Department of computer science engineering (Theory and Practical)

2.3.1 Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Following innovative teaching learning methods are adapted by the department:

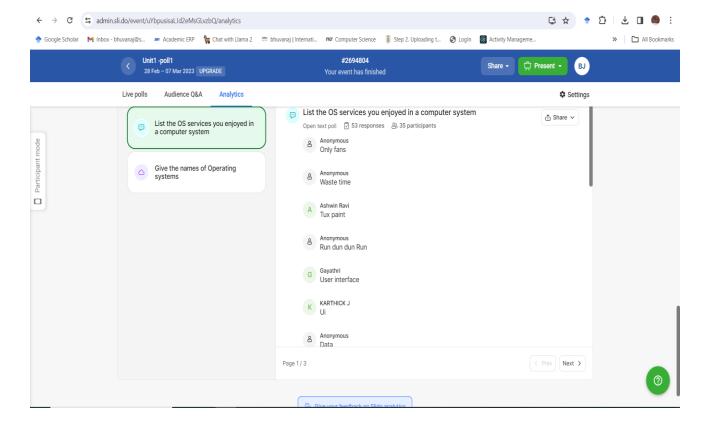
- Think Pair and Share
- Minute Lecture
- Problem Solving
- Demo
- Slido Quiz
- Inline Quiz

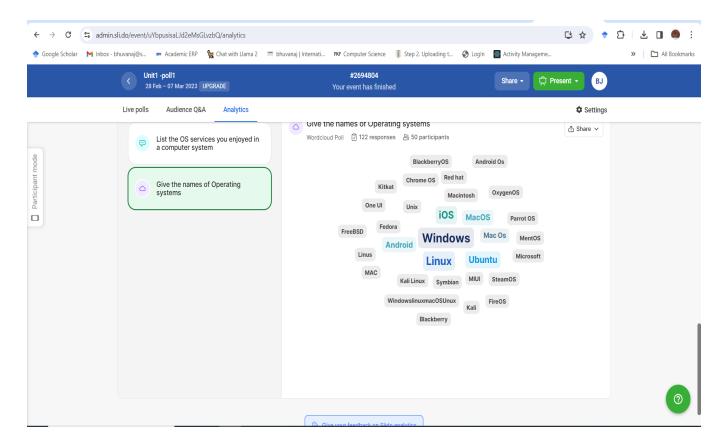
Think-pair-share (TPS) is a collaborative learning strategy where students work together, to solve a problem or answer a question about an assigned reading. The teachers have provided these activities to enhance the teaching-learning process in the classrooms.

Google colab and Online compilers were used to demonstrate the concepts, for all the courses wherever demo was planned.

Slido Quiz

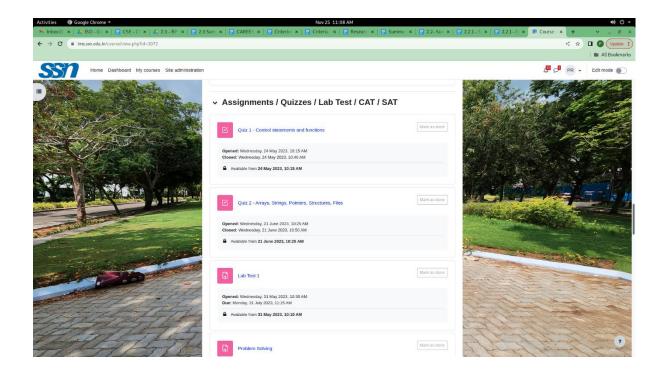
To enhance the learning ability, disruptive learning is adapted and implemented using tools like Slido, MS Teams, LMS and Google forms. A sample Slido quiz pages and LMS in-line quiz are shown below:





Sample inline quiz





2.3.1 Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Following are the innovative methodologies adapted by the department.

1. For the theory cum lab integrated course major focus was given to experiential learning where students will learn concepts by engaging in hands-on experiences and reflection of the concept they learned in the class, they are better able to connect theories and knowledge learned in the classroom to real-world situations.

