



CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE

Department of Mechanical Engineering

Assignment 1

Sub: Quality & Reliability Engg

Sub Code: 402050A

Faculty In-charge: Mr. Ashish H Raut

Date:- 24/03/2022

Class:- BE (MECH)

Max Marks:20

- 1 a Explain Poka yoke with example. 3 CO1
- b Enlist 7 tools of Quality. Explain Ishikawa diagram with neat sketch 4 CO1
- c Write short note on TS16949. 3 CO1
- 2 a Write short not on OC curve and its characteristics 3 CO2
- b The given table shows the number of defectives found in inspection of 10 lots of 100 items each. Determine the control limits for appropriate chart and state whether the process is in control. 4 CO2

Draw the control chart.

Lot no	1	2	3	4	5	6	7	8	9	10
No of Defec tives	6	3	1	4	3	0	5	5	2	3

- c Six hundred bicycle mudguards were observed for point defect- air bubble, scratch, foreign particles, etc. In all 1200 defects were found in 600 mudguards. What type of control chart be used here ? If sample size is 10 , what will be the limits 3 CO2

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering

Assignment 1

Date:-24/03/2023

Class: BE Mech

SEM-VIII (AY 2022-23)

Sub:- Q & RE

Marks:-20


Roll No.	Name of student	Marks	Sign
1	ABHISHEK KUMAR YADAV	12	
2	AKASH DADASO JADHAV	10	
3	ANIKET DATTATRAYA SASE	15	
4	ANIKET SHIVAJI SAPNAR	11	
5	ANKIT GUPTA	11	
6	AODUT PRAVIN RAVASAHEB	14	
7	ASHUTOSH BAPUSAHEB TOUNDKAR	13	
8	AWAGHADE ATISH SHANKAR	13	
9	BHARAT BARKU BORYE	10	
10	BIDAYE YASH RAMCHANDRA	11	
11	CHAUDHARI ANUP HIRALAL	17	
12	CHAVHAN ASHWINI SUKHDEV	16	
13	DADASAHEB NANASAHEB PAWAR	11	
14	DAHIVALDKAR PUJA PRAVIN	12	
15	DAUNDKAR RAJKUMAR BALASAHEB	12	
16	DESHMUKH AKASH SAMPAT	10	
17	DINDE ARJUN YASHWANT	10	
18	DIPAK PRADIP KUSUMKAR	12	
19	DIXIT PRASHANT MANIKRAO	13	
20	GADE ADESH BALASAHEB	13	
21	GADE SANTOSH SARJERAO	14	
22	GAIKWAD KUNDAN KISHOR	12	
23	GANESH TULSHIDAS KUMBHAR	11	
24	GAVHANE AJDUMBAR BALIRAM	12	
25	GAWADE AJAY MOHAN	15	
26	GHARE SAGAR VITTHAL	11	
27	GHURE DILIP DATTATRAY	11	
28	GUPTA KRISHNA DINESH	11	
29	HIRATOT SHRISHAIL NAGESHI	08	
30	JADHAV SHUBHAM RAJENDRA	12	
31	JADHAV SIDDESH KAILAS	11	
32	JARHAD MAYUR POPAT	12	
33	KADAM AJINKYA BALJBA	11	
34	KAMBALE NAGANATH BHARAT	10	
35	KAMTIKAR RAHUL BABULAL	11	

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 Department of Mechanical Engineering
Assignment 1

Class: BE Mech
 Sub:- Q & RE

Date:-24/03/2023
 SEM-VIII (AY 2022-23)

Roll No.	Name of student	Marks	Sign
36	KSHIRSAGAR SADHANA SHANTLING	12	Sok
37	KUMBHAR MADHAV TULASHIDAS	13	Madhav
38	KUMBHAR NARAYAN KALLAPPA	16	NK
39	LINGADE UMESH DILIP	11	Lingade
40	MANDALE SUNIL HARIBHAU	11	Mandale
41	MANE AKSHAY RAMLING	15	Mane
42	MANE TRUPTI JITENDRA	16	Mane
43	MANISH UMESH MOURYA	09	Manish
44	MANSI DEEPAK KOKANE	11	Mansi
45	MORE PRASAD DHARMARAJ	11	More
46	NAGARE NIKITA SUDHIR	11	Nikita
47	NIDVANKE ASHISH BHIM	12	Nidvanke
48	PALKAR RUSHIKESH FULCHAND	13	Palkar
49	PANASKAR SAYALI BAJIRAO	14	Panaskar
50	PARASHRAM PANDURANG PATIL	10	Parashram
51	PATIL JITENDRA VASANT	15	Patil
52	PATIL SHUBHAM RAJENDRA	13	Shubham
53	PAWAR CHANDRAKANT KAILAS	10	Pawar
54	PRIYANKA RAMESH SURYAWANSHI	11	Priyanka
55	ROHIT SANDEEP SAWANT	10	Rohit
56	SAGAR SANJAY JADHAV	10	Sagar
57	SAIPRASAD NANDKUMAR SHINDE	12	Saiprasad
58	SANKET SANDEEP PATIL	13	Sanket
59	SATALE AVINASH HARISHCHANDRA	15	Satale
60	SATHE DHANANJAY DNYANESHWAR	08	Sathe
61	SHAHIL PAWAR	13	Shahil
62	SHINDE GANESH BALASO	12	Shinde
63	SHINKAR PRATIK VIJAY	13	Shinkar
64	SUTAR RUSHIKESH HANUMANT	12	Sutar
65	TAKBHATE SHUBHAM JAGADISH	11	Takbhate
66	TELGOTE NILESH DEORAO	12	Telgote
67	UGWEKAR DHANANJAY SHRIKRISHNA	14	Ugwekar
68	VICHARE PRATHAMESH DIPAK	17	Vichare
69	WANKAR JAYESH RAMESH	13	Wankar
70	YASIN RAMJAN MUJAWAR	12	Yasin


 Prof. A. H. Bhatt
 Subject Teacher

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20

A2

Page No.	
Date	

Name - AKSHAY RANVING MAME

Roll No - 41 (Forty one)

Day - 24/03/2023

Subject - Quality & Reliability Engg.

Assignment No - 01

Q.1	Q.2
08	07

Q 1)

a) Explain Poka Yoke example?

Poka Yoke is Japanese term that means "mistake-proofing or error proofing or avoiding inadvertent errors".

It refers to any mechanism or process that is designed to prevent mistake or errors from occurring in a system. The goal of Poka Yoke is to improve the quality and reliability of a system by reducing the likelihood of errors and defects. Under the principle of Poka Yoke, the method of preventing errors in the process and making them human independent, as far as possible, are the work for this a standard operation procedure or the SOP is written so that the errors are minimal and there is a consistency in the performance.

The process runs as per the written down method of working that is the SOP. The process performance is measured by periodic audit with or without a checklist. The process can also be measured by the control chart.

These are the methods which measure and record whether the process or the product is as per the specifications and within the normal or outside it.

In case the product or the process is not as per normal and outside the control limit, suitable warning mechanism as well as the corrective measure have to be taken: to first stop the process output in terms of the product and the service is as per the desired performance level.

The identification of occurrence of the error or the mistake issuing warning signals stopping the machine or the process back to the desired performance level can be done manually.

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The permanency of control mechanism increases manifold as we move from manual to automation. The objective of poka yoke is to prevent errors in the process and make them human independent for as possible.

The movement of the process starts producing product outside the control limit, the sensor in automatic in-process gauging system senses the error and stop the machine.

and simultaneous store a warning mechanism in the form of a buzzer or warning red light.

2. Auto e-mail generation for meeting deadline
2. Automatic regression testing
3. Drop down menu
4. pop up menu for wrong entry
5. Auto validation check for incorrect field.

Q(B) Enlist 7 tools of Quality. Explain Ishikawa diagram with neat sketch?

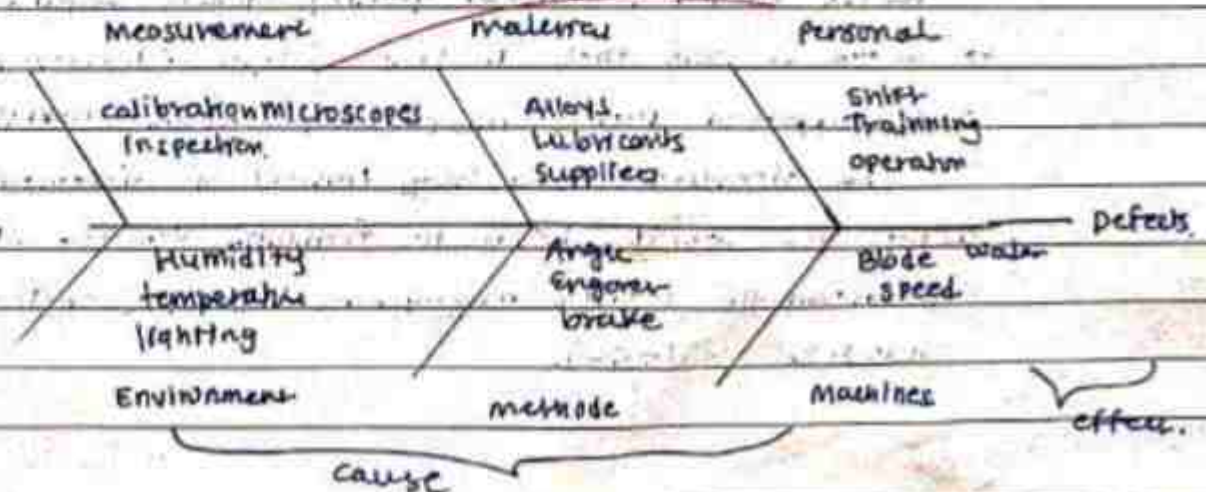
The old seven quality tools are

- 1) Check sheets
- 2) Flow charts
- 3) Histograms
- 4) Pareto chart
- 5) Cause and effect diagram / Ishikawa diagram
- 6) Scatter diagram
- 7) Control charts

Ishikawa diagram

Ishikawa diagram are also called fishbone diagram, herringbone diagram or cause and effect diagram. Ishikawa diagram are causal diagram that show cause of central event created by Kaoru Ishikawa. Common use of Ishikawa diagram are produce design and quality defect prevention, to identify potential factors causing an overall effect. Each cause or reason for imperfect is a source of variation cause are usually grouped into major categories:

- 1) People :- Anyone involved with the process.
- 2) Method :- How the process is performed and the specific requirements for doing it such as policies, procedures, rules, regulations & laws.
- 3) Machines :- Any equipment, computer, tools etc required to accomplish the job.
- 4) Material :- Raw material parts, pens, paper etc. used to produce the final product.
- 5) Measurement :- Data generated from the process that are used to evaluate quality.
- 6) Environment :- The condition such as location, time, temperature and culture in which the process operates.



causes In the diagram are often categorized as machine, method, material man, power, measurement, environment. Cause & effect diagram can reveal key relationship.

(c) Write a short note on TS16949

ISO/TS 16949 - 2000 is an ISO technical specification model for aligning automotive quality systems. Standard of most international automobile companies.

The goal of the standard is to develop a quality management system that provides for continual improvement; emphasizing defect prevention and reduction of waste and variation in supply chain.

It is meant to eliminate the need for multiple certification to satisfy customer needs. The standard was developed by Iso and the International Automotive Task force (IATF).

IATF is an adhoc body of well known automobile companies of the world including BMW, Daimler Chrysler, Ford, Renault, Volkswagen etc.

The requirements of the standard apply to design, development, production, installation & servicing of automobile related products in the format of TS16949.

Beside defining international quality system requirements to automotive core tools in the context of improved quality, part approval process, measurement system analysis etc.

The standard has a huge impact on automotive industry across the world because it formulates under a single global standard the quality management system requirements that must be satisfied.

Q. (2)

(a) Write short note on DC curve and its characteristics?

→ Following types of risks are associated with acceptance sampling.

- i) Producer Risk
- ii) Consumer Risk

1) Producer Risk:- Sometimes it happens that in spite of good quality the sample taken may show defective units and the entire lot is rejected.

In spite of good quality the lot is rejected, such a type of risk of rejection is known as producer risk.

ii) Consumer Risk:-

Sometimes it may happen the lot quality of the lot is not good but the samples picked up at random resulted good quality units as such the consumer has to accept a defective lot.

Such a risk is known as consumer risk.

In other words the probability of accepting a lot which has actually been satisfactory by the consumer according to a predetermined standard is known as consumer risk. Thus the risk of accepting a lot of bad items is known as consumer risk.

The consumer & producer both decide the acceptance standard of the lot. This is known as acceptable quality level (AQL) or lot of tolerance percentage defective (LTPD).

100% percent inspection is not cost effective & not possible in mass production hence it is desirable to use sampling inspection in which acceptance or rejection of complete lot or batch is based on the results obtained from sample.

(5)2

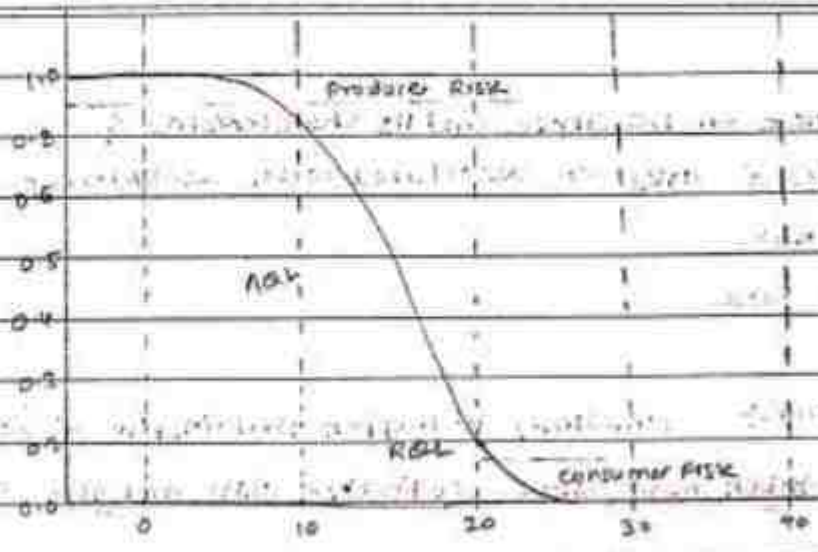
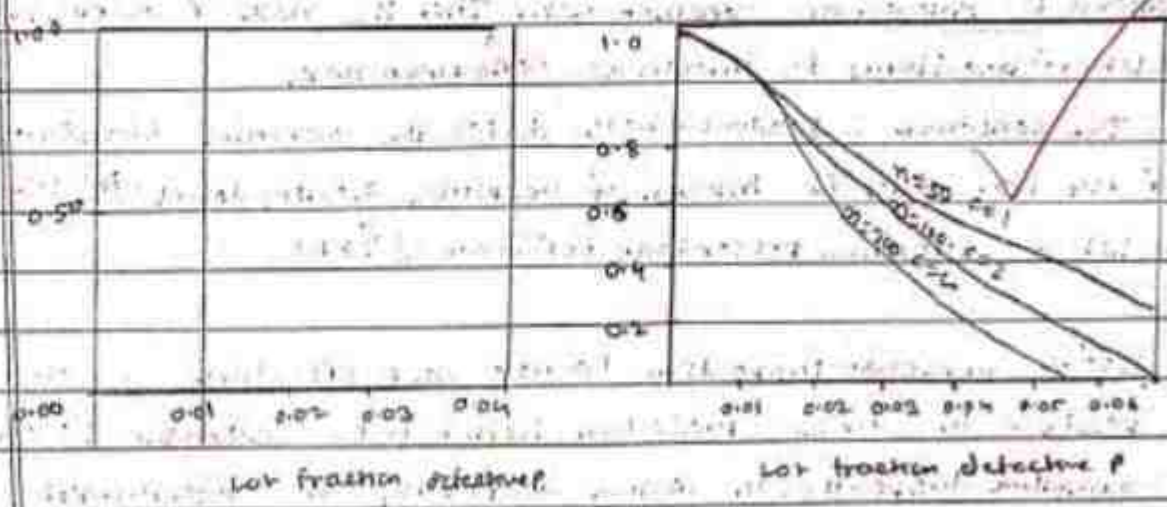


Fig. Show OC curve with an AQL of 0.9 percent defect (0.1) a RQL of 0.8 producer Risk of 0.1 consumer risk of 0.1 sample size of 86 and acceptance number of 12

Each of criteria can have a profound effect on the other for developing a sampling plan that balances cost versus risk. While your initial selection may be that this is not applicable to PDD testing, the same principle for creating OC curves can help for certain types of PDD testing. OC curve practical graphic method to understand criteria, alpha, beta, etc.



- (b) The given data table shows that the number of defective found in inspection of 10 lots of 100 items each. Determine the control limits for appropriate chart and state whether the process is in control.

Lot of no	1	2	3	4	5	6	7	8	9	10
No of Defectives	6	3	1	4	3	0	5	5	2	3

→ given data $n=100$ no. of lot = 10

$$\bar{p} = \frac{\text{Total number of defective}}{\text{Total number of inspected items}}$$

$$= \frac{6+3+1+4+3+0+5+5+2+3}{100 \times 10}$$

$$\bar{p} = 0.032$$

STEP 2. calculate the upper & lower control p-chart

$$(UCL)_p = \bar{p} + 3 \times \sqrt{\frac{\bar{p}(1-\bar{p})}{n}}$$

$$(UCL)_p = 0.032 + 3 \times \sqrt{\frac{0.032(1-0.032)}{100}} = 0.0848$$

$$\text{and } (LCL)_p = \bar{p} - 3 \times \sqrt{\frac{\bar{p}(1-\bar{p})}{n}}$$

$$= 0.032 - 3 \times \sqrt{\frac{\bar{p}(1-\bar{p})}{n}}$$

$$= 0.032 - 3 \times \sqrt{\frac{0.032(1-0.032)}{100}}$$

$$(LCL)_p = -0.0208$$

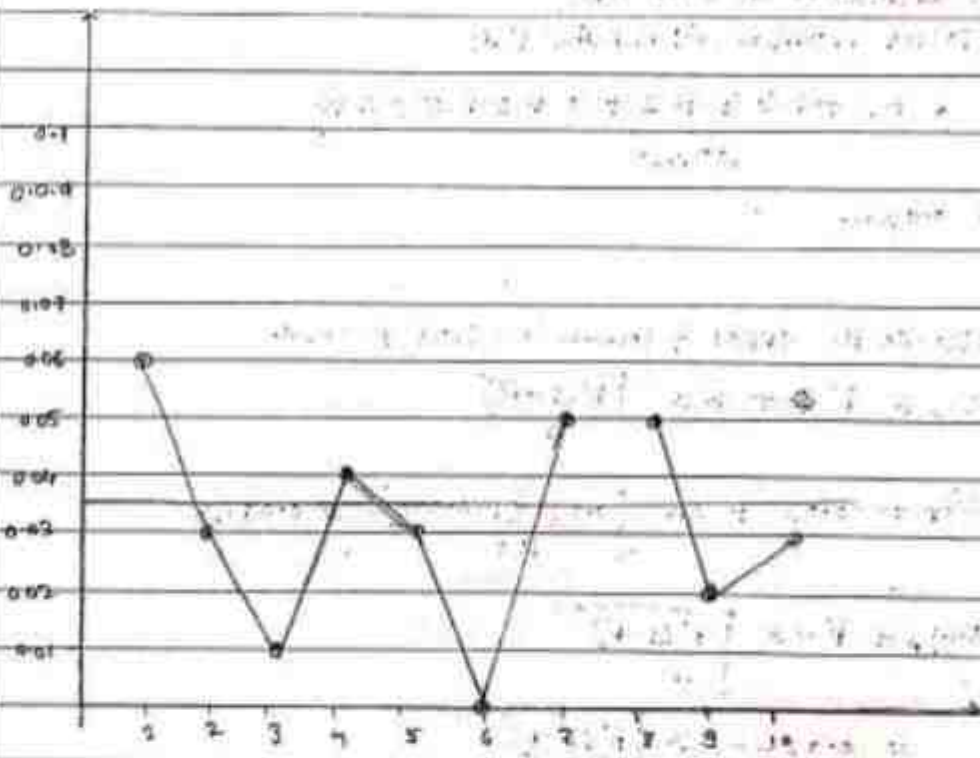
calculate the values of fraction defectives for each lot

Fraction defective = $\frac{\text{No. of defective Jobs}}{\text{No. of Jobs Inspected}}$

$$= \frac{6}{100} = 0.06$$

$$\text{fraction defective} = \frac{3}{100} = 0.03$$

Lot No	1	2	3	4	5	6	7	8	9	10
No. of defective	6	3	2	4	3	0	5	5	2	3
Fraction defective	0.06	0.03	0.02	0.04	0.03	0	0.05	0.05	0.02	0.03



- (c) six hundred bicycle mudguards were observed for point defect - air bubble scratch, foreign particles, etc. In all 1200 defects were found in 600 mudguards. what type of control chart be used here? if sample size is 10, what will be the limits.

