY EXAMINATION

SEMESTER - I A.Y.2022-23

### TIMETABLE

Time:-10.00 AM To 12.30 PM

Day & Date	Paper Code	Subject
Wednesday 01-03-2023	107009	ENGINEERING CHEMISTRY
Wednesday 01-03-2023	107002	ENGINEERING PHYSICS
Thursday 02-03-2023	103004	BASIC ELECTRICAL ENGINEERING
Thursday 02-03-2023	104010	BASIC ELECTRONICS ENGINEERING
Friday 03-03-2023	110005	PROGRAMMING AND PROBLEM SOLVING
Friday 03-03-2023	101011	ENGINEERING MECHANICS
Monday 06-03-2023	102003	SYSTEMS IN MECHANICAL ENGINEERING
Wednesday 08-03-2023	107001	ENGINEERING MATHEMATICS-I

Date: 27/02/2023

  
Prof. R.S. More  
Exam-coordinator

  
Dr. L.V. Shinde  
HOD

  
Dr. L.V. Kamble  
Principal



Siddhant College of Engineering  
Sudumbare, Pune - 412 106

Siddhant College of Engineering  
Sudumbare, Pune - 412 106

F.E. PRELIMINARY EXAMINATION SEM-I (A.Y.2022-23)

Page 2 of 2

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE  
FE PRELIMINARY EXAMINATION

A.Y. 2022-23

SEMESTER - I

JOURNOR SUPERVISOR DUTY CHART

Sr. No.	Name of Faculty	1/3/2023	2/3/2023	3/3/2023	6/3/2023	8/3/2023	Total	SIGN
		10:00 AM - 12:30 PM						
1	Prof. Avinash Takale	BLOCK NO.01	BLOCK NO.03		BLOCK NO.04	BLOCK NO.06	4	<i>Avinash Takale</i>
2	Prof. Sonali Ghuge			BLOCK NO.01	BLOCK NO.02	BLOCK NO.03	3	<i>Sonali Ghuge</i>
3	Prof. Shilpa Charapale	BLOCK NO.02	BLOCK NO.01	BLOCK NO.04			3	<i>Shilpa Charapale</i>
4	Prof. Deepak Kute		BLOCK NO.02	BLOCK NO.03	BLOCK NO.01	BLOCK NO.04	4	<i>Deepak Kute</i>
5	Prof. Ashwini Bhosale	BLOCK NO.03			BLOCK NO.06	BLOCK NO.05	3	<i>Ashwini Bhosale</i>
6	Prof. Pooja Patil	BLOCK NO.04		R	BLOCK NO.07	BLOCK NO.02	3	<i>Pooja Patil</i>
7	Prof. Dipali Bajare		R	BLOCK NO.02	BLOCK NO.05	BLOCK NO.01	3	<i>Dipali Bajare</i>
8	Prof. Harshada Dabhadre	R	BLOCK NO.04		BLOCK NO.03	BLOCK NO.07	3	<i>Harshada Dabhadre</i>



*R.S. More*  
INT. SENIOR SUPERVISOR  
Prof. R. S. More



Total No. of Questions: 8

107002

Seat No.  

Total No. of Pages: 4

**SIDDHANT COLLEGE OF ENGINEERING**  
**F.E. PRELIMS EXAMINATION**  
**ENGINEERING PHYSICS**  
**(2019 PATTERN) (Semester-II)**

[Time: 2½ Hours]

[Maximum Marks: 70]

*Instructions to the candidates:*

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed. 5) Assume suitable data, if necessary.

**Physical Constants :**

- 1) Mass of Electron ( $m_e$ ) =  $9.1 \times 10^{-31}$  kg
- 2) Charge on Electron ( $e$ ) =  $1.6 \times 10^{-19}$  C
- 3) Mass of Proton ( $m_p$ ) =  $1.673 \times 10^{-27}$  kg
- 4) Mass of neutron ( $m_n$ ) =  $1.673 \times 10^{-27}$  kg
- 5) Velocity of light ( $c$ ) =  $3 \times 10^8$  m/s
- 6) Planck's constant ( $h$ ) =  $6.63 \times 10^{-34}$  J.s

- Q.1 a) Derive an equation for energy of a particle enclosed in 1D rigid box or in an infinite potential well. [6]
- b) State and explain Heisenberg's uncertainty principle. [4]
- c) Calculate de Broglie wavelength of electron having kinetic energy 1 KeV [4]
- d) Derive the expression for de Broglie wavelength for a particle when it is moving with kinetic energy 'E'. [4]

OR

- Q.2 a) Derive Schrodinger's time independent wave equation. [6]
- b) State the de Broglie hypothesis and explain any three properties of matter waves. [4]
- c) What is wave function  $\Psi$ ? Write mathematical conditions well behaved wave function [4]

- d) Lowest energy of an electron trapped in potential well is 38 eV. Calculate the width of well in A.V. [Given : Mass of electron  $9.1 \times 10^{-31}$  kg, plank constant  $6.63 \times 10^{-34}$  J.s, charge on electron  $1.6 \times 10^{-19}$  C. [4]
- Q.3 a) Explain Hall effect with figure. Derive the equation of Hall voltage and Hall coefficient. [6]
- b) What is Fermi level in a semiconductor? With the neat labelled diagram, draw the position of Fermi level in N Type & P Type semiconductor at 0° K. [4]
- c) State the advantages (any two) and applications (any two) of solar cell. [4]
- d) A copper strip 2.0 m wide, 1.0 mm thick is placed in a magnetic field of 1.5T. If a current of 200 A is set up in the strip, calculate the Hall voltage that appears across the strip. Assume  $R_{21} = 6 \times 10^{-2} \text{ m}^2/\text{A}^\circ\text{C}$ . [4]

OR

- Q.4 a) Define Fermi level in metals. Write Fermi-Dirac probability distribution function and explain the meaning of each term. [6]
- b) Draw a neat and labelled diagram showing I-V characteristics of a solar cell. Write the equations for fill factor and efficiency of solar cell. [4]
- c) Define Fermi level in conductors and semiconductors. Draw the position of Fermi level in intrinsic, N-type & P-type semiconductors. [4]
- d) Calculate the mobility of charge carriers in doped silicon whose conductivity is 10 ohm .m and the Hall coefficient is  $3.6 \times 10^{-4} \text{ m}^3/\text{C}$  [4]
- Q.5 a) Explain the following terms in superconductivity : [6]
- i) Critical Magnetic field.
- ii) Meissner effect.
- b) Define (i) magnetic field strength (ii) magnetic induction (iii) magnetic permeability. Write relation between them. [4]
- c) The transition temperature  $T_c$  for lead is 7.26 K. The critical magnetic field at 0K, i.e.  $H_c(0)$  is  $8 \times 10^4$  A/m. It is to be used as a super conductor subjected to a magnetic field  $H_c(T)$  of  $4 \times 10^4$  A/m. At what maximum temperature  $T$ , it can be operated without losing its superconductivity. [4]
- d) What is super conductivity? Differentiate between type I & type II superconductors (any three). [4]

OR



- Q.6 a) Define superconductivity with resistance Vs temperature graph and example. [6]  
Explain zero electrical resistance in super conductivity.
- b) Distinguish between diamagnetism, paramagnetism and ferromagnetism (two points each). [4]
- c) Define with unit : (i) Magnetic field strength (H) (ii) Magnetisation(M) [4]
- d) For Niobium, if critical temperature  $T_c$  is 11.3 K and critical magnetic field at 0K is  $H_c(0)$  is  $2 \times 10^5$  A/m. Calculate critical magnetic field  $H_c(T)$  at  $T = 4.2$  K. [3]

- Q.7 a) Explain electrical and mechanical properties of nanoparticles. [6]
- b) An ultrasonic pulse of frequency 130 kHz is sent through a block of steel. echo pulse is received after 1.693 s. If velocity of ultrasonic in steel is  $2990$  m/s, calculate the thickness of the steel block and wavelength of the pulse. [4]
- c) Explain in brief how acoustic emission technique is used in non-destructive Testing. [4]
- d) Explain in brief, the principle of radiography testing technique. [4]

OR

- Q.8 a) What is non-destructive testing? State types of non-destructive techniques? [6]  
Explain ultrasonic testing technique for flaw detection.
- b) What is nanotechnology? Explain applications of nanotechnology in electronic field. [4]
- c) Write applications of nanotechnology in the field of automobiles. Explain any one application in brief. [4]
- d) Distinguish between Destructive and Non Destructive testing (any two points). [3]

πππ



Verified all entries &amp; found correct

Jr. Supervisor's Name, Signature &amp; Date


 Sr. Asst. V. Singh
Seat No. (in figures) F190440319 Centre : 4044Seat No. (in words) F- one nine zero four four zero three one nineDay & Date : Wednesday 12-7-2023 Examination : Preliminary examSubject : Physics Section :Course / Paper No. Medium of Answer : English

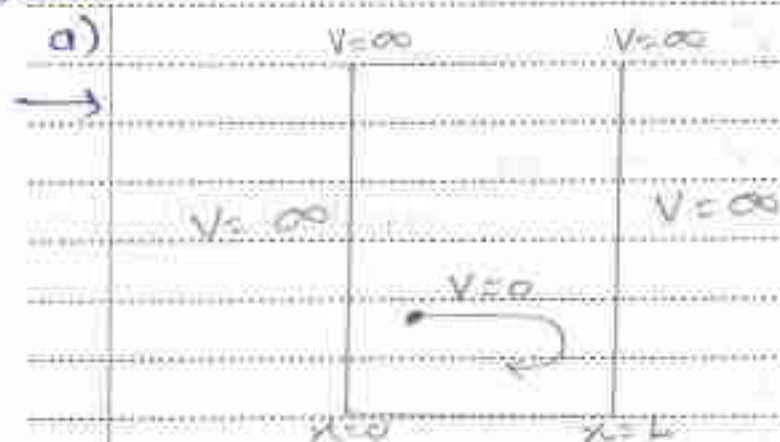
Main Ans. Book + No. of Supplements = Total

Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks	13	-	15	-	13	-	16						57	
Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks														

Use of Coloured pencil or ink is strictly prohibited except in case of Diagrams and Sketches  
(Write on both sides and start writing on this page)

Q.1

a)



- consider a particle in 1D rigid box the velocity of particle is zero inside the box ( $V=0$ ) and the velocity infinite outside the box ( $V=\infty$ )
- The particle is enclosed in rigid box
- The particle cannot escape outside the box hence the wavefunction  $\psi=0$  at

$$V=0$$

$$V=\infty$$

$$0 < x < L$$

$$x \leq 0 \text{ and } x \geq L$$



By using schrodinger time dependent wave equation

$$\nabla^2 \psi + \frac{2m}{\hbar^2} (E - V) \psi = 0 \quad \text{--- (1)}$$

when  $V = 0$  the eq<sup>n</sup> becomes

$$\frac{d^2 \psi}{dx^2} + \frac{2mE\psi}{\hbar^2} = 0$$

$$\text{put } \frac{2mE\psi}{\hbar^2} = k^2 \quad \text{--- (2)}$$

the solution of eq<sup>n</sup> (2) is

$$\psi(x) = A \sin kx + B \cos kx \quad \text{--- (3)}$$

at the

we use cond<sup>n</sup>  $\psi = 0$  and  $x = 0$  in eq<sup>n</sup> (3)

$$0 = 0 + B$$

$$\therefore \boxed{B = 0}$$

put  $B = 0$  in eq<sup>n</sup> (3)

$$\psi = A \sin kx \quad \text{--- (4)}$$

Now use cond<sup>n</sup>  $\psi = 0$  and  $x = L$  in eq<sup>n</sup> (4)

$$0 = A \sin kL$$

$$\therefore A \sin kL = 0$$

$$\sin kL = 0 \quad \text{--- (A} \neq 0 \text{)}$$

$$kL = n\pi$$

$$k = \frac{n\pi}{L}$$

$\therefore$  put  $k = \frac{n\pi}{L}$  in eq<sup>n</sup> (4) we get

$$\boxed{\psi_n = A \sin\left(\frac{n\pi x}{L}\right)} \quad \text{--- (n = 1, 2, 3)}$$

where

$$k^2 = \frac{2mE\psi}{\hbar^2}$$

$$\therefore \frac{n^2 \pi^2}{L^2} = \frac{2mE\psi}{\hbar^2}$$





$$\therefore E_n = \frac{n^2 h^2}{8mL^2}$$

This is eq<sup>n</sup> of energy of particle enclosed in 1D rigid box

b) Heisenberg's uncertainty principle  
- It states that it is impossible to determine simultaneously and accurately the position and momentum of particle.

measurement position is  $\Delta x$  and momentum is  $\Delta p$  this are greater than or equal to plank's constant  $h$

$$\therefore \Delta x \Delta p \geq h$$

more accurately

$$\Delta x \Delta p = \frac{h}{2\pi}$$

c) Given:-

$$E = 1 \text{ keV} \quad e = 1.6 \times 10^{-19} \text{ C}$$

$$h = 6.63 \times 10^{-34} \text{ Js}$$

$$m = 9.1 \times 10^{-31} \text{ kg}$$

$$\lambda = \frac{h}{\sqrt{2mE}}$$

$$\lambda = \frac{6.63 \times 10^{-34}}{\sqrt{2 \times 9.1 \times 10^{-31} \times 1 \times 1.6 \times 10^{-19}}}$$

$$\lambda = 2.27 \times 10^{-10} \text{ m}$$



d) The kinetic energy of moving particle is given by

$$E = \frac{1}{2} m v^2$$

Multiply  $m$  by R.H.S.  
we can also write this eq<sup>n</sup> in below form

$$E = \frac{m^2 v^2}{2m}$$

$$E = \frac{p^2}{2m} \quad \left( \begin{array}{l} p = mv \\ \therefore p^2 = m^2 v^2 \end{array} \right)$$

$$\therefore p^2 = 2mE$$

$$p = \sqrt{2mE}$$

de Broglie wavelength is

$$\lambda = \frac{h}{p}$$

$$\therefore \lambda = \frac{h}{\sqrt{2mE}}$$

This is the expression for de Broglie wavelength for particle when it is moving with kinetic energy  $E$ .

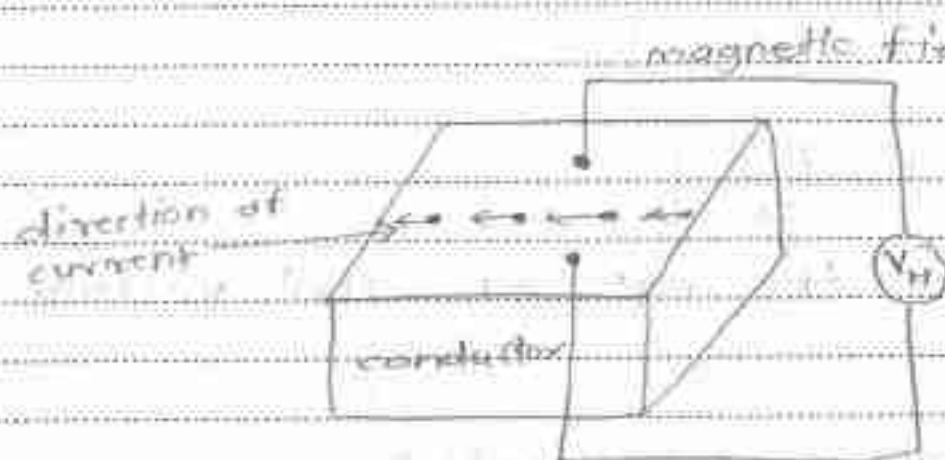




Q.3

a) Hall effect

- When the magnetic field is applied perpendicular to the direction of current then the voltage is produced along the both magnetic field and current. This is called as Hall effect.



• Current produced in magnetic field is  $eEH$

• magnetic field is  $BeV$

$$\therefore eEH = BeV \quad \text{--- (1)}$$

$$EH = BV \quad \text{--- (2)}$$

∴ The current eq<sup>n</sup> is

$$I = neVA$$

$$\therefore V = \frac{I}{neA}$$

put the value of  $V$  in eq<sup>n</sup> (2)

$$EH = \frac{BI}{neA}$$

$$EH = \frac{V_H}{d}$$

$$\therefore \frac{V_H}{d} = \frac{BI}{neA}$$



$$V_H = \frac{BI d}{neA}$$

$$\therefore V_H = \frac{BI}{ne\omega} \quad (A = \omega \times d)$$

$\therefore$  Hall coefficient is

$$\Rightarrow R_H = \frac{1}{ne}$$

$$\Rightarrow \therefore V_H = R_H \frac{BI}{\omega}$$

This is the eqn of Hall voltage

b) Fermi level in semiconductor

- Highest energy occupied by electron is called as fermi level.