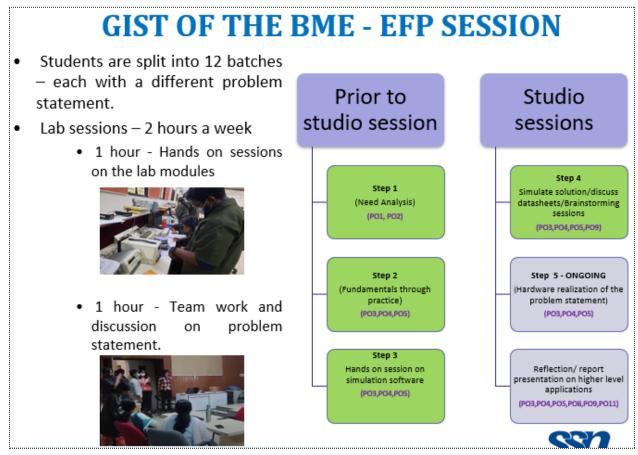


Figure 1: Different steps involved in EFP session (experiential learning)

Students were divided into groups and they were told to perform a need analysis for the problem statement which the team has chosen. Fundamentals knowledge which is required to execute the project was given through lab experiments. Students were encouraged to involve themselves in different discussions via brainstorming sessions and group discussions. Hardware realization of the problem statement was executed and it was evaluated. Reflections about the work and a report/ presentation on higher level applications of the work was submitted as a report.

BRAINSTORMING SESSIONS

Introduction to Classifications of Transducers & Its Medical Applications (Unit I)

- Students were given an overview of transducer classification.
- · Assigned five teams to do a presentation
- ·Students actively participated
- ·Titles given were
 - √Classification based on source requirement
 - ✓Classification based on physical phenomenon
 - ✓Classification based on output
 - ✓Classification based on transduction phenomenon
 - √Classification based on construction





Figure 2: Snapshot of brainstorming session

BRAINSTORMING SESSIONS

For indepth knowledge on various sensors

Example: Comparison between Temperature sensors: RTD, Thermistor and Thermocouple

- · Students were split into three groups for discussion
- · Datasheets with background theory and specifications were provided
- · Students prepared for an interesting brainstorming session

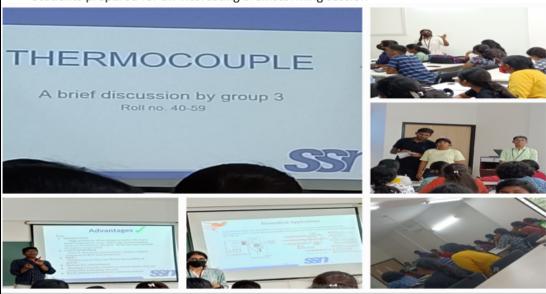


Figure 3: Brainstorming session

Some participatory learning techniques like brainstorming sessions, group discussions and presentations were included as shown in in figure 2 and 3 to make the learning more interactive and fruitful and hence can boost the confidence of students in delivering the learnt concepts clearly and make others to participate in the various discussions and activities.



Figure 4: Snapshot of project exhibition conducted

Figure 4 shows the snapshot of the project exhibition conducted and the students' performance were evaluated by the experts.

Students had a very good exposure to different problem-solving methodologies that can be applied for solving the real time problems related to different applications of sensors.

2. Students were encouraged and given support to join for different internship opportunities/ hospital training to get a real time hands on experience of different equipments and also to have interactions with doctors/ researchers to get more involvement in participatory learning and thus to enhance the learning experience.

Name	Place of internship Dates	
Abinaya.P	Prashanth hospital 30.06.2023 - 18.07.2023	
	Deepam Hospital	03.07.2023 - 25.07.2023
Abirami	HTIC IGRS Lab	18.07.2023 - 17.08.2023
	Deepam Hospital	03.07.2023 - 25.07.2023
Abishek P.S	DVerse Labs, IITM HTIC	17.07.2023 - 18.08.2023