(c)
 No of defects = 1200 } U-chart
 Sample size $n = 10$

No. of items inspected $m = 600$

$$\bar{U} = \frac{c}{m} = \frac{1200}{600} = 2$$

$$UCL = \bar{U} + 3\sqrt{\frac{\bar{U}}{n}}$$

$$= 2 + 3\sqrt{\frac{2}{10}} = 3.3416$$

$$LCL = \bar{U} - 3\sqrt{\frac{\bar{U}}{n}} = 0.6583$$

**Department of Mechanical Engineering
Assignment 2**

Sub: Quality & Reliability Engg

Sub Code: 402050A

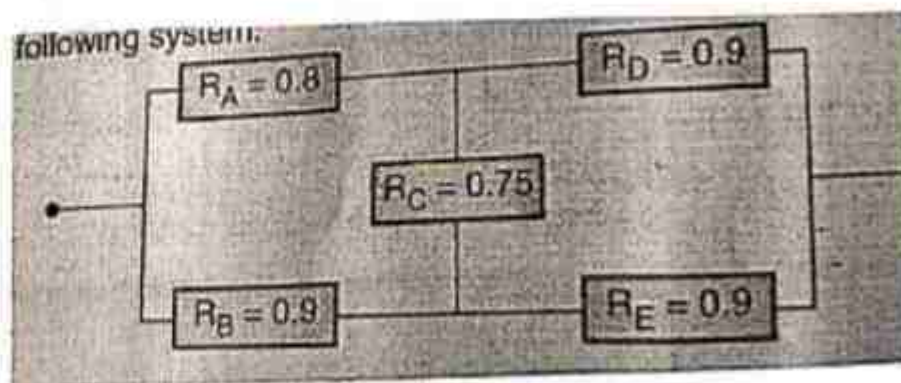
Faculty In-charge: Mr. Ashish H Raut

Date:-20/04/2023

Class:- BE (MECH)

Max Marks:20

- 1 a Define And Explain 2 CO3
- i) Failure Density
- ii) Hazard Rate
- b Explain different laws of Probability with examples 4 CO3
- c The tests are conducted on 500 screws and results are tabulated as given below. Find Failure density, Hazard rate of the screw. 4 CO3
- | Time Interval (hrs) | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
|----------------------|------|-------|-------|-------|-------|
| No. of failed screws | 174 | 126 | 85 | 75 | 40 |
- 2 a Find the reliability of the system using conditional Probability method 4 CO4





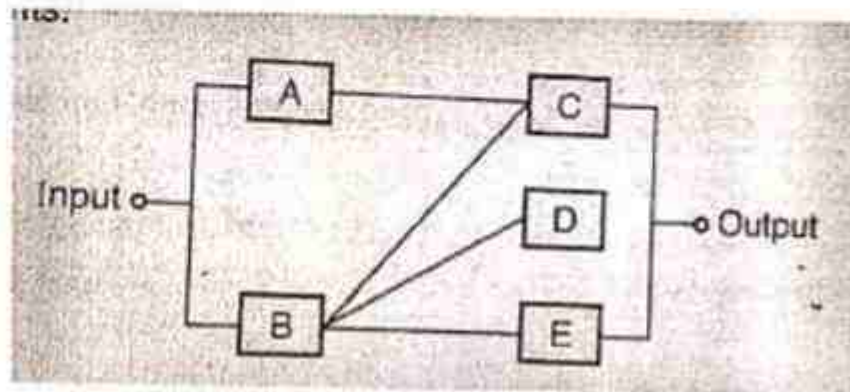
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Department of Mechanical Engineering

Assignment 2

- b Find the reliability of the system shown in fig using cut set method. Also draw equivalent block diagram using minimal cut set element. 4 CO4



- c What is reliability allocation? Write the advantages of reliability allocation method. 2 CO4

Siddhant College of Engineering, Sudumbare

Department of Mechanical Engineering

Assignment 2

Date:-20/04/2023

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Marks:-20

Roll No.	Name of student	Marks	Sign
1	ABHISHEK KUMAR YADAV	13	
2	AKASH DADASO JADHAV	16	
3	ANIKET DATTATRAYA SASE	12	
4	ANIKET SHIVAJI SAPNAR	9	
5	ANKIT GUPTA	14	
6	AJODIY PRAVIN RAVASAHEB	12	
7	ASHUTOSH BAPUSAHEB TOUNDKAR	15	
8	AWAGHADE ATISH SHANKAR	11	
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13	DADASAHEB NANASAHEB PAWAR	7	
14	DAHIVALKAR PUJA PRAVIN	17	
15	DAUNDKAR RAJKUMAR BALASAHEB	7	
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17	DINDE ARJUN YASHWANT	12	
18	DIPAK PRADIP KUSUMKAR	14	
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24	GAVHANE AJDUMBAR BALIRAM	14	
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32	JARHAD MAYUR POPAT	12	
33	KADAM AJINKYA BALIBA	12	
34	KAMBALE NAGANATH BHARAT	11	

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Assignment 3

Date:-20/04/2023

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SEM-VIII (AY 2022-23)

Sub:- Q & RE

Marks:-20

Roll No.	Name of student	Marks	Sign
35	KAMTIKAR RAHUL BABULAL	14	Rahulkamtikar
36	KSHIRSAGAR SADHANA SHANTLING	12	Sadhana
37	KUMBHAR MADHAV TULASHIDAS	14	Madhavkumbhar
38	KUMBHAR NARAYAN KALLAPPA	15	Narayan
39	LINGADE UMESH DILIP	07	Lingade
40	MANDALE SUNIL HARIBHAU	12	Sunil
41	MANE AKSHAY RAMLING	13	Akshay
42	MANE TRUPTI JITENDRA	10	Trupti
43	MANISH UMESH MOURYA	13	Manish
44	MANSI DEEPAK KOKANE	11	Mansi
45	MORE PRASAD DHARMARAJ	07	Prasad
46	NAGARE NIKITA SUDHIR	16	Nikita
47	NIDVANICHE ASHISH BHIM	11	Ashish
48	PALKAR RUSHIKESH FULCHAND	12	Rushikesh
49	PANASKAR SAYALI BAJIRAO	12	Sayali
50	PARASHRAM PANDURANG PATIL	13	Parashram
51	PATIL JITENDRA VASANT	13	Jitendra
52	PATIL SHUBHAM RAJENDRA	13	Shubham
53	PAWAR CHANDRAKANT KAILAS	14	Chandrakant
54	PRIYANKA RAMESH SURYAWANSHI	13	Priyanka
55	ROHIT SANDEEP SAWANT	17	Rohit
56	SAGAR SANJAY JADHAV	13	Sagar
57	SAIPRASAD NANDKUMAR SHINDE	14	Saiprasad
58	SANKET SANDEEP PATIL	17	Sanket
59	SATALE AVINASH HARISHCHANDRA	13	Avinash
60	SATHE DHANANJAY DNYANESHWAR	12	Dhananjay
61	SHAHIL PAWAR	17	Shahil
62	SHINDE GANESH BALASO	17	Ganesh
63	SHINKAR PRATIK VIJAY	13	Pratik
64	SUTAR RUSHIKESH HANUMANT	17	Rushikesh
65	TAKBHATE SHUBHAM JAGADISH	11	Shubham
66	TELGOTE NILESH DEORAO	11	Nilesh
67	UGWEKAR DHANANJAY SHRIKRISHNA	16	Dhananjay
68	VICHARE PRATHAMESH DIPAK	17	Prathamesh

CAYMET'S

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering
Assignment 2

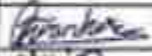
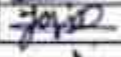
Date:-20/04/2023


Class: BE Mech

SEM-VIII (AY 2022-23)

Sub:- Q & RE

Marks:-20

Roll No.	Name of student	Marks	Sign
69	WANKAR JAYESH RAMESH	12	
70	YASIN RAMJAN MUJAWAR	13	


Prof. A. H. H. H. H.
Subject Teacher

Topic : _____

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ND
Act

Page No. : _____

Date. : / /

Name - Dixit Prayant Manikrao

Roll No - 2019

Subject - CORE

- Assignment No 2.

A-1 | A-2
9 | 9

Q.1

(a) Define

i] Failure density :-

At any point in life of component the incremental change in number of failure per associated with incremental change in time

ii] Hazard rate :-

At a particular time, the rate of change of number of item, that have failed divided by the number of items surviving

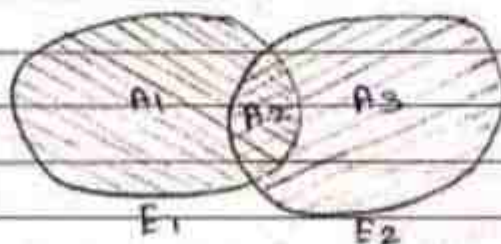
$$\lambda(t) = \frac{f(t)}{R(t)}$$

(b) Explain different laws of probability with example.

→ Probability can be defined in number of ways. we will consider two definitions namely: the relative frequency & axiomatic definitions.

1] Union & intersection of two events :-

* If E_1 and E_2 denotes two events, then the union of E_1 & E_2 means occurrence of event E_1 or E_2 or both. It denoted by $E_1 \cup E_2$ or $E_1 + E_2$



* Intersection of E_1 & E_2 means the joint occurrence of event E_1 or E_2 or both.

* E_1 = shortage of material

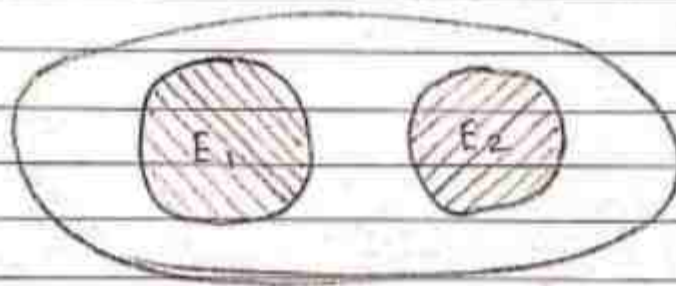
E_2 = shortage of skilled workers in plant then

$E_1 \cup E_2$ = shortage of material or workers are both

$E_1 \cap E_2$ = shortage of material & skilled workers

$$\begin{aligned} \therefore P(E_1 \cup E_2) &= P(E_1) + P(E_2) - P(E_1 \cap E_2) \\ &= P(E_1) + P(E_2) - P(E_1) \cdot P(E_2) \end{aligned}$$

2] Mutually Exclusive events:-



When two sets E_1 & E_2 not having common elements the area do not overlaps in Venn diagram are called mutually exclusive or disjoint events

e.g.

E_1 = rain in locality.

E_2 = Drough in the same locality.

$$P(E_1 \cap E_2) = 0$$

$$P(E_1 \cup E_2) = P(E_1) + P(E_2)$$

3] Complementary events:-

Associated with any event there is

Topic : _____

Another event known as complementary event denoted as \bar{E}
 2] If sample space corresponding to event E is represented as 's' in the venn diagram.

The remaining space \bar{s} denoted complement or negation of E as \bar{E}

3] If $P(E)$ & $P(\bar{E})$ are respective probabilities when $P(E) + P(\bar{E}) = 1$

E = Appearance of no 6 upon a rolling die

\bar{E} = Appearance of any other number

$$n(E) = 1$$

$$n(\bar{E}) = 5$$

$$\therefore P(E) = \frac{1}{6} \text{ \& } P(\bar{E}) = 1 - P(E) = \frac{5}{6}$$

4] Conditional Probability:-

The occurrence of event E_2 , when it is known that E_1 has occurred, is known as the conditional event & is denoted as $\frac{E_2}{E_1}$. The probability of event is defined as:-

$$P\left(\frac{E_2}{E_1}\right) = \frac{P(E_2 \cap E_1)}{P(E_1)} = \frac{P(E_1) \times P(E_2)}{P(E_1)}$$

5] The test tests are conducted on 500 screws & results are tabulated as given below find failure density hazard rate of screw.

Topic : _____

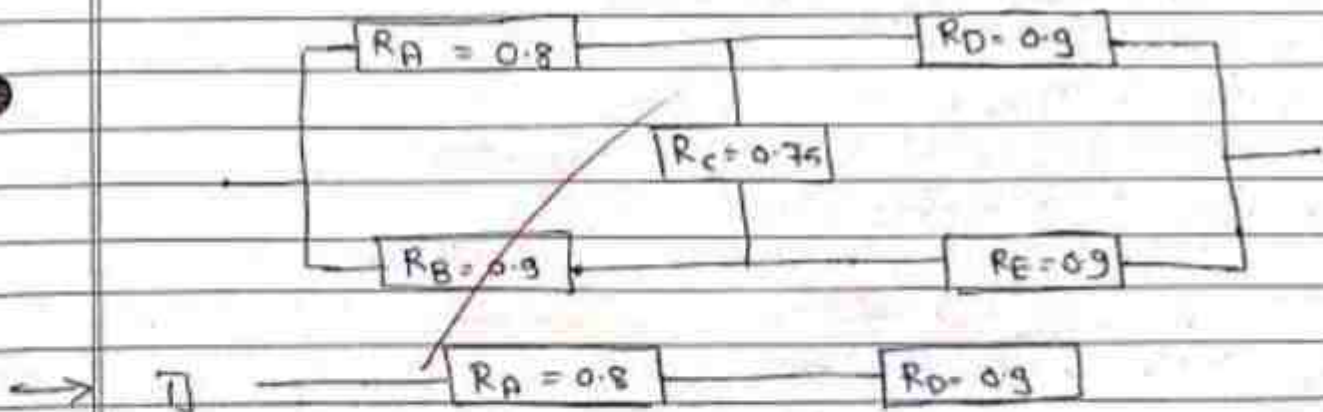
Page No. : 4

Date : / /

Time Interval hr	Failure density per hr	Hazard rate of screw per hr
0-10	$\frac{174}{500} \times 10 = 3.48$	$\frac{174}{500} \times 10 = 3.48$
10-20	$\frac{126}{500} \times 10 = 2.52$	$\frac{126}{326} \times 10 = 3.86$
20-30	$\frac{85}{500} \times 10 = 1.5$	$\frac{85}{200} \times 10 = 4.25$
40-50	$\frac{40}{500} \times 10 = 0.8$	$\frac{40}{40} \times 10 = 10$
30-40	$\frac{75}{500} \times 10 = 1.5$	$\frac{75}{115} \times 10 = 6.52$

Q.2

a) Find the reliability of system using conditional probability method



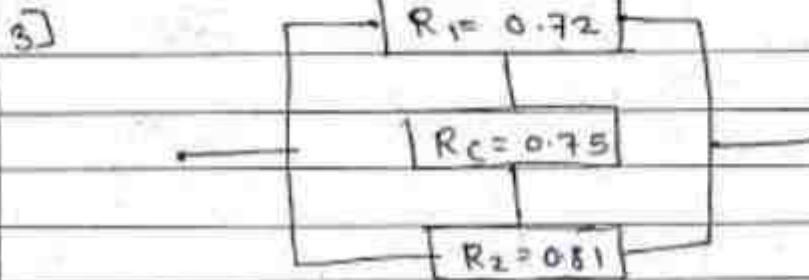
$$R_1 = R_A \times R_D$$

$$= 0.8 \times 0.9$$

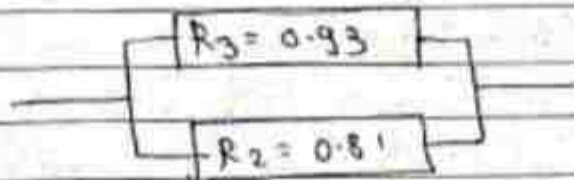
$$R_1 = 0.72$$



$$\begin{aligned} R_2 &= R_D \times R_E \\ &= 0.9 \times 0.9 \\ R_2 &= 0.81 \end{aligned}$$



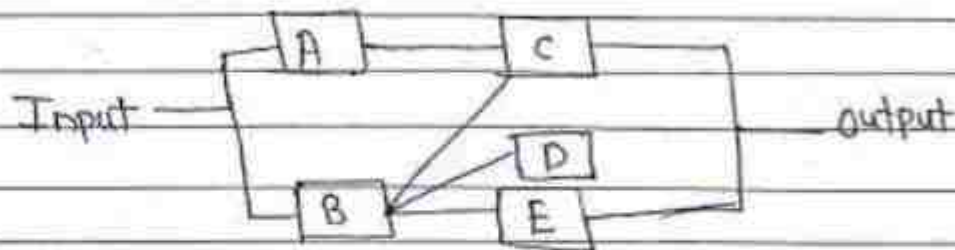
$$\begin{aligned} R_3 &= 1 - [(1 - R_1) \times (1 - R_C)] \\ &= 1 - [(1 - 0.72) \times (1 - 0.81)] \\ R_3 &= 0.93 \end{aligned}$$



$$\begin{aligned} 4] R_C &= 1 - [(1 - R_3) \times (1 - R_2)] \\ &= 1 - [(1 - 0.93) \times (1 - 0.81)] \\ R_C &= 0.98 \end{aligned}$$

Reliability of system is 0.98

- b) Find reliability of the system using cut set method Also draw equivalent block diagram using minimal cut set element.



Minimal cut sets are

$$C_1 = AB$$

$$C_2 = BC$$

$$C_3 = CDE$$

Failure of system is given by.

$$F(s) = P[(\bar{A}\bar{B}) \text{ or } (\bar{B}\bar{C}) \text{ or } (\bar{C}\bar{D}\bar{E})]$$

$$= P(AB) + P(\bar{B}\bar{C}) + P(\bar{C}\bar{D}\bar{E}) - P(\bar{A}\bar{B}\bar{C}) - P(\bar{B}\bar{C}\bar{D}\bar{E})$$

$$- P(\bar{A}\bar{B}\bar{C}, \bar{D}\bar{E}) + P(\bar{A}\bar{B}\bar{C}, \bar{D}\bar{E})$$

$$= P(\bar{A}\bar{B}) + P(\bar{B}\bar{C}) + P(\bar{C}\bar{D}\bar{E}) - P(\bar{A}\bar{B}\bar{C}) - P(\bar{B}\bar{C}\bar{D}\bar{E})$$

$$= P(\bar{A})P(\bar{B}) + P(\bar{B})P(\bar{C}) + P(\bar{C})P(\bar{D})P(\bar{E}) - P(\bar{A})P(\bar{B})$$

$$P(\bar{C}) - P(\bar{B})P(\bar{C})P(\bar{D})P(\bar{E})$$

$$= (1 - P_A)(1 - P_B) + (1 - P_B)(1 - P_C) + (1 - P_C)(1 - P_D) + (1 - P_D)(1 - P_E)$$

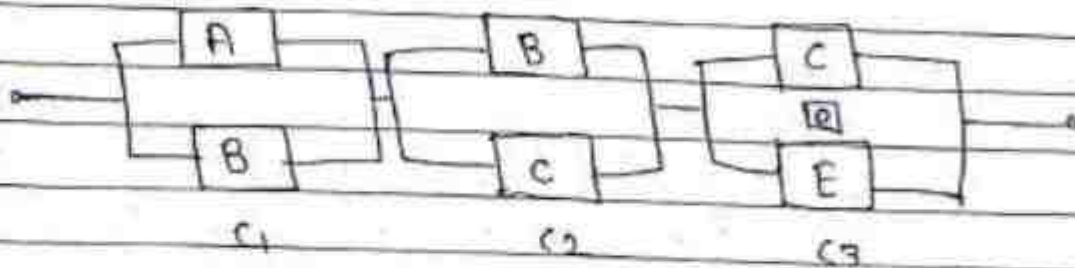
$$F(s) = 1 - P_A P_C + 1 - P_A P_B P_C + P_B P_D - P_B P_C + P_B P_D P_E - P_B P_C$$

$$+ P_B P_C P_D + P_B P_C P_E + P_B P_C P_D + P_E$$

$$R(s) = 1 - F(s) = P_A P_C + P_B P_C + P_B P_D + P_B P_E + P_A P_B P_C -$$

$$P_B P_D P_E - P_B P_C P_D - P_B P_C P_E + P_B P_C P_D P_E$$

Block diagram using minimal cut set element the cut set denoted by C_1 , C_2 & C_3 are assumed to be connected in series, since occurrence of any one cut set implies the failure of system.



c) what is reliability allocation? write the advantages of reliability allocation method.

1] Process of assigning the reliability requirements to individual component to attain the specialized system reliability is called reliability allocation or apportionment

2] purpose of assigning the reliability requirements to individual component to attain the specialized system reliability.

3] Generally reliability factor of a system is known or specified on basis of overall mission requirements.