Position of fermi level in P type



Position of fermi level in N type





c) \* Advantages of solar cell

- It is non polluting, environment friendly
- High energy production in less time

\* Application

- It is used in ~~satellite~~ satellites
- It is used in aerospace.
- It is used in water heaters like solar water heater

d) Given:-

$$\omega = 1 \text{ mm}$$

$$R_H = 6 \times 10^7 \text{ m}^3/\text{C}$$

$$B = 1.5 \text{ T}$$

$$I = 200 \text{ A}$$

$$V_H = R_H \frac{BI}{\omega}$$

$$= \frac{6 \times 10^7 \times 1.5 \times 200}{1.6 \times 10^{-13} \times 1}$$

$$V_H = 1.8 \times 10^3 \text{ V}$$



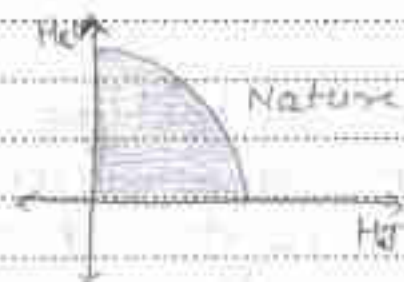


Q.5

a)

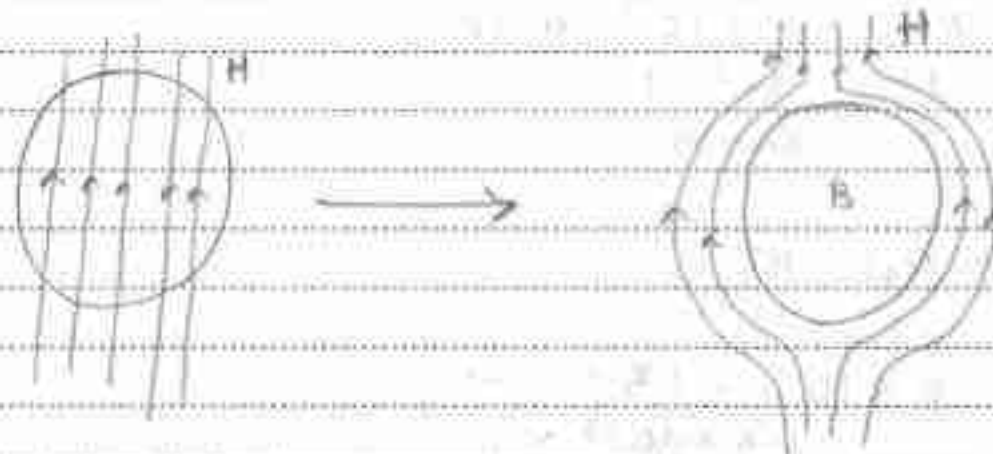
→ i) Critical magnetic field

- When the sufficient voltage is required to destroy superconductivity and restore to its original position.



$$H_c(0) = H_c(T) \left[ 1 - \left( \frac{T}{T_c} \right)^2 \right]$$

ii) Meissner effect



When the semiconductor is cooled to its critical temperature ( $T_c$ ) and magnetic field is applied to the conductor then magnetic field passed <sup>outside</sup> from the conductor this phenomenon is called as Meissner effect.



**SIDDHANT COLLEGE OF ENGINEERING**

Verified all entries &amp; found correct

Jr. Supervisor's Name, Signature &amp; Date

Seat No. (In figures) E190440319 Centre: 4044Seat No. (In words) f- one nine zero four four zero three one nineDay & Date: Monday 12-2-23 Examination:Subject: physics Section:Course / Paper No. Medium of Answer: EnglishMain Ans. Book + No. of Supplements 1 = Total

Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks														
Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks														

Use of Coloured pencil or ink is strictly prohibited except in case of Diagrams and Sketches  
(Write on both sides and start writing on this page)

Q5

- b) i) Magnetic field strength (H)  
 - When the magnitude is expressed by North pole and south pole at any point in magnetic field this is called the strength of magnetic field.  
 unit - ~~Ampereturns~~ Ampereturns/m.

$$H = \frac{\text{Ampereturns}}{\text{length in m}}$$

- ii) Magnetic induction or flux density (B)  
 - It is the no. of lines per unit cross sectional area.

$$B = \frac{\phi}{A}$$

$$\text{unit} - \text{wb/m}^2$$

- It is also defined as flux per unit area.





iii) Magnetic permeability ( $\mu$ )

- It is defined as the ratio of magnetic induction to magnetic field strength

$$\mu = \frac{B}{H}$$

unit - ampere turns

relation =  $\mu = \frac{B}{H}$

c) Given:-

$$H_c(0) = 8 \times 10^5 \text{ A/m}$$

$$H_c(T) = 4 \times 10^4 \text{ A/m}$$

$$T_c = 7.26 \text{ K}$$

$$T = ?$$

$$H_c(0) = H_c(T) \left[ 1 - \left( \frac{T}{T_c} \right)^2 \right]$$

$$8 \times 10^5 = 4 \times 10^4 \left[ 1 - \left( \frac{T}{7.26} \right)^2 \right]$$

$$\frac{8 \times 10^5}{4 \times 10^4} = 1 - \frac{T^2}{1.2 \times 10^6}$$

~~4 \times 10^4~~  $\times$

$$T = 0.5 \text{ K}$$

d) Super conductivity

- It is defined as the decrease the resistivity of material and increase the conductivity





### Type I

- 1) These are diamagnetic in nature
- 2) This follows meissner effect
- 3) The critical temperature is very low  
i.e.  $0.1\text{ K}$
- 4) This have only one critical temp.  $T_c$
- 5) low use in industry

### Type - II

- 1) These are not diamagnetic in nature
- 2) This doesn't follow meissner effect
- 3) critical temperature is very high  
i.e.  $0.1 \ll T$
- 4) These have two critical temp.  $T_{c1}, T_{c2}$
- 5) Very high use in industry

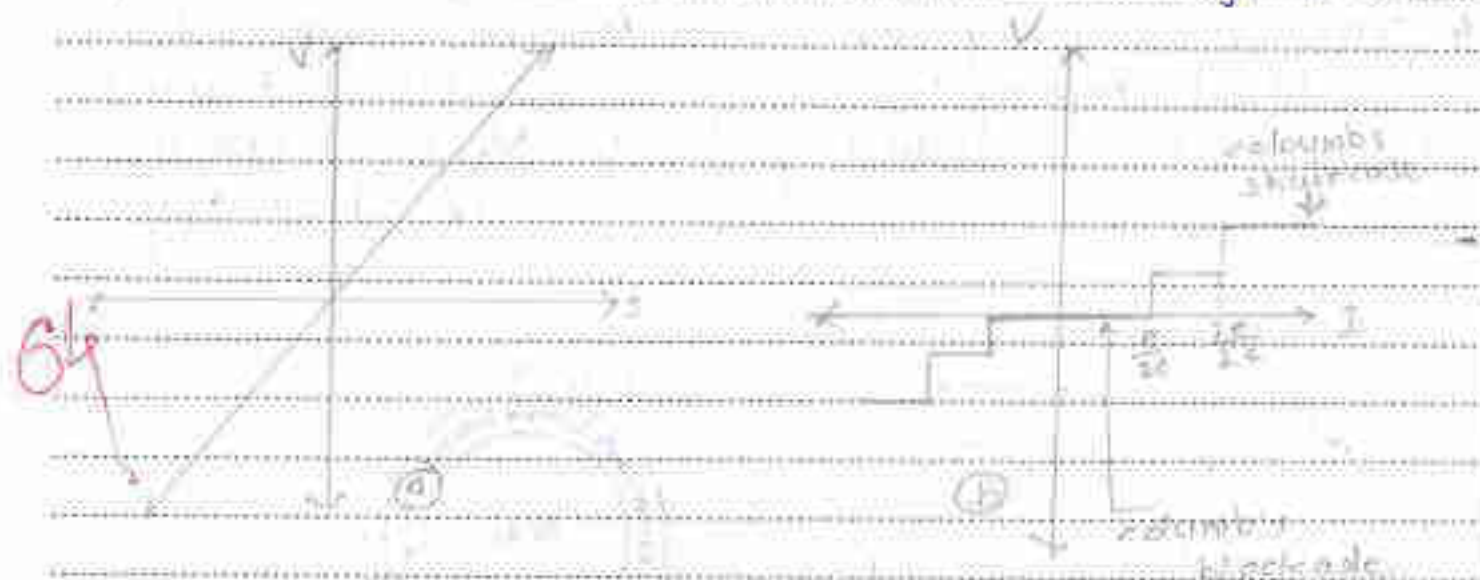




R7

### a) Electrical properties

- Electrical resistivity depends upon the grain size
- If the particle is small then the resistivity is high.
- If the ~~current~~ <sup>voltage</sup> is applied to bulk material then it obeys ohm's law and the nano-particles carries current and voltage both



If the current  $I_0$  is at

- If the current flowing through the particle the electrons moves if no current is flowing then no electrons flow.
- Coulomb blockade is shown in fig (b) at the zero current and coulomb stair case is also shown.

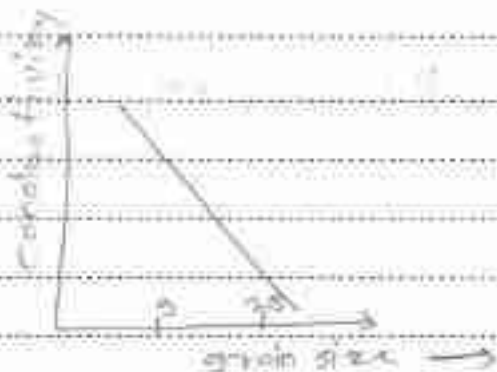
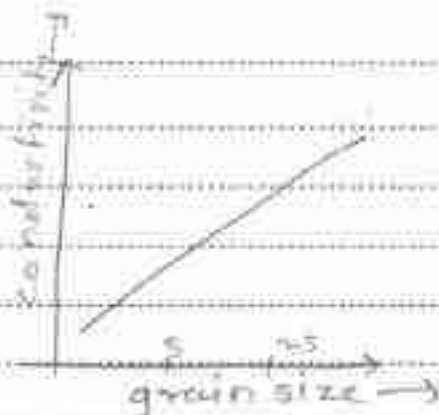
### b) Mechanical properties

- The mechanical properties like hardness, ductility and elasticity are depends upon the imperfection and impurities in material.
- If the impurities are less in the material then it is said to be pure material.
- If voltage is applied to bulk material then conductivity varies with grain size in nanomaterials when grain size is decreases then conductivity increases



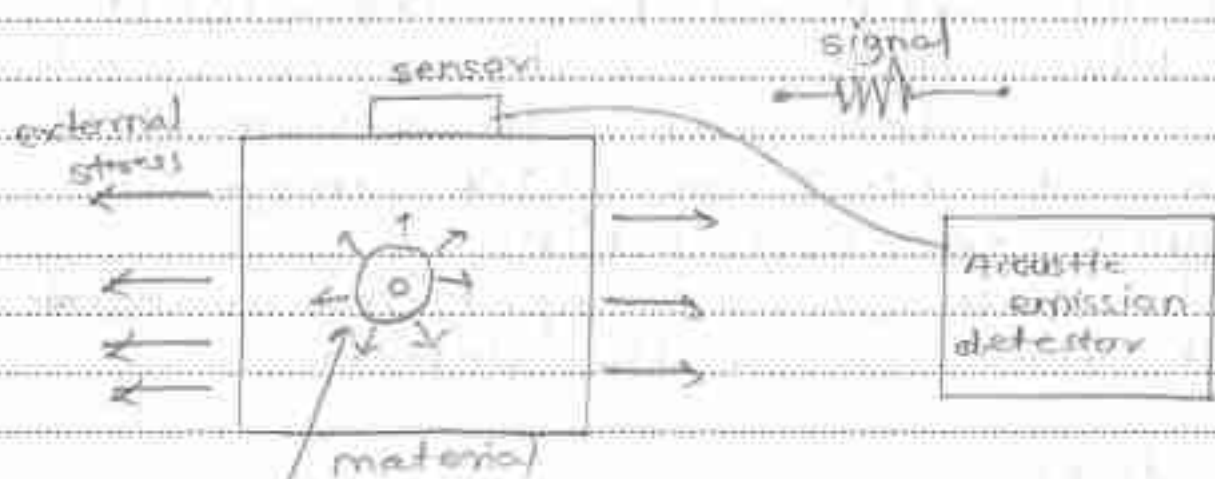


Q4



### c) Acoustic emission technique

- Acoustic emission technique is the non-destructive test technique which is used to finding and locating defect in component (material)



acoustic emission waves

- When the pressure is applied on material then the ~~the~~ material starts to deformation.
- Cause of pressure and deformation the waves are emitted and passed out to the crack. This waves are called acoustic emission waves.
- This waves are detected by sensor and this information in signal send to the Acoustic emission detector.

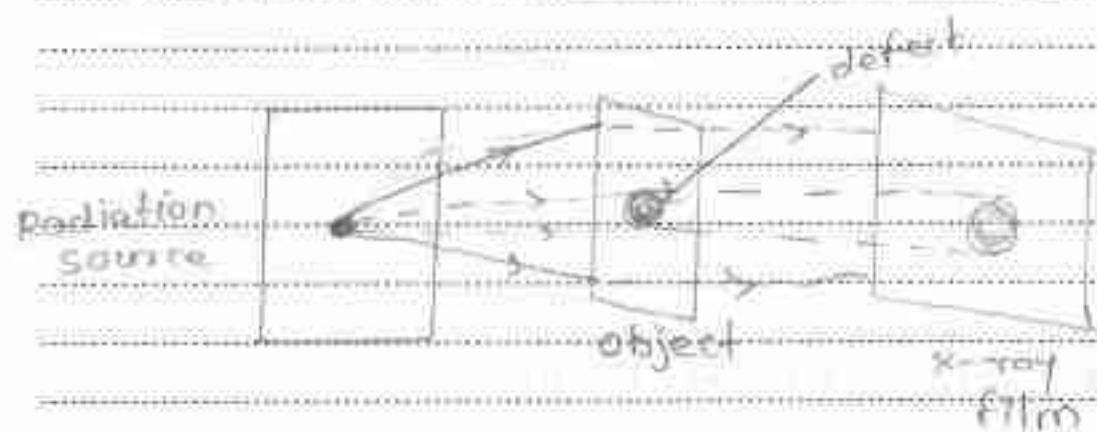
### Applications

- This is used in welding and soldering





#### d) Radiography testing technique



- When the x-ray or  $\gamma$ -ray's are passed by radiation source on the object.
- This rays are partially absorbed or partially reflected from the object.
- But When there is a defect in object then rays have small thickness in the region of defect and large image is obtained on x-ray film.
- By the help of x-ray film we can detect the size of the defect.

#### Applications:-

- 1) By using this technique we can detect crack, hole, cavity in object.

b)  $f = 130 \text{ KHz}$   
 $t = 1.69 \text{ GS}$   
 $v = 5900 \text{ m/s}$



$$\lambda = \frac{v}{f}$$
$$= \frac{5900}{130}$$

$$\boxed{\lambda = 45.38}$$

## SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-II)

COURSE- FE 2019 PATTERN

BLOCK NO-

SUBJECT - ENGINEERING PHYSICS (107002)

DATE - 12/07/2023

## ATTENDANCE SHEET

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440006	ALHAT CHINMAY PRAMOD	<i>[Signature]</i>	25
2	F190440008	AMRE SWAPNIL DEEPAK	<i>[Signature]</i>	26
3	F190440012	AYUSH BAG	<i>[Signature]</i>	03
4	F190440014	BACCHE VAISHNAVI CHANDRANATH	<i>[Signature]</i>	31
5	F190440018	BAGADI CHANCHAL RAJ	<i>[Signature]</i>	15
6	F190440022	BARI AYUSH SUNIL	<i>[Signature]</i>	00
7	F190440027	BHAGAT KSHITIA KUNDLIK	<i>[Signature]</i>	05
8	F190440029	BHANGE DIVALI ACHYUT	<i>[Signature]</i>	16
9	F190440032	BIDKAR DUVESH DINESH	<i>[Signature]</i>	04
10	F190440043	BIRADAR ANALI RAMESH	<i>[Signature]</i>	26
11	F190440046	BISWAS HIRAKHA BASUDEV	<i>[Signature]</i>	14
12	F190440047	BORADE AARYA MURLIDHAR	<i>[Signature]</i>	10
13	F190440048	BORHARE AISHWARYA SANJAY	<i>[Signature]</i>	34
14	F190440050	BOROLE SAKSHI GHANASHYAMDAS	<i>[Signature]</i>	35
15	F190440058	CHAUDHARY VAISHNAVI BALISTER	<i>[Signature]</i>	40
16	F190440059	CHAUHAN SUMERSINGH JAGANNATHISINGH	<i>[Signature]</i>	30
17	F190440061	CHAVAN VISHAL PRAVIN	<i>[Signature]</i>	29
18	F190440063	CHELEKAR MAHESH RAJARAM	<i>[Signature]</i>	31
19	F190440065	CHORAGE SAYALI SANJAY	<i>[Signature]</i>	22
20	F190440068	DEOKAR SNEHA SURESH	<i>[Signature]</i>	40
21	F190440070	DESHMUKH HARSHAL DILIP	<i>[Signature]</i>	00
22	F190440071	DESHMUKH JANHAVI DILIPRAO	<i>[Signature]</i>	
23	F190440074	DHANGAR PAVAN SANTOSH	<i>[Signature]</i>	
24	F190440075	DHANOKAR SAKSHI JAYDEO	<i>[Signature]</i>	25
25	F190440076	DHOLE ADITYA SANJAY	<i>[Signature]</i>	13
26	F190440078	DHONAGE SAPNA SUBHASH	<i>[Signature]</i>	41
27	F190440084	DIVEKAR VANIKA SUNIL	<i>[Signature]</i>	26
28	F190440091	GADE KARTIK ARUN	<i>[Signature]</i>	06
29	F190440093	GADHAVE PREM RAJENDRA	<i>[Signature]</i>	07
30	F190440094	GAIGOLE GAURI NANDKISHOR	<i>[Signature]</i>	26
31	F190440095	GAIKAR ABHISHEK ROHIDAS	<i>[Signature]</i>	14
32	F190440097	GAIKWAD POOJA RAM	<i>[Signature]</i>	38
33	F190440099	GAIKWAD PRADEEP KANAKDAS	<i>[Signature]</i>	11



SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-II)  
COURSE- FE 2019 PATTERN  
SUBJECT - ENGINEERING PHYSICS (107002)