		00 00 0000 00 00 0000
	Cancer Institute, Adyar	02.08.2022 - 06.08.2022
Akash Kumar Deepam Hospital Akash Kumar CEHE IIT HVDERARAD		03.07.2023 - 25.07.2023
Akileshwar G	CFHE, IIT HYDERABAD	01.07.2023 - 02.08.2023
	Kauvery Hospital	09.08.2022 - 16.08.2022
Anusha A	Deepam Hospital	03.07.2023 - 25.07.2023
	SERB Research Project, SSNCE	05.08.2022 - 05.10.2022
Aswathama.S.M Neurostellar-IITM Research park		15.07.2023 - 15.08.2023
Aswin JC	B. Braun Medical Devices Company	01.07.2023 - 15.08.2023
A Avanthikha	Sri Manakula Vinayagar Medical College and Hospital	26.06.2023 - 07.07.2023
Bhavana	Fortis Malar	01.08.2023 - 20.08.2023
Caleb Mark Selwyn	Agappe diagnostics ltd	10.07.2023 - 10.08.2023
	Gem Hospital, Chennai	27.07.2022 - 12.08.2022
Devadharshini	BioRehab Group, CMC Vellore	03.07.2023 - 17.08.2023
	Medical Robotics Programme, Athenapandian Pvt Ltd.	08.08.2022 - 09.09.2022
	Deepam Hospital	03.07.2023 - 25.07.2023
Giridharani R	MIT,Anna University,CIoT,Summer Internship	17.07.2023 - 28.07.2023
	Deepam hospital	03.07.2023 - 25.07.2023
Haripriya C	Kriti kare India private limited	17.07.2023 - 17.08.2023
		03.07.2023 - 25.07.2023
S.P.Harshan	Siemens	01.07.2023 - 25.07.2023
Jacob Thomas Kauvery Hospital		
	Gem Hospital	26.06.2023 - 15.07.2023
Jeni Christina.G	CSIR - CLRI Chennai	17.07.2023 - 17.08.2023
	Design & Prod Dept, Irillic Pvt Ltd	16.01.2023 - 22.01.2023
	Global Hospitals	10.07.2023 - 29.07.2023
Jerin Reshmon	TUV Rheinland	01.08.2023 - 15.08.2023
Jhothshana GA	Reprosci, Bangalore	03.07.2023 - 06.08.2023
Kanimozhi Shri K	Deepam hospital	03.07.2023 - 25.07.2023
	Deepam Hospital	03.07.2023 - 25.07.2023
Krishnapriya S	CSIR - CLRI Chennai	17.07.2023 - 17.08.2023
Mahitha TR Deepam hospital		03.07.2023 - 25.07.2023
	Apollo Hospital Greams Road	24.06.2023 - 09.07.2023
Meera Kumaar	Niramai Health Analytix	10.07.2023 - 10.08.2023
	HTIC IGRS Lab	06.07.2023 - 06.08.2023
Neeraja R	Apollo Hospital	07.08.2023 - 17.08.2023
1 1001aja IX	ripono mospital	07.00.2023 17.00.2023