4] If system comprises many element & unit, we must have a method to determine reliability factor for each of them, so that when they are assembled to form a system the system reliability have a desire value.

* Advantages of reliability allocation methods-

1] The allocation distributes reliability of subsystem & individual component into more critical blocks.

2] It help optimize the best combination of component ~~and~~ reliability improvement that ~~met~~ meet the intended goals and at sufficient allocated costs.

3] It gives a detailed overview of how your business expenses are used.



Sub: Quality & Reliability Engg

Sub Code: 402050A

Faculty In-charge: Mr. Ashish H Raut

Date:-05/05/2023

Class:- BE (MECH)

Max Marks: 20

-
- 1 a Write name and applications of symbols used in Construction of Fault tree with neat sketches 4 CO5
- b For an emergency operation theater in a hospital, the power is obtained from the main city supply through a transformer connected in series. To ensure and uninterrupted series supply, an auxiliary generator is also used with a suitable switch over. The probability of failure of the main city supply is 0.01 and transformer reliability is 0.996. The auxiliary power generator has a reliability factor of 0.99. Draw a block diagram for the system. Construct the fault tree and calculate reliability of the system. 6 CO5
- 2 a Write Objectives of Maintenance. Explain different types of Maintenance 4 CO6
- b Write short notes on 6 CO6
- i) Reliability Growth Testing
 - ii) Markov Chain Analysis
-

CAYME'S
Siddhant College of Engineering, Sudumbare
 Department of Mechanical Engineering
Assignment 3

Class: BE Mech
 Sub: Q & RE

Date: 05/05/2023
 SEM-VIII (AY 2022-23)

Roll No.	Name of student	Marks	Sign
1	ABHISHEK KUMAR YADAV		
2	AKASH DADASO JADHAV	17	Abhishe
3	ANIKET DATTATRAYA SASE	12	Aniket
4	ANIKET SHIVAJI SAPNAR	17	Sasapna
5	ANKIT GUPTA	11	Ankit
6	AJODUT PRAVIN RAVASAHEB	10	Ajodut
7	ASHUTOSH BAPUSAHEB TOUNDKAR	13	Ashutosh
8	AWAGHADE ATISH SHANKAR	11	Atish
9	BHARAT BARKU BORYE	13	Bharat
10	BIDAYE YASH RAMCHANDRA	11	Yash
11	CHAUDHARI ANUP HIRALAL	10	Anup
12	CHAVHAN ASHWINI SUKHDEV	15	Ashwini
13	DADASAHEB NANASAHEB PAWAR	10	Dadasaheb
14	DAHIVALKAR PUJA PRAVIN	10	Puja
15	DAUNDKAR RAJKUMAR BALASAHEB	14	Rajkumar
16	DESHMUKH AKASH SAMPAT	15	Akash
17	DINDE ARJUN YASHWANT	12	Arjun
18	DIPAK PRADIP KUSUMKAR	13	Dipak
19	DIXIT PRASHANT MANIKRAO	16	Prashant
20	GADE ADESH BALASAHEB	11	Adesh
21	GADE SANTOSH SARJERAO	12	Santosh
22	GAIKWAD KUNDAN KISHOR	15	Kundan
23	GANESH TULSHIDAS KUMBHAR	13	Ganesh
24	GAVHANE AUDUMBAR BALIRAM	23	Audumbar
25	GAWADE AJAY MOHAN	11	Ajay
26	GHARE SAGAR VITTHAL	09	Sagar
27	GHURE DILIP DATTATRAY	12	Dilip
28	GUPTA KRISHNA DINESH	10	Krishna
29	HIRATOT SHRISHAIL NAGESHI	13	Shrishail
30	JADHAV SHUBHAM RAJENDRA	11	Shubham
31	JADHAV SIDDHESH KAILAS	12	Siddhesh
32	JARHAD MAYUR POPAT	8	Mayur
33	KADAM AJINKYA BALIBA	12	Ajinkya
34	KAMBALE NAGANATH BHARAT	9	Naganath
35	KAMTIKAR RAHUL BABULAL	13	Rahul
		12	Rahul

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering
Assignment 3

Class: BE Mech
Sub: Q & RE

Date: 05/05/2023
SEM-VIII (AY 2022-23)

Marks: 20

Roll No.	Name of student	Marks	Sign
36	KSHIRSAGAR SADHANA SHANTUNG	10	Ssk
37	KUMBHAR MADHAV TULASHIDAS	15	MParabhe
38	KUMBHAR NARAYAN KALLAPPA	11	Kallappa
39	LINGADE UMESH DILIP	7	Lingade
40	MANDALE SUNIL HARIBHAU	12	Sunil
41	MANE AKSHAY RAMLING	11	Akshay
42	MANE TRUPTI JITENDRA	09	Trupti
43	MANISH LIMESH MOURYA	14	Manish
44	MANSI DEEPAK KOKANE	12	Mansi
45	MORE PHASAD DHARMARAJ	10	Phasad
46	NAGARE NIKITA SUDHIR	14	Nikita
47	NIDVANICHE ASHISH BHIM	13	Ashish
48	PALKAR RUSHIKESH FULCHAND	12	Rushikesh
49	PANASKAR SAYALI BAJIRAO	14	Sayali
50	PARASHRAM PANDURANG PATIL	14	Parashram
51	PATIL JITENDRA VASANT	11	Jitendra
52	PATIL SHUBHAM RAJENDRA	12	Shubham
53	PAWAR CHANDRAKANT KAILAS	15	Chandrakant
54	PRIYANKA RAMESH SURYAWANSHI	12	Priyanka
55	ROHIT SANDEEP SAWANT	13	Rohit
56	SAGAR SANJAY JADHAV	11	Sagar
57	SAIPRASAD NANDKUMAR SHINDE	11	Saiprasad
58	SANKET SANDEEP PATIL	14	Sanket
59	SATALE AVINASH HARISHCHANDRA	13	Avinash
60	SATHE DHANANJAY DNYANESHWAR	13	Sathe
61	SHAHIL PAWAR	14	Shahil
62	SHINDE GANESH BALASO	11	Shinde
63	SHINKAR PRATIK VUAY	10	Shinkar
64	SUTAR RUSHIKESH HANUMANT	12	Rushikesh
65	TAKBHATE SHUBHAM JAGADISH	11	Shubham
66	TELGOTE NILESH DEORAO	10	Nilesh
67	UGWEKAR DHANANJAY SHRIKRISHNA	14	Ugwekar
68	VICHARE PRATHAMESH DIPAK	14	Prathamesh
69	WANKAR JAYESH RAMESH	11	Wankar
70	YASIN RAMJAN MUJAWAR	14	Yasin

Prof. A. H. Raut
Subject Teacher



CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE

Department of Mechanical Engineering Mid Term Test

Sub: Quality & Reliability Engg
Sub Code: 402050A
Faculty In-charge: Mr. Ashish H Raut

Date:- 29/03/2022
Times:- 1 hr
Max Marks: 20

- 1 a. Explain Cost of Quality 5 CO1
b. Write Short Note on Quality Circle. 5 CO1

OR

- 2 a. Enlist Seven quality tools. Explain any one tool 5 CO1
b. Write Short note on PDCA cycle 5 CO1

- 3 a. Enlist different types of control charts & their applications/ uses. 4 CO2
b. The number of defects found in each sample of paper of 1 square meter area are shown below. Draw appropriate control chart & state whether the process is under control or not. If sample falling outside control limits is taken out, what are the new control limits? 6 CO2

Sample	1	2	3	4	5	6	7	8	9	10	11	12
No of Defects Found	5	6	2	5	2	6	6	13	6	5	6	4

OR

- 4 a. Enlist and explain different types of sampling plans. 4 CO2
b. X and R control charts are maintained for a dimension of a component. The data is collected. The subgroup size for the calculations is taken as 5. The values of X and R are calculated for each subgroup. The values of summation of X and R are for 25 subgroups are 614.8 and 120 respectively. Compute the control limits for X chart $R = 2.32\sigma$ 6 CO2

ALL THE BEST

Siddhant College of Engineering, Sudumbare

Department of Mechanical Engineering

Mid Term Test

Date:-29/03/2023

SEM-VIII (AY 2022-23)

Class: BE Mech

Sub:- Q & RE

Marks:-20

Roll No.	Name of student	Marks	Sign
1	ABHISHEK KUMAR YADAV	16	<i>Abhishek</i>
2	AKASH DADASO JADHAV	09	<i>Akash</i>
3	ANIKET DATTATRAYA SASE	11	<i>Sase</i>
4	ANIKET SHIVAJI SAPNAR	12	<i>Aniket</i>
5	ANKIT GUPTA	16	<i>Ankit</i>
6	AOUDIT PRAVIN RAVASAHEB	13	<i>Audit</i>
7	ASHLITOSH BAPUSAHEB TOUNDKAR	11	<i>Ashlitosh</i>
8	AWAGHADE ATISH SHANKAR	16	<i>Atish</i>
9	BHARAT BARKU BORYE	10	<i>Bharat</i>
10	BIDAYE YASH RAMCHANDRA	11	<i>Yash</i>
11	CHAUDHARI ANUP HIRALAL	11	<i>Anup</i>
12	CHAVHAN ASHWINI SUKHDEV	12	<i>Ashwini</i>
13	DADASAHEB NANASAHEB PAWAR	12	<i>Dadashaheb</i>
14	DAHIVALKAR PUJA PRAVIN	08	<i>Puja</i>
15	DAUNDKAR RAJKUMAR BALASAHEB	10	<i>Rajkumar</i>
16	DESHMIKH AKASH SAMPAT	10	<i>Akash</i>
17	DINDE ARJUN YASHWANT	11	<i>Arjun</i>
18	DIPAK PRADIP KUSUMKAR	15	<i>Dipak</i>
19	DIXIT PRASHANT MANIKRAO	11	<i>Prashant</i>
20	GADE ADESH BALASAHEB	12	<i>Aadesh</i>
21	GADE SANTOSH SARJERAO	16	<i>Santosh</i>
22	GAIKWAD KUNDAN KISHOR	13	<i>Kundan</i>
23	GANESH TULSHIDAS KUMBHAR	11	<i>Ganesh</i>
24	GAVHANE AUDUMBAR BALIRAM	14	<i>Audumbar</i>
25	GAWADE AJAY MOHAN	15	<i>Ajay</i>
26	GHARE SAGAR VITTHAL	12	<i>Sagar</i>
27	GHURE DILIP DATTATRAY	14	<i>Dilip</i>
28	GUPTA KRISHNA DINESH	17	<i>Krishna</i>
29	HIRATOT SHRISHAIL NAGESHI	12	<i>Hiratot</i>
30	JADHAV SHUBHAM RAJENDRA	14	<i>Shubham</i>
31	JADHAV SIDDESH KAILAS	14	<i>Siddesh</i>
32	JARHAD MAYUR POPAT	12	<i>Mayur</i>
33	KADAM AJINKYA BALIBA	06	<i>Ajinkya</i>
34	KAMBALE NAGANATH BHARAT	13	<i>Naganath</i>
35	KAMTIKAR RAHUL BABULAL	14	<i>Rahul</i>

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering
Mid Term Test

Date:-29/03/2023

Class: BE Mech

SEM-VIII (AY 2022-23)

Sub:- Q & RE

Marks:-20

Roll No.	Name of student	Marks	Sign
36	KSHIRSAGAR SADHANA SHANTLING	11	
37	KUMBHAR MADHAV TULASHIDAS	12	
38	KUMBHAR NARAYAN KALLAPPA	15	
39	LINGADE UMESH DILIP	16	
40	MANDALE SUNIL HARIBHAU	09	
41	MANE AKSHAY RAMLING	15	
42	MANE TRUPTI JITENDRA	13	
43	MANISH UMESH MOURYA	08	
44	MANSI DEEPAK KOKANE	14	
45	MORE PRASAD DHARMARAJ	16	
46	NAGARE NIKITA SUDHIR	14	
47	NIDVANICHE ASHISH BHIM	12	
48	PALKAR RUSHIKESH FULCHAND	13	
49	PANASKAR SAYALI BAJRAO	13	
50	PARASHRAM PANDURANG PATIL	12	
51	PATIL JITENDRA VASANT	13	
52	PATIL SHUBHAM RAJENDRA	12	
53	PAWAR CHANDRAKANT KAILAS	06	
54	PRIYANKA RAMESH SURYAWANSHI	13	
55	ROHIT SANDEEP SAWANT	13	
56	SAGAR SANJAY JADHAV	07	
57	SAIPRASAD NANDKUMAR SHINDE	17	
58	SANKET SANDEEP PATIL	12	
59	SATALE AVINASH HARISHCHANDRA	16	
T ₂₀ 60	SATHE DHANANJAY DNYANESHWAR	16	
61	SHAHIL PAWAR	14	
62	SHINDE GANESH BALASO	11	
63	SHINKAR PRATIK VIJAY	15	
64	SUTAR RUSHIKESH HANUMANT	04	
65	TAKBHATE SHUBHAM JAGADISH	10	
66	TELGOTE NILESH DEORAO	09	
67	UGWEKAR DHANANJAY SHRIKRISHNA	07	
68	VICHARE PRATHAMESH DIPAK	04	
69	WANKAR JAYESH RAMESH	08	
70	YASIN RAMJAN MUJAWAR	11	

Prof. A. H. Hant
Subject Teacher

**SIDDHANT COLLEGE OF ENGINEERING**

Verified all entries & found correct

Jr. Supervisor's Name, Signature & Date

Seat No. (in figures) ^{Roll No} 35 Centre: SCOE, sudumbre 4044

Seat No. (in words) Fifty four - Rahul Babulal Kamtikar

Day & Date: 29/03/2023 Examination: Mid term test

Subject: Quality and reliability - Engg. Section: -

Course / Paper No. - Medium of Answer: English

Main Ans. Book + No. of Supplements 0 = Total

Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks	-	08	-	-	06								14/20	fr
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)

Q2)

Seven quality tools :-

- 1) checksheet
- 2) Flow charts
- 3) Histograms
- 4) Pareto charts
- 5) Cause and effect diagram
- 6) scatter diagram
- 7) control charts

Scatter diagram :-

The scatter diagram graph is a pair of numerical data with one variable on each axis, to look for a relationship between them.

following steps are involved in drawing and interpreting scatter diagram

- 1) select the two factor in which relationship is required to be studied.

- 2) Collect the data.
- 3) Draw the axes of scatter diagram.
- 4) Plot each set of data.
- 5) Interpretation of results.

Three types of relationship are recognised in scatter diagram.

1) Positive relationship -

An increase in driving factor cause increase in performance characteristics.

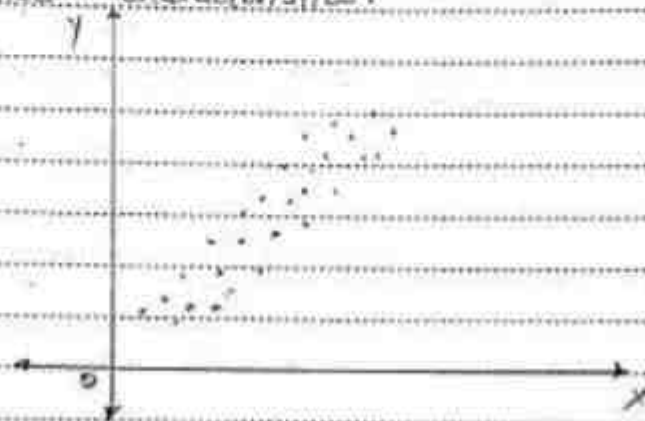


Fig. Positive correlation

2) Negative correlation -

The driving factor and performance factor are related inversally, i.e. an increase in the driving factor causes a decrease in the performance factor.

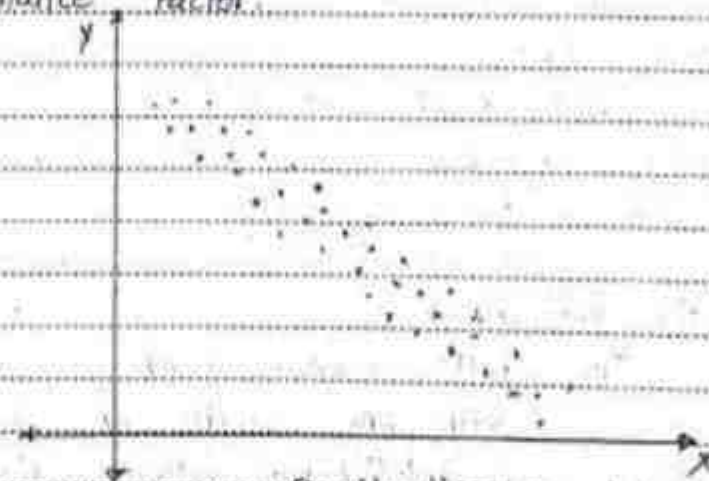


Fig. Negative correlation

3) No correlation -

If a variation in x-axis has no effect on value of characteristics on y-axis, these two factor said to be not related to each other.

Q1

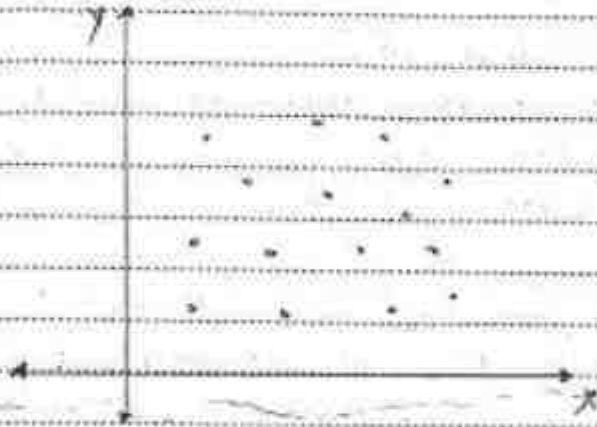


Fig. No. correlation



CAYMET'S
SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE
Department of Mechanical Engineering
End Term Test

Sub: Quality & Reliability Engg
Sub Code: 402050A
Faculty In-charge: Mr. Ashish H Raut

Date:- 17/05/2023
Times:- 2 hr
Max Marks: 40

- 1 a. Accelerometers of 350 numbers were tested for 120 hrs. and the number of failed accelerometers out of 350 accelerometers is tabulated as given below. Find the hazard rate reliability and tabulate the results

Time Interval (hrs.)	0-20	20-40	40-60	60-80	80-100	100-120
No. of failed accelerometers	157	73	55	33	20	12

6 CO3

- b. Explain Bath Tub Curve with neat sketch

4 CO3

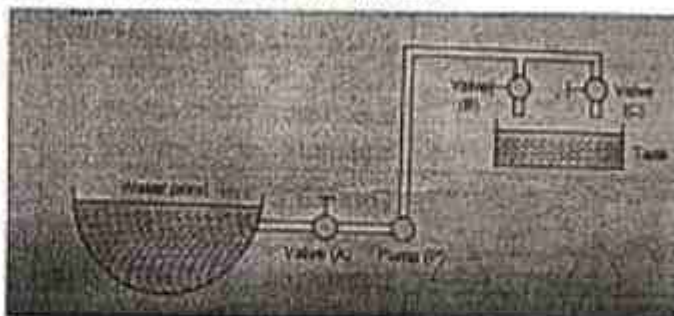
- 2 a. Using Conditional reliability method evaluate the reliability of the following system

10 CO4



- 3 a. Fig shows three valves A, B and C, a pump (P), a pipeline and a tank to collect water pumped from the pond. Construct the fault tree corresponding to the top event "no flow of water into the tank"

10 CO5



- 4 a. Write short note on

10 CO6

1. Preventive and Corrective maintenance
2. Reliability centred maintenance

ALL THE BEST

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering
End Term Test

Date: 17/15/2023

Class: BE Mech

SEM-VIII (AY 2022-23)

Sub:- Q & RE

Marks:-40

Roll No.	Name of student	Marks	Sign
1	ABHISHEK KUMAR YADAV	19	
2	AKASH DADASO JADHAV	19	
3	ANIKET DATTATRAYA SASE	19	
4	ANIKET SHIVAJI SAPNAR	16	
5	ANKIT GUPTA	26	
6	AODUT PRAVIN RAVASAHEB	15	
7	ASHUTOSH BAPUSAHEB TOUNDKAR	16	
8	AWAGHADE ATISH SHANKAR	28	
9	BHARAT BARKU BORYE	23	
10	BIDAYE YASH RAMCHANDRA	12	
11	CHAUDHARI ANUP HIRALAL	27	
12	CHAVHAN ASHWINI SUKHDEV	14	
13	DADASAHEB NANASAHEB PAWAR	20	
14	DAHIVALKAR PUJA PRAVIN	27	
15	DAUNDKAR RAJKUMAR BALASAHEB	15	
16	DESHMUKH AKASH SAMPAT	28	
17	DINDE ARJUN YASHWANT	15	
18	DIPAK PRADIP KUSUMKAR	18	
19	DIXIT PRASHANT MANIKRAO	19	
20	GADE ADESH BALASAHEB	19	
21	GADE SANTOSH SARJERAO	27	
22	GAIKWAD KUNDAN KISHOR	13	
23	GANESH TULSHIDAS KUMBHAR	24	
24	GAVHANE AUDUMBAR BALIRAM	19	
25	GAWADE AJAY MOHAN	21	
26	GHARE SAGAR VITTHAL	16	
27	GHURE DILIP DATTATRAY	18	
28	GUPTA KRISHNA DINESH	28	
29	HIRATOT SHRISHAIL NAGESHI	20	
30	JADHAV SHUBHAM RAJENDRA	27	
31	JADHAV SIDDESH KAILAS	18	
32	JARHAD MAYUR POPAT	13	
33	KADAM AJINKYA BALIBA	12	
34	KAMBALE NAGANATH BHARAT	13	
35	KAMTIKAR RAHUL BABULAL	14	

Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering
End Term Test

Class: BE Mech
Sub:- Q & RE

Date:- 17/5/2023
SEM-VIII (AY 2022-23)

Marks:-40

Roll No.	Name of student	Marks	Sign
36	KSHIRSAGAR SADHANA SHANTLING	15	
37	KUMBHAR MADHAV TULASHIDAS	24	
38	KUMBHAR NARAYAN KALLAPPA	19	
39	LINGADE UMESH DILIP	20	
40	MANDALE SUNIL HARIBHAU	25	
41	MANE AKSHAY RAMLING	27	
42	MANE TRUPTI JITENDRA	19	
43	MANISH UMESH MOURYA	18	
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46	NAGARE NIKITA SUDHIR	16	
47	NIDVANCHE ASHISH BHIM	14	
48	PALKAR RUSHIKESH FULCHAND	13	
49	PANASKAR SAYALI BAJIRAO	19	
50	PARASHRAM PANDURANG PATIL	21	
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56	SAGAR SANJAY JADHAV	18	
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58	SANKET SANDEEP PATIL	27	
59	SATALE AVINASH HARISHCHANDRA	27	
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61	SHAHIL PAWAR	25	
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63	SHINKAR PRATIK VIJAY	16	
64	SUTAR RUSHIKESH HANUMANT	09	
65	TAKBHATE SHUBHAM JAGADISH	18	
66	TELGOTE NILESH DEORAO	22	
67	UGWEKAR DHANANJAY SHRIKRISHNA	20	
68	VICHARE PRATHAMESH DIPAK	18	
69	WANKAR JAYESH RAMESH	16	
70	YASIN RAMJAN MUJAWAR	23	

Prof A H Raut
Subject Teacher

**SIDDHANT COLLEGE OF ENGINEERING**

Verified all entries & found correct

Jr. Supervisor's Name, Signature & Date

Seat No. (In figures) Roll no. :- 11

Centre : SCOE - 4044

Seat No. (In words) Anup H. Chaudhari

Day & Date : 17/05/23 - Tuesday Examination : End term

Subject : QRE

Section :

Course / Paper No. B.E. Mech

Medium of Answer : English

Main Ans. Book + No. of Supplements : 1 + 00 = Total 01

Q. No	1	2	3	4	5	6	7	8	9	10	11	12	Total	Signature of Examiner
Marks	4	7	7	7	-----								27/40	AH
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) Explain Bath tub curve with neat Sketch.



1) A typical curve showing three basic modes of failure is & it is generally called as 'bath tub' curve because of its shape.

2) The life of human being also was found to follow similar curve i.e. childhood (early failures), normal age period from 10 years to 45 years (old age as onwards (wear out period)).

3) A large number of mechanical & electronic component or systems has generally same failure characteristic.

4) Region I (period t_0 to t_1) Infant mortality. In front ~~near~~ failure or early failures caused due to reason as defective materials, poor design, poor quality control.

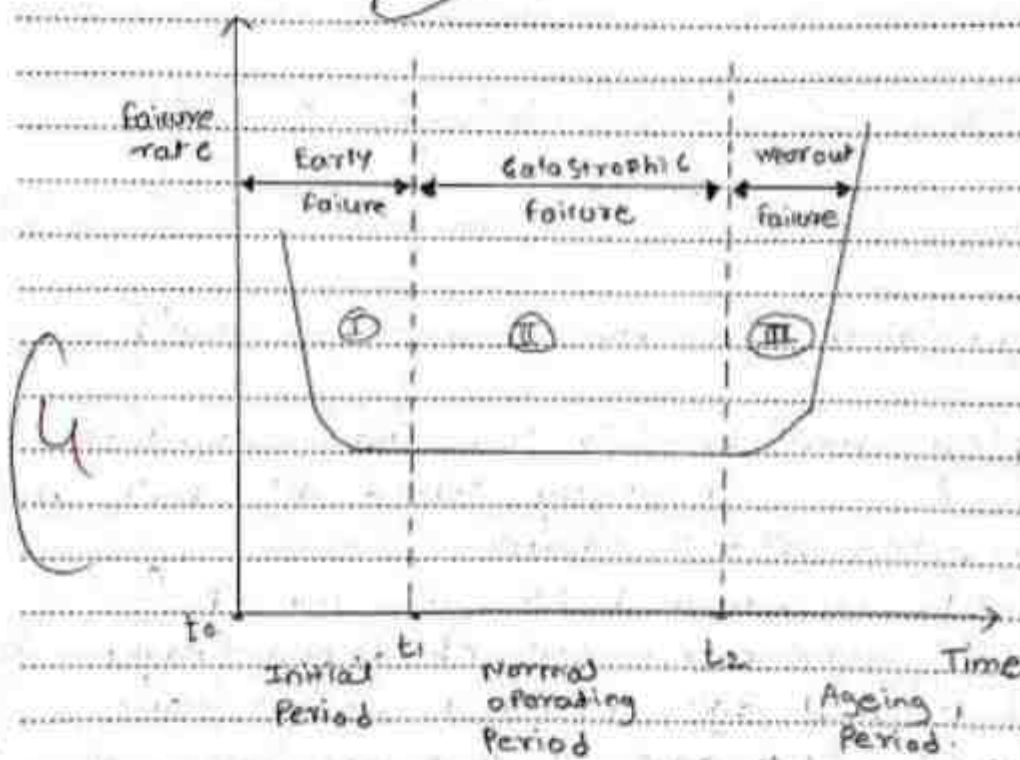
5] Region II (Period $t_1 - t_2$) Normal operation Period :-

As the defective components are replaced by newer ones the reliability of system increases. The next phase of failures occurs in ^{for} normal (operating) period.

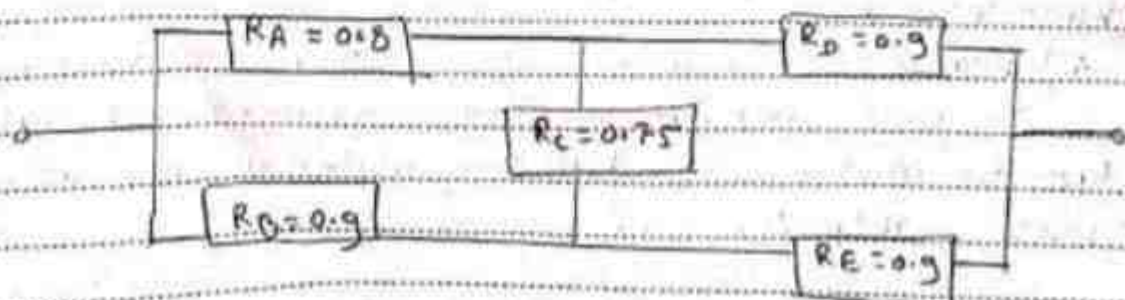
These failure are also known as random failure.

6] Region III (Period t_2 onwards) :- wear out / Aging Period.

After time t_2 wear out or aging failure occurs due to excessive wear after expected useful design life has been exceeded.

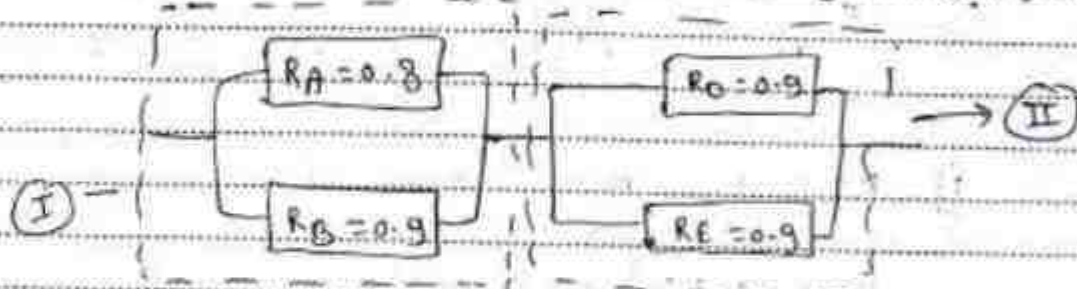


Q. 2) Using conditional reliability method evaluate the reliability of following



→ Critical component is $R_c = 0.75$

I] when critical component is good (R_c)



$$1) R_I = 1 - [(1 - R_A)(1 - R_B)]$$
$$= 1 - [(1 - 0.8)(1 - 0.9)]$$

$$R_I = 0.98$$

$$2) R_{II} = [1 - (1 - R_C)(1 - R_E)]$$
$$= 1 - [(1 - 0.9)(1 - 0.9)]$$

$$R_{II} = 0.99$$

3) Reliability of system when component is in series

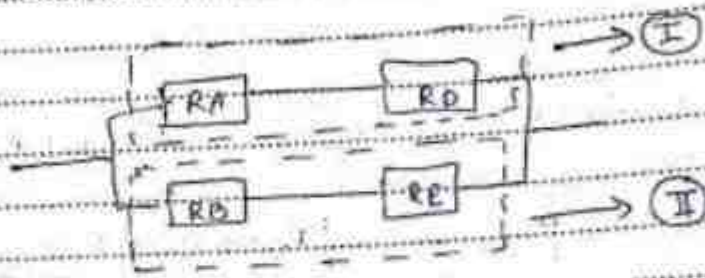
$$R_s = R_I \times R_{II}$$

$$= 0.98 \times 0.99$$

$$R_s = 0.97$$

~~Bad reliability = $R_s = 0.71$~~

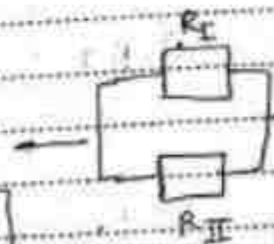
I] when Critical component is bad.



$$\begin{aligned} 1) R_I &= R_A \times R_D \\ &= 0.8 \times 0.9 \\ \boxed{R_I} &= \boxed{0.72} \end{aligned}$$

$$\begin{aligned} 2) R_{II} &= R_B \times R_E \\ &= 0.9 \times 0.9 = 0.81 \end{aligned}$$

$$\begin{aligned} 3) R_{III} &= 1 - [(1 - R_I)(1 - R_{II})] \\ &= 1 - [(1 - 0.72)(1 - 0.81)] \\ &= 1 - [0.053] \\ R_{III} &= 0.94 \end{aligned}$$



II] Substituting values in formulae :-

$$R_S = \left[\begin{array}{l} \text{Reliability of} \\ \text{system when} \\ \text{comp is good} \end{array} \right] \times [\text{good reliability}] +$$

$$\left[\begin{array}{l} \text{Reliability of} \\ \text{system when} \\ \text{comp is bad} \end{array} \right] \times [\text{Bad reliability}]$$

$$= 0.97 \times 0.75 + 0.94 \times (1 - 0.75)$$

$$\boxed{R_S = 0.96}$$

Q. 4] Write short note on :-

1] Preventive & corrective maintenance :-

→
i] In preventive maintenance system is periodically inspected, some components are replaced lubrication, checked & adjustment are made before system fails.

2] preventive maintenance is intended to eliminate costly repairs involved during corrective type of maintenance stage when system fails.

3] preventive maintenance can be divided into following types of maintenance.

a] Running maintenance (on-line maintenance), maintenance which can only be carried out whilst the unit or plant is in use.

b] Shutdown maintenance (offline) maintenance which can only be carried out when plant or unit is not in use.

c] Time-based preventive maintenance :-
The type of maintenance is effective when failure of system is time independent & system is expected to wear out.

2] corrective maintenance :-

corrective maintenance is used after system failure. The objective of corrective maintenance is to bring system from failed state to operating state the operating as possible to increase availability.

corrective maintenance is also known as repair & can include any or all following steps.

i] Detection or verification.

ii] Isolation

iii] Disassembly

iv] Interchange

v] Reassembly

vi] Alignment

vii] Start up

2] Reliability Centred maintenance
→ 1) Reliability Centred maintenance (RCM) is a systematic methodology used to identify the preventive maintenance related tasks necessary for realizing inherent reliability of equipment at lowest cost.

2) RCM goals:- To establish design related priorities that can facilitate preventive maintenance in effective manner.

• To plan preventive maintenance tasks that can ensure safety & reliability to their original levels in the event of system or equipment deterioration.

3] RCM Principles:-

1) focus on maintaining system & equipment function.

2) Provide consistency in maintenance of all types of products.

4) RCM process:-

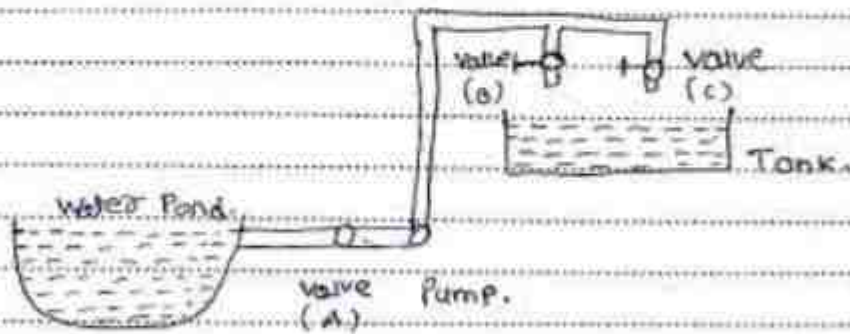
1) Identify high priority items with respect to maintenance.

2) Gather all necessary failure data.

3) Group maintenance requirements.

4) Perform fault tree analysis.

Q. 4. Fig. shows three valves A, B & C, a pump, a pipeline & a tank to collect water pumped from the pond.
 → Construct the fault tree corresponding to the top event "no flow of water into the tank".



→ Solⁿ:- Top event - No flow of water into tank
 Primary events.

(a) Valve B & C closed (failed).

(b) Pump P failed no flow of water to valve B & C.

Secondary events:-

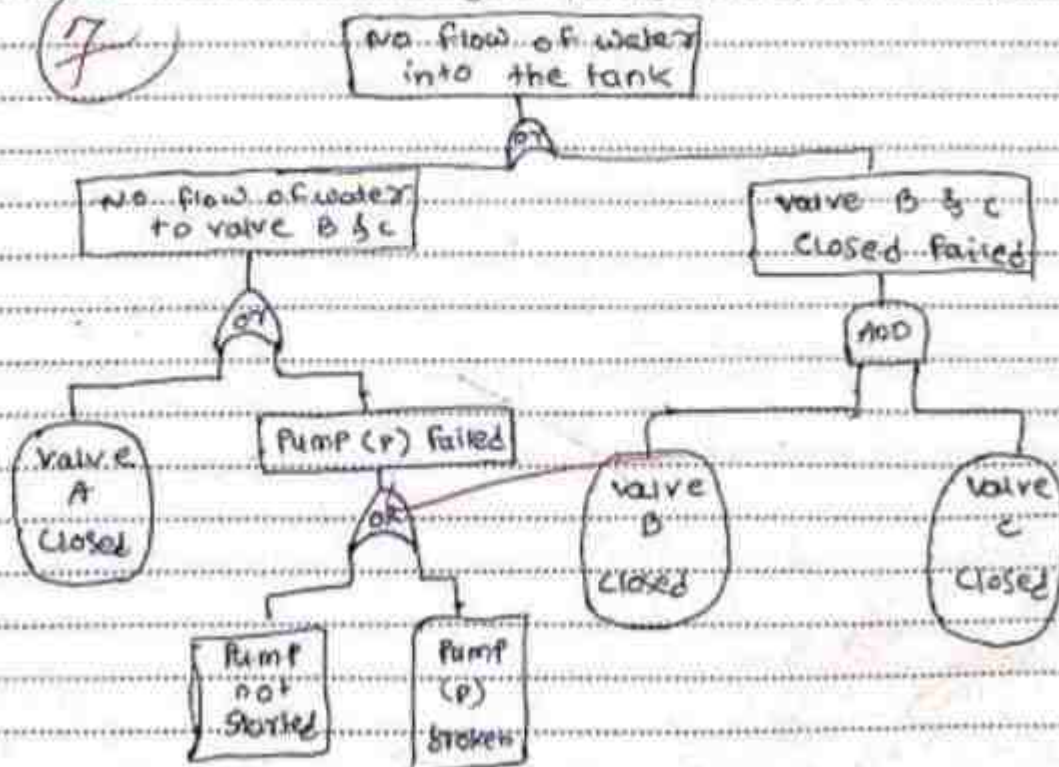
a) valve A closed (failed).

b) Pump P failed:

i] Pump (P) not started.

ii] Pump (P) broken.

7



Siddhant College of Engineering, Sudumbare
Department of Mechanical Engineering

BE (Mech)

SEM-II 2022-23

Q & RE Submission sheet

Roll No.	Name of student	Asgn. 1	Asgn 2	Asgn 3	M.Term Test	End Term Test	INSEM Marks	Student Sign
		20	20	20	20	40	30	
1	ABHISHEK KUMAR YADAV	12	13	17	16	24	21	Abhishek
2	AKASH DADASA JADHAV	10	16	12	09	19	18	Akash
3	ANIKET DATTATRAYA SASE	15	12	17	11	19	16	SASE
4	ANIKET SHIVAJI SAPNAR	11	9	11	12	16	14	Aniket
5	ANKIT GUPTA	11	14	16	16	26	17	Ankit
6	AODUT PRAVIN RAVASAHEB	14	12	13	13	15	12	Aodut
7	ASHUTOSH BAPUSAHEB TOUNDKAR	13	15	11	11	16	12	Ashutosh
8	AWAGHADE ATISH SHANKAR	13	11	13	16	28	13	Atish
9	BHARAT BARKU BORYE	10	11	11	10	23	16	Bharat
10	BIDAYE YASH RAMCHANDRA	11	10	10	11	12	08	Yash
11	CHAUDHARI ANUP HIRALAL	17	18	15	11	27	15	Anup
12	CHAVHAN ASHWINI SUKHDEV	16	13	10	12	14	15	Ashwini
13	DADASAHEB NANASAHEB PAWAR	11	7	10	12	20	18	Dadashaheb
14	DAHIVALKAR PUJA PRAVIN	13	17	14	08	27	16	Dahivalkar
15	DAUNDKAR RAJKUMAR BALASAHEB	12	7	15	10	15	15	Rajkumar
16	DESHMUKH AKASH SAMPAT	10	12	12	10	28	07	Akash
17	DINDE ARJUN YASHWANT	10	12	13	11	15	AB	Arjun
18	DIPAK PRADIP KUSUMKAR	12	12	16	15	18	16	Dipak
19	DIXIT PRASHANT MANIKRAO	13	18	11	11	19	09	Prashant
20	GADE ADESH BALASAHEB	13	12	12	12	19	13	Adesh
21	GADE SANTOSH SARJERAD	14	16	15	16	27	15	Santosh
22	GAIKWAD KUNDAN KISHOR	12	12	13	13	13	09	Kundan
23	GANESH TULSHIDAS KUMBHAR	11	12	23	11	24	17	Ganesh
24	GAVHANE AUDUMBAR BALIRAM	12	14	11	14	19	23	Audumbar
25	GAWADE AJAY MOHAN	15	12	09	15	21	13	Ajay
26	GHARE SAGAR VITTHAL	11	11	12	12	16	07	Sagar
27	GHURE DILIP DATTATRAY	11	18	10	14	18	19	Dilip
28	GUPTA KRISHNA DINESH	11	13	13	17	28	21	Krishna
29	HIRATOT SHRISHAIL NAGESHI	08	13	11	12	20	18	Shrishail
30	JADHAV SHUBHAM RAJENDRA	12	12	12	14	27	05	Shubham
31	JADHAV SIDDESH KAILAS	11	11	8	14	18	12	Siddesh
32	JARHAD MAYUR POPAT	12	12	12	12	13	06	Mayur