BLOCK NO- 2  
DATE - 12/07/2023

ATTENDANCE SHEET

Sl. No.	Seat No.	Name of Students	Sign	Marks
1	F190440112	GOLE ATHARV BEHARAT	<i>[Signature]</i>	11
2	F190440118	HAJARE SANKET SADASHIV	<i>[Signature]</i>	34
3	F190440122	HARSHAL VILAS PAWAR	<i>[Signature]</i>	39
4	F190440125	HINGE KSHITI GOKUL	<i>[Signature]</i>	27
5	F190440128	HUNASNALE SNEHA RAJKUMAR	<i>[Signature]</i>	25
6	F190440130	INGALE MOTIRAM BABARAO	<i>[Signature]</i>	20
7	F190440147	JOSHI SUJAL ANIL	<i>[Signature]</i>	22
8	F190440148	KADSAI SANTOSH	<i>[Signature]</i>	11
9	F190440149	KADAM RUTURAJ RAMESH	<i>[Signature]</i>	02
10	F190440154	KAKADE ADITYA DATTATRAYA	<i>[Signature]</i>	25
11	F190440156	KALANGE PRATHAMESH VIKAS	<i>[Signature]</i>	16
12	F190440157	KALE GAURAV SANJAY	<i>[Signature]</i>	18
13	F190440160	KAMBLE ISHARAJESH	<i>[Signature]</i>	23
14	F190440161	KANASE ATHARVA JEETENDRA	<i>[Signature]</i>	00
15	F190440165	KARANDI JAY ANAND	<i>[Signature]</i>	24
16	F190440167	KARGUDE SANJEEV SHIVAJI	<i>[Signature]</i>	43
17	F190440173	KHAIRE SIDDH RAJENDRA	<i>[Signature]</i>	28
18	F190440175	KHANDE RAMESHWAR SANJAY	<i>[Signature]</i>	24
19	F190440177	KHARCHE JITENDRA GANESH	<i>[Signature]</i>	06
20	F190440180	KOTHAWALE MANISH MAHESH	<i>[Signature]</i>	00
21	F190440190	KURLEKAR ATHARVA SATISH	<i>[Signature]</i>	31
22	F190440192	LAKHIMALE ASHISH ANANT	<i>[Signature]</i>	30
23	F190440195	MANDADE MURIT SANTOSH	<i>[Signature]</i>	04
24	F190440196	MANE SNEHAL DABAN	<i>[Signature]</i>	22 15
25	F190440197	MARATHE HIRSHIKESH SANTOSH	<i>[Signature]</i>	04
26	F190440201	MOHITE APERKSHA DATTATRAYA	<i>[Signature]</i>	05
27	F190440208	MURTHY KRISHNA RAVICHARAN	<i>[Signature]</i>	00
28	F190440209	NAGARCOJE ADISHK DEVLIDAS	<i>[Signature]</i>	18
29	F190440211	NAIK VIKAS MAUKHAN	<i>[Signature]</i>	24
30	F190440214	NAYAKOBI LAXMI BHAGANTEPPA	<i>[Signature]</i>	27
31	F190440215	NICHIT SUYASH KACHARU	<i>[Signature]</i>	35
32	F190440218	OM PRATAP GADEKAR	<i>[Signature]</i>	22



SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-II)  
COURSE- FE 2019-PATTERN  
SUBJECT - ENGINEERING PHYSICS (107002)

BLOCK NO- 03  
DATE - 12/07/2023

ATTENDANCE SHEET

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440221	PADWAL SAHIL DATTATRAY	<i>Padwal</i>	13
2	F190440224	PANDEY HEMANGI UMESHCHANDRA	<i>Pandey</i>	14
3	F190440226	PASHILKAR TANMAY KIRAN	<i>Pashilkar</i>	15
4	F190440228	PATIL AYUSH SANJAY	<i>Patil</i>	02
5	F190440231	PATIL OMKAR RUTHA	<i>Patil</i>	15
6	F190440233	PATIL SATHIKUMAR ANANDRAO	<i>Patil</i>	01
7	F190440236	PATIL SHREYA HANTOSH	<i>Patil</i>	33
8	F190440237	PATOLE SUDAL NAVNATH	<i>Patole</i>	02
9	F190440239	PAWADE SAURABH VIKRANT	<i>Pawade</i>	24
10	F190440242	PAWAR MANSHI NAVNEET	<i>Pawar</i>	15
11	F190440245	PAWAR RISHABH RAJENDRA	<i>Pawar</i>	00
12	F190440246	PHALKE UDAY NAVNATH	<i>Phalke</i>	22
13	F190440252	PRITHVIRAJ SACHIN VADAY	<i>Prithviraj</i>	22
14	F190440254	RAIKAR SAKSHI PRASHANT	<i>Raikar</i>	32
15	F190440271	SANRUDDHI MOHAN SHIR	<i>Sanruddhi</i>	12
16	F190440274	SARAWADE RISHI DEVIL	<i>Sarawade</i>	05
17	F190440275	SARTAPE HIRIKUMAR VINAYAK	<i>Sartape</i>	32
18	F190440277	SATAV MOHANSANTH PRAMOD	<i>Satav</i>	14
19	F190440281	SAWANT KUSHANT HANUMANT	<i>Sawant</i>	12
20	F190440282	SAYYAD SAMEER JALIL	<i>Sayyad</i>	30
21	F190440284	SEWLKAR HARSHIT ALDEEP	<i>Seulkar</i>	35
22	F190440288	SHARMA AKSHAY HARSH	<i>Sharma</i>	00
23	F190440290	SHELKE AAKASH GADHAR	<i>Shelke</i>	01
24	F190440291	SHELKE DNYANESHVAR SHANJAY	<i>Shelke</i>	11
25	F190440293	SHEWALE SUMAL KANDRA	<i>Shewale</i>	18
26	F190440301	SHITOLE VALHINAV RAMDAS	<i>Shitole</i>	17
27	F190440310	SINGH SANDEEP	<i>Singh</i>	00
28	F190440312	SOMASE ADITYA PRAN	<i>Somase</i>	20
29	F190440313	SONAWANE DNYANESH	<i>Sonawane</i>	21
30	F190440318	SURYAWANSI ANIL TANAJI	<i>Suryawansi</i>	15
31	F190440319	SURYAWANSI PRADIP DILIP	<i>Suryawansi</i>	58
32	F190440320	SURYAWANSI RUPALI SATISAMADHAN	<i>Suryawansi</i>	12

SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-II)

COURSE- FE 2019 PATTERN

BLOCK NO. 01

SUBJECT - ENGINEERING PHYSICS (117002)

DATE - 12/07/2023

ATTENDANCE SHEET

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440335	TAMBE ADUNASHIKR	<i>Ant</i>	01
2	F190440338	TARHALE RAJESHWAR GAJANAN	<i>SEI</i>	09
3	F190440333	THAKUR PRINCEESH VISHI	<i>Pringee</i>	24
4	F190440336	THORAWADE ADITHIN TANAJ	<i>Adithin</i>	22
5	F190440340	TUPE SHWETA NAVNATH	<i>Shweta</i>	40
6	F190440341	TURE SHAHIL NASTAY	<i>Shahil</i>	00
7	F190440342	VAIDYA SURAJ NUTPATRY	<i>S.D. Vaidya</i>	09
8	F190440344	VARE PRATIK DADU	<i>Pratik</i>	01
9	F190440345	VARE SHRIHAR DANKU	<i>Shrihar</i>	05
10	F190440348	VISHAL HARPAL WADHODE	<i>Vishal</i>	21
11	F190440352	WAGHMAH TAJUDDIN BHARAVAN	<i>Tajuddin</i>	19
12	F190440354	WALUNI NILESH VISHWAN	<i>Nilesh</i>	28
13	F190440357	WAROLE SANGHAT BHINAKAR	<i>Sanghat</i>	41
14	F190440361	YASH MUKUNDHAR DSALE	<i>Yash</i>	04
15	F190440364	YEDKE YOGESHWAR GIRUBA	<i>Yedke</i>	37
16	F190440366	YEDLE SHRIYANESH KADU	<i>Shriyana</i>	19

PRESENT :-	16
ABSENT :-	00
TOTAL :-	16

NO OF FAILED STUDENTS :-

NO OF PASSED STUDENTS :-

*Harshada*  
Prof. H. D. Dabhadre  
NAME & SIGN OF IR SUPERVISOR

*Yedke D.A.*  
NAME & SIGN OF EXAMINAR







*C.A.Y.M. Education Trust's*  
**SIDDHANT COLLEGE OF ENGINEERING.**

*(Approved by AICTE, Recognised by Government of Maharashtra and Affiliated to University of Pune)*  
At Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109

☎ 02114 - 661901  
website :- [www.siddhantcoe.in](http://www.siddhantcoe.in)

Tele Fax No. 02114 - 661902  
E-mail: [engineeringprincipal@gmail.com](mailto:engineeringprincipal@gmail.com)

**Shri R. S. Yadav**  
President

**Dr. L. V. Kamble**  
Principal

Date: - 03/07/2023

## NOTICE

All FE students are hereby informed that the Prelim Examination of SEM- II have been scheduled from **Wednesday, 12/07/2023 to Tuesday 18/07/2023**. The question paper pattern will be as per SPPU norms. All students are instructed that attendance is compulsory for the examination. The detailed schedule will be displayed on the notice board.



  
**Dr. U.V. Shinde**  
**FE-HOD**

**Shinde U. V.**  
First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare, Tal Maval, Pune - 412 109.



# SIDDHANT COLLEGE OF ENGINEERING

## F.E. PRELIMINARY EXAMINATION

SEMESTER - II A.Y.2022-23

### TIMETABLE

Time:-10.00 AM To 12.30 PM

Day & Date	Paper Code	Subject
Wednesday 12-07-2023	107009	ENGINEERING CHEMISTRY
Wednesday 12-07-2023	107002	ENGINEERING PHYSICS
Thursday 13-07-2023	103004	BASIC ELECTRICAL ENGINEERING
Thursday 13-07-2023	104010	BASIC ELECTRONICS ENGINEERING
Friday 14-07-2023	110005	PROGRAMMING AND PROBLEM SOLVING
Friday 14-07-2023	101011	ENGINEERING MECHANICS
Monday 17-07-2023	107008	ENGINEERING MATHEMATICS-II
Tuesday 18-07-2023	102012	ENGINEERING GRAPHICS

Date: 07/07/2023

  
Prof. R.S. More  
Exam-coordinator

  
Dr. U.V. Shinde  
HOD U. V.  
First Year Co-ordinator  
Siddhant College of Engineering,  
Sudumbare Tal. Jalgaon, Dist. Jalgaon, Gujarat - 392 109.

  
Dr. L.V. Kamble  
Principal



F.E. PRELIMINARY EXAMINATION SEM-II (A.Y.2022-23)





# SIDDHANT COLLEGE OF ENGINEERING

## F.E. PRELIMINARY EXAMINATION

SEMESTER – II A.Y.2022-23

PROGRAMME OF F.E. (2019 COURSE) CURRICULUM SYSTEM

### INSTRUCTIONS FOR CANDIDATES

- Candidates are required to be present at the examination center, **THIRTY MINUTES** before the stipulated time.
- Candidates are forbidden from taking any material into the examination hall that can be treated as a malpractice.
- Candidates are requested to see the Notice Board at their center of examination regularly for changes if any that may be notified later in the program.
- No request shall be granted for change in time or date for the University Examination on any ground.
- Candidates are requested to note the Day, Date and Time of Paper.
- Candidates are permitted to use stencils at the time of examination.
- The exchanges of side-rules, drawing instruments of other materials used in the examination hall is not permitted at the time of examination. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
- Use of non-programmable battery operated electronic pocket size Calculator is allowed. The exchange of Calculators is not allowed. Electronics Devices including mobile are not allowed at the time of examination.
- The written examination will be conducted in the following order.










**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE**  
**FE PRELIMINARY EXAMINATION 2022-23**

A.Y. 2022-23

SEMESTER - II

**JUNIOR SUPERVISOR DUTY CHART**

Sr. No.	Name of Faculty	12/7/2023	13/07/2023	14/07/2023	17/07/2023	18/07/2023	Total	SIGN
		10:00 AM - 12:30 PM						
1	Prof. Avinash Takale	BLOCK NO.01			BLOCK NO.04	BLOCK NO.06	3	
2	Prof. Deepak Kute		BLOCK NO.01		BLOCK NO.02	BLOCK NO.03	3	
3	Prof. Dipali Hegare	BLOCK NO.02		BLOCK NO.04	BLOCK NO.03	BLOCK NO.07	4	
4	Prof. Harshada Dabhlade		BLOCK NO.02	BLOCK NO.03	BLOCK NO.01	BLOCK NO.04	4	
5	Prof. Dhanshree Chaudhari		BLOCK NO.03	BLOCK NO.02	BLOCK NO.06	BLOCK NO.05	4	
6	Prof. Santosh Karle	BLOCK NO.04	02	BLOCK NO.01	BLOCK NO.07	BLOCK NO.02	4	
7	Prof. Nidhi Patil	BLOCK NO.03	BLOCK NO.04	03	BLOCK NO.05	BLOCK NO.01	4	



*(Signature)*  
 Prof. R. S. More  
 INT. SENIOR SUPERVISOR

Total No. of Questions: 9]

157002

Seat No.  

Total No. of Pages: 4

**SIDDHANT COLLEGE OF ENGINEERING**  
**V.E. PHELINI EXAMINATION**  
**ENGINEERING PHYSICS**  
**(2019 PATTERN) (Semester-II)**

(Time: 1 Hour 15 Minutes)

(Maximum Marks: 70)

Instructions to the candidates:

- 1) Attempt Q. No. 2 or 3, Q. No. 4 or 5, Q. No. 6 or 7, Q. No. 8 or 9
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1. Multiple choice questions: [10]

1) The wavelength  $\lambda$  associated with a particle of mass  $m$  moving with velocity  $v$  is given by

- a)  $h/mv$     b)  $mv/h$     c)  $h/mv$     d)  $mv/h$

2) A solar cell works on the principle of:

- a) Photoelectric effect    b) Photoconductive effect  
c) Photovoltaic effect    d) Photoconduction effect.

3) Addition of pentavalent impurity to a semiconductor creates many .....

- a) free electrons    b) holes    c) valence electrons    d) bound electrons

4) In an intrinsic semiconductor, the number of free electrons .....

- a) equals the number of holes    b) is greater than the number of holes

c) is less than the number of holes    d) none of the above

5) In nanomaterials, which of the following statement is correct.

- a) Surface to volume ratio is very small  
b) Surface to volume ratio is large  
c) Surface to volume ratio is 1 (unity)  
d) None of the above

6) The magnetic lines of force cannot penetrate the body of a superconductor, a phenomenon is known as

- a) Isotopic effect    b) BCS theory    c) Meissner effect    d) London theory

7) The transition temperature of mercury is.....

- a) 7.2 K    b) 12 K    c) 4.2 K    d) 4.1 K

8) The critical temperature is that temperature where

- a) the resistivity of a superconducting metal drops to zero  
b) the current flowing through a superconductor is minimum  
c) the magnetic field inside a superconductor becomes constant  
d) none of these

9) The temperature at which the conductivity of material becomes infinite is called.....

- a) Critical temperature    b) Absolute temperature  
c) Mean temperature    d) Crystallization temperature

10) The maximum current that can be passed through a superconductor is called.....

- a) Supercurrent    b) Optimum current    c) Critical current    d) None

Q2. a) Derive an equation for energy of a particle enclosed in 1D rigid box or in an infinite potential well. [6]

b) State and explain Heisenberg's uncertainty principle. [5]

c) Calculate de Broglie wavelength of electron having kinetic energy 1KeV [4]

OR

Q3. a) Derive Schrodinger's time independent wave equation. [6]

b) State the de Broglie hypothesis and explain any three properties of matter waves. [5]

c) Lowest energy of an electron trapped in potential well is 38 eV. Calculate the width of well in A. [Given: Mass of electron  $9.1 \times 10^{-31}$  kg, plank constant  $6.63 \times 10^{-34}$  J-s, charge on  $e = 1.6 \times 10^{-19}$  C]. [4]

Q4. a) Explain Hall effect with figure. Derive the equation of Hall voltage and Hall coefficient. [6]





- h) A copper strip 2.0 m wide, 1.0 mm thick is placed in a magnetic field of 1.0 T. If a current of 200 A is set up in the strip, calculate the Hall voltage that appears across the strip. Assume  $RH = 8 \times 10^{-5} \text{ m}^3/\text{C}$ . [5]

- i) State Hall effect. Derive an equation of Hall voltage. [4]

OR

- Q5. a) Using Fermi Dirac probability distribution function, derive an expression for the position of Fermi energy level in the intrinsic semiconductor. [6]

- b) What is Fermi level in a semiconductor? With the neat labelled diagram, draw the position of Fermi level in N-Type & P-Type semiconductor at 0° K. [5]

- c) Calculate the mobility of charge carrier in doped silicon whose conductivity is 100 per cm and the Hall coefficient is  $3.6 \times 10^{-4} \text{ m}^3/\text{C}$ . [4]

- Q6. a) What are SQUIDS? Explain any two applications of SQUIDS. [6]

- b) Explain DC and AC Josephson effect with diagram. [5]

- c) The transition temperature of lead is 7.2 K. However, at 5 K it loses the superconducting property if subjected to magnetic field of  $3.3 \times 10^4 \text{ A/m}$ . Find the maximum value of H which will allow the metal to retain its super conductivity at 6 K. [4]

OR

- Q7. a) Define superconductivity with resistance Vs temperature graph and example. Explain zero electrical resistance in super conductivity. [6]

- b) Distinguish between diamagnetism, paramagnetism and ferromagnetism (two points each). [5]

- c) Define with unit : (i) Magnetic field strength (H) (ii) Magnetisation(M) [4]

- Q8. a) Explain electrical and mechanical properties of nanoparticles. [6]

- b) An ultrasonic pulse of frequency 130 kHz is sent through a block of steel. The [5]

echo pulse is received after  $1.695 \times 10^{-3} \text{ s}$ . If velocity of ultrasonic in steel is 5900 m/s, calculate the thickness of the steel block and wavelength of the pulse. 4

- c) Explain in brief how acoustic emission technique is used in non-destructive testing [4]

OR

- Q9. a) What is non-destructive testing? State types of non-destructive techniques? Explain ultrasonic testing technique for flaw detection. [6]