Poorvica Ramanand	Summer Research Fellowship Program by Indian Academies of Sciences- Tractrix Opto Dynamics, Hyderabad	01.07.2023 - 28.08.2023
S. Prabhu	Dr. Kamakshi Memorial Hospitals	26.07.2023 - 15.08.2023
Pradiep Kumar G D NIMHANS, Bangalore		26.06.2023 - 25.07.2023
	NSIC Technical Services	26.06.2023 - 03.07.2023
Pramod Rajan S	Deepam hospital	03.07.2023 - 25.07.2023
Prathibha M		
	NSIC Technical Services	26.06.2023 - 03.07.2023
Praveenkumar K R	Deepam Hospital	03.07.2023 - 25.07.2023
Raajameenakshi AL	IITM - Summer fellowship program	26.06.2023 - 25.08.2023
Rithisha Jagan	Aravind eye hospital	01.07.2023 - 20.07.2023
V. Ruban	Dr. Kamakshi Memorial Hospitals, Stanley Medical College and Hospitals	.023 - 15.08.2023, 5.07.2023-25.
Sandhiya V	Deepam hospital	03.07.2023 - 25.07.2023
	Deepam hospital	03.07.2023 - 25.07.2023
Sanjeeth	verzeo	01.01.2023 - 28.02.2023
	NSIC Technical Services	26.06.2023 - 03.07.2023
K. Santhoshi	IITM-Research Internship (Dr. S. Ramakrishnan)	07.07.2023 - 07.08.2023
	NSIC Technical Services	26.06.2023 - 03.07.2023
Sharmila G	Deepam hospital	03.07.2023 - 25.07.2023
	Apollo Hospitals	10.08.2022 - 16.08.2022
	Deepam Hospital	03.07.2023 - 25.07.2023
Shivapriya S	MIT,Anna University,CIoT,Summer Internship	17.07.2023 - 28.07.2023
Shreeda	NSIC Technical Services	26.06.2023 - 07.07.2023
Shreya M	Apollo Hospitals	10.07.2023 - 29.07.2023
Shri Thrisha	IITM-Research Internship(Dr. S. Ramakrishnan)	07.07.2023 - 07.08.2023
Shruthi G	Apollo Hospitals	10.07.2023 - 29.07.2023
-	-	-
	Birla Institute of Technology	11.01.2023 - 09.02.2023
Sneha V	and Sciences, Pilani, K K Birla Goa Campus,	03.07.2023 - 22.07.2023
	Gem Hospital	26.06.2023 - 15.07.2023
Sowjanya B	DVerse Labs (HTIC IITM Research park)	17.07.2023 - 18.08.2023
	Nit Trichy	26.06.2023 - 25.07.2023
Srianantha Kamali S	Dr. Kamakshi Memorial Hospitals	26.07.2023 - 15.08.2023

Srilalitha	B. Braun Medical Devices Company	01.07.2023 - 15.08.2023
Srivibha	HTIC IGRS Lab	06.07.2023 - 06.08.2023
Parthasarathy	Apollo Hospital	07.08.2023 - 17.08.2023
C.R.Suke Bhargav	Deepam Hospital	03.07.2023 - 25.07.2023
	CURI	27.07.2022 - 16.08.2022
	Neurostellar	10.01.2023 - 16.02.2023
Supraja	Deepam hospital	03.07.2023 - 25.07.2023
Vaidhyanathan	IIT Madras -Research internship (Dr. Sujatha N)	01.07.2023 - 30.08.2023
	Marcello tech (online)	2022, 11-12-2022, 17-12-2022 &
	Apollo Hospitals	10.08.2022 - 16.08.2022
	Deepam Hospital	03.07.2023 - 25.07.2023
Supriya R S	MIT,Anna University,CIoT,Summer Internship	17.07.2023 - 28.07.2023
M.Swapna	Deepam hospital	03.07.2023 - 25.07.2023
J Sweetlyn Golda Margaret Deepam hospital		03.07.2023 - 25.07.2023
Swetha A	MGMC & Research Institute 03.07.2023 - 22.07.202	
Swethashri	NSIC Technical Services 26.06.2023 - 07.07	
	Dr. Kamakshi Memorial Hospitals	26.07.2023 - 15.08.2023
A.V.Trisha	IITM-Research Internship(Dr. S. Ramakrishnan)	07.07.2023 - 07.08.2023
Abishake S	Apollo Hospitals 10.07.2023 - 29.07.202	
Drithve B.S	Dr. Kamakshi Memorial Hospitals 26.07.2023 - 15.08.20	
	Gem Hospital	26.06.2023 - 15.07.2023
Mohamed Yaser H	DVerse Labs (HTIC IITM Research park)	17.07.2023 - 17.08.2023
Shakthivel B Apollo Hospitals		10.07.2023 - 29.07.2023

3. "Active Learning" project was implemented to engage students in their learning by thinking, discussing, investigating, and creating. The project included in class intervention in the form of MCQs being asked to the students during the class to see their participation in the teaching learning process.

Department of Information Technology (Theory and Practical)

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

The curriculum is updated with necessary components to initiate enhanced learning experiences among the students. Essentially, there are different types of courses in the curriculum that include Theory courses, Theory cum Practical courses, Laboratory courses, Project works and Internships to ensure enhanced learning. Additionally, a specific course on experiential learning EFP courses were introduced in the curriculum 2021 to enhance the student experience in problem solving by collective of theory, practical and project components together as a single course. For each of the courses, the students are provided with access to the Moodle platform (LMS) with various features of discussion forums, resource sharing, assignment submission, online test and so on.