		AA ₁	A ₂	A ₂	T ₁	T ₂	IN	
33	KADAM AJINKYA BALIBA ✓	11	12	9	06	12	10	Shah
34	KAMBALE NAGANATH BHARAT ✓	10	11	13	13	13	18	Kulkarni
35	KAMTIKAR RAHUL BABULAL ✓	11	14	12	14	14	15	Felix
36	KSHIRSAGAR SADHANA SHANTLING ✓	12	12	10	11	15	14	Sst
37	KUMBHAR MADHAV TULASHIDAS ✓	13	14	15	12	24	16	Murthy
38	KUMBHAR NARAYAN KALLAPPA ✓	16	15	12	15	19	18	AA
39	LINGADE UMESH DILIP ✓	11	07	7	16	20	12	Jayesh
40	MANDALE SUNIL HARIBHAU ✓	11	12	12	09	25	13	Bhat
41	MANE AKSHAY RAMLING ✓	15	13	14	15	27	14	Amare
42	MANE TRUPTI JITENDRA ✓	16	10	09	15	19	19	Shree
43	MANISH UMESH MOURYA ✓	09	13	14	08	18	16	Prasad
44	MANSI DEEPAK KOKANE ✓	11	11	12	14	19	17	AA
45	MORE PRASAD DHARMARAJ ✓	11	07	10	16	12	15	Felix
46	NAGARE NIKITA SUDHIR ✓	11	16	14	12	15	12	Nikita
47	NIDVANICHE ASHISH BHIM ✓	12	11	13	12	14	06	AA
48	PALKAR RUSHIKESH FULCHAND ✓	13	12	12	13	13	16	R. Palkar
49	PANASKAR SAYALI BAJIRAO ✓	14	12	14	13	19	19	Shree
50	PARASHRAM PANDURANG PATIL ✓	10	13	14	12	21	18	Patil
51	PATIL JITENDRA VASANT ✓	15	13	11	13	28	22	Jitendra
52	PATIL SHUBHAM RAJENDRA ✓	13	13	12	12	15	17	Shubham
53	PAWAR CHANDRAKANT KAILAS ✓	10	14	15	6	27	16	AA
54	PRIYANKA RAMESH SURYAWANSHI ✓	11	13	12	13	18	22	AA
55	ROHIT SANDEEP SAWANT ✓	10	17	13	13	19	22	Shant
56	SAGAR SANJAY JADHAV ✓	10	13	11	7	18	16	Shree
57	SAIPRASAD NANDKUMAR SHINDE ✓	12	14	11	17	27	15	Shinde
58	SANKET SANDEEP PATIL ✓	13	17	14	12	27	19	Shanket
59	SATALE AVINASH HARISHCHANDRA ✓	15	13	13	16	27	17	Astale
60	SATHE DHANANJAY DNYANESHWAR ✓	08	12	13	15	27	13	Shree
61	SHAHIL PAWAR ✓	13	17	14	14	25	22	Shree
62	SHINDE GANESH BALASO ✓	12	17	14	11	21	19	Shinde
63	SHINKAR PRATIK VIJAY ✓	13	13	10	15	16	18	Shinkar
64	SUTAR RUSHIKESH HANUMANT ✓	12	13	12	4	03	15	Rushikesh
65	TAKBHATE SHUBHAM JAGADISH ✓	11	11	11	9	18	18	Shree
66	TELGOTE NILESH DEORAO ✓	12	11	10	10	22	13	AA
67	UGWEKAR DHANANJAY SHRIKRISHNA ✓	14	16	14	7	20	12	Ugwekar
68	VICHARE PRATHAMESH DIPAK ✓	17	17	14	4	18	12	Vichare
69	WANKAR JAYESH RAMESH ✓	13	12	11	8	16	12	Wankar
70	YASIN RAMJAN MUJAWAR ✓	12	13	14	11	23	16	Yasin

Prof. A. H. Bhat
Subject Teacher

Siddhant College of Engineering
Department of Mechanical Engineering
Academic Year 2022-23, Semester II.
Subject: Energy Engineering: 402048 Continuous Assessment Sheet.

PRN.	Name of The Student.	Practic	Practic	Practic	Practic	Practic	Practic	Practic	Practic	Assign	Assign	Prctis	Mid Ter	Attend	Mark out of 100	Mark out of 25	
72165753C	Gade Adesh Balasaheb	7	8	7	8	8	7	8	8	8	7	18	42	16	152	20	
72165783E	Ganesh Tulshidas Kumbhar	8	9	7	8	9	7	8	8	8	7	20	45	19	164	22	
72165772K	Ghare sagar vittal	9	7	8	7	7	8	7	7	9	7	17	43	17	153	20	
72165791F	Jitendra Vasant Patil	7	7	7	8	7	7	8	7	7	9	25	41	20	160	21	
72165775D	Krishna Gupta	9	8	8	7	8	8	7	8	8	8	23	32	15	140	20	
72165770C	Kundan Kishor Gallowad	9	8	7	8	8	7	8	8	7	7	21	40	20	158	21	
72165765G	Kurumkar deepak pradip	9	9	7	8	9	7	8	9	9	9	17	39	20	154	20	
72165784C	Madhav Tulshidas Kumbhar	7	9	7	8	9	7	8	9	9	8	18	44	18	162	21	
72165785M	Mane Trupti Jitendra	8	7	8	8	7	8	8	7	9	9	22	44	20	160	22	
72029376G	Manish Umesh Mourya	9	8	8	8	8	8	8	8	8	7	17	37	17	151	20	
72165781J	Manoj Kokane	9	8	7	8	8	7	8	8	9	7	20	31	19	149	20	
72165779G	Mayur Popat Jarhal	7	7	7	8	7	7	8	7	7	7	20	39	18	143	20	
71913972E	more pranad dharmaraj	7	8	7	7	8	7	7	8	7	8	18	35	19	146	20	
72165780L	Naganath Bharat kambale	8	8	7	7	8	7	7	8	8	7	23	42	20	160	21	
72165786K	Nagre Nikita Sudhir	8	8	8	8	8	8	8	8	8	7	7	27	35	18	156	21
72165787H	NARAYAN KALLAPPA KUMBHAR	8	7	8	7	7	8	7	7	7	9	25	31	20	151	20	
72165810F	Nilesh Telgote	7	8	8	7	8	8	7	8	9	7	22	34	17	150	20	
72165792D	Parashram Pandurang Patil	7	8	8	7	9	8	7	9	7	8	18	34	15	146	19	
72165794L	Pawar Chandrakant Kalas	7	7	7	8	7	7	8	7	7	8	19	42	17	151	20	
72165795J	Pawar Dadasaheb Nanasaheb	9	9	8	7	9	8	7	9	9	7	21	36	18	157	21	

Prof. Sagar Upendra Deshpande
Subject Incharge

Dr. P. K. Makasare
HOD

CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE
DEPARTMENT OF MECHANICAL ENGINEERING

Date - 13/02/2023

NOTICE

As per TE (2019 PAT.) Mechanical syllabus all TE Mechanical Engineering students are instructed to give your respective choice for **Internship/Mini project** on or before 17/02/2023 (Friday) for more details contact to respective guide allotted.

Also those who are going for the Internship are hitherto instructed to collect "Letter to Company" from student section.

Satish Kumar
HOD (Mech)

CAYMET's
Siddhant College of Engineering
Mechanical Engineering Department
TE Mech (2019 pat) AY 2022-23

Allocation of Mini Project/Internship Group list with Guide Name

Sr. No	Group No.	Candidate Name	Name of Guide	Sign of Guide
1	1	AAGHADE RUSHIKESH SANJAY	Dr. P.A.MAKASARE	
2		AMBRE AISHWARYA NITIN		
3		ANIKET CHAVAN		
4		BANASE PRATIK SHIVRAJ		
5		BARAMADE GANESH KIRAN		
6	2	BHANDARI JAYESH GANPAT	Mr. B. D. GARJE	
7		BHOSALE AKSHAY POPAT		
8		BIRDAWADE PRAJAKTA MAHESH		
9		BORATE KAMLESH RAJENDRA		
10	BOTKAR PRATIKSHA PRAKASH			
11	3	CHOUGULE SHITAL MALLAPA	Mr. B. B. KEDAR	
12		GAIKWAD SUPRIYA BHARAT		
13		GAURAV SUNIL DEORE		
14		GAUTAM SHAILESH CHHOTELAL		
15		GODSE SARTHAK BALASAHEB		
16	4	GUNJAL SHUBHAM DATTU	Mr. S.U. DESHPANDE	
17		HARSHALA RAVINDRA SHIRKE		
18		HONAWALE SURAJ NITIN		
19		INDURKAR BHUPESH RAJENDRA		
20		INGAVALE VIJAYSINGH PARBATI		
21	5	JADHAV LAXMI MAHADEV	Mr. V.S. MUNDE	
22		JADHAV PRIYA CHHOTURAM		
23		JADHAV RAHUL RANGRAO		
24		JADHAV VAIJANATH MADHUKARRAO		
25		KADAM PRAVIN SHIVAJI		
26	6	KADUSKAR ADITYA BHAUSAHEB	Mr. P.P. GEDAM	
27		KATURE SHRINIVAS EKNATH		
28		KAWALE SHIVAM SADASHIV		
29		KEDARI GAURAV ASHOK		
30		KHAMBE ANIKET NARAYAN		
31	7	KHANDARE SAHIL BHASKARRAO	Ms. S.V. CHAMBHARE	
32		KOLLI HIRITHIK SIDDANNA		
33		KULKARNI ANUSHA PADMAKAR		
34		KUMBHAR SANDESH GORAKHNATH		
35		KURADE SAMPADA RAJARAM		
36	8	LOKHANDE AMIT SURESH	Ms. S. B. GHOSE	
37		MAHALKAR BHIVA LAXMAN		
38		MAJGAONKAR MOHAMMAD TARIQ BA		
39		NAIK OMSHRI AJAY		
40		NANNAWARE GEETA RAMESH		

41	9	NIKAM HARSHADA RAMCHANDRA	Mr A. H. RAUT	<i>A</i>
42		PALKAR SAVITRI MARUTI		
43		PATIL BHUSHAN SHANTARAM		
44		PATIL NIKITA VILAS		
45		PAWAR PRAJWAL BHARAT		
46	10	PAWAR PRAMOD SHANKAR	Mr. R. R. KULKARNI	<i>S.R. Kulkarni</i>
47		PAWAR SAMARTH DINKAR		
48		PAWAR SHRUTI RAMCHANDRA		
49		PAWAR SWAPNIL RAJU		
50		RAUT SUMIT MARUTI		
51	11	SABEER IMTIHAJAHMAD SHAIKH	Ms. S. B. GHOSE	<i>A</i>
52		SAURABH MARUTI MEDGE		
53		SAWANT SAURABH DILIP		
54		SHAHU SANJAY KAKAD		
55		SINGH ABHAY SATENDAR		
56	12	SONAVANE PRATHAMESH GIRISH	Mr. R. R. KULKARNI	<i>S.R. Kulkarni</i>
57		TAGAD BHUSHAN VISHVANATH		
58		TELANG PRASHANT VINAYAK		
59		TIKANDE NIKHIL RAMDAS		
60		UDUGADE KISHOR DADASO		
61	13	UGALE VAIBHAV SHANKARRAO	Mr. V.S. MUNDE	<i>V.S. Munde</i>
62		UPASANI SUYASH GANGADHAR		
63		VARADE BHUSHAN VISHNU		
64		WAGHLE YUVRAJ SHAM		
65		YADYNESH NITIN KHACHANE		

V.S. Munde
 Prof. V.S. Munde
 Minii Project Coordinator

S.R. Kulkarni
 Dr. P.A. Makasre
 HOD (MECH)

CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE
DEPARTMENT OF MECHANICAL ENGINEERING

NOTICE

03/04/2023

All the students of T. E. Mechanical Engineering are hereby informed that 1st Review has been scheduled on 07/04/2023 Friday.

All the Mini-project group members/ Internship doing students shall come prepared with followings.

➤ For Mini-Project group :-

- Experimentation readings.
- Calculations and Result.
- A Primary copy of Project Report.

➤ For Internship doing Students :-

- Internship Diary/ Internship Workbook.
- Attendance record.

All are informed to remain present for this review.

Venue: CAD/CAM lab.

Time: 10:30 a.m. onwards.


-HOD (Mech)

CAYMET's
Siddhant College of Engineering
Mechanical Engineering Department
TE Mech (2019 pat) AY 2022-23
Review I

Date:- 07/04/2023.

Sr. No	Group No.	Candidate Name	Marks (50)	Name of Guide	Sign of Guide
1	1	AAGHADE RUSHIKESH SANJAY	39	Dr. P.A.MAKASARE	
2		AMBRE AISHWARYA NITIN	40		
3		ANIKET CHAVAN	39		
4		BANASE PRATIK SHIVRAJ	40		
5		BARAMADE GANESH KIRAN	39		
6	2	BHANDARI JAYESH GANPAT	39	Mr. B. D. GARJE	
7		BHOSALE AKSHAY POPAT	40		
8		BIRDAWADE PRAJAKTA MAHESH	41		
9		BORATE KAMLESH RAJENDRA	39		
10		BOTKAR PRATIKSHA PRAKASH	37		
11	3	CHOUGULE SHITAL MALLAPA	41	Mr. B. B. KEDAR	
12		GAIKWAD SUPRIYA BHARAT	42		
13		GAURAV SUNIL DEORE	40		
14		GAUTAM SHAILESH CHHOTELAL	41		
15		GODSE SARTHAK BALASAHEB	40		
16	4	GUNJAL SHUBHAM DATTU	39	Mr. S.U. DESHIPANDE	
17		HARSHALA RAVINDRA SHIRKE	39		
18		HONA WALE SURAJ NITIN	39		
19		INDURKAR BHUPESH RAJENDRA	38		
20		INGAVALE VIJAYSINGH PARBATI	42		
21	5	JADHAV LAXMI MAHADEV	39	Mr. V.S. MUNDE	
22		JADHAV PRIYA CHHOTURAM	39		
23		JADHAV RAHUL RANGRAO	37		
24		JADHAV VAJANATH MADHUKARRAO	45		
25		KADAM PRAVIN SHIVAJI	42		
26	6	KADUSKAR ADITYA BHAUSAHEB	40	Mr. P.P. GEDAM	
27		KATURE SHRINIVAS EKNATH	41		
28		KAWALE SHIVAM SADASHIV	40		
29		KEDARI GAURAV ASHOK	39		
30		KHAMBE ANIKET NARAYAN	40		
31	7	KHANDARE SAHIL BHASKARRAO	40	Ms. S.V. CHAMBHARE	
32		KOLLI HRITHIK SIDDANNA	41		
33		KULKARNI ANUSHA PADMAKAR	41		
34		KUMBHAR SANDESH GORAKHNATH	39		
35		KURADE SAMPADA RAJARAM	42		
36	8	LOKHANDE AMIT SURESH	40	Ms. S. B. GHOSE	
37		MAHALKAR BHIVA LAXMAN	37		
38		MAJGAONKAR MOHAMMAD TARIQ BARKAT ALI	41		
39		NAIK OMSHRI AJAY	37		
40		NANNAWARE GEETA RAMESH	42		
41		NIKAM HARSHADA RAMCHANDRA	43		

42	9	PALKAR SAVITRI MARUTI	44	Mr. A. H. RAUT	<u>A +</u>
43		PATIL BHUSHAN SHANTARAM	43		
44		PATIL NIKITA VILAS	44		
45	10	PAWAR PRAJWAL BHARAT	43	Mr. R. R. KULKARNI	<u>skulkarni</u>
46		PAWAR PRAMOD SHANKAR	37		
47		PAWAR SAMARTH DINKAR	37		
48		PAWAR SHRUTI RAMCHANDRA	37		
49		PAWAR SWAPNIL RAJU	42		
50	11	RAUT SUMIT MARUTI	44	Ms. S. B. GHOSE	<u>ghose</u>
51		SABEER IMTIHAJAHMAD SHAIKH	39		
52		SAURABH MARUTI MEDGE	37		
53		SAWANT SAURABH DILIP	40		
54		SHAHU SANJAY KAKAD	41		
55	12	SINGH ABHAY SA'TENDAR	37	Mr. R. R. KULKARNI	<u>skulkarni</u>
56		SONAVANE PRATHAMESH GIRISH	42		
57		TAGAD BHUSHAN VISHVANATH	37		
58		TELANG PRASHANT VINAYAK	37		
59		TIKANDE NIKHIL RAMDAS	42		
60	13	UDUGADE KISHOR DADASO	37	Mr. V.S. MUNDE	<u>skulkarni</u>
61		UGALE VAIBHAV SHANKARRAO	43		
62		UPASANI SUYASH GANGADHAR	44		
63		VARADE BHUSHAN VISHNU	44		
64		WAGHLE YUVRAJ SHAM	40		
65		YADYNESH NITIN KHACHANE	43.		

Prof. V.S. Munde
Mini Project Coordinator

skulkarni
Dr. P.A. Makasre
HOD (MECH)

CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE
DEPARTMENT OF MECHANICAL ENGINEERING

NOTICE

26/05/2023

All the students of T. E. Mechanical Engineering are hereby informed that 2nd Review has been scheduled on 31/05/2023 Wednesday.

All the Mini-project group members/ Internship doing students shall come prepared with followings.

➤ For Mini-Project group :-

- Result and Conclusion,
- A copy of Project Report.

➤ For Internship doing Students :-

- Internship Diary/ Internship Workbook.
- Attendance record.
- Internship Report.
- Completion Certificate.

All are informed to remain present for this review.






Venue: CAD/CAM lab.

Time: 11:30 a.m. onwards.

S. S. Kulkarni
HOD (Mech)

CAYMET's
Siddhant College of Engineering
Mechanical Engineering Department
TE Mech (2019 pat) AY 2022-23
Review II

Date:- 31/05/2023

Sr. No	Group No.	Candidate Name	Marks (50)	Name of Guide	Sign of Guide
1	1	AAGHADE RUSHIKESH SANJAY	40	Dr. P.A.MAKASARE	
2		AMBRE AISHWARYA NITIN	41		
3		ANIKET CHAVAN	41		
4		BANASE PRATIK SHIVRAJ	39		
5		BARAMADE GANESH KIRAN	39		
6	2	BHANDARI JAYESH GANPAT	40	Mr. B. D. GARJE	
7		BHOSALE AKSHAY POPAT	39		
8		BIRDAWADE PRAJAKTA MAHESH	40		
9		BORATE KAMLESH RAJENDRA	40		
10		BOTKAR PRATIKSHA PRAKASH	39		
11	3	CHOUGULE SHITAL MALLAPA	40	Mr. B. B. KEDAR	
12		GAIKWAD SUPRIYA BHARAT	39		
13		GAURAV SUNIL DEORE	41		
14		GAUTAM SHAILESH CHHOTELAL	40		
15		GODSE SARTHAK BALASAHEB	41		
16	4	GUNJAL SHUBHAM DATTU	42	Mr. S.U. DESHPANDE	
17		HARSHALA RAVINDRA SHIRKE	42		
18		HONAWALE SURAJ NITIN	43		
19		INDURKAR BHUPESH RAJENDRA	40		
20		INGAVALE VIJAYSINGH PARBATI	43		
21	5	JADHAV LAXMI MAHADEV	42	Mr. V.S. MUNDE	
22		JADHAV PRIYA CHHOTURAM	42		
23		JADHAV RAHUL RANGRAO	37		
24		JADHAV VAJANATH MADHUKARRAO	45		
25		KADAM PRAVIN SHIVAJI	42		
26	6	KADUSKAR ADITYA BHAUSAHEB	41	Mr. P.P. GEDAM	
27		KATURE SHRINIVAS EKNATH	40		
28		KAWALE SHIVAM SADASHIV	40		
29		KEDARI GAURAV ASHOK	40		
30		KHAMBE ANIKET NARAYAN	40		
31	7	KHANDARE SAHIL BHASKARRAO	39	Ms. S.V. CHAMBHARE	
32		KOLLI HRITHIK SIDDANNA	39		
33		KULKARNI ANUSHA PADMAKAR	40		
34		KUMBHAR SANDESH GORAKHNATH	41		
35		KURADE SAMPADA RAJARAM	39		
36	8	LOKHANDE AMIT SURESH	40	Ms. S. B. GHOSE	
37		MAHALKAR BHIVA LAXMAN	37		
38		MAJGAONKAR MOHAMMAD TARIQ BARKAT ALI	39		
39		NAIK OMSHRI AJAY	37		
40		NANNAWARE GEETA RAMESH	42		
41		NIKAM HARSHADA RAMCHANDRA	44		

42		PALKAR SAVITRI MARUTI	43		
43	9	PATIL BHUSHAN SHANTARAM	44	Mr A. H. RAUT	<u>A</u>
44		PATIL NIKITA VILAS	43		
45		PAWAR PRAJWAL BHARAT	44		
46		PAWAR PRAMOD SHANKAR	87		
47		PAWAR SAMARTH DINKAR	88	Mr. R. R. KULKARNI	<u>R.R. Kulkarni</u>
48	10	PAWAR SHRUTI RAMCHANDRA	88		
49		PAWAR SWAPNIL RAJU	43		
50		RAUT SUMIT MARUTI	43		
51		SABEER IMTIHAJAHMAD SHAIKH	40		
52		SAURABH MARUTI MEDGE	87		
53	11	SAWANT SAURABH DILIP	41	Ms. S. B. GHOSE	<u>S</u>
54		SHAHU SANJAY KAKAD	41		
55		SINGH ABHAY SATENDAR	87		
56		SONAVANE PRATHAMESH GIRISH	41		
57		TAGAD BHUSHAN VISHVANATH	88	Mr. R. R. KULKARNI	<u>R.R. Kulkarni</u>
58	12	TELANG PRASHANT VINAYAK	89		
59		TIKANDE NIKHIL RAMDAS	42		
60		UDUGADE KISHOR DADASO	40		
61		UGALE VAIBHAV SHANKARRAO	44		
62		UPASANI SUYASH GANGADHAR	44	Mr. V.S. MUNDE	<u>V.S. Munde</u>
63	13	VARADE BHUSHAN VISHNU	43		
64		WAGHLE YUVRAJ SHAM	40		
65		YADYNESH NITIN KHACHANE	42		

V.S. Munde
Prof. V.S. Munde
Mini Project Coordinator

P.A. Makasre
Dr. P.A. Makasre
HOD (MECH)

**A
INTERNSHIP TRAINING
REPORT
ON
" LEENA ENGINEERING WORKS, SOLAPUR."**

**Submitted By: -
Miss. Harshala R. Shirke**

(PRN NO: -72297693D)

In partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

To

Savitribai Phule Pune University,

Pune



DEPARTMENT OF MECHANICAL ENGINEERING

CAYMET'S

SIDDHANT COLLEGE OF ENGINEERING

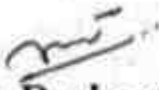
Academic Year: - 2022- 23



**CAYMET'S
SIDDHANT COLLEGE OF ENGINEERING**

CERTIFICATE

This is to certify that the vocational in- plant training in "**LEENA ENGINEERING WORKS, SOLAPUR.**" has been completed successfully and the report of the same has been submitted by '**Miss. Harshala R. Shirke** of third year (Mechanical Engineering) PRN NO: -72297693D in the partial fulfillment of the curriculum laid by **Savitribai Phule Pune University, Pune** during the academic year 2022- 23.