- b) What is nanotechnology? Explain applications of nanotechnology in electronic field. [5]

- c) What are nanoparticles? What is nanotechnology? Explain the optical property of nanoparticles. [4]





Choudhari Atarsingh Yadav Memorial Education Trust's

# SIDDHANT COLLEGE OF ENGINEERING

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*U. G. D.*

*60/60*

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Seat No. (in figures) *5190440108*

Centre :

Seat No. (in words) *Five one nine zero four four zero one zero eight*

Day & Date : *01-March-2023*

Examination : *Prelims*

Subject : *physics*

Section : *C*

Course / Paper No. *107007*

Medium of Answer : *English*

Main Ans. Book + No. of Supplements *1+4*

= Total

*5*

Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks	<i>10</i>		<i>11</i>	<i>15</i>		<i>15</i>		<i>11</i>					<i>60</i>	<i>[Signature]</i>
Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks														

Use of Coloured pencil or ink is strictly prohibited except in case of Diagrams and Sketches  
(Write on both sides and start writing on this page)

*Q1]*

*13*

*⇒ a)  $h/mv$*

*Q2]*

*⇒ c) photovoltaic effect*

*Q3]*

*⇒ c) Valence electrons*

*Q4]*

*⇒ a) equals the number of holes*

*Q5]*

*⇒ a) surface to volume ratio is very small*





17]

⇒ d) Meissner effect

27]

⇒ d) 4.2 K

37]

⇒ a) The resistivity of temp superconducting metal drops to zero

37]

⇒ b) Absolute temperature

127]

⇒ a) supercurrent

9]

⇒





Q3]

a)

⇒ Schrodinger's wave time independent wave equation

The general equation for wave is given by the.

$$\frac{\partial^2 \psi}{\partial x^2} = \frac{1}{v^2} \left( \frac{\partial^2 \psi}{\partial t^2} \right)$$

For the wave equation with co-ordinates of  $x, y, z$  and 3 dimensional object

it is given by

$$\frac{\partial^2 \psi}{\partial x^2} + \frac{\partial^2 \psi}{\partial y^2} + \frac{\partial^2 \psi}{\partial z^2} = \frac{1}{v^2} \left( \frac{\partial^2 \psi}{\partial t^2} \right)$$

$$\left( \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2} \right) \psi = \frac{1}{v^2} \left( \frac{\partial^2 \psi}{\partial t^2} \right)$$

where the general derived equation also can be given by

$$\Delta \psi(x, y, z) = \frac{1}{v^2} \left( \frac{\partial^2 \psi}{\partial t^2} \right)$$

$$\psi(x, y, z) = \psi_0 e^{i\omega t}$$

$$\frac{\partial \psi}{\partial t} = \psi_0 (e^{i\omega t}) \quad \text{--- *}$$

Differentiating the above eq<sup>n</sup> with respect to  $t$

we get

$$\frac{\partial \psi}{\partial t} = \psi_0 i\omega (e^{i\omega t}) \quad \text{--- ①}$$

Again differentiating the eq<sup>n</sup> ① w.r.t.



$$\frac{\partial^2 \psi}{\partial t^2} = \psi_0 (-i\omega) (-i\omega) e^{-i\omega t}$$

$$= \psi_0 (-1)^2 (\omega)^2 e^{-i\omega t}$$

$$= \psi_0 \cdot (\omega)^2 e^{-i\omega t}$$

$$= (\omega)^2 (\psi) \quad \text{--- from --- (2)}$$



b)

De Broglie Hypothesis :- i) In 1911 De Broglie proposed that the wave has two nature one is particle nature and matter nature.

where the wave has its particle nature associated with it.

ii) He also state that behaviour of wave is not uniform.

iii) It was derived By Einsteins Postulate

$$E = mc^2 \quad \text{--- (1)}$$

where

$$E = h\nu \quad \text{--- (2)}$$

From (1) and (2):

$$h\nu = mc^2$$



$$h = \frac{h}{mc^2}$$

$$h = \frac{h}{mc^2}$$

equating eqn (i) and (ii)

$$h = \frac{h}{mv}$$

where  $c = \frac{1}{v^2}$

$$\therefore h = \frac{h}{mv}$$

The wavelength associated with particle of mass  $m$  moving with velocity  $v$  is given by  $h/mv$

where

$m$  = mass of electron

$h$  = Planck's constant

$v$  = velocity of electron

c7.

$$E = 38 \text{ eV}$$

$$m = 9.1 \times 10^{-31}$$

$$h = 6.63 \times 10^{-34}$$

$$e = 1.6 \times 10^{-19}$$

$$E = \frac{nh^2}{8mL^2}$$

$$L^2 = \frac{nh^2}{8mE}$$

$$L^2 = \frac{1 \times (6.63 \times 10^{-34})^2}{8 \times 9.1 \times 10^{-31} \times 38}$$

$$= \frac{6.63 \times 10^{-34}}{2.766 \times 10^{-24}}$$

$$L^2 = 2.396 \times 10^{-10}$$

$$L = 1.547 \times 10^{-5}$$





Q4]

a)

⇒ Hall effect :-

i) Hall effect state that the magnetic field passing from the conductor is perpendicular to the current flowing through the circuit.

ii) In 1927 Edwin Hall has found the Hall effect and given derivation for it.

Magnetic field is given by.

$$F_B = B \cdot e \cdot V$$

when current pass it is balance d by magnetic field.

∴ The equation becomes.

$$E \cdot e = B \cdot e \cdot V$$

$$E = B \cdot V \quad \text{--- (1)}$$



where as

$$E = \frac{V_H}{d}$$

$$\frac{V_H}{d} = B \cdot v$$

$$V_H = dB \cdot v \quad \text{--- (1)}$$

for the Hall voltage velocity  
can be derived by

$$I = nei \cdot v \cdot A$$

$$\frac{I}{neiA} = v \quad \text{--- (2)}$$

putting value of eqn (2) in (1)

$$V_H = dB \cdot \frac{I}{neiA}$$

Here we can take  $nei$   
separate to form eqn

$$V_H = \frac{I}{nei} \cdot \frac{dB I}{A}$$

Here we get eqn for Hall  
voltage.

where Hall coefficient can be  
derived by

$$R = \frac{1}{nei} \quad \text{--- (3)}$$

putting value in eqn.

$$V_H = R \cdot \frac{dB I}{A}$$

$$V_H = \frac{1}{nei} \cdot \frac{dB I}{A}$$

$$\text{Hall coefficient } (R) = \frac{1}{nei}$$





Q4]

g)

⇒ Hall effect :-

i) Hall effect state that the magnetic field passing from the conductor is perpendicular to the current flowing through the circuit.

ii) In 1927 Edwin Hall has found the Hall effect and given derivation for it.

magnetic field is given by.

$$F_B = B e \cdot V$$

when current pass it is balanced by magnetic field.

∴ The equation becomes.

$$E \cdot e = B \cdot e \cdot V$$

$$E = B \cdot V \quad \text{--- (1)}$$



b)

⇒

$$w = 2.0 \text{ m}$$

$$t = 1.0 \text{ mm}$$

$$B = 1.5 \text{ T}$$

$$I = 200 \text{ A}$$

$$R_H = 6 \times 10^{-7} \text{ m}^3/\text{C}$$

$$V_H = R_H \cdot \frac{I \cdot B}{A}$$

$$= 6 \times 10^{-7} \cdot \frac{200 \cdot 2.0 \times 1.5}{A}$$

$$= \underline{3.6 \times 10^{-4}}$$

g)

⇒

Hall effect :-

when the magnetic field is applied on the conductor the magnetic lines are perpendicular to the flow of current.

Working :-

when the current pass through conductor the electrons flow in the one direction in the straight line. But due the disturbance in the way of electrons they get separate where the positive electrons and holes get shifted towards the edges of conductor.

Here the voltmeter is connected parallel to the current flows at ends of the conductor.







## SAVITRIBAI PHULE PUNE UNIVERSITY

Supplement

JL

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Jr. Supervisor's Name, Signature &amp; Date

Seat No. (in figures) 190440109 Centre : \_\_\_\_\_Seat No. (in words) one nine zero four four zero one zerorightDay & Date : Tuesday 1-3-23 Examination : practicalSubject : Physics Section : \_\_\_\_\_

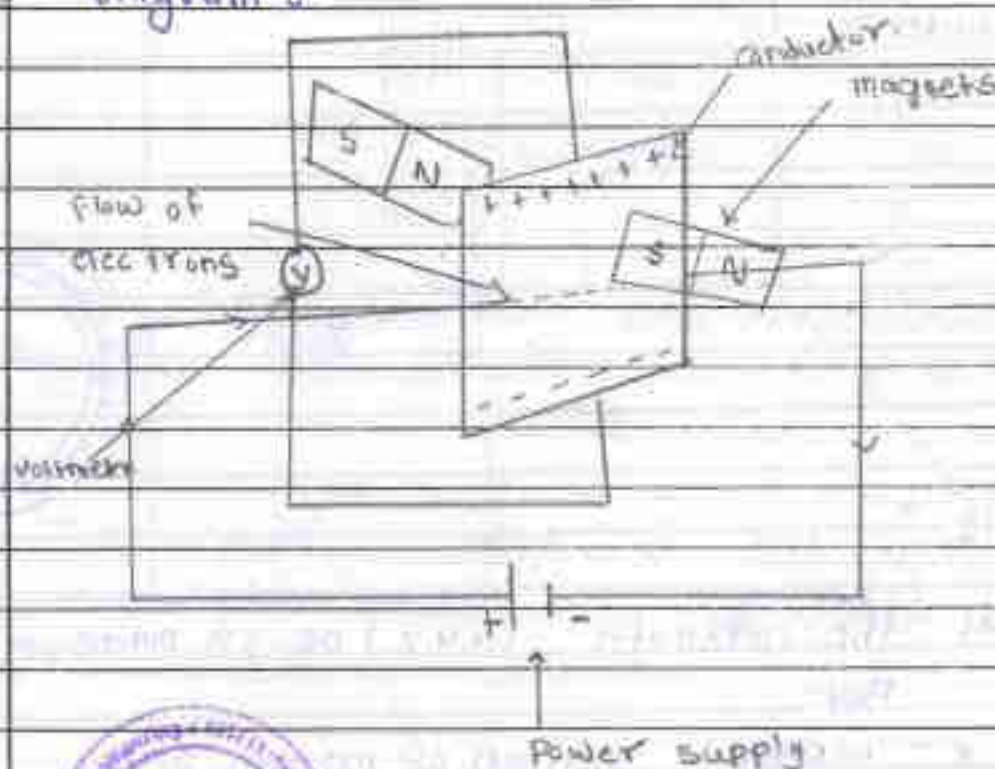
Course/Paper No. \_\_\_\_\_ Medium of Answer: \_\_\_\_\_

Supplement No.: 2 = Total  

Write the answer book in blue or black ink/ball pen only and use of pencils in case of diagrams &amp; sketches.

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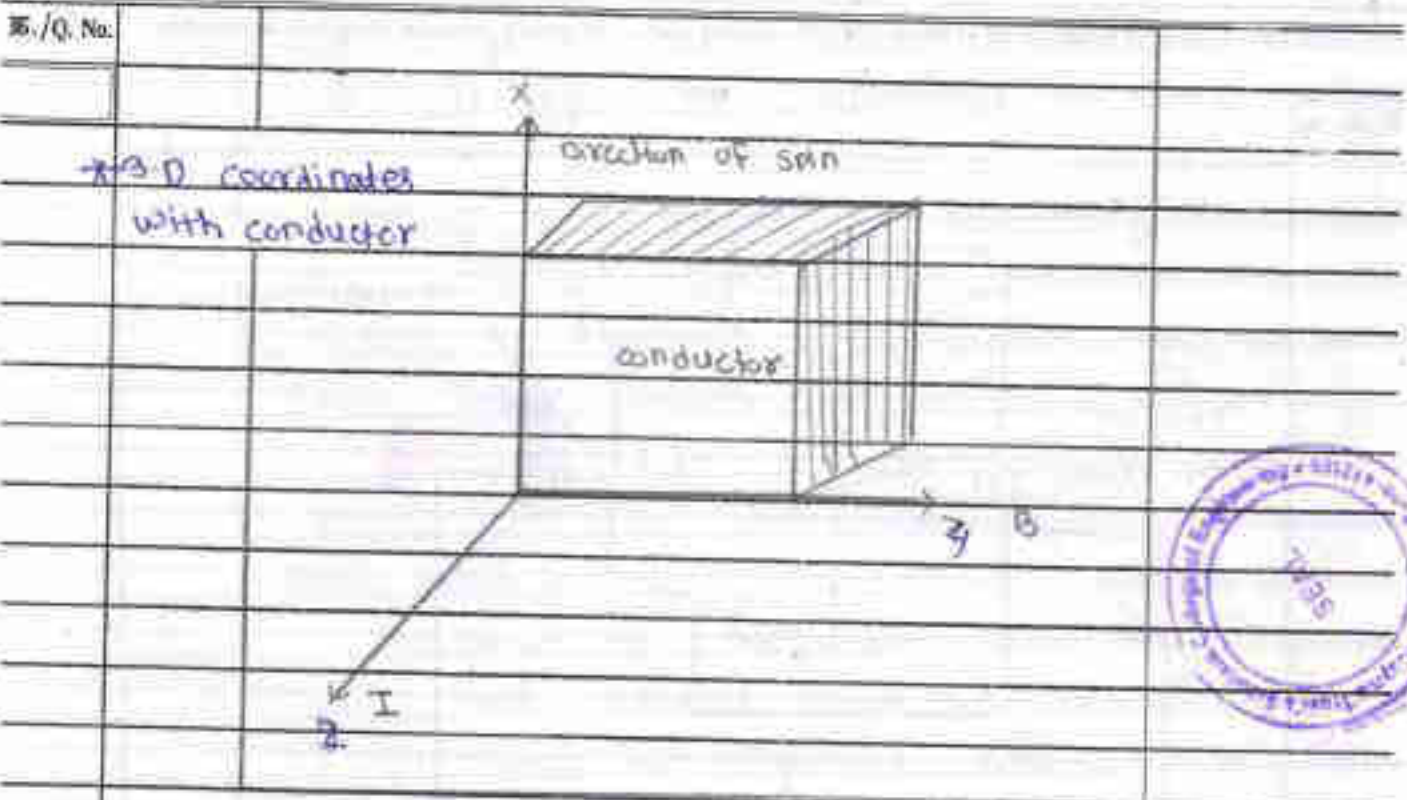
Diagram :-



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4. Hollow Craft is to be pasted on space marked with dotted line.
४. होली क्राफ्ट स्टीकर विहित जागेवर लावावी.



let the coordinates  $(x, y, z)$  be 3 dimensional Rays.

x - Represent direction of magnetic field.

y - Represent magnetic field.

z - Represent Induced current.

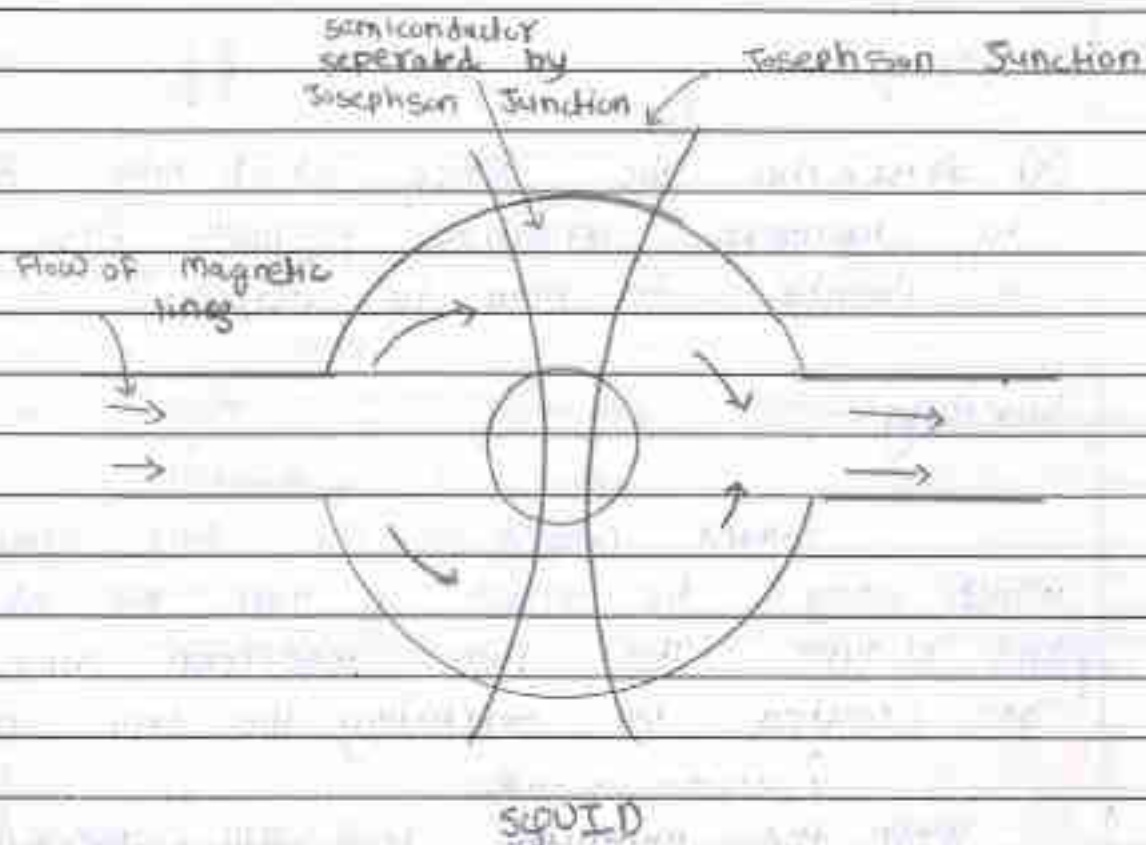




Q. No.

Q6]

a).