The following are the student-centric methodologies followed for various courses:

1. Theory courses

Lectures for the theory classes are done through conventional methods, PowerPoint-presentations and other ICT technologies like touch screens, recording of lectures. Assignments are designed in a way to extend the conceptual learning to problem solving. Assignments and in-class-seminars pave a way to enhanced learning.

2. Laboratory courses

Exercises in laboratory courses are framed to ensure that every theoretical concept is applied in problem solving using the latest technologies and tools. Each exercise has two sections where the first section contains questions to be solved by both the slow learner and the bright students and the second section contains questions of higher order knowledge level specifically for the bright students and is made as an option for the slower learners. It is also ensured that the faculty student ratio is kept to 1: 15 to ensure every student is provided individual attention in improving his skills on problem solving. This approach provides an opportunity for enhancing learning experiences.

3. Theory cum practical courses

This is a combination of both theory and laboratory in a single course. The usual practice of student centric methodology of theory and practical courses are included, additionally application-based problem solving are provided as groupwork to enable participative learning.

4. Project work

Project work is offered in different semesters starting from the first year. These courses are specially designed to enable the students to experience the industrial practices in

problem solving. A team of students are provided with real world problems with requirements collected from the external clients. Complete agile methodology as per the industry practice is followed in the software project development process. Appropriate tools, frameworks and technologies such as PSPs, Jira, GitHub are used. The software development process followed in the project provides students with an opportunity for experiential learning, participative learning and extended learning.

Experience gained in the lower semesters on project development enables the student to provide better novel solutions in their eight semester projects. The problem statement identified is either research based or application-based problem. Students provide novel solutions and contribute to the society where the project outcome is converted to a research publication or patent. Some of the research domains in the department include AI in Health care, Computer Vision, Speech, Language & text processing, Network & Security, IoT, Web services, Cloud and Nano Electronics. There are few problem statements offered by the industry experts or by the collaborative organization, where the student provides solutions that are motivated for either patenting or to initiated by the innovation cells for startups.

The institution also opens a funding opportunity for the students through the Internally Funded Student Project every year where the students are motivated with funds for their project implementation on research ideas which also provide a big opportunity for experiential and participative learning.

5. EFP course

This course is inclusive of theory, practical and project work. All student centric methodologies of theory, laboratory and project are followed here. This course gives a new experiential learning for the student going hand in hand of theory, laboratory and project work. This course ensures that students learn by implementing the concepts as well as applying the concepts for real world problem solving. Thus, this course provides a student with the opportunity to enhance his learning experiences through participative learning and experiential learning.

6. Internships

Internships create an opportunity for the student to experience industry working experience. It allows the student to effectively communicate and collaborate with the industry members to raise their standards and practices in problem solving. There is a steady rise in students doing internships every year. The student percentage undergoing internships has increased to 55.67% from 36.05% in the academic year 2022-2023.

Apart from the courses, participation in workshops, hackathons, technical seminars, technical symposiums, paper presentations and other technical events enable every student with an opportunity to experience enhanced learning.

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603110 Department of Civil Engineering

Assignment - 1

Submission Date: 02.06.2023

Problem:

If I want to construct a temple that has architectural shapes and mythological structures that are sometimes symmetrical but otherwise unsymmetrical, what type of masonry will I choose based on the factors like, time, workmanship, cost and safety. Elaborate on the two types of masonry that are commonly adopted.

Your answer should along the following points:

- Material Cost
- Workmanship
- Appearance
- Strength
- Construction Time
- Maintenance
- Design Flexibility
- Availability

- Cost of Transportation
- Historical Significance

Course Coordinator	Approved By
SH	Sin
Dr. Aswin Sriram G	HoD/ Civil

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603110 Department of Civil Engineering

Assignment – 2

Submission Date: 28.07.2023

Problem:

"Imagine you're leading a groundbreaking project to create the world's most sustainable and technologically advanced city on Earth. This city is designed to combat climate change, reduce energy consumption, and minimize environmental impact. In your research, you discover that there are 12 distinct types of cement, each with unique properties and benefits, ranging from high-strength to low-carbon options.