Mr. S.U. Deshapande
Sub Teacher




Dr. L.V. Kamble
Principal

Dr. Prandy Makasare
Head Mech. Engg. Dept.

SIDDHANT COLLEGE OF ENGINEERING



Leena

ENGINEERING WORKS

Plot No. 156, Industrial Estate, Hotgi Road, Solapur 413 003

Tel : (0217) 2601501 | Email : leenaengwks@yahoo.co.in

Certificate

This is to certify that Mrs. Harshala Ravindra Shinde
of S.C.O.F. PUNE. Roll No. TEME16
has completed his In Plant Training in our works from 20-02-23
to 20-03-23.

He has taken training on CNC VMC and Conventional Machines.



Leena
ENGINEERING WORKS
S. S. Bahule
CEO



Siddhant College of Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)

Department of Information and Technology

SEM- I (2021-22)
2021

Class:- BE (IT)

Date :24thSept 2021

Notice (Project Review-I)

All the students of BE Information Technology Engineering are hereby informed that, **Project Review-I** is scheduled on **1st October, Friday at 11.00 am.** All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review

This review has weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly.

All the Group members should be present at the time of Project Review.

Prof. Rashmi Kulkarni
Project coordinator
(9689910756)



Dr. B. Gupta
Head of Department (IT)

Head of Info. Tech. Dept.
Siddhant College of Engineering
Sudumbare, Maval, Pune-412 109.



Siddhant College of Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)

Department of Information and Technology

SEM-I (2021-22)

Class:- BE (IT)

Date :24th Sept 2021

Project Review I Schedule

Panel	Date	Time	Project Group No	Location	Expert 1	Expert 2
1			1,2	C19	Prof. R. G. Kulkarni	Prof. S. Rangdale
			5, 6			
			8			
2	01/10/2021 Friday	11.00 AM to 1:00 PM	7,9, 10	C21	Prof. C. B. Sharma	Prof. A. Bhosale
5			3, 4	C-23	Prof. J. M. Pingalkar	Prof. R. G. Kulkarni

Prof. Rashmi Kulkarni
Project coordinator
(9689910756)



Dr. B. Gupta
Head of Department (IT)

Head of Info. Tech. Dept.
Siddhant College of Engineering
Sudumbare, Maval, Pune-412 109.



SEM- I (2021-22)

Class:- BE (IT)

Date :11thNov 2021

Notice (Project Review -II)

All the students of BE Information Technology are hereby informed that, **Project Review-II** is scheduled on **15thNovember ,Monday at 10.00 am**. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Current status of the Project

This review has weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly.

All the Group members should be present at the time of Project Review.

Prof. Rashmi Kulkarni
Project coordinator
(9689910756)



Dr. B. Gupta
Head of Department (IT),

Head of Info. Tech. Dept.
Siddhant College of Engineering
Sudumbro, Maval, Pune-412 109.



Siddhant College of Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)

Department of Information and Technology

SEM- I (2021-22)

Class:- BE (IT)

Date : 11th Nov 2021

Project Review II Schedule

Panel I	Date	Time	Project Group No	Location	Expert 1	Expert 2
1	15/11/2021 Monday	10.00 AM to 12:00 NOON	1,2	C-19	Prof. R. G. Kulkarni	Prof.S.Rangdale
5, 6						
8						
2			7,9, 10	C-21	Prof. C. B. Sharma	Prof. A. Bhosale
5			3, 4	C-23	Prof. J. M. Pingalkar	Prof. R. G. Kulkarni

Prof. Rashmi Kulkarni
Project coordinator
(9689910756)



Dr. B. Gupta
Head of Department (IT)

Head of Info. Tech. Dept.
Siddhant College of Engineering
Sudumbare, Maval, Pune-412 109.

28/6/23.

To
Principal
SCOE (pune)
Sudumbre (412109)
Date

Subject: Out of the syllabus questions in Question paper of software engineering [6002]-162 and syllabus issue with question papers.

Respected sir,

We, the students of second year computer engineering, SCOE, sudumbre (pune), faced some issue with question-paper of software engineering end-sem 2023.

The issues are as follow:

- Q.3 a) was out of syllabus
- Q.3 b) was out of syllabus
- Q.4 a) was out of syllabus
- Q.4 b) was out of syllabus
- Q.5 a) was out of syllabus
- Q.6 b) was out of syllabus
- Q. b) was out of syllabus.

So, we request higher authorities to take a note of it and take appropriate actions on it.

Thanking you...

Paper is really out of syllabus.
28/6/23

CEO / HOD (Comp)

To check the genuinity of the problem & necessary communication to the concerned Authority

H.Kable
28/6/23

Yours sincerely
All SE CS students
SCOE, sudumbre
(pune) 412109

- 1) Aaditya Anil Chaudhari - A.Chm
- 2) Nikita Ramesh Adak - Adak N.R.
- 3) Babar Shivraj Rajendra - Babar
- 4) Tejas Dipak Badgujar - Tejas
- 5) Apeksha Shrikant Badhe - Apeksha
- 6) Divesh Ravindra Baviskar - Divesh
- 7) Ajinkya Rajendra Bhase - Ajinkya
- 8) Rahul Yashwant Bhegade - Rahul B
- 9) Anand Ramesh Budruk - Anand
- 10) Bhor Soham Shekhar - Bhor
- 11) Bhoote Maharudra Laaman - Bhoote
- 12) Bhoote Sagar Subhash - Bhoote
- 13) Omkar Basavaraj Chaudhari - Omkar
- 14) Binadar Rohit Bhavesh - Binadar
- 15) Sneha Datta Chorage - Sneha
- 16) Deshmukh Avishkar Vivek - Deshmukh
- 17) Dewadkar Abhishek Ganesh - AD
- 18) Divakar Omkar Badrinath - Divakar
- 19) Gadge Amit Anil - Gadge
- 20) Gaikwad Dhruv Shri Parmod - Gaikwad
- 21) Rutuja Sandip Gangane - Rutuja
- 22) Sakshi Ranish Ganekar - Sakshi
- 23) Saurabh Shrimant Khavale - Saurabh
- 24) Aryan Jitendra Kairale - A.K.
- 25) Kakade Abhishek Akuldas - Kakade
- 26) Kadam Narsing Madhav - Kadam
- 27) Gurav Prathamesh Pattatray - Gurav
- 28) Konde Projakta Arakash - Konde
- 29) Harde Tejas Amol - Harde
- 30) Shashank S. Itagi - Itagi
- 31) Ashwini Ravindra Jadhav - Ashwini
- 32) Parnita Ganes Jadhav - Parnita

- 33) Shruti. Jeevan. Jadhav Shruti
- 34) Sudesh Prashant Jadhav Jadhav
- 35) Swapnali Shivaji Jadhav Jadhav
- 36) Swafil Shivaji Jadhav. Jadhav
- 37) Jaiswal Ruturaj Dipak Jaiswal
- 38) Jathar Magesh Dhanraj Jathar
- 39) Kadam Sakshi Ankush Kadam
- 40) Kadam Rutuja Rajabhai Kadam
- 41) Kale Piyush Premnath Kale
- 42) Kalyani Yash Suchi Kalyani
- 43) Geetanjali Amare Kande Kande
- 44) Divya Chandrakant Karande Karande
- 45) Karne Abhiram Sambhaji Karne
- 46) Kawade Sheshrao Pandurang Kawade
- 47) Kedar Ajinkya Bhagwan Kedar
- 48) Kele Rushikesh Dattatray Kele
- 49) Nilesh Murlidhar Khairnar NK
- 50) Khartude Rahul Gajanan Khartude
- 51) Khedkar Darshan Dharamraj Khedkar
- 52) Khilari Rahul Chandrakant Khilari
- 53) ANIRUPDHA Dilip KHOUDE KHOUDE
- 54) chaitanya Rajendra kokate chaitanya
- 55) Deepika. Surash. Koli Deepika
- 56) Sanika Kamalakar Koli S.K.Koli
- 57) Yewade Mahesh Ratnakar Yewade
- 58) Yeole Rashmi Vilas Yeole
- 59) Yadav Abhishek Pratikshor A.Yadav
- 60) Patil Vitthal Prakash Patil
- 61) Varma Shradha Rajesh Varma
- 62) Zambare Mauli Sudam Zambare
- 63) Daund Piyush Rajendra P.R.Daund



CHAUDHARI ATARSINGH YADAV MEMORIAL EDUCATION TRUSTS,
SIDDHANT COLLEGE OF ENGINEERING
(College of Engineering Recognised by D.T.E. (Govt. of Mah.) and Affiliated to the S.P. Pune University)
Lingulistic Minority (Hind)
At Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109.
I.D. No. PU/PN/Engg/231(2005), AISHE Code- C-41256, University PUN Code-CEGP012140

☎ 02114-661904/661902/661901
Website: - www.siddhantcoe.in E-mail: engineeringprincipal@gmail.com

Ref. No- ECOE/Admin/004/2023-24

Date:- 03/7/2023

To,
The Cap Director,
SE Engineerings, SPPU,
Pune.

Sub:- Grievance Received by Second Year Students from Computer Science for SPPU Examination May/June- 2023.

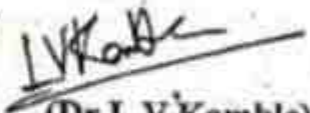
Respected Sir,

The grievance is received by SE (Computer Science) students regarding the question paper for the subject of Software Engineering examination held on 27th June 2023. The letter enclosed with this application regarding the grievance claim for above subject.

This is for your information & do the needful please.


(Prof.M.U.Inamdar)
CEO




(Dr.L.V.Kamble)
Principal
Siddhant College of Engineering
Sudumbare, Pune - 412 109

Recd by
B. Ambekar
5/7/23



Total No. of Questions : 8]

SEAT No. :

P-1533

[Total No. of Pages : 2

[6002]162

**S.E. (Computer/A.I.& D.S.)
SOFTWARE ENGINEERING
(2019 Pattern) (Semester - IV) (210253)**

Time : 2½ Hours

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1) a) Explain any four design concepts with appropriate example. [9]
b) What is design pattern? How patterns can be used in design? [9]

- Q2) a) Explain the Data-flow architecture and Layered Architecture in detail. [9]
b) Explain the golden rules for User Interface Design. [9]

- Q3) a) What question needs to be answered in order to develop a project plan according to W⁵HH principle? [9]
b) Explain the project management life cycle. [8]

OR

- Q4) a) Explain with appropriate example how schedule can be prepare using PERT. [9]
b) List and explain the different metrics in the process and project domain. [8]

- Q5) a) Describe the software quality dilemma in your own words. [9]
b) What are the objectives of testing? Explain the different types of testing. [9]

P.T.O.

OR

- Q6) a) What is software quality? Write the different quality metrics. [9]
b) What is test case design? Write the various approaches for test case design. [9]

- Q7) a) What is SCM? Write short note on SCM Elements. [9]
b) What is Risk? Explain the reactive and proactive risk strategies with appropriate examples. [8]

OR

- Q8) a) Explain the repository features with respect to software configuration management. [9]
b) Write short note on CASE TOOLS for software development. [8]

□□□

SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)



NOTIFICATION

Subject: Re-examination of Second Year Engineering program (Computer/AIDS) (2019 Pattern) subject – Software Engineering for the March 2023 exam.

As per the previous timetable declared on 17 May 2023 the examination for SE (Computer/AIDS) (2019 pattern) subject – Software Engineering was conducted on 27 June 2023 is being cancelled due to many questions were out of syllabus. The decision of conduct the re-examination for the same has been taken by the Board of Examinations and Evaluation meeting held on 4th July 2023 and as per the power vested to it by Maharashtra Public University Act 2016 section 48.

The details as follow.

Sr. No.	Branch Name	Subject code	Subject Name	Re-examination Day, Date & Time
1	S.E. (2019 PATTERN) (COMPUTER/ AIDS) SEM - IV	210253	Software Engineering	Monday 10.07.2023 11.00 a.m. to 01.30 p.m.

The Principals of all Engineering colleges are requested to bring the contents of this notification to the notice of all students, teachers and all other concerned.

Pune - 411007.
Date : 04/07/2023

Director

Board of Examinations and Evaluation.

Copy to:

1. Deputy Registrars (Exam Section)
2. Assistant Registrar, Exam. (S & T Unit) for further necessary action.
3. Section Officer, Engineering Section



CAYM EDUCATION TRUST'S
SIDDHANT COLLEGE OF ENGINEERING

(College of Engineering Recognised by D.T.E. (Govt. of Mah.) and Affiliated to the University of
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109.
I.D. No. PU/PN/Engg/231(2005), AISHE Code- C-41286

☎ 02114-661904, 661966
Website: - www.siddhantcoe.in

Fax No. 02114-661902
E-mail: engineeringprincipal@gmail.com

Ref. No. SCOE (Admin) 722/2021-22

Date:- 24/6/2022

To,
The Deputy Registrar,
Examination Section
S.P. Pune University,
Pune-411007.

Subject :- Unfair Means .

Respect Sir,

We are sending One Copy Case on Date 23/06/2022 ,their details as below :-

Sr. NO.	NAME OF THE STUDENT	EXAM SEAT NO.	SUBJECT	DATE
1	Galkwad Supriya Bharat	S190440812	Applied Thermodynamics	23/06/2022



R. Khandagale
Dr. R.L. Khandagale
Principal
Siddhant College of Engineering
Sudumbare, Pune - 412 109



Copy case - sent to unipune.ac.in

UNIVERSITY OF PUNE
Report of the Jr. Supervisor, Supervisory Chief Conductor

Block No. 09
Examination: May-June 22
Subject: Applied Thermodynamics
Date: 23/06/2022

To
The Controller of Examinations,
University of Pune
Ganeshkhind, Pune-411 007.

Sir
I Shikha Pant the undersigned, Jr. Supervisor appointed on the above-mentioned Block at the May-22 examination held at Siddhant College of Engineering (Centre), am hereby making report against Candidate No. S190440812 Smt. Supriya Gaikwad the examinations, as follows;

Yours faithfully,
Shikha Pant
(Jr. Supervisor)
Date: 23/06/22

Name & Address of the Junior Supervisor
Mrs. Shikha Pant
A'SCOE, Sudumbare.

On the basis of the report made by the Jr. Supervisor, I am of the opinion that there is a prima facie case of Unfair Means resorted to by the aforesaid Candidate No. and therefore the case be forwarded to the University for investigation.

S.B. Shinde
Signature of Sr. Supervisor

Name: Prof. S.B. Shinde

Date: 23/06/2022 Senior Supervisor

Forwarded to the Controller of Examinations, University of Pune, Ganeshkhind, Pune-411 007 for necessary action. **University of Pune Exam. Siddhant College of Engineering/ Sudumbare, Maval, Pune-412 106**

Seal of the College/Institution/University (Centre)

Place: Sudumbare
Date: 23/06/22
Encl



(N.B.) Kindly enclose copy of the tele. question paper.

Pradip
Signature of Chief Conductor
Principal
Siddhant College of Engineering
Sudumbare, Maval, Pune - 412 106

Proforma for submission of the Information regarding prosecution of Candidates appeared at the Centre

Centre No.	Examination	Name and Seat No. of the Candidate Prosecuted	Date of Prosecution	Report of which the candidate was found malpractising and nature of malpractice in brief	Name of the Person who detected the malpractice	Signature of Jr. Supervisor	Signature of Sr. Supervisor	Signature of Chief Conductor	Remarks
1	2	3	4	5	6	7	8	9	10
1.	May/June-2022	Gaitwood Sripriya S190040 812	23/08/22	2 Cheats Found	External Squad	<i>[Signature]</i>	<i>[Signature]</i> Shinde S.P.	<i>[Signature]</i>	



[Signature]
23/08/22
Principal
Siddhant College of Engineering
Sudentare, Pune - 412 100



CAYM KES
SIDDHANT
COLLEGE OF ENGINEERING

A/1, Symbion, Taluka, Near, Dist. Pune - 412105
Ph. - 02114 - 661921, 661991 Fax: 02114 - 661902

STUDENT IDENTITY CARD



Name: Supriya Gaikwad

Class: SE

Gaikwad
Card Holder's Sign

Academic Year: 2021-22

Roll No. 12

Permanent Address: Akurdi
pune

Tel No. : 8484950779

Blood Group: _____

Issue Date: 16/06/2022

Principal

In Case of Emergency Contact

Name: Shirke Harshala

Tel No. : 9145012961

SIDDHANT COLLEGE OF ENGINEERING

Savitribai Phule Pune University



(Formerly University of Pune)

Hall Ticket For S.E.(2019 PAT.)(MECHANICAL) Mar/Apr 2022

SeatNo	PRN	CentreCode	CollegeCode	PUN Code
S190440812	72297653E	44	44	CEGP012140

Name : GAIKWAD SUPRIYA BHARAT

Mother : GAIKWAD JYOTI BHARAT

Centre : SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE



Sub Code	Subject Name	Type	Exam Date	Exam Time
202047	Kinematics of Machinery	[IN]. [TH]. [OR]		
202048	Applied Thermodynamics	[IN]. [TH]. [OR]		
202049	Fluid Mechanics	[IN]. [TH]. [OR]		
202050	Manufacturing Processes	[IN],[TH]		
202051	Machina Shop	[TW]		
202052	Project Based Learning -II	[TW]		
202053F	TECHNICAL WRITING/ RESEARCH WRITING	[AC]		
207002	Engineering Mathematics - III	[IN]. [TH]. [TW]		

NOTE:

Students should ensure that details like Name, Photo, PRN, Subjects printed on Hall Ticket are correct. In case of any discrepancy, please immediately contact to College Exam Officer (CEO).

In Case, College does not have Exam Center, please follow University Circular.

In Case of any discrepancy between hallticket & time table published on university website (<http://exam.unipune.ac.in>), the timetable on website to be followed.