① SQUID is superconducting interference device which is most sensitive device known to man

② The most uncertain and smallest, sensitive magnetic field can be measured with help of it

③ The SQUID consists of the two semiconductor which is separated by two Josephson Junction.

④ The device can be configured as the magnetometer.





Q. No./Q. No.

⑤ SQUID is the device which has ability to measure sensitive magnetic field which is possible to man to detect.

Working :-

SQUID consist of the two semiconductor which may be varies on their use as P and N type. The two Josephson Junction are created by separating the two semiconductor

when the magnetic lines are passed through one end of SQUID it is detected by the Josephson Junctions and they get passed from other end.

Application :-

- ① SQUID is used to detect the magnetic field created inside the brain.
- ② SQUID is used to study the strain caused inside the rock forming.
- ③ It has ability to detect smallest magnetic field inside living organism.
- ④ SQUID is used by scientist to study the strain and stress caused inside earth.





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Supplement	JL	Verified all entries & found correct
		Jr. Supervisor's Name, Signature & Date
Seat No. (in figures)	Fig 04008	Centre :
Seat No. (in words)	F one one zero four zero one zero eight	
Day & Date :	Tuesday 1-03-23	Examination :
Subject :	physics	Section :
Course/Paper No.	107602	Medium of Answer:
Supplement No.:	2	English
		Total <span style="border: 1px solid black; padding: 2px 10px;"> </span>

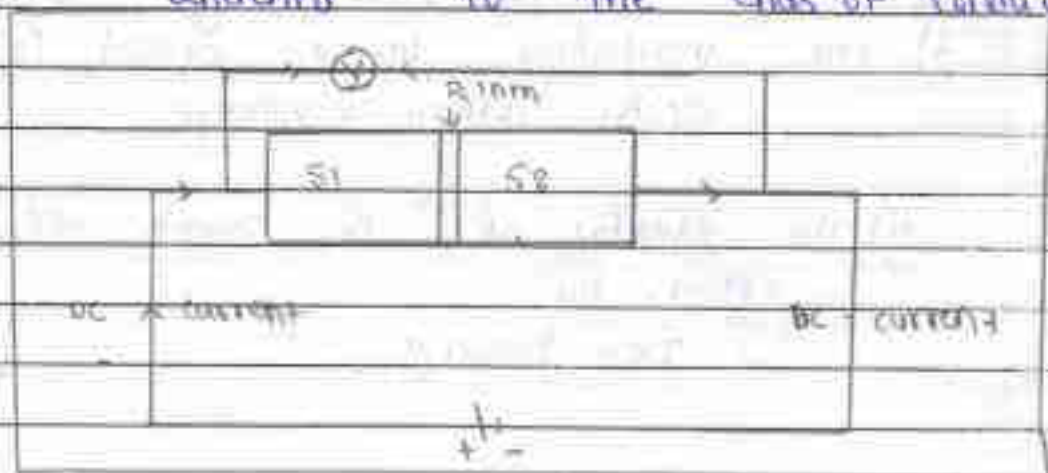
Write the answer book in blue or black ink/ball pen only and use of pencils in case of diagrams & sketches.

Q. No./Q. No.

b]

Q. - Josephson effect :-

When the one semiconductor is semiconductor is separated by the thin insulating layer of the 2 nm. then the DC current is supplied through it. and one voltmeter is attached to the ends of conductor.



## सूचना

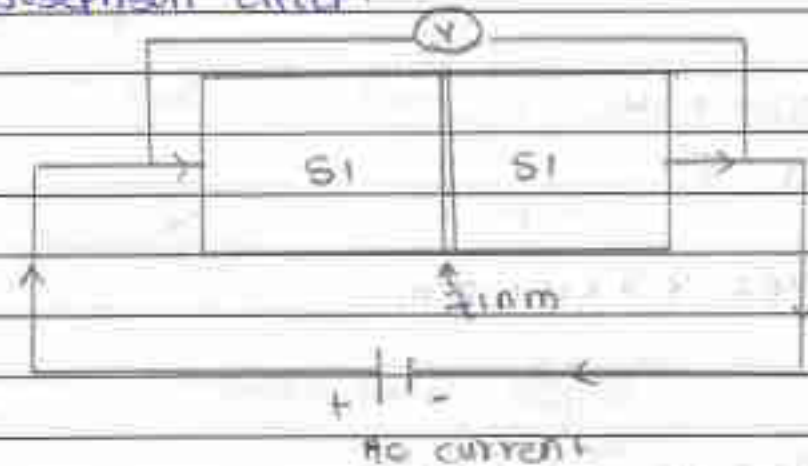
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R. No./Q. No.

ii) AC Josephson effect.



working :- if when the AC current is passed through the junction. The Radio Frequency and oscillations are produced and Infinite amount of current get flows.

ii) The equation for AC Josephson effect is given by.

$$R_H = \frac{2\pi\hbar}{2eV_h} \cdot \frac{1}{2eV_h}$$





Q. No./Q. No.

c]

$$T_c = 7.2 K$$

$$T = 5 K$$

$$H_c = 3.3 \times 10^4 \text{ A/m}$$

$$H_c = H_0 \left( 1 - \left( \frac{T}{T_c} \right)^2 \right)$$

$$H_c = H_0$$

$$\left( 1 - \left( \frac{T}{T_c} \right)^2 \right)$$

$$3.3 \times 10^{-4}$$

$$\left( 1 - \left( \frac{7.2}{5} \right)^2 \right)$$

$$3.3 \times 10^{-4}$$

$$- 1.0736$$


$$= - 3.0 \times 10^{-4}$$







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Seat No. (in words)	F-one nine zero four four zero one zero	
	eight	
Day & Date :	Tuesday 1-03-23	Examination :
Subject :	Physics	Section :
Course/Paper No.	107002	Medium of Answer: English
Supplement No.:	3	- Total <span style="border: 1px solid black; padding: 2px 10px;"> </span>

Write the answer book in blue or black ink ball pen only and use of pencils in case of diagrams & sketches.

Q. No./Q. No.	
08]	
9].	
1) Electrical properties :-	
	① when the size of bulk material is reduced to the nano size with respect to their size Electrical properties also get changed
	② The flow of electrons in the conductor is due to mobility of electrons carrier and these property work different with decreasing size.



# INSTRUCTIONS

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प्र. क्र./Q. No.

३) E.g :

① The conductivity of ceramic increase with decrease in size.

② The conductivity of metals such as Iron, phosphorus, the electrical conductivity decrease with the decrease in size.

२] Mechanical properties:-

① The material in the bulk has the properties such as elasticity, malleability, ductility and hardness.

② The mechanical properties of metal show.





R. No./Q. No.

much variation with the nanosize.

③ The lubrication property at nanosize increases and show much variation.

4) Eg ① The ductility of iron with nanosize decreases gradually.

② Hardness of diamond show little variation with decrease in size.

b)  
Soln

$$t = 1.695 \text{ s}$$

$$v = 5900$$

$$T = \frac{vt}{2}$$

$$= \frac{5900 \times 1.695}{2}$$

$$= 10000.5$$

$$T = 5000$$

$$T = 5000 \text{ nm}$$





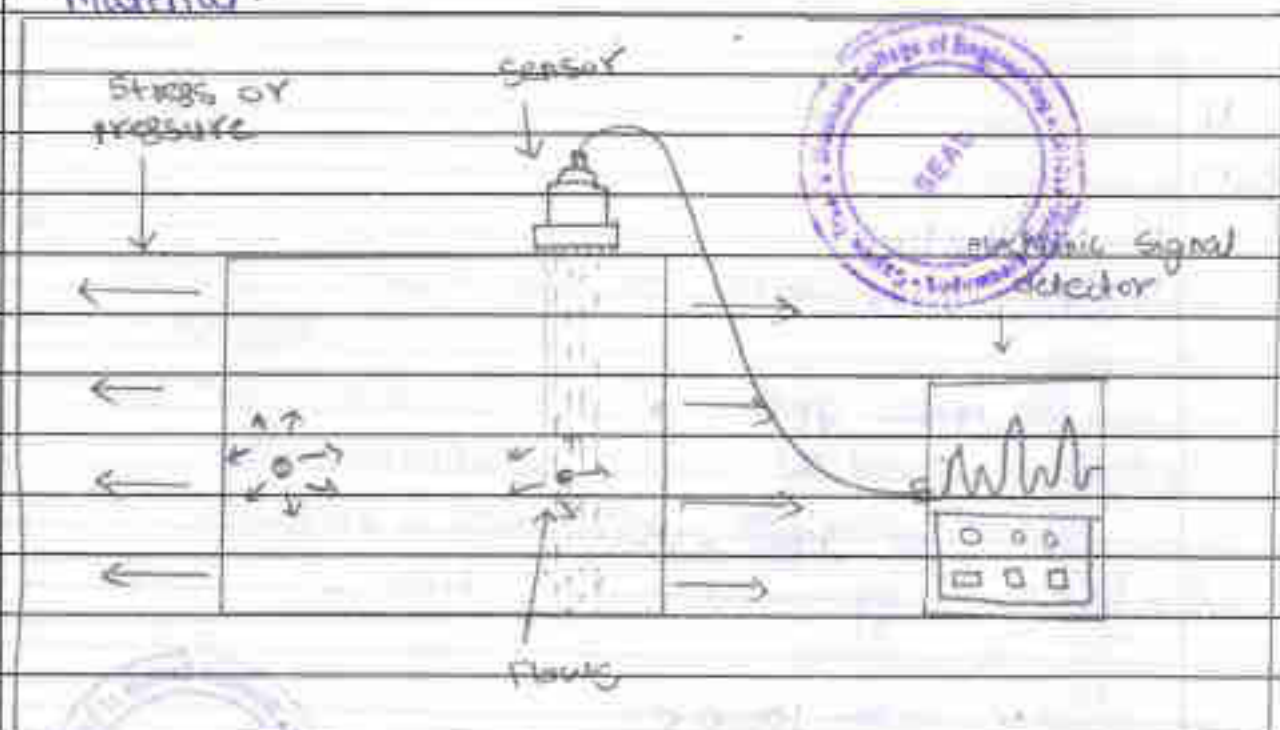
Pr. No./Q. No.

c].

=&gt; Acoustic Emission :-

i) Acoustic Emission is the Non-destructive testing method.

ii) This method is used to detect the fault, flaws, leak and crack inside the material.




In Acoustic emission technique the sensors is used. to detect the fault in material. Here elastic waves or sound waves are transmitted inside the material. when the pressure is created the fault in the specimen. disturb the intensity of elastic wave. If the crack is greater than 100 nm. the the wave get absorbed the.





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Subject :		Section :	
Course/Paper No.		Medium of Answer :	
Supplement No.:		= Total	

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ii) When the fault is greater than 50 nm the. it get reflected and density of the wave get change which later detected with the help of sensor.

iii) The sensor is used for analysis of the defective and low Intensity wave and then it is send to the electronic wave detection component. the change in Frequency transducer convert it in wave form. which is later monitored and defect get located



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\* Advantages of Acoustic emission :-

- i) Quick Result can be obtained
- ii) Response speed can be monitored
- iii) less noisy
- iv) There is no need to detect the material again.

\* Affordable.

\* Disadvantages :

- i) Maintenance cost is high
- ii) initial cost of electronic device is high
- iii) Exact location of fault cannot be located or traced.

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SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-I)

COURSE- FE 2019 PATTERN

BLOCK NO: 01

SUBJECT - ENGINEERING PHYSICS (107002)

DATE - 01/03/2023

ATTENDANCE SHEET

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440056	CHARU SHARMA	<i>[Signature]</i>	56
2	F190440062	CHAYHAN ATHARVA SUDHAKAR	<i>[Signature]</i>	10
3	F190440064	CHIRAG RAMESHCHANDRA AGRAWAL	<i>[Signature]</i>	24
4	F190440066	DANIFALE SIDDHARTH ASHOK	<i>[Signature]</i>	15
5	F190440067	DAMARE ONKAR RAJENDRA	<i>[Signature]</i>	12
6	F190440072	DEVKAR NEHA DASHARATH	<i>[Signature]</i>	15
7	F190440073	DEVRE DARSHAN DINESH	<i>[Signature]</i>	20
8	F190440079	DHORAJKAR SHUBHAM DILIP	<i>[Signature]</i>	12
9	F190440081	DIKSHA POPAT GAIKWAD	<i>[Signature]</i>	42
10	F190440082	DIVATE HEMANT PARSHURAM	<i>[Signature]</i>	Ab
11	F190440085	DOBARE VAIBHAV BABURAO	<i>[Signature]</i>	37
12	F190440086	DONUR FRAJWAL ASHOK	<i>[Signature]</i>	22
13	F190440090	GADE AVANTIKA RAJU	<i>[Signature]</i>	00
14	F190440096	GAJARE BHUPESH NITIN	<i>[Signature]</i>	07
15	F190440101	GARGOTE RAJGURU NAVANATH	<i>[Signature]</i>	38
16	F190440102	GAJGE BHADVAN AJINATH	<i>[Signature]</i>	Ab
17	F190440104	GAVHANE RUTUJA MAHADEV	<i>[Signature]</i>	37
18	F190440106	GAWARI KESHAV GOVIND	<i>[Signature]</i>	08
19	F190440107	GAWATE SARTHAK DATTATRAY	<i>[Signature]</i>	08
20	F190440108	GHARAT ABHISHEK SAKHARAM	<i>[Signature]</i>	00
21	F190440110	GHORPADE RUTUJA RAJENDRA	<i>[Signature]</i>	15
22	F190440114	GORDE SURAJ SHARAD	<i>[Signature]</i>	08
23	F190440116	GLIND HARSHAD SUNIL	<i>[Signature]</i>	50
24	F190440121	HANWANTE SAYALI SANJAY	<i>[Signature]</i>	12
25	F190440123	HEBARE MAYUR JIVAN	<i>[Signature]</i>	33
26	F190440124	HINGANE SAKSHI SHIVPRKASH	<i>[Signature]</i>	12
27	F190440127	HULAWALE YASH AJIT	<i>[Signature]</i>	20
28	F190440131	JADHAO DHANASHREE GAJANAN	<i>[Signature]</i>	Ab
29	F190440132	JADHAV ANJALI DNYANUBA	<i>[Signature]</i>	24
30	F190440133	JADHAV ASHOK BHAGWAT	<i>[Signature]</i>	32
31	F190440136	JADHAV MADHURA ANIL	<i>[Signature]</i>	38
32	F190440137	JADHAV PARTH GOPAL	<i>[Signature]</i>	10

PRESENT	-	19
ABSENT	-	03
TOTAL	-	32

NO OF FAILED STUDENTS - 19  
NO OF PASSED STUDENTS - 10



A. P. Tpkale  
NAME & SIGN OF JR. SUPERVISOR  
*[Signature]*  
NAME & SIGN OF EXAMINAR  
*[Signature]*

**SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-I)**

COURSE- FE 2019 PATTERN

BLOCK NO. 02

SUBJECT - ENGINEERING PHYSICS (107002)

DATE - 01/03/2023

**ATTENDANCE SHEET**

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440138	JAGHAV PRATISHA KRISHNA	Jadhav	34
2	F190440141	JAGTAP PRANAV GUNESH	Jagt	16
3	F190440142	JAHAGIRDAR SUHAIB NAZIM	Jahagirdar	27
4	F190440143	JARUDE SIDDHI SHANKAR	Jarude	25
5	F190440146	JAYACHE NAGESH BALAJI	Jayach	40
6	F190440153	KAGANE NIKITA ASHOK	Kagane	55
7	F190440158	KALE PRIYANKA SUKHDEV	Kale	50
8	F190440159	KALOKHE MRUNAL MOHAN	Kalokhe	2 + 13
9	F190440163	KANEKAR NIDHI SUBENDRA	Kane	39
10	F190440168	KARMALKAR NEHA YOGESH	Karmalkar	35
11	F190440171	KEDAR ASHWINI RADHAKRISHNA	Kedar	38
12	F190440176	KHANDELOTE MEHUL SURESH	Khande	08
13	F190440181	KHILE SHARATI SARJERAO	Khile	059
14	F190440182	KOCHAREKAR GAYATHI SATYAVIJAY	Kochare	09
15	F190440188	KULKARNI ADITYA SUDHIR	Kulkarni	23
16	F190440203	MORE DIVYA MACHINDRA	More	40
17	F190440210	NAGARGUJE OMKAR RAOSAHEB	Nagarguje	09
18	F190440212	NANDAN GUPTA	Nandan	30
19	F190440213	NARKHEDE PRANAV MANOJ	Narkhede	14
20	F190440220	ONKAR SANJAY TAKALE	Onkar	20
21	F190440227	PATIL ATHARVA SHARAD	Patil	18
22	F190440229	PATIL BALIRAM KAMESH	Patil	34
23	F190440230	PATIL DEVESH SATYAWAN	Patil	20
24	F190440234	PATIL RHISHIKESH VIKAS	Patil	50
25	F190440238	PAWADE RUTUJA VITTHAL	Pawade	43
26	F190440243	PAWAR OMKAR SADASHIV	Pawar	22
27	F190440247	PILLAI JOSHUA JABA	Pillai	42
28	F190440250	PRATHAMESH DNYANESHWAR THIGALE	Prathame	23
29	F190440251	PRATIK MACHINDRA SHINDE	Pratik	07
30	F190440253	PUJARI SHRADDHA RATNAKAR	Pujari	34
31	F190440255	RAKSHE SHRINATH PRAVIN	Raksh	23
32	F190440256	RAKSHE TANUJA GULAB	Raksh	25

PRESENT	= 32
ABSENT	= Nil
TOTAL	= 32

NO OF FAILED STUDENTS :- 14  
NO OF PASSED STUDENTS :- 18



(S.M. Chavale)  
NAME & SIGN OF JLSUPERVISOR

NAME & SIGN OF EXAMINAR

M. P. S.  
*[Signature]*



**SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-I)**

COURSE- FE 2019 PATTERN

BLOCK NO- 03

SUBJECT - ENGINEERING PHYSICS (107002)