Signature of Student

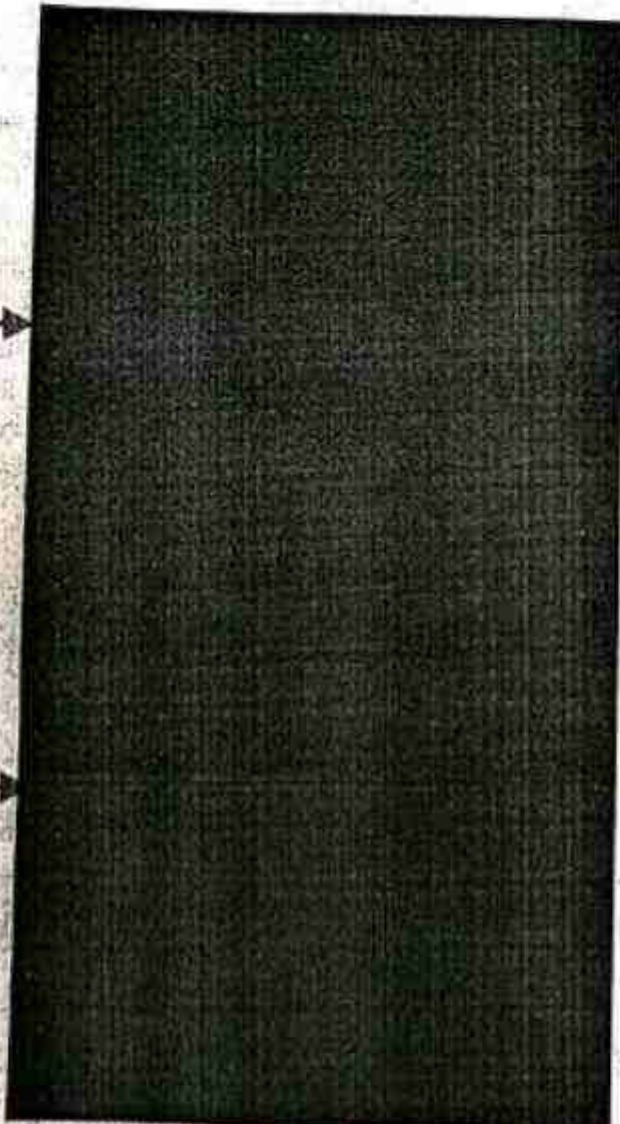
Pradyota
College Principal
Siddhant College of Engineering
SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE
Sudumbare, Pune - 412109

[Signature]
College Examination Officer
University of Pune
Siddhant College of Engineering
Sudumbare, Maval, Pune - 412109.



UID Sticker paste here

BA



SAVITRIBAI PHULE PUNE UNIVERSITY

202048-AT



Sem:4 7021012

Instruction to Candidate

1. Candidate has to confirm seat number, subject and centre number printed on Bar code and write it on attendance sheet.
विद्यार्थ्यांनी प्रथम बार कोडवरील असलेल्या क्रमांक, विषय व केंद्र क्रमांक तपासून योग्य असल्याची खात्री करावी. आणि उपस्थित पत्रकावर नोंदवावी.
2. Paste Bar Code in prescribed space.
उत्तरपत्रिकेवरील विहित जागेतच बार कोड लावावा.
3. Do not write anything on bar code sticker, otherwise it will be treated as unfair means.
बार कोड स्टिकरवर काहीही लिहू नये, अन्यथा परीक्षा गैरप्रकार समजला जाईल.

Q. No.	Examiner		Moderator	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
Total in Figure				
Total in Words				
Signature				

Supplements attached		
Main Answer Book	No. of Supplements	Total
1	+	=

Specific remarks of Centre conductor regarding malpractice (In Red Ink)

Total	Marks in Figure	Marks in Words	Sign
Examiner			
Moderator			



	Q. No.						TOTAL
E							
M							

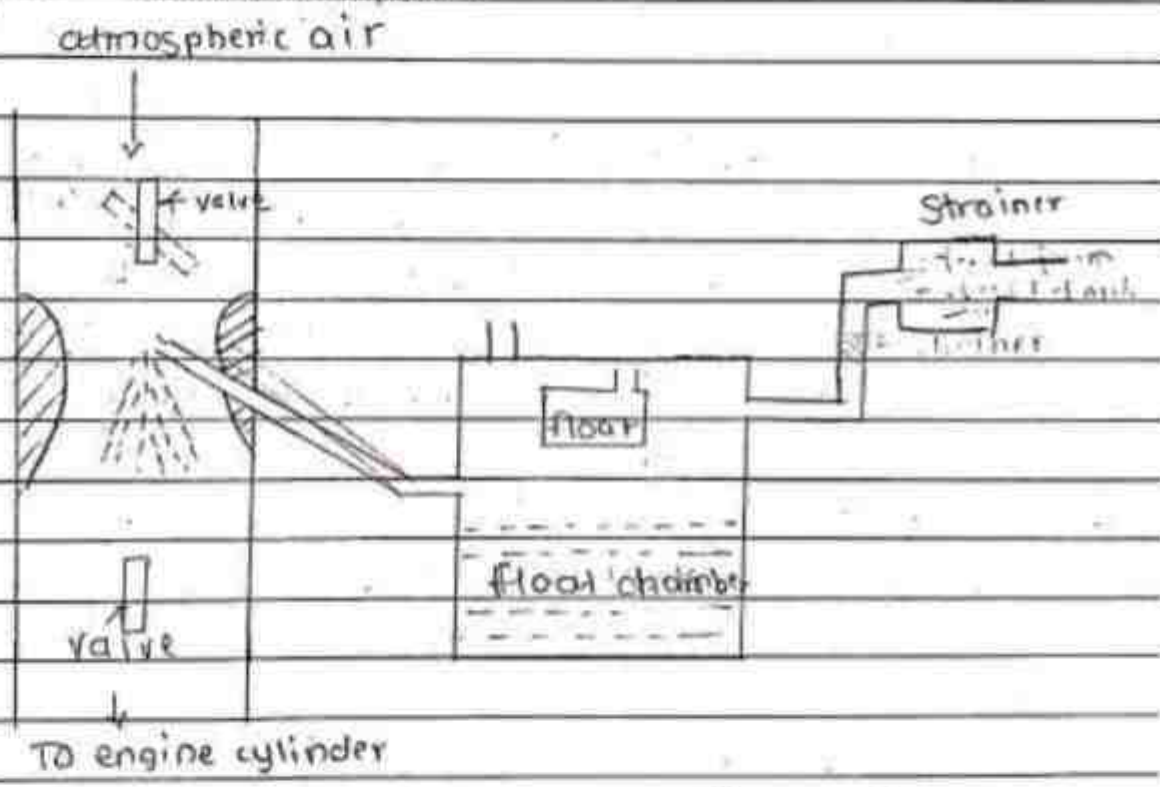
अ. क्र./Q. No.

Q1 a)

carburettor:-

carburetor is a device used for mixing of air and fuel in the cylinder called carburetor. carburetor mixes the air from atmosphere and fuel from fuel tank in proper air-fuel ratio.

Simple carburetor:-



- Simple carburetor consists of a float float chamber and venturi.

- float is mounted inside the float chamber.



Q. E./Q. No.

• fuel is collected from fuel tank through strainer in the float chamber.

• From float chamber fuel is goes inside the carburetor venturi through pipes or tubes.

• An atmospheric air is collected from the atmosphere. In the venturi air is mixes with the fuel from float and this air fuel mixture then passed inside the engine cylinder.

• A suction of engine draws air through the choke tube and passes through the venturi since the area of cross-section at throat of venturi reduces the pressure at main nozzle reduces and velocity of air increases.

• Due to pressure differential caused at the main nozzle and the pressure in float chamber.

Chit Obtained from student by Block Supervisor

1. Explain the principle of operation of a compressor. [20]

2. List the various types of compressors used in refrigeration. [10]

3. Describe the working of a reciprocating compressor. [20]

4. Explain the significance of the compression ratio. [10]

5. List the advantages and disadvantages of a reciprocating compressor. [10]

6. Explain the principle of operation of a centrifugal compressor. [20]

7. Describe the working of a centrifugal compressor. [20]

8. Explain the significance of the compression ratio for a centrifugal compressor. [10]

9. List the advantages and disadvantages of a centrifugal compressor. [10]

10. Explain the principle of operation of an axial compressor. [20]

11. Describe the working of an axial compressor. [20]

12. Explain the significance of the compression ratio for an axial compressor. [10]

13. List the advantages and disadvantages of an axial compressor. [10]

14. Explain the principle of operation of a scroll compressor. [20]

15. Describe the working of a scroll compressor. [20]

16. Explain the significance of the compression ratio for a scroll compressor. [10]

17. List the advantages and disadvantages of a scroll compressor. [10]

Sl. No.	Name of Compressor	Capacity Range (Tons)	Operating Pressure (kg/cm ²)	Speed (rpm)
1	Reciprocating	1-50	10-15	1450
2	Centrifugal	1-100	10-15	3500
3	Scroll	1-10	10-15	1450
4	Axial	1-1000	10-15	3500

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3	Scroll	1-10	10-15	1450
4	Axial	1-1000	10-15	3500

UNIT VI - Compressor

Chapter 9 : Positive Displacement Reciprocating and Rotary Compressors

1. Explain the principle of operation of a compressor. [20]

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3. Describe the working of a reciprocating compressor. [20]

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Axial	1-1000	10-15	3500

1. The first step in the process is to identify the problem. This involves a clear understanding of the situation and the objectives of the project. It is essential to define the scope of the work and to identify the key stakeholders who will be involved in the process.



2. The second step is to develop a plan. This involves identifying the resources needed to complete the project and determining the best way to use those resources. It is important to create a detailed schedule and to identify potential risks and how to mitigate them.

3. The third step is to execute the plan. This involves putting the plan into action and monitoring progress. It is important to communicate regularly with stakeholders and to adjust the plan as needed. It is also important to document the progress and to report on the results of the project.



4. The fourth step is to evaluate the results. This involves comparing the actual results of the project to the original objectives and identifying any areas for improvement. It is important to gather feedback from stakeholders and to use this feedback to inform future projects.

Chit Obtained by B Block Supervisor from Student

1. The first step in the process is to identify the problem. This involves a clear understanding of the situation and the objectives of the project. It is essential to define the scope of the work and to identify the key stakeholders who will be involved in the process.

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5. The fifth step is to report on the results. This involves preparing a final report that summarizes the project's progress and results. It is important to include a clear summary of the project's objectives, a detailed description of the work that was done, and a clear statement of the results that were achieved.

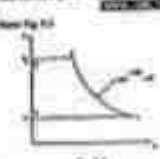


Fig. 1.1

1. The first step in the process is to identify the problem. This involves a clear understanding of the situation and the objectives of the project. It is essential to define the scope of the work and to identify the key stakeholders who will be involved in the process.

STUDENT COPY

Ref. No. Exam/Certi/U.F./ 419



EXAMINATION DEPARTMENT
Certificate Section (Unfair means unit)
Ganeshkhind, PUNE-7, INDIA
Phone: (020)25601207/17

Date : 08/07/2022

Shri/Smt : GAIKWAD SUPRIYA BHARAT

Subject- Show Cause Notice (under clause 10(i) of Ordinance 09) in respect of Unfair means at the University examination held in March/April, 2022

Sir/Madam,

This is to inform you that the University has received a report about unfair means case resorted by you during the examination held in March/April, 2022. The details of the unfair means alleged to have been committed by you are given below:-

Case No : SE022
Examination : S.E.(2019 PAT.) (MECHANICAL)
Seat Number : S190440812
Centre : SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE
Subject : 202048-Applied Thermodynamics
Date of Examination : 23/06/2022
Nature of Unfair means : You were carrying Printed, Xerox Material related to the examination.

You are therefore asked to remain present before the said Unfair Means Committee in the University Examination Office on 20/07/2022 at 02:00 pm along with your written explanation (as per the enclosed format) to this Show Cause Notice.

You should also bring your examination hall ticket and college identity card.

Yours Faithfully

Note: Forwarded through Principal with stamp

Encl : as above


Deputy Registrar (Examinations)
Certificate Unit



SAVITRIBAI PHULE PUNE UNIVERSITY

Ganeshkhind, Pune 411 007

Note: Pay Fine Using Link- <http://pun.unipune.ac.in/copycase/StudLogin.aspx>

Sr.No.	Case No	Seat No.	Recommendations
First Interaction			
1	BARC001	13045	Absent
2	BE001	B150580126	Annulment of the performance of the student in the 401007-Dams and hydraulic Structures subject and Fine Rs. 1000/-
3	BE002	B151014265	Annulment of the performance of the student in the 410250-Machine Learning subject and Fine Rs. 1000/-
4	BE003	B151010026	Annulment of the performance of the student in the 401007-Dams and hydraulic Structures subject and Fine Rs. 1000/-
5	BE004	B151010828	Annulment of the performance of the student in the 402047-Energy Engineering subject and Fine Rs. 1000/-
6	BE005	B150530025	Annulment of the performance of the student in the 401007-Dams and hydraulic Structures subject and Fine Rs. 1000/-
7	BE006	B150531064	Annulment of the performance of the student in the 402047-Energy Engineering subject and Fine Rs. 1000/-
8	BE007	B150930844	Annulment of the performance of the student in the 402047-Energy Engineering subject and Fine Rs. 1000/-
9	BE008	B150123046	Annulment of the performance of the student in the 404190-Broadband Communication Systems subject and Fine Rs. 1000/-
10	BE009	B150123015	Annulment of the performance of the student in the 404190-Broadband Communication Systems subject and Fine Rs. 1000/-
11	BE010	B151230038	Annulment of the performance of the student in the 401008-Quantity Surveying, Contracts and tenders subject and Fine Rs. 1000/-
12	BE011	B150980013	Annulment of the performance of the student in the 401008-Quantity Surveying, Contracts and tenders subject and Fine Rs. 1000/-
13	BE012	B150984235	Annulment of the performance of the student in the 410251-Information and Cyber Security subject and Fine Rs. 1000/-
14	BE013	B150982522	Annulment of the performance of the student in the 403148-POWER ELECTRONIC CONTROLLED DRIVES subject and Fine Rs. 1000/-
15	BE014	B150660802	Annulment of the performance of the student in the 402048-Mechanical System Design subject and Fine Rs. 1000/-
16	BE015	B150660805	Annulment of the performance of the student in the 402048-Mechanical System Design subject and Fine Rs. 1000/-

81	SE020	S190538652	Annulment of the performance of the student in the 214451-Processor Architecture subject and Fine Rs. 1000/-
82	SE021	S190534239	Annulment of the performance of the student in the 210252-Data Structures and Algorithms subject and Fine Rs. 1000/-
83	SE022	S190440812	Annulment of the performance of the student in the 202048-Applied Thermodynamics subject and Fine Rs. 1000/-
84	SE023	S191150038	Absent
85	SE024	S191150848	Annulment of the performance of the student in the 202049-Fluid Mechanics subject and Fine Rs. 1000/-
86	SE025	S191150042	Absent
87	SE026	S191150849	Annulment of the performance of the student in the 202049-Fluid Mechanics subject and Fine Rs. 1000/-
88	SE027	S191094321	Declare the result and Fine Rs. 1000/-
89	SE028	S191092019	Declare the result and Fine Rs. 1000/-
90	SE029	S191092055	Declare the result and Fine Rs. 1000/-
91	SE030	S190080894	Declare the result and Fine Rs. 1000/-
92	SE031	S190080933	Declare the result and Fine Rs. 1000/-
93	SE032	S190080937	Declare the result and Fine Rs. 1000/-
94	SE033	S190082024	Declare the result and Fine Rs. 1000/-
95	SE034	S190082068	Declare the result and Fine Rs. 1000/-
96	SE035	S190080917	Declare the result and Fine Rs. 1000/-
97	SE036	S190080891	Declare the result and Fine Rs. 1000/-
98	SE037	S190352050	Annulment of the performance of the student in the 217528- Statistics subject and Fine Rs. 1000/-
99	SE038	S190350835	Annulment of the performance of the student in the 202049-Fluid Mechanics subject and Fine Rs. 1000/-
100	SE039	S191134222	Annulment of the performance of the student in the 210253-Software Engineering subject and Fine Rs. 1000/-
101	SE040	S190054267	Annulment of the performance of the student in full and Fine Rs. 1000/-
102	SE041	S190350814	Annulment of the performance of the student in the 202050-Manufacturing Processes subject and Fine Rs. 1000/-
103	SE042	S190532585	Annulment of the performance of the student in the 203148-Numerical Methods & Computer Programming subject and Fine Rs. 1000/-
104	SE043	S190534297	Annulment of the performance of the student in the 210254-Microprocessor subject and Fine Rs. 1000/-
105	SE044	S190532612	Annulment of the performance of the student in the 203148-Numerical Methods & Computer Programming subject and Fine Rs. 1000/-
106	SE045	S190530963	Annulment of the performance of the student in the 202050-Manufacturing Processes subject and Fine Rs. 1000/-
107	SE046	S190530865	Annulment of the performance of the student in the 202050-Manufacturing Processes subject and Fine Rs. 1000/-



SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007

STATEMENT OF MARKS / GRADES FOR S.E. (2019 CREDIT PAT.) EXAM., APR/MAY 2022
BRANCH CODE: 12-S.E. (2019 PAT.) (MECHANICAL)

SEAT NO. S190440812 CENTRE SCES[44] PERM. REG. NO.: 72297653E
NAME GAIKWAD SUPRIYA BHARAT MOTHER: GAIKWAD JYOTI BHARAT
COLLEGE / SCHOOL [CEGP012140] - SIDDHANT COLLEGE OF ENGINEERING,
SADUMBARE

COURSE CODE	COURSE NAME	CO. TYPE	TOT. CRD	EARN. CRD	GRD	CRD. PTS
SEM.:1						
202041	SOLID MECHANICS	TH	04	04	A	36
202041	SOLID MECHANICS	PR	01	01	A	09
202042	SOLID MODELING & DRAFTING	TH	03	03	B	24
202042	SOLID MODELING & DRAFTING	PR	01	01	A	09
202043	ENGINEERING THERMODYNAMICS	TH	03	03	O	30
202043	ENGINEERING THERMODYNAMICS	OR	01	01	A	09
202044	ENGG. MATERIALS & METALLURGY	TH	03	03	B	24
202044	ENGG. MATERIALS & METALLURGY	TW	01	01	A	09
202045	GEOMETRIC DIM. & TOL. LAB	TW	01	01	O	10
203156	ELECTR. & ELECTRONICS ENGG.	TH	03	03	A	27
203156	ELECTR. & ELECTRONICS ENGG.	TW	01	01	A	09
202046B	ENTREPRENEURSHIP DEVELOPMENT	AC	00	00	AC	00
SEM.:2						
202047	KINEMATICS OF MACHINERY	* TH	03	03	C	21
202047	KINEMATICS OF MACHINERY	* OR	01	01	A	09
202048	APPLIED THERMODYNAMICS	* TH	03	PC	F	00
202048	APPLIED THERMODYNAMICS	* OR	01	01	A	09
202049	FLUID MECHANICS	* TH	03	03	P	12
202049	FLUID MECHANICS	* OR	01	01	A	09
202050	MANUFACTURING PROCESSES	* TH	03	03	C	21
202051	MACHINE SHOP	* TW	01	01	B	08
202052	PROJECT BASED LEARNING -II	* TW	02	02	A	18
207002	ENGINEERING MATHEMATICS - III	* TH	03	03	C	21
207002	ENGINEERING MATHEMATICS - III	* TW	01	01	O	10
202053F	TECH. WRITING/RSRCH. WRITING.	* AC	00	00	AC	00

SECOND YEAR SGPA : --, TOTAL CREDITS EARNED : 41

NOTE : PLEASE SEE THE BACKSIDE OF THIS STATEMENT FOR MORE DETAILS.

MEDIUM OF INSTRUCTION : ENGLISH


Director

Board of Examinations & Evaluation

R22101317768

DATE: 27 AUG 2022



CHAUDHARI ATARSINGH YADAV MEMORIAL EDUCATION TRUST'S,
SIDDHANT COLLEGE OF ENGINEERING

(College of Engineering Recognised by D.T.E. (Govt. of Mah.) and Affiliated to the S.P. Pune University)
Linguistic Minority (Hindi)

At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109.

I.D. No. PU/PN/Engg/231(2005), AISHE Code- C-41286, University PUN Code-CEGP012140

☎ 02114-661904/661902/661901

Website: - www.siddhantcoe.in

E-mail:engineeringprincipal@gmail.com

Ref. No- SCOE/ Admin/894/2022-23

Date:- 16/05/2023

To,
The Director Board of Examination & Evaluation,
Savitribai Phule Pune University,
Ganeshkhind, Pune.

Subject: Request for opening the exam form link to inward.(ME-1ST YEAR).

Respected Sir,

Following students filled the online exam form but they are not submitted in the college. 13/05/2023 was last date submission of exam form May/June-2023 of the ME-2017 PAT with late fee. But they unable to submit exam form 13/05/2023 unavoidable circumstances so requesting you to kindly accept request for the same so that they could submit these exam form.

Sr.No	Name of the Students	Year & Branch	PRN Number
1	PATIL CHETAN PANDIT	SYME DESIGN	77100462B
2	PRABHAKARAN S	FYME IT	77200476F

Thanking you,

Prof. M.U.Inamdar
(C.O.E.)

COLLEGE CODE:4044

PUN CODE:-CEGP012140



L.V.Kamble
Dr. L.V.Kamble
(Principal)

Siddhant College of Engineering
Sudumbare,Pune - 412 109

Received
J.P.
16/05/2023.

Savitribai Phule Pune University



(Formerly University of Pune)

HallTicket For ME 2017 PATTERN (INFORMATION TECHNOLOGY) MAR/APR 2023

SeatNo	PRN	CentreCode	CollegeCode	PUN Code
11150	77200476F	44	44	CEGP012140

Name : PRABHAKARAN S

Mother : S LAKSHMI

Centre : SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE



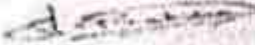
Sub Code	Subject Name	Type	Exam Date	Exam Time
514402	ADVANCE SOFTWARE ENGINEERING & PROJECT MANAGEMENT	[IE]		
514403	APPLIED ALGORITHMS	[IE]		
514405A	CLUSTER, GRID AND CLOUD COMPUTING	[IE]		
514407	CYBER SECURITY AND FORENSICS	[IE]		
514408	CLOUD AND DATA TECHNOLOGIES	[IE]		
514409	INFORMATION TECHNOLOGY ORIENTED OPERATIONS RESEARCH	[IE]		
514410B	USER EXPERIENCE DESIGN	[IE]		
514411	SEMINAR-I	[OV]		
514412	LAB PRACTICE-II	[OV]		

NOTE:

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Signature of Student

College Principal / Director

SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE

Savitribai Phule Pune University



(Formerly University of Pune)

HallTicket For ME 2017 PATTERN MECHANICAL (DESIGN ENGINEERING) MAR/APR 2023

SeatNo	PRN	CentreCode	CollegeCode	PUN Code
11131	77100462B	44	44	CEGP012140

Name : PATIL CHETAN PANDIT

Mother : VANDANA

Centre : SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE



Sub Code	Subject Name	Type	Exam Date	Exam Time
602218	SEMINAR-III	[OV]		
602219	PROJECT WORK STAGE-II	[OV]		

NOTE:

Students should ensure that details like Name, Photo, PRN, Subjects printed on Hall Ticket are correct. In case of any discrepancy, please immediately contact to College Exam Officer (CEO).

In Case, College does not have Exam Center, please follow University Circular.

In Case of any discrepancy between hallticket & time table published on university website (<http://exam.unipune.ac.in>), the timetable on website to be followed.

Signature of Student

College Principal / Director

SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE

Sr.No.	Faculty Name	Pattern Name	Result Date	Start Date	End Date
20	Pharmacy	SECOND YEAR B.PHARMACY 2019 PATTERN	17/08/2023	21/08/2023	30/08/2023
21	Pharmacy	THIRD YEAR B.PHARMACY 2019 PATTERN	17/08/2023	21/08/2023	30/08/2023
22	Engineering	S.E.(2019 PAT.)(CIVIL)	08/08/2023	17/08/2023	26/08/2023
23	Engineering	S.E.(2019 PAT.)(MECHANICAL)	08/08/2023	17/08/2023	26/08/2023
24	Engineering	S.E.(2019 PAT.)(PRODUCTION ENGINEERING)	08/08/2023	17/08/2023	26/08/2023
25	Engineering	S.E.(2019 PAT.)(ELECTRICAL)	08/08/2023	17/08/2023	26/08/2023
26	Engineering	S.E.(2019 PAT.)(ELECTRONICS &TELECOM)	08/08/2023	17/08/2023	26/08/2023
27	Engineering	S.E.(2019 PAT.)(INSTRUMENTATION)	08/08/2023	17/08/2023	26/08/2023
28	Engineering	S.E.(2019 PAT.)(COMPUTER)	08/08/2023	17/08/2023	26/08/2023
29	Engineering	S.E.(2019 PAT.)(CHEMICAL)	08/08/2023	17/08/2023	26/08/2023
30	Engineering	S.E.(2019 PAT.)(PRINTING ENGINEERING AND GRAPHIC COMMUNICATION)	08/08/2023	17/08/2023	26/08/2023
31	Engineering	S.E.(2019 PAT.)(MECHANICAL SANDWICH)	08/08/2023	17/08/2023	26/08/2023
32	Engineering	S.E.(2019 PAT.)(PRODUCTION ENGINEERING (SANDWICH)	08/08/2023	17/08/2023	26/08/2023
33	Engineering	S.E.(2019 PAT.)(INFORMATION TECHNOLOGY)	08/08/2023	17/08/2023	26/08/2023
34	Engineering	S.Y.(2019 PAT.)(B.TECH. BIOTECHNOLOGY)	08/08/2023	17/08/2023	26/08/2023
35	Engineering	S.E.(2019 PAT.)(AUTOMOBILE)	08/08/2023	17/08/2023	26/08/2023
36	Engineering	S.E.(2019 PAT.)(AUTOMATION & ROBOTICS ENGINEERING)	08/08/2023	17/08/2023	26/08/2023
37	Engineering	S.E.(2019 PAT.)(ARTIFICIAL INTELLIGENCE & DATA SCIENCE)	08/08/2023	17/08/2023	26/08/2023

Sr.No.	Faculty Name	Pattern Name	Result Date	Start Date	End Date
38	Engineering	S.E.(2019 PAT.)ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)	06/08/2023	17/08/2023	26/08/2023
39	Engineering	S.E.(2019 PAT.)ELECTRONICS & COMPUTER)	05/08/2023	17/08/2023	26/08/2023
40	Engineering	S.E.(2019 PAT.)MECHATRONICS ENGINEERING)	05/08/2023	17/08/2023	26/08/2023
41	Engineering	S.E.(2019 PAT.)ROBOTICS & AUTOMATION(RA))	06/08/2023	17/08/2023	26/08/2023
42	Engineering	S.E.(2019 PAT.)Computer Science And Design)	06/08/2023	17/08/2023	26/08/2023
43	Arts	M.A. (REV.2013)	11/08/2023	14/08/2023	23/08/2023
44	Engineering	T.E.(2019 PAT.)CIVIL)	05/08/2023	11/08/2023	20/08/2023
45	Engineering	T.E.(2019 PAT.)MECHANICAL)	05/08/2023	11/08/2023	20/08/2023
46	Engineering	T.E.(2019 PAT.)PRODUCTION ENGINEERING)	05/08/2023	11/08/2023	20/08/2023
47	Engineering	T.E.(2019 PAT.)AUTOMOBILE)	05/08/2023	11/08/2023	20/08/2023
48	Engineering	T.E.(2019 PAT.)ELECTRICAL)	05/08/2023	11/08/2023	20/08/2023
49	Engineering	T.E.(2019 PAT.)ELECTRONICS & TELECOM)	05/08/2023	11/08/2023	20/08/2023
50	Engineering	T.E.(2019 PAT.)ELECTRONICS)	05/08/2023	11/08/2023	20/08/2023
51	Engineering	T.E.(2019 PAT.)INSTRUMENTATION & CONTROL)	05/08/2023	11/08/2023	20/08/2023
52	Engineering	T.E.(2019 PAT.)COMPLITER)	05/08/2023	11/08/2023	20/08/2023
53	Engineering	T.E.(2019 PAT.)CHEMICAL)	05/08/2023	11/08/2023	20/08/2023
54	Engineering	T.E.(2019 PAT.)PRINTING ENGINEERING AND GRAPHIC COMMUNICATION)	05/08/2023	11/08/2023	20/08/2023
55	Engineering	T.E.(2019 PAT.)MECHANICAL SANDWICH)	05/08/2023	11/08/2023	20/08/2023



CHAUDHARI ATARSINGH YADAV MEMORIAL EDUCATION TRUST'S,

SIDDHANT COLLEGE OF ENGINEERING

(College of Engineering Recognised by D.T.E. (Govt. of Mah.) and Affiliated to the S.P. Pune University)
Linguistic Minority (Hindi)

At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109.

I.D. No. PU/PN/Engg/231(2005), AISHE Code- C-41286, University PUN Code-CEGP012140

☎ 02114-661904/661902/661901

Website: - www.siddhantcoe.in

E-mail: engineeringprincipal@gmail.com

Ref. No- SCOE/Admin/130/2023-24

Date:- 21/08/2023

NOTICE

Photocopy & Revaluation

Students of **Second Year- (2019 Pattern) Following Branches** are directed to fill online Answersheets Photocopy form on or before 26/08/2023.

SR NO	Course	Start Date	Last Date
1)	S.E.(2019 PAT.) (CIVIL)	17/08/2023	26/08/2023
2)	S.E.(2019 PAT.) (MECHANICAL)		
3)	S.E.(2019 PAT.) (ELECTRONICS & TELECOM)		
4)	S.E.(2019 PAT.) (COMPUTER)		
5)	S.E.(2019 PAT.) (INFORMATION TECHNOLOGY)		

Fill online form on website www.unipune.ac.in



L.V. Kamble

(Dr. L. V. Kamble)

Principal

Siddhant College of Engineering,
Sudumbare, Pune - 412 109

SAVITRIBAI PHULE PUNE UNIVERSITY

Application Form No.

17 Aug 2023



12304028714

APPLICATION FORM FOR PHOTOCOPY/XEROX COPY OF ANSWER BOOKS

- 1.The Application form shall be printed and preserved with candidate only.
- 2.Don't send hard copy of the Application form to Savitribai Phule Pune University / College.

**DIRECTOR,
BOARD OF EXAMINATION &
EVALUATION,
SAVITRIBAI PHULE PUNE UNIVERSITY,
GANESHKHIND,PUNE 411007.**

Sir,
I, the undersigned, request you to verify and issue xerox copy of my answer book(s) as per details given below:

Candidate Name	YADYNESH NITIN KHACHANE
College	SIDDHANT COLLEGE OF ENGINEERING, SADUMBARE
Exam Month & Year	202304
No. of Subjects appeared:	1
Centre at which appeared	44
Seat No.	S190440891
PRN No.	72297704C

(Subject(s) for Xerox Copy of Answer Book(s) [Theory Subjects only].)

Subject Code	Subject Name	Marks Obt.	Photocopy
207002	ENGINEERING MATHEMATICS - III	19	Photocopy/ Scancopy
Processing Fees			30.00
Subject Fees			200.00
Total Fees			230.00

DECLARATION OF THE CANDIDATE

I here by declare that,
1. I have gone through the rules for providing a xerox copy of answer book(s) mentioned in the application and it shall be binding on me.

Yours faithfully,

(Signature of the Candidate)



Transaction Successful
07:13 pm on 17 Aug 2023

Paid to



UNIPUNE

₹230



Transfer Details



Message

Pay

Transaction ID

T2308171913167105765173

Debited from



XXXXXXXXXXXX5630

₹230

UTR: 322933151088

Powered by



To,
The Principal,
Siddhant College of Engineering,
Sudumbare Road

Subject :- Name Correction in FE/SE/TE/BE/Degree Certificates.

Sir,
I want to correct the spelling mistake in my name & my father's name in the F.E/TE/SE/BE/Degree Certificates from "SHALEASH KOUL" to "SHAILESH KAUL" and my father's name from "PIYARAY KRISHAN KOUL" to "PIARAY KRISHAN KOUL". I have already corrected ^{10th, 11th, 12th} worksheets from the J.B.OSE (Sammiti & Kashmir Board of Secondary Education). So for this process, I will be requiring the college letter head addressed to "To, The Director, Board of Examinations & Evaluation, Santiribai Shule Pune University Pune - 411007" and Eligibility list Concern student name as per required and Principal Stamp and Sign". I request you to kindly issue the same.

Shankar Kaul

Dated
22/08/2022

(Check all documents)
Student Section
Prabhakar
21/8/22

Yours Sincerely,
Shankar Kaul

59	1654042/ANN/REG/2020/SSE/S/Z	MN	AMANDEEP SINGH S/O BALWANT SINGH MN: KULJEET KAUR	MN: KULJEET KAUR TO MN: KULJIT KAUF
60	14105004/AN/REG/2020/WZ/SSE	MN	NIMROZ AKHTER D/O MOHD SHAKOOR MN: NASEEMA AKHTER	MN: NASEEMA AKHTER TO MN: NASEEM AKHTER
61	14105017/AN/REG/2020/WZ/SSE	MN	MAHREEN FATIMA D/O MARABAT HUSSAIN MN: NAZIR KOUSER	MN: NAZIR KOUSER TO MN: NAZIA KOUSER
62	14107048/ANN/REG/2020/SSE/WZ	CN FN	KHAJASTA RAFIQ D/O MOHD RAFIQ	CN: KHAJASTA RAFIQ TO KHAJASTA RAFIQ FN: MOHD RAFIQ TO MOHD RAFIQ
63	200023/ANN/2002/SSE 244037/ANN/2003/HSP-I 120945/ANN2005/HSP-II	CN FN	SHALEASH KOUL S/O PIYARAY KRISHAN KOUL	CN: SHALEASH KOUL TO SHALEASH KOUL FN: PIYARAY KRISHAN KOUL TO PIARAY KRISHAN KOUL
64	2118278/BI/ANN/2019/SZ/SSE 2127409/ANN/2020/HSP-I	FN MN	MANSI WATLOO D/O RAJJI WATLOO MN: MONI DEVI	FN: RAJJI WATLOO TO RAJJI WATLOO (AS PER R.R. CARD) MN: MONI DEVI TO MUNI DEVI
65	4838084/ANN/REG/2018/SSE/SZ	FN MN	ROHIT KUMAR S/O OM PARKASH MN: JATTO DEVI	FN: OM PARKASH TO OM PERKASH MN: JATTO DEVI TO JATO DEVI



06

**CAYM EDUCATION TRUST'S
SIDDHANT COLLEGE OF ENGINEERING & POLYTECHNIC.**

(Approved by All India Council for Technical Education (AICTE) New Delhi, recognized by Government of Maharashtra, Mumbai & Affiliated to the University of Pune)
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412109.
I.D. No. PU/PN/Engg/231(2005)

02114-661901,661904
Website:- siddhantcoe.in

Fax o.02114-661902
Email ID:- engineeringprincipal@gmail.com

SCOE/ Admin/ 123/ 2022-23

Date:- 22/08/2022

To,
The Director Board of Examination & Evaluation,
Savitribai Phule Pune University,
Ganeshkhind, Pune.

Sub:- Name Correction in to the Marksheet.

This is to certify that, **SHAILESH KAUL** is bonafide student of this college and studying in Final Year Computer Engineering for the academic year 2012-13.

He was admitted in the academic year-2005-06 & for this year Eligibility Numbers not generated.

His name is wrong in attached marksheets So Please Correct it.

Sr. No	Name of the Student	Exam Seat Number	PRN Number	Exam Name	Wrong Name	Correct Name
1	SHAILESH KAUL	B80444265	70611167C	Oct- 2013	SHALEASH KOUL	SHAILESH KAUL

Shailish Kaul
Received
Date 22/08/2022



[Handwritten Signature]

[Handwritten Signature]
(Dr. R. L. KHANDAGALE)
Principal
Siddhant College of Engineering
Sudumbare, Pune - 412109

NOTE: FIRST LINE : SEAT NO., NAME OF THE CANDIDATE, MOTHER, PERMANENT REG. NO., PREVIOUS SEAT NO., COLLEGE, SEAT NO.
OTHER LINES: HEAD OF PASSING, MAX. MARKS, MIN. PASS MARKS, MARKS OBTAINED, P/F:PASS/FAIL, C: PREVIOUS CARRY OVER

MAX.MARKS : 1500 DISTINCTION : 0950 FIRST CLASS : 900 HIGHER II CL: 825 SECOND CLASS: 750 PASS CLASS: 600

880444264 NAVALE ANOL NITTHU BHAGERATTI , 711332670 , SCES

010 . DESIGN AND ANALY. OF ALGORITHMS	PP	100	40	26	F
020 . PRINCIPLES OF COMPILER DESIGN	PP	100	40	28	F
030 . OBJECT ORIENTED MODELING & DES.	PP	100	40	34	F
030 . OBJECT ORIENTED MODELING & DES.	TW	25	10	21	F
030 . OBJECT ORIENTED MODELING & DES.	OR	50	20	29	F
04C . ARTIFICIAL INTELLIGENCE	PP	100	40	41	F
04C . ARTIFICIAL INTELLIGENCE	TW	25	10	20	P
04C . ARTIFICIAL INTELLIGENCE	OR	50	20	36	P
05D . SOFTWARE TESTING & QUALITY ASSU	PP	100	40	46	P
060 . COMPUTER LABORATORY I	PR	50	20	32	P
070 . PROJECT WORK	TW	50	20	38	P

FIRST TERM TOTAL = 351/750.

880444265 SHALEASH KADU SUSHILA , 70611187C , 880444296 , SCES

010 . DESIGN AND ANALY. OF ALGORITHMS	PP	100	40	31	F	080 . DISTRIBUTED OPERATING SYSTEMS	PP	100	40	41	P	C	
020 . PRINCIPLES OF COMPILER DESIGN	PP	100	40	44	P	C	090 . ADVANCED COMPUTER ARCHITECTURE	PP	100	40	45	P	C
030 . OBJECT ORIENTED MODELING & DES.	PP	100	40	41	P	C	100 . ADVANCED DATABASES	PP	100	40	44	P	C
030 . OBJECT ORIENTED MODELING & DES.	TW	25	10	17	P	C	100 . ADVANCED DATABASES	TW	50	20	30	P	C
030 . OBJECT ORIENTED MODELING & DES.	OR	50	20	20	P	C	100 . ADVANCED DATABASES	OR	50	20	21	P	C
040 . SOFTWARE ARCHITECTURE	PP	100	40	40	P	C	11C . CLOUD COMPUTING	PP	100	40	41	P	
040 . SOFTWARE ARCHITECTURE	TW	25	10	13	P	C	120 . COMPUTER LABORATORY II	TW	50	20	21	P	C
040 . SOFTWARE ARCHITECTURE	OR	50	20	22	P	C	120 . COMPUTER LABORATORY II	PR	50	20	25	P	C
05D . SOFTWARE TESTING & QUALITY ASSU	PP	100	40	53	P	C	130 . PROJECT WORK	TW	100	40	80	P	C
060 . COMPUTER LABORATORY I	PR	50	20	29	P	C	130 . PROJECT WORK	OR	50	20	35	P	C
070 . PROJECT WORK	TW	50	20	33	P	C							

GRAND TOTAL = 726/1500, RESULT: PASS CLASS # [0.4]

880444266 PISAL SAYALI SUNIL POOJA , 71133274G , SCES

010 . DESIGN AND ANALY. OF ALGORITHMS	PP	100	40	58	P
020 . PRINCIPLES OF COMPILER DESIGN	PP	100	40	32	F
030 . OBJECT ORIENTED MODELING & DES.	PP	100	40	48	P
030 . OBJECT ORIENTED MODELING & DES.	TW	25	10	22	P
030 . OBJECT ORIENTED MODELING & DES.	OR	50	20	39	P
040 . SOFTWARE ARCHITECTURE	PP	100	40	58	P
040 . SOFTWARE ARCHITECTURE	TW	25	10	20	P
040 . SOFTWARE ARCHITECTURE	OR	50	20	38	P
05D . SOFTWARE TESTING & QUALITY ASSU	PP	100	40	54	P
060 . COMPUTER LABORATORY I	PR	50	20	37	P
070 . PROJECT WORK	TW	50	20	42	P

FIRST TERM TOTAL = 448/750.

TRUE COPY
Handwritten Signature
Principal
Sidhant College of Engineering
Sudumbare, Mayal, Pune- 443109

The Jammu & Kashmir State
Board of School Education



Secondary School Examination
ANNUAL (REGULAR)-2002

Serial No. 1005222

Roll No. 208023

Registration No. 00N-JRM-214514

This is to certify that **SHAILESH KAUL**
PIARAY KRISHAN KOUL

Son/daughter of

Date of birth **01/07/1986**
(First July, Nineteen Hundred Eighty Six)

Passed the above examination of this Board, with **GRADE TWO**
From : **V B PUBLIC HIGH SCHOOL AKALPUR**

Jammu : 09 July, 2021



[Signature]
JOINT SECRETARY

[Signature]
SECRETARY

[Signature]
CHAIRMAN



The Jammu & Kashmir State Board of School Education



Higher Secondary Part Two

Annual - 2005

Serial No. *05AJTP-530650*

Roll No. *120045*

Registration No. *00N/JRAT-214514*



This is to certify that *Shallesh Kaul*

Son/daughter of *Piaray Krishan Koul & Sushila Koul*

Passed the above examination of this Board, with *Second Division*

In the faculty of *Science* with the following subjects

- 1. General English*
- 3. Chemistry*

- 2. Physics*
- 4. Mathematics*

Jammu : *15 Jul 21*

[Signature]
JOINT SECRETARY

[Signature]
SECRETARY

[Signature]
CHAIRMAN