DATE - 01/03/2023

**ATTENDANCE SHEET**

Sl. No.	Seat No.	Name of Students	Sign	Marks
1	F190440257	RASAL MORESHWAR NANDKUMAR	<i>Morash</i>	24
2	F190440259	RASKAR VRUSHALI UTTAM	<i>Vrushali</i>	50
3	F190440260	RATHOD PAYAL TULSHIDHAM	<i>Payal</i>	20
4	F190440261	RAUT PRAONYA SHAM	<i>Praonya</i>	18
5	F190440262	REDDY SRUSHTI BIBHISHAN	<i>Srushti</i>	32
6	F190440265	SABALE VEDANG BALASAHEB	<i>Vedang</i>	15
7	F190440267	SADEWAD VISHWAJEET DATTU	<i>Vishwa</i>	15
8	F190440268	SAKORE PRATIK VILAS	<i>Pratik</i>	30
9	F190440271	SANKET VILAS DESHMUKH	<i>Sanket</i>	40
10	F190440279	SAUDAGAR SKOLIN ALLABAKSH	<i>Skolin</i>	40
11	F190440283	SAYYED MOHAMMAD HANIF JILANI	<i>Mohammad</i>	08
12	F190440292	SHENDGE AMIT BABAN	<i>Amit</i>	16
13	F190440294	SHINDE DIKSHA NILESH	<i>Diksha</i>	40
14	F190440301	SHINGDE GAYATRI BALAJI	<i>Gayatri</i>	40
15	F190440303	SHIVEKAR SWAPNIL NANDU	<i>Swapnil</i>	18
16	F190440304	SHRAVANI AJAYSING GAYDHAR	<i>Shravani</i>	32
17	F190440306	SHRUTIKA ABUN CHAUDHARI	<i>Shrutika</i>	40
18	F190440308	SINGH ANKIT HARILAL	<i>Ankit</i>	10
19	F190440311	SINGH YASHPAL SUMANTRUMAR	<i>Yashpal</i>	38
20	F190440314	SONAWANE SHREYA RAKHAMAJI	<i>Shreya</i>	18
21	F190440321	SYED REHAN ALI SAHID ALI	<i>Rehan</i>	15
22	F190440322	TADAKALE KARBASAPPA DATTATRAY	<i>Karbasa</i>	20
23	F190440323	TAKALKAR RUSHIKESH SUNIL	<i>Rushikesh</i>	48
24	F190440326	TAMBOLKAR SHRUTI BALVANT	<i>Shruti</i>	45
25	F190440329	TARLEKAR HARSH GAJANAN	<i>Harsh</i>	24
26	F190440335	THORAT SHREYASH RAJESH	<i>Shreyash</i>	40
27	F190440337	TIKANDE LALIT RAMDAS	<i>Lalit</i>	28
28	F190440347	VIDHATE YASH RAMDAS	<i>Yash</i>	54
29	F190440351	VYAVAHARE PRAVIN GOVARDHAN	<i>Pravin</i>	18
30	F190440359	YADAV PRASHANT BRIJESH	<i>P. Yadav</i>	12
31	F190440360	YADAV SURAJ RAMPRAKASH	<i>Suraj</i>	22
32	F190440368	ZANJAD DIKSHA SATISH	<i>Diksha</i>	18

PRESENT	>	30
ABSENT	>	02
TOTAL	>	32

NO OF FAILED STUDENTS - 16  
NO OF PASSED STUDENTS - 14



*Ashwini Bhasale*  
NAME & SIGN OF JK SUPERVISOR

NAME & SIGN OF EXAMINAR

*K. K. K.*  
*[Signature]*

**SCOE, FE PRELIMINARY EXAMINATION 2022-23 (SEM-I)**

COURSE- FE 2019 PATTERN

BLOCK NO- 04

SUBJECT - ENGINEERING PHYSICS (107002)

DATE - 01/03/2023

**ATTENDANCE SHEET**

Sr. No.	Seat No.	Name of Students	Sign	Marks
1	F190440002	ABHISHEK THAKUR	<i>Abhishek</i>	15
2	F190440004	ADANE VAISHNAVI MADHUKAR	<i>Adane</i>	32
3	F190440007	AMBIKE SHARDUL MILIND +13	<i>Shardul A.</i>	46
4	F190440009	ANARTHE RUCHIKA DATTATRAYA +13	<i>Anarthe</i>	44
5	F190440011	ATUL MANOJ SINGH	<i>Atul</i>	18
6	F190440015	BADE GURUDATTA KRUSHNA	<i>Bade</i>	10
7	F190440020	BARBADE MOHIT ASHOK	<i>Barbade</i>	28
8	F190440024	BAVASKAR RITESH VIJAY	<i>Bavaskar</i>	17
9	F190440026	BEHERA ONKAR BANAMALI	<i>Onkar</i>	38
10	F190440028	BHANDARI PRASEN BABLU +13 +13	<i>P. Bhandari</i>	37
11	F190440030	BHAWAR TUSHAR SAMPAT +13	<i>Bhawar</i>	30
12	F190440031	BHOTANE BILAKTI BHASKAR +13	<i>Bhotane</i>	42
13	F190440035	BHOSALE AVISHKAR SHRIKANT +13	<i>A.S. Bhosale</i>	40
14	F190440039	BHILINDE YASH NANDU	<i>Y.N. Bhunde</i>	18
15	F190440054	CILKATANYA PAIGUDE +13 +13	<i>Paigude</i>	36
16	F190440055	CHANGAN SHUBHAM SUDHAKAR	<i>Shubham</i>	26

PRESENT	- 16
ABSENT	- 00
TOTAL	- 16

*Prof. Pooja Patil / Patil*  
01/03/23  
NAME & SIGN OF ILSUPERVISOR

NO OF FAILED STUDENTS :- 05  
NO OF PASSED STUDENTS :- 11

NAME & SIGN OF EXAMINAR



*Kate...*  
*[Signature]*

*[Signature]*



# SIDDHANT COLLEGE OF ENGINEERING

DEPARTMENT OF FIRST YEAR ENGINEERING

## STUDENTS PROGRESSIVE REPORT

SEM - I

2-23: DIV A & B:			M-I			SME				CHEM				BEE				EM				Workshop	Total	Parents
Roll No	Seat No.	Name of Students	IN	CT(20)	AS(2)	IN	CT(20)	AS(3)	PR(5)	IN	CT(10)	CT(20)	PR(8)	IN	CT(20)	CT2	PR(4)	IN	CT2	CT2	PR(5)	PR(4)	%TH	Signature
101	F190440008	AMBRE SWARNIL DEEPAK	8	12	2	12	4	2	5	8	8	12	8	13	16	7	4	5	AB	17	5	4	92	B.D Ambre
102	F190440014	BACHE VAISHNAVI CHANDRAKANT	19	15	2	24	9	3	5	23	2	19	8	19	18	10	4	14	10	17	5	4	94	Bach C.S.
103	F190440018	BAGADI CHANCHAL RAJU	12	10	2	13	7	1	3	16	2	15	6	15	12	AB	3	5	12	AB	5	2	80	
104	F190440022	BARI AYUSH SUNIL	12	9	1	8	1	2	4	6	0	10	6	4	2	AB	3	1	9	AB	5	4	68	
105	F190440042	BIDKAR DUVESH DINESH	12	5	2	12	2	3	3	10	1	10	6	7	1	0	3	3	3	8	3	4	68	
106	F190440046	BISWAS BISHAKHA BASUDEB	9	8	2	15	10	2	2	12	5	10	4	17	9	11	4	12	9	4	4	3	80	Car
107	F190440050	BOROLE SAKSHI GHANASHYAMDAS	24	20	2	20	7	3	4	22	4	AB	8	18	17	6	4	22	11	9	5	4	95	SB
108	F190440059	CHAUHAN SUMERSINGH L	8	4	2	12	9	1	4	12	2	AB	8	7	2	7	4	3	6	13	5	4	94	Wing
109	F190440065	CHORAGE SAYALI SANJAY	21	18	2	13	2	3	5	13	6	10	8	13	12	9	3	4	6	16	2	4	73	
110	F190440078	DHONAGE SAPNA SUBHASH	6	6	2	17	8	3	5	18	5	7	6	15	16	2	3	12	6	13	5	4	94	S.D. Dhonage
111	F190440070	DESHMUKH HARSHAL DILIP	1	5	2	0	1	3	5	3	4	14	8	6	7	AB	3	2	9	AB	4	4	77	SB
112	F190440071	DESHMUKH JANHAVI DILIPRAO	7	6	2	17	6	3	5	15	2	18	8	17	11	4	4	8	6	5	5	4	96	
113	F190440219	OM SHANKAR DESHMUKH	0	4	2	14	2	3	4	3	5	15	6	8	9	AB	3	1	6	AB	5	4	76	
114	F190440084	DIVEKAR SANDEEP SUNIL	9	14	2	12	8	3	4	9	1	7	6	12	14	1	3	12	3	11	5	4	90	Divakar
115	F190440218	OM PRATAP GADEKAR	6	5	2	15	6	3	5	4	5	10	6	6	4	5	4	5	9	15	5	4	91	Pradeep
116	F190440093	GADHAVE PREM RAJENDRA	0	2	1	1	AB	1	3	4	1	7	6	3	2	AB	4	0	9	AB	5	4	70	Ashwini
117	F190440094	GAIKOLE GAURI NANDKISHOR	5	AB	1	19	5	1	2	16	2	7	2	9	AB	4	2	12	6	6	2	3	65	Am
118	F190440128	HINASHALE SRIHA RAJUMAR	12	9	2	15	5	3	5	15	4	18	8	12	12	7	4	10	9	AB	5	4	89	Pratik
119	F190440130	INGALE MOTIRAM BABARAO	6	3	2	15	3	2	4	12	8	AB	6	12	AB	5	3	4	10	14	1	3	76	
120	F190440142	JOSHI SUJAL ANIL	6	2	2	17	11	2	5	14	AB	13	6	12	AB	AB	4	5	9	AB	4	2	68	SB
121	F190440149	KADAM RITURAJ RAMESH	14	9	2	9	4	1	4	13	AB	AB	6	14	AB	4	3	15	13	4	4	3	86	
122	F190440154	KAKADE AJITHA DATTATRAYA	4	3	2	23	13	2	5	13	AB	18	6	12	AB	4	3	6	10	7	4	4	85	SB
123	F190440157	KALE GAURAV SANJAY	12	15	2	22	12	2	5	17	4	18	6	16	17	3	2	14	11	7	4	4	94	Pradeep
124	F190440160	KAMBLE ISHA RAJESH	4	AB	2	13	6	2	4	7	3	AB	6	15	14	AB	4	12	AB	AB	5	4	80	Chamale
125	F190440047	BOBADE AARYA MUKLISHAR	16	15	2	12	11	2	4	17	4	AB	6	15	18	7	4	12	10	5		4	97	Pratik
126	F190440167	KARODE SANJURUTI SHIVAJI	19	17	2	18	9	3	4	24	2	18	8	15	17	4	4	12	8	4	5	4	93	Car
127	F190440173	KHARE SIDDHI RAJENDRA	8	9	2	17	12	3	5	14	7	AB	8	13	13	10	4	13	14	18	5	4	99	Pratik
128	F190440177	KHARCHI JITENDRA GANESH	6	4	2	16	4	1	5	8	AB	13	8	9	AB	6	4	4	6	10	5	4	77	
129	F190440186	KOTHAWALE MANISH MAHESH	4	2	2	3	0	2	2	11	1	9	2	1	AB	4	2	3	6	13	4	3	45	
130	F190440190	KURLEKAR ATHARVA SATISH	1	AB	1	16	8	1	4	12	3	10	4	12	2	AB	4	4	8	5	5	4	77	



**SIDDHANT COLLEGE OF ENGINEERING**  
DEPARTMENT OF FIRST YEAR ENGINEERING  
STUDENTS PROGRESSIVE REPORT

2-23 DIV A & B			M-I			SME				CHEM				BEE				EM				Workshop	Total	Parents
Roll No	Seat No.	Name of Students	IN	CT(20)	AS(2)	IN	CT(20)	ASO	PR(5)	IN	CT(10)	CT(20)	PR(5)	IN	CT(20)	CT2	PR(4)	IN	CT1	CT2	PR(5)	PR(4)	%TH	Signature
131	F190440195	MANDADE MOHIT SANTOSH	8	2	2	12	4	1	4	8	1	7	8	3	2	AB	3	5	10	AB	4	4	78	
132	F190440197	MARATHE HRISHIKESH SANTOSH	2	1	2	12	5	2	4	10	3	6	8	8	AB	6	3	3	9	0	4	3	87	
133	F190440208	MURTHY KRISHNA RAVIKIRAN	0	AB	1	6	AB	1	4	2	0	7	8	6	1	2	4	1	8	6	5	4	88	
134	F190440214	NAYAKODI LAXMI BRAGANTEPPA	20	16	2	19	12	3	5	19	2	18	6	15	16	11	4	22	11	18	5	3	98	
135	F190440226	PASHILKAR TANMAY KIRAN	17	AB	1	25	16	1	5	20	4	11	4	15	9	6	3	15	12	16	5	3	74	Usha
136																								
137	F190440231	PATIL OMKAR JOTIBA	7	4	1	17	10	2	5	4	1	7	8	12	8	6	3	2	6	8	5	4	83	
138	F190440233	PATIL SAHILKUMAR ANANDRAO	2	2	2	12	4	1	2	6	2	AB	6	2	AB	AB	3	12	7	AB	3	3	67	
139	F190440239	PAWATE SAURABH VIJAY	2	2	0	18	5	3	4	9	4	15	6	8	AB	0	3	3	AB	11	3	4	76	
140	F190440242	PAWAR MANSI NAVNEET	9	8	2	21	11	3	5	19	8	18	8	14	13	3	4	12	8	12	5	4	94	
141	F190440245	PAWAR RISHABH RAJENDRA	12	10	2	12	1	1	3	5	0	5	2	8	AB	AB	2	5	9	AB	0	0	41	Usha
142	F190440246	PHALKE UDAY NAVNATH	8	7	1	12	4	1	4	13	2	13	4	12	6	4	3	5	AB	4	4	4	73	Usha
143	F190440254	RAIKAR SAKSHI PRASHANT	16	15	2	12	7	3	5	18	6	AB	6	16	10	4	3	10	8	10	5	3	95	Usha
144	F190440271	SAMRUDDHI MOHAN BHOR	17	16	2	24	12	3	5	23	6	AB	6	23	10	AB	3	14	7	9	5	4	92	Usha
145	F190440274	SARAWADE ROHIT SUNIL	12	AB	2	10	AB	1	4	8	3	9	6	13	AB	AB	3	13	10	9	2	3	65	
146	F190440275	SARTAPE SHIVKUMAR VINAYAK	16	16	1	18	4	1	3	13	10	12	6	15	16	6	4	6	AB	AB	5	4	86	
147	F190440277	SATAV MOKSHNATH PRAMOD	2	3	1	10	9	2	5	7	2	12	4	5	AB	6	4	3	9	13	3	4	81	
148	F190440281	SAWANT SUSHANT HANUMANT	13	9	2	22	AB	1	5	20	0	13	8	14	6	6	4	12	2	12	5	4	88	
149	F190440288	SHARMA AKSHAY MANJU	14	1	2	25	8	1	4	23	4	18	6	16	13	0	3	12	6	23	2	2	79	Usha
150	F190440293	SHEWALE SONAL RAJENDRA	10	8	2	7	5	2	4	9	4	8	6	9	12	5	4	16	5	AB	5	4	91	Usha
151	F190440310	SINGH SANDEEP UDAY	13	12	2	17	6	2	5	25	5	15	8	7	12	1	4	14	6	6	5	4	91	Usha
152	F190440313	SONAWANE DIYA RAJESH	23	20	2	25	14	1	5	20	8	17	8	19	11	7	3	12	12	10	5	4	93	
153	F190440320	SURYAWANSHI SHASHWATI SAMADHAN	3	6	2	9	7	1	5	4	3	16	8	6	14	9	4	12	9	7	5	4	98	Usha
154	F190440331	THAKUR PRINCE SATISH	24	20	2	19	2	1	5	20	2	16	8	17	8	6	4	12	10	16	5	4	95	Usha
155	F190440340	TUPE SHWETA NAVNATH	12	9	2	17	10	1	5	19	8	18	8	13	16	8	4	12	6	19	5	4	94	Usha
156	F190440344	VARE PRATIK DALU	3	4	2	13	2	1	5	2	AB	AB	4	6	2	0	3	1	5	10	3	4	78	Usha
157	F190440345	VARE SHIKHAR LANKU	4	6	2	14	AB	1	5	7	AB	AB	4	7	0	0	3	1	6	10	3	4	76	Usha
158	F190440354	WALUNGI NIKHIL KUNDAN	1	2	2	16	7	2	4	7	6	AB	8	6	11	0	3	2	6	9	5	3	87	Usha
159	F190440390	SHILKE AKAASH GANGADHAR	5	AB	2	6	0	1	5	5	AB	AB	8	3	AB	0	3	12	4	10	3	4	71	Usha



# SIDDHANT COLLEGE OF ENGINEERING

## DEPARTMENT OF FIRST YEAR ENGINEERING

### STUDENTS PROGRESSIVE REPORT

S-23 DIV A & B			M-I			SME				CHEM				BEE				EM				Workshop	Total	Parents
Roll No.	Seat No.	Name of Students	IN	CT(20)	AN(2)	IN	CT(20)	AS(3)	PR(5)	IN	CT(10)	CT(20)	PR(5)	IN	CT(20)	CT2	PR(4)	IN	CT1	CT2	PR(5)	PR(4)	%TH	Signature
201	F190440074	DHANGAR PAVAN SANTOSH	19	18	2	17	AB	1	3	14	7	AB	6	12	12	AB	2	12	AB	AB	4	2	78	
202	F190440086	ALHAT CHINMAY PRAMOD	12	12	2	14	10	1	5	15	2	13	6	14	11	11	4	8	14	12	5	3	92	Present
203	F190440148	VISHAL DAPU WAGHMODE	12	10	1	21	16	2	5	19	2	AB	8	22	12	AB	2	12	13	AB	5	3	84	
204	F190440012	AYUSH BAG	15	14	1	14	11	1	4	16	6	12	8	19	12	15	3	15	5	12	2	3	74	Atishay
205	F190440027	BHAGAT KSHITIA KUNDLIK	12	11	2	10	AB	3	3	15	6	AB	8	13	10	7	3	12	15	12	4	4	85	
206	F190440029	BHANGE DIPALI ACHYUT	3	4	2	12	0	2	4	13	AB	9	8	7	2	7	4	5	15	9	5	4	86	Yashant
207	F190440043	BIRADAR ANJALI HAMISH	3	5	1	12	3	2	5	13	6	5	6	8	5	5	4	3	15	AB	4	3	92	
208	F190440048	BOCHARE ASHWARYA SANJAY	22	19	2	19	AB	3	5	26	12	15	8	19	17	AB	4	12	15	AB	5	4	88	
209	F190440058	CHAUDHARY VAISHNAVI BALISTER	25	20	2	23	13	13	5	24	9	27	8	22	18	13	4	18	15	15	5	4	99	CS
210	F190440063	CHAVAN VISHAL PRAVIN	12	10	2	13	5	3	5	19	6	14	6	15	10	12	4	12	12	9	5	4	96	Chavan
211	F190440063	CHELEKAR MAHESH RAJARAM	22	18	2	12	10	1	4	15	9	10	6	14	8	AB	3	14	13	12	4	3	83	Chavan
212	F190440068	DEOKAR SNEHA SUBESH	6	AB	1	18	AB	1	5	17	1	AB	6	14	10	6	3	12	13	7	4	4	80	Exo
213	F190440075	DHANGAR SAKSHI JAYDEO	12	9	2	14	7	2	5	16	AB	15	8	18	17	6	4	10	15	12	5	4	91	C.T. Mallonee
214	F190440078	DHOLE ADITYA SANJAY	5	2	1	15	3	3	5	16	6	AB	8	6	8	4	2	5	1	15	3	4	86	Dhole
215	F190440091	GADE KARTIK ARUN	12	12	2	14	8	1	5	21	AB	AB	8	7	12	AB	4	14	11	AB	5	4	73	
216	F190440095	GAIKAR ABHISHEK ROHIDAS	21	18	2	15	4	3	5	19	5	10	6	13	10	7	4	14	5	15	5	4	84	
217	F190440097	GAIKWAD POOJA RAM	16	17	2	13	7	1	3	21	7	11	4	12	15	14	4	12	12	14	5	3	84	
218	F190440111	GHULE YOGRAJ HARISHCHANDRA	1	1	1	6	AB	1	5	4	2	11	4	2	10	6	2	1	AB	9	2	2	71	
219	F190440112	GOLE ATHARV BHARAT	15	16	1	10	AB	0	0	12	AB	0	4	12	11	AB	2	4	10	6	3	3	61	
220	F190440118	HAJARE SANKET SADASHIV	19	18	2	12	3	2	5	18	6	13	8	16	6	8	3	6	13	11	3	4	93	
221	F190440125	HINGE KSHITU GOKUL	12	14	1	19	10	1	4	12	AB		6	12	7	3	3	5	3	9	0	2	69	Indul
222	F190440148	KAD SAJ SANTOSH	7	5	2	8	AB	2	3	15	10		8	12	17	AB	3	12	15	AB	2	3	81	
223	F190440156	KALANGE PRATHAMESH VIKAS	12	13	2	23	10	2	4	19	8	7	6	16	16	AB	3	12	10	AB	4	3	75	
224	F190440161	KANASE ATHARVA IREENDRA	1	AB	0	3	AB	1	5	2	1	10	8	4	11	8	3	4	8	AB	3	4	63	Parvati
225	F190440165	KARANDE JAY ANAND	12	9	1	12	4	1	5	12	4	1	8	9	4	6	3	9	10	4	5	3	98	
226	F190440175	KHANDE RAMESHWAR SANJAY	12	10	1	18	13	1	3	17	3	9	6	12	11	3	3	9	5	11	3	2	83	
227	F190440192	LAKHMALE ASHISH ANANT	10	12	1	23	12	2	5	25	7	10	8	17	13	13	4	10	11	13	4	4	88	Prashant
228	F190440196	MANE SNEHAL BABAN	14	15	2	14	4	2	4	19	10		8	17	12	7	4	6	15	21	4	3	88	
229	F190440201	MOHITE APEKSHA DATTATRAYA	7	6	1	12	4	2	3	15	4	9	8	9	7	AB	2	5	14	AB	5	4	87	Pranav
230	F190440209	NAGARGOJE ABHISHEK DEVIDAS	0	AB	0	5	0	0	0	0	AB	AB	4	1	AB	AB	2	2	AB	AB	4	2	14	Prashant



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## STUDENTS PROGRESSIVE REPORT

E-23 DIV A & B			M-I			SME				CHEM				BEE				EM				Workshop	Total	Parents
Roll No.	Seat No.	Name of Students	IN	CT(20)	AS(2)	IN	CT(20)	AS(2)	PR(5)	IN	CT(10)	CT(10)	PR(5)	IN	CT(20)	CT(2)	PR(4)	IN	CT(1)	CT(2)	PR(5)	PR(4)	%TH	Signature
231	F190440211	NAIK VIKAS MALKHAN	0	2	2	6	9	1	4	12	3	9	6	13	11	6	3	12	10	5	5	3	85	
232	F190440221	PADWAL SAHIL DATTATRAY	5	AB	1	16	2	3	5	18	7	1	8	13	5	7	4	5	2	14	5	4	96	
233	F190440224	PANDEY HEMANGI UMESHCHANDRA	22	19	2	20	AB	2	5	19	8	10	6	16	11	9	4	17	15	22	3	4	88	Pandey
234	F190440228	PATIL AYUSH SANJAY	0	AB	1	9	3	1	3	4	1	AB	6	3	4	AB	3	2	2	AB	1	2	75	Patil
235	F190440236	PATIL SHREYA SANTOSH	13	10	2	24	9	2	4	21	AB	11	6	15	15	9	4	12	15	13	4	3	84	
236	F190440237	PATOLE SUJAL NAVNATH	12	12	2	14	2	1	5	12	7	AB	8	7	AB	12	4	9	15	20	5	3	91	Patole
237	F190440123	HARSHAL VILAS PAWAR	12	13	1	18	9	1	0	14	6	AB	4	13	14	AB	4	12	6	AB	0	0	75	Pawar
238																								
239	F190440242	SAYYAD SAMEER JAMEER	13	AB	1	23	12	2	4	15	2	AB	8	18	AB	15	3	12	13	14	2	3	84	
240	F190440284	SEWLKAR HARSHIT KULDEEP	24	17	2	26	14	3	5	24	7	13	8	28	18	10	4	22	14	13	5	3	87	
241	F190440291	SHILKE DNYANESHWAR SHANJAY	19	16	2	12	5	2	4	12	2	10	6	9	4	6	3	13	2	9	5	3	85	
242	F190440302	SHITOLE VAISHNAVI RAMDAS	4	2	1	11	11	2	4	12	AB	AB	8	12	17	8	4	12	15	16	4	2	85	Shitole
243	F190440312	SOMASE ADITYA PANDURANG	14	12	2	13	11	3	4	22	9	18	6	16	11	6	4	12	11	9	5	3	92	Somase
244	F190440318	SURVAVANSHI ANKET TANAJI	12	10	2	24	10	3	4	15	4	13	6	9	12	4	4	5	6	10	5	4	92	
245	F190440319	SURVAVANSHI PRASAD DILIP	19	16	2	20	11	2	4	26	11	AB	8	20	AB	AB	2	12	12	AB	2	2	80	
246	F190440315	NICHTI SUYASH KACHARI	13	12	2	24	10	1	5	18	3	9	8	6	15	3	4	12	9	14	3	4	93	
247	F190440323	TAMBE ARJUN ASHOK	6	4	1	5	AB	1	2	12	5	5	6	6	4	AB	4	6	11	9	5	3	79	
248	F190440328	TARHALE RAJESHWAR GAJANAN	5	2	2	5	3	3	3	12	6	5	6	8	6	6	3	4	11	9	5	2	82	
249	F190440361	YASH MUKUNDA TEKALE	2	1	0	9	AB	0	1	2	AB	AB	0	2	AB	3	0	1	10	9	1	0	53	
250	F190440336	THORAWADE ASHWINI TANAJI	12	9	2	17	AB	2	4	12	4	13	8	8	8	8	4	5	15	10	4	4	89	V.T. Thorawade
251	F190440341	TURE SHAHUK SANJAY	1	1	1	12	AB	2	1	6	6	7	4	4	5	AB	1	1	11	AB	3	2	47	
252	F190440342	VAIDYA SURAJ DATTATRY	4	7	2	16	6	1	4	6	10	6	6	10	6	4	4	4	6	11	3	2	93	
253	F190440352	WAGHMARE TANUJA SHIVAN	12	10	2	13	0	3	4	10	AB	AB	6	10	7	3	3	9	15	10	5	2	83	
254	F190440357	WAROLE SANJEEV RATNAKAR	26	20	2	30	13	3	5	22	10	18	8	24	20	16	3	25	15	23	4	4	97	Warole
255	F190440352	PRITHVIRAJ SACHIN YADAV	12	11	2	23	9	3	4	16	8	10	8	16	13	10	4	8	12	12	5	3	84	
256	F190440384	YEDKE YOGITA ASHRUBA	9	AB	2	14	9	1	5	18	4	AB	8	17	11	12	3	4	3	8	4	3	86	Yedke
257	F190440366	YEOLE SHREYA KISHOR	5	2	1	9	0	3	5	5	1	3	8	6	4	6	4	1	15	12	2	3	78	Yeole
FACULTY NAME			Prof. Shilpa Charapale			Prof. Rushikesh More				Dr. Urmil Shinde				Prof. Sonali Ghuge				Prof. Pooja Patil						
FACULTY SIGNATURE																								

Shinde U. V.  
First Year Co-ordinator



# SIDDHANT COLLEGE OF ENGINEERING

## DEPARTMENT OF FIRST YEAR ENGINEERING

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3 DIV C & D			STUDENTS PROGRESSIVE REPORT																				Workshop		Total	Parents
Roll No	Seat No.	Name of Students	M-I			SME			PHY			BLX			PPS				PR	%	T1	Signature				
			IN	AS1	AS2	IN	CT1	CT2	PR(4)	IN	CT1	CT2	PR(4)	IN	CTH(35)	CT2(20)	PR(6)	IN					CT1(20)	CT2(20)	PR(4)	
301	F190440064	CHIRAG RAMESHCHANDRA AGRAWAL	16	Y	Y	14	5	8	3	25			2	17	16	0	4	14	AB	AB	3	4	66			
302	F190440009	ANAR THE RUCHIKA DATTATRAYA	8	Y	Y	17	6	9	4	22			4	17	AB	10	6	19	10	9	4	4	91			
303	F190440007	AMBIKE SHARDUL MILIND	3	Y	Y	12	5	6	4	14			3	12	AB	3	3	15	5	AB	2	3	78			
304	F190440015	BADE GURUDATTA KRUSHNA	12	Y	Y	12	4	9	4	12			4	3	1	AB	4	7	4	9	2	4	77			
305	F190440020	BARRADE MOHIT ASHOK	8	Y	Y	5	8	8	4	12			4	12	3	5	6	14	8	8	2	4	81			
306	F190440024	BAVASKAR RITESH VIJAY	12	Y	Y	17	3	5	3	16			3	5	2	5	5	19	3	5	3	4	85			
307	F190440026	BEHERA OMKAR BANAMALI	15	Y	Y	19	8	5	3	16			1	12	7	0	6	16	13	12	2	4	84			
308	F190440030	BHAWAR TUSHAR SAMPAT	5	Y	Y	12	5	9	4	18			3	5	7	5	6	19	13	9	4	3	93			
309	F190440035	BHOSALE AYUSHKAR SHRIKANT	24	Y	Y	18	6	6	4	26			4	19	11	15	6	17	10	10	3	4	96			
310	F190440054	CHAITYA PAIGUDE	14	Y	Y	20	8	8	3	29			4	17	10	6	5	28	15	16	3	3	89			
311	F190440055	CHANDAN SHUBHAM SUSHAKAR	6	Y	Y	13	9	7	3	26			4	13	4	8	6	21	9	13	4	3	89			
312	F190440056	CHAKU SHARMA	22	Y	Y	25	5	8	4	26			4	21	9	10	6	26	15	16	4	4	95			
313	F190440306	SHRUTIKA ARUN CHAUDHARI	18	Y	Y	14	9	6	4	14			4	15	8	13	6	16	9	11	4	3	87			
314	F190440066	DAHIFALE SIDDHARTH ASHOK	9	Y	Y	6	7	5	3	5			4	6	0	0	6	1	7	10	4	3	86			
315	F190440273	SANKET VILAS DESHMUKH	16	Y	Y	13	4	3	4	23			4	15	6	15	6	19	4	6	2	2	81			
316	F190440072	DEVKAR NEHA DASHARATH	13	Y	Y	17	5	5	4	12			4	17	2	10	4	16	5	10	3	4	92			
317	F190440067	DAMARE ONKAR RAJENDRA	12	Y	Y	14	5	5	3	14			4	2	6	6	3	13	5	10	3	4	92			
318	F190440081	DIKSHA POPAT GAIKWAD	19	Y	Y	19	8	13	4	24			2	15	9	AB	1	30	11	13	2	3	83			
319	F190440090	GADE AVANTIKA RAJU	5	Y	Y	12	5	7	4	12			4	12	AB	5	4	13	AB	7	2	2	83			
320	F190440098	GAJARE BHUPESH NITIN	1	Y	Y	6	4	5	3	13			3	12	3	AB	6	12	8	10	2	4	66			
321	F190440106	GAWARI KESHAV DOVIND	0	N	N	AB	5	AB	2	AB			4	AB	AB	AB	2	AB	AB	AB	2	0	14			
322	F190440104	SHIVAYANI AJAY SING GAYDHAR	12	Y	Y	13	7	6	4	15			3	14	6	AB	4	12	7	11	3	4	71			
323	F190440108	GHARAT ABHIRAM SAKHARAM	20	Y	Y	22	6	5	4	27			4	17	7	13	5	24	12	12	4	4	94			
324	F190440110	GHORPADE RUTUJA RAJENDRA	5	Y	Y	15	8	9	3	20			4	14	6	10	6	20	8	9	3	3	91			
325	F190440116	GOND HARSHAD SUNIL	6	Y	Y	15	5	6	4	17			4	15	5	6	6	19	10	12	4	4	95			
326	F190440129	TARLOKAR HARSH GAJANAN	7	Y	Y	14	6	6	4	20			3	12	AB	2	2	16	11	11	2	4	71			
327	F190440123	HEBDE MAYUR DIVAN	19	Y	Y	22	4	8	4	24			4	16	13	17	3	17	4	8	4	4	93			
328	F190440124	HUNGANE SAKSHI SHIVPRAKASH	12	Y	Y	18	9	9	4	19			4	14	8	9	3	17	9	9	4	4	90			
329	F190440127	HULAWALE YASH ARIT	3	Y	Y	12	7	5	AB	12			4	13	6	4	4	12	7	AB	4	4	83			
330	F190440131	JADHAV DHANASHREE GAJANAN	0	Y	Y	6	AB	AB	AB	12			3	8	AB	AB	0	4	AB	AB	0	0	0			



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3. DIV C & D

3. DIV C & D		STUDENTS PROGRESSIVE REPORT																				Workshop		Total	Parents
Roll No	Seat No.	Name of Students	M-I			SME			PHY			BLX				PPS				PR	%TH	Signature			
			IN	AS1	AS2	IN	CT1	CT2	PR(4)	IN	CT1	CT2	PR(4)	IN	CT1(35)	CT2(20)	PR(6)	IN	CT1(20)				CT2(20)	PR(4)	
331	F190440132	JADHAV ANJALI DNYANUBA	15	Y	Y	12	6	5	3	12			4	5	8	3	6	20	11	9	3	4	94	Anjali	
332	F190440136	JADHAV MADHURA AND.	13	Y	Y	14	7	6	3	19			4	12	5	9	5	18	7	10	3	4	93	Madhura	
333	F190440137	JADHAV PARTH GOPAL	0	Y	Y	7	6	5	4	14			4	12	4	5	6	13	6	AB	2	4	88	Parth	
334	F190440139	KALORHE MRUNAL MOHAN	2	Y	Y	13	8	9	3	12			4	12	6	17	6	12	8	9	1	4	89		
335	F190440176	KHANDELOTE MEHUL SURESH	3	Y	Y	7	7	6	2	7			3	0	AB	3	5	3	7	6	4	4	80		
336	F190440181	KHILE BHARATI SARJERAO	29	Y	Y	21	6	8	2	29			3	22	AB	15	5	25	12	16	4	4	80	Bharati	
337	F190440188	KULKARNI ADITYA SUDHIR	5	Y	Y	12	7	8	4	8			4	12	0	5	5	13	7	8	3	4	86	Aditya	
338	F190440229	PATIL BALIRAM RAMESH	14	Y	Y	17	6	6	2	22			3	15	3	8	6	23	AB	AB	4	4	83	Baliram	
339	F190440234	PATIL BHUSHKESH VIKAS	20	Y	Y	22	6	7	4	24			4	13	6	11	6	22	6	12	3	4	93	Bhushkesh	
340	F190440238	PAWADE RUTUJA VITTHAL	15	Y	Y	16	6	7	2	21			0	23	12	7	6	19	13	14	2	4	75	Rutuja	
341	F190440243	PAWAR OMKAR SADASHIV	12	Y	Y	11	7	5	2	15			4	13	5	AB	4	12	AB	10	3	3	80	Omkar	
342	F190440255	RAKSHI SHRIDYATH PRAVIN	15	Y	Y	13	5	6	2	21			3	15	AB	8	6	18	10	12	3	3	84	Rakshi	
343	F190440259	RASKAR VRUSHALI UTTAM	12	Y	Y	12	6	4	AB	20			3	12	AB	AB	6	20	6	AB	3	3	74		
344	F190440260	RATHOD PAVAI TULSHIRAM	12	Y	Y	7	5	5	4	13			3	3	2	AB	6	12	10	9	4	4	91	Pavai	
345	F190440263	SABALE VEDANG BALASAHEB	12	Y	Y	19	3	8	4	21			4	12	0	AB	6	15	3	8	2	4	87	Vedang	
346	F190440267	SADWAD VISHWAJEET HATU	1	Y	Y	10	4	3	AB	2			4	12	AB	0	5	12	4	AB	2	4	73		
347	F190440283	SAYVED MUHAMMAD HANIF ILANI	8	Y	Y	9	3	6	4	12			3	8	2	11	6	15	3	12	4	4	82	Muhammad	
348	F190440292	SHENDE AMIT BABAN	25	Y	Y	12	4	6	4	16			3	10	6	3	6	12	4	12	2	4	86	Amit	
349	F190440294	SHINDE DHISHA NILESH	12	Y	Y	14	7	4	2	21			0	15	3	AB	5	20	14	AB	1	3	86	Dhisha	
350	F190440308	SINGH ANKIT HARILAL	3	Y	Y	4	6	AB	AB	1			3	0	AB	AB	3	2	AB	AB	1	1	52	Ankit	
351	F190440311	ATUL MANOJ SINGH	8	Y	Y	12	6	AB	3	8			3	12	AB	9	6	12	6	AB	3	3	65	Manoj	
352	F190440322	FADAKALE KARRASAPPA DATTATRAY	12	Y	Y	15	6	4	AB	20			4	14	9	8	6	16	6	AB	2	4	90		
353	F190440328	GHOSKAR SANJAY TAKALE	3	Y	Y	11	5	6	2	14			3	7	3	10	2	12	AB	11	2	1	76		
354	F190440326	LAMBHAKAR SHRUTI BALVANT	12	Y	Y	15	8	7	2	13			0	12	8	8	6	14	8	15	3	4	84	Shruti	
355	F190440333	THORAT SHIBU YASH RAJESH	0	Y	Y	15	7	4	3	12			3	12	AB	4	5	13	7	8	3	4	77	Shibu	
356	F190440357	TIKANDI LALIT RAMDAS	6	Y	Y	17	7	6	4	17			3	17	4	7	6	13	7	12	3	4	92	Lalit	
357	F190440329	YADAV PRASHANT BRIDESH	15	Y	Y	14	9	6	3	23			4	18	3	9	6	14	9	11	3	4	95	Prashant	





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DEPARTMENT OF FIRST YEAR ENGINEERING

## STUDENTS PROGRESSIVE REPORT

3 DIV C & D			M-I			SME				PHY				BLX				PPS				Workshop	Total	Parents
roll No	Seat No.	Name of Students	IN	AS1	AS2	IN	CT1	CT2	PR(4)	IN	CT1	CT2	PR(4)	IN	CT1(35)	CT2(20)	PR(6)	IN	CT1(20)	CT2(20)	PR(4)	PR	%TH	Signature
401	F190440002	ABHISHEK THAKUR	1	Y	Y	2	2	AB	2	4			0	0	0	0	0	2	2	AB	2	1	81	
402	F190440033	BHROJANE BHAKTI BHASKAR	13	Y	Y	17	9	7	2	16			4	15	9	9	5	22	9	14	2	4	91	
403	F190440058	BHANDARI PRASEN BABLU	18	Y	Y	22	6	7	3	25			4	18	11	AB	6	16	12	13	4	4	92	Pratish
404	F190440039	BHUNDE YASH NANDU	8	Y	Y	12	8	6	3	13			3	8	2	5	6	14	8	11	3	4	93	Shubham
405	F190440004	ADANE VAISHNAVI MADHUKAR	18	Y	Y	22	6	8	3	29			4	24	8	AB	5	20	6	15	2	4	81	
406	F190440062	CHAVHAN ATHARVA SUDHAKAR	0	Y	Y	9	4	7	3	12			4	5	3	12	3	12	4	7	2	4	75	
407	F190440073	DEVKE DARSHAN DINESH	14	Y	Y	13	6	5	3	12			4	12	2	6	1	12	6	10	4	3	80	
408	F190440008	ZAMAD DIKSHA SATISH	15	Y	Y	18	5	6	3	14			4	17	9	10	6	12	5	13	2	4	98	Sangam
409	F190440079	DHORAJKAR SHUBHAM DILIP	12	Y	Y	15	4	6	3	15			3	14	7	0	3	12	4	AB	1	3	75	
410	F190440082	DIVATE HEMANT PARSHURAM	7	Y	Y	6	1	4	2	5			2	1	AB	AB	5	5	1	AB	4	2	63	
411	F190440085	DOBULE VAIBHAV BABURAO	12	Y	Y	10	9	6	2	14			3	12	5	0	6	12	9	13	2	4	89	Pratik
412	F190440086	DONUR PRAJWAL ASHOK	5	Y	Y	12	4	4	2	12			3	12	2	2	3	13	4	8	4	3	93	Pratik
413	F190440101	GARGOTE RAJGURU NAVANATH	14	Y	Y	13	4	6	3	17			4	16	5	3	6	17	4	13	1	4	95	
414	F190440102	GARJE BHASVAN AJINATH	4	Y	Y	9	3	5	AB	9			0	12	0	0	0	5	3	7	1	0	80	
415	F190440104	GAVHANE BLITUA MAHADEV	14	Y	Y	17	8	7	3	27			4	18	9	10	6	20	8	14	3	4	92	
416	F190440107	GAWATE SARTHAK DATTATRAY	0	Y	Y	4	AB	AB	AB	2			0	0	AB	AB	0	1	AB	0	3	0	9	
417	F190440101	SHINGDE GAYATRI BALAJI	6	Y	Y	14	6	5	2	17			0	12	AB	AB	3	15	6	AB	2	1	74	
418	F190440114	GORDE SURAJ SHARAD	0	Y	Y	6	3	4	2	15			3	12	3	1	0	12	0	8	3	4	87	
419	F190440121	HANWANTE SAYALI SANJAY	12	Y	Y	14	6	7	AB	20			3	15	9	3	3	21	AB	14	4	3	84	
420	F190440133	JADHAV ASHOK BHAGWAT	15	Y	Y	15	9	5	2	21			4	14	10	9	3	15	9	AB	3	3	85	
421	F190440130	JADHAV PRATIKSHA KRISHNA	20	Y	Y	23	9	8	2	25			4	22	8	AB	6	17	9	15	4	4	85	Shubham
422	F190440141	JAGTAP PRANAV GUNESH	1	Y	Y	12	9	6	2	12			4	4	6	AB	6	12	9	12	4	4	91	Pratik
423	F190440142	JAHAGIRDAR SUHAIB NAZIM	12	Y	Y	16	6	8	2	16			4	5	AB	AB	4	20	6	8	3	4	68	Pratik
424	F190440143	JAGUDE SIDDHI SHANKAR	2	Y	Y	12	9	7	2	21			4	14	9	10	6	15	9	14	3	4	90	S. S. Jagade
425	F190440146	JAYACHE NAGESH BALAJI	19	Y	Y	15	6	6	2	21			3	15	12	2	4	17	12	AB	4	2	91	
426	F190440153	KAGANE NIKITA ASHOK	26	Y	Y	22	5	8	2	30			4	27	14	15	6	24	14	15	3	4	90	Pratik
427	F190440158	KALE PRIYANKA SURJDEV	6	Y	Y	17	9	7	AB	29			3	19	7	AB	6	19	9	14	4	4	87	
428	F190440163	KANESAR KIDDI SURENDRA	19	Y	Y	18	8	7	AB	21			4	20	8	8	6	18	8	14	4	4	92	
429	F190440168	KARMALKAR NEHA YOGESH	12	Y	Y	12	6	6	2	18			0	16	AB	AB	6	18	AB	12	3	3	85	
430	F190440171	KEDAR ASHWINI RADHAKRUSHNA	1	Y	Y	12	8	5	AB	12			4	12	AB	3	6	12	8	10	3	4	83	Pratik



# SIDDHANT COLLEGE OF ENGINEERING

DEPARTMENT OF FIRST YEAR ENGINEERING

## STUDENTS PROGRESSIVE REPORT

3. DIV C & D			M-I			SME			PHY				BLX				PPS				Workshop	Total	Parents			
Roll No	Seat No.	Name of Students	IN	AS1	AS2	IN	CT1	CT2	PR(4)	IN	CT1	CT2	PR(4)	IN	CT1(35)	CT2(30)	PR(6)	IN	CT1(20)	CT2(20)	PR(4)	PR	%TH	Signature		
431	F190440182	KOCHAKEKAR GAYATRI SATYAVUJAY	3	Y	Y	10	6	6	AB	12			4	3	AB	AB	4	12	6	15	3	3	88			
432	F190440283	MORE DIVYA MACHINDRA	13	Y	Y	17	5	5	2	27			4	19	7	3	6	22	5	AB	2	4	89			
433	F190440210	NAGARGOJE OMKAR RAOSAHEB	0	Y	Y	4	2	3	2	9			4	2	AB	AB	4	3	0	11	2	2	78	Dr. 3.7		
434	F190440212	NANDAN GURTA	12	Y	Y	9	6	4	AB	17			4	12	5	0	4	13	6	10	2	3	86			
435	F190440213	NARKHED PRANAV MANOJ	20	Y	Y	15	6	6	2	21			4	17	6	AB	6	22	6	13	2	4	86			
436	F190440227	PATIL ATHARVA SHARAD	0	Y	Y	14	8	6	AB	12			4	6	4	AB	6	6	8	13	3	1	88			
437	F190440230	PATIL DEVESH SATYAWAN	0	Y	Y	13	6	6	4	7			4	12	6	0	4	12	6	12	4	3	83			
438	F190440247	PILLAI JOSHUA JABA	13	Y	Y	17	6	5	3	20			4	16	8	1	5	14	10	AB	3	4	75	P		
439	F190440268	SAKORE PRATIK VILAS	18	Y	Y	11	0	6	4	23			3	12	2	AB	3	13	0	13	3	4	81	P		
440	F190440253	PUJARI SHRADDHA RATNAKAR	15	Y	Y	12	6	7	4	17			4	16	10	AB	4	21	11	15	3	3	88	P		
441	F190440256	RAKSHI TANUJA GULAB	24	Y	Y	13	4	6	3	24			4	13	10	3	5	15	4	13	3	4	90	P		
442	F190440257	KASAL MORESHWAR NANDKUMAR	8	Y	Y	12	7	3	4	15			3	12	6	3	4	15	14	11	3	4	87	P		
443	F190440261	KAUT PRADNYA SHAM	17	Y	Y	18	7	6	3	24			4	20	5	AB	5	21	7	13	1	4	91			
444	F190440262	REDDY SRUJITH BIRBHISHAN	25	Y	Y	22	6	8	2	26			4	12	AB	5	2	22	10	16	3	4	78			
445	F190440279	SAUDAGAR SKQIN ALLABAKSHI	0	Y	Y	2	AB	AB	4	1			0	5	AB	AB	0	5	AB	AB	3	0	7			
446	F190440252	PRATIK MACHINDRA SHINDE	8	Y	Y	14	0	6	2	13			4	5	2	AB	4	8	0	12	3	0	69			
447	F190440303	SHIVELAK SWAPNIL NANOJ	14	Y	Y	9	4	6	4	12			4	12	6	8	6	18	8	13	3	4	89	P		
448	F190440311	SINGH YASHPAL SUMANTKUMAR	12	Y	Y	16	4	8	4	17			4	15	3	AB	6	16	4	8	2	4	91			
449	F190440314	SINAWANE SHREYA RAKHAMAJI	12	Y	Y	12	4	5	4	13			4	12	AB	AB	5	21	AB	AB	2	4	72	P		
450	F190440321	SYED REHAN ALI SAJID ALI	10	Y	Y	17	6	5	4	8			4	9	2	6	6	12	6	AB	2	4	83	P		
451	F190440323	TAKALKAR RUSHIKESH SUNIL	12	Y	Y	13	4	6	4	23			3	12	1	3	4	16	4	6	2	3	80			
452	F190440330	PRATHAMESH DNYANESHWAR THIGALE	13	Y	Y	14	7	6	4	18			4	12	3	AB	2	12	7	AB	3	3	66			
453	F190440347	VIDHATE YASH RAMDAS	14	Y	Y	12	5	8	4	19			4	15	7	4	3	14	10	15	2	4	93			
454	F190440360	YADAV SURAJ RAMPRKASH	12	Y	Y	14	5	5	AB	22			2	15	AB	1	2	22	AB	AB	2	4	71			
455	F190440351	VYAVAHARE PRAVDY GOVARDHAN	12	Y	Y	13	4	4	3	19			4	12	3	AB	3	13	4	AB	2	4	77			
FACULTY NAME			Prof. Avinash Tekale			Prof. Bhagwat Kedar			Prof. Deepak Kute			Prof. Dipali Bajare			Prof. Ashwin Bhoisale											
FACULTY SIGNATURE																										




Date: -10/05/2023


CAMNET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE  
FIRST YEAR ENGINEERING (2022-23) SEM-1  
S.P.PUNE UNIVERSITY RESULT

**HEARTY  
CONGRATULATIONS ...!!!**

Sr. No.	Name of Student	Marks out of 650	SGPA	Credit	Div
1	Warole Sanket Ratnakar	554	9.14	50	B
2	Khile Bharati Surjerao	523	8.68	50	C
3	Kagane Nikita Ashok	520	8.5	50	D
4	Gharat Abhishek Sakharan	499	8.41	50	C
5	Chaudhari Vaishnavi Balister	499	8.32	50	B

  
Dr. U. V. Shinde  
FE Co-ordinator

  
Dr. L. V. Kamble  
Principal  
Siddhant College of Engineering  
Sudumbare, Pune - 412 108



CAYMET'S  
SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE  
FE-SEM-I Result Analysis 2022-23

**Subject Wise Result Analysis**

Sr. No.	Name of Subject	No. of Student Appear	No. of Student Pass	No. of Student Fail	%age of Result	Name of Staff
1	Engineering Maths - I	114 (DIV A and B)	55	59	48.24	Prof. Shilpa Chavale
		109 (DIV C and D)	43	66	39.44	Prof. Avinash Tekale
2	Engg. Chemistry	114	53	61	46.49	Dr. Utkarsh Shinde
3	Engg. Physics	109	46	63	42.20	Prof. Deepak Jate
4	Basic Electroni- Engg	113	37	76	32.74	Prof. Sumit Ghuge
5	Basic Electronics Engg	109	65	44	59.63	Prof. Deepali Bajare
6	System in Mechanical Engg.	114 (DIV A and B)	90	24	78.94	Prof. Kishikesh More
		109 (DIV C and D)	83	26	77.98	Prof. Kedar Bhagwat
7	Engg. Mechanics	113	30	83	26.54	Prof. Pooja Patil
8	PPS	109	79	30	72.47	Prof. Ashwani Bhorle

- Total No of Students Appeared = 223
- Total No of Students Failed = 171
- Total No of Students Passed = 52
- All Clear Result = 23.33%

Dr. U. V. Shinde  
FE Co-ordinator

Dr. L. V. Kamble  
Principal

Siddhant College of Engineering,  
Sudumbare, Pune - 412 108





**CAYMET'S**  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBAHE, PUNE**  
**FE-SEM-I Result Analysis 2022-23**

*First Ten Toppers*

Sr. No.	Name of Student	Marks out of 650	SGPA	Credit	Div
1	Warele Sanket Ratnakar	554	9.14	50	B
2	Khile Bharati Sarjerao	523	8.68	50	C
3	Kagane Nikita Ashok	520	8.5	50	D
4	Gharat Abhishek Sakharum	499	8.41	50	C
5	Chaudhari Vaishnavi Balister	490	8.32	50	B
6	Reddy Shrushti Bihishan	483	8.05	50	D
7	Borele Sakshi ghanashyamdas	476	8.00	50	A
8	Jadhav pratiksha Krishna	477	7.95	50	D
9	Bhandari Prasen Bablu	473	7.82	50	D
	Patil Rushikesh Vikas	469			C
10	Jayache Nages Balaji	464	7.82	50	D
	Sewlikar Harshit Kuldeep	467			B

  
 Dr. L. V. Shinde  
 FE Co-ordinator

  
 Dr. L. V. Kamble  
 Principal


Siddhant College of Engineering  
 Sudumbare, Pune - 412 109




**CAYMET'S**  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE, PUNE**  
**FE-SEM-I Result Analysis 2022-23**

*Subject Toppers*

Sr. No.	Name of Student	Subject	Marks (OUT OF 100)	Div
1	Khile Bharati Sarjerao	M-I	87	C
2	Warole Sanket Ratnakar	SME	91	B
3	Chaudhari Vaishnavi Balister	CHEM	85	B
4	Khile Bharati Sarjerao	PHY	85	C
5	Warole Sanket Ratnakar	EM	66	B
7	Warole Sanket Ratnakar	BEE	83	B
8	Reddy Shtuti G.	PPS	74	D
9	Khile Bharati Sarjerao Kagane Nikita Ashok Bhandari Prasen Bablu	BLX	76	C D D

  
Dr. U. V. Shinde  
FE Co-ordinator

  
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