If you could select just one type of cement from this diverse range to be the cornerstone of your sustainable city's construction, which specific type would you choose and what qualities or properties make it the ideal choice for achieving your ambitious environmental goals?"

Your answer should write what are the various types of cement and their properties.

Approved By
HoD/Civil

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603110

Department of Civil Engineering

Industrial Training Program Guidelines

PREAMBLE

Industrial Training refers to work experience that is relevant to professional development prior to graduation. Industrial Training is an essential component in the development of the practical and professional skills required for an Engineer and an aid to prospective employment. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience. At the end of the Industrial Training, students should be able to improve their knowledge and skills relevant to their areas of specialization and at the same time able to relate, apply and adapt relevant knowledge, concepts and theories within an industrial organization, practice and ethics. With this experience and exposure, the students should be able to acquire knowledge and skills to compete in the job market. The for internship/Industrial training/Project work industry/academic opt in any institute/R&D/PSU/Government or semi-government organizations. This caters students, the opportunity to gain valuable applied experience and explore networks in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent. This will not only help students in gaining professional know-how but also benefits, corporate on fresh perspectives on business issues and even discovering future business leaders

1.0 OBJECTIVE:

• To train the students in field work so as to have a firsthand knowledge of practical problems in carrying out engineering tasks. To develop skills in facing and solving the field problems

1.1 STRATEGY:

• The students individually undertake training in reputed civil engineering companies for the specified duration. At the end of the training, a report on the work done will be prepared and presented. The students will be evaluated through a viva-voce examination by a team of internal staff.

1.2 OUTCOMES:

At the end of the course the student will be able to understand

- The intricacies of implementation textbook knowledge into practice
- The concepts of developments and implementation of new techniques

Jours and

Workflow Methodology

Stage 1

Approach and apply organization

Get acceptance from company

Present the acceptance letter to Coordinator along-with Industrial training registration form



Stage 2

Attend the Internship training

Enter the daily work in log sheets

Complete the training and get completion certificate, feedback form and get the student logbook attested





Prepare the Internship Report

Soft binding should include a copy of completion certificate and log sheet

Final viva will be conducted and PPT presentation should be given by students about their training

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Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam - 603 110 (An Autonomous Institution, Affiliated to Anna University, Chennai)

DEPARTMENT OF CHEMICAL ENGINEERING

2.3.1 Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

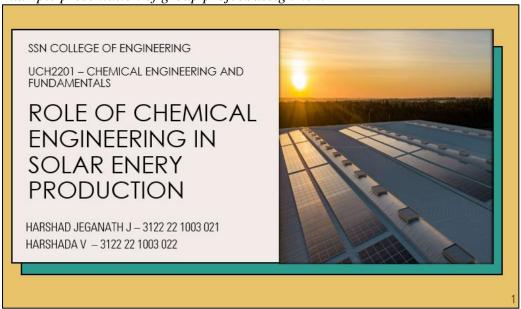
Following innovative teaching-learning methods are adapted by the department:

- i. Theory-cum-practice
- ii. Think-pair-share and present
- iii. Problem Solving with tools
- iv. Solving literature problems
- v. Slido/Learning Management System (LMS)
- i. Theory-cum-practice: We have implemented theory-cum-practical courses with the aim of seamlessly blending theoretical knowledge with its practical application. The primary objective of these courses is to deepen understanding and proficiency in theoretical concepts. The curriculum is designed to integrate experiential learning opportunities, including engaging in practical projects and solving case studies using industry-relevant software. For instance, in the execution of a specific course, UCH2201 Chemical Engineering Practice and Fundamentals, the theoretical aspects of a heat exchanger were first covered in the classroom setting. Subsequently, this theoretical knowledge was reinforced through hands-on experimentation in the laboratory. Additionally, students gained practical experience with industry-standard software, such as ASPEN heat exchanger simulation. This approach not only reinforces theoretical concepts but also equips students with practical skills and exposure to real-world applications within the field.

ii. Think-pair-share (TPS): TPS is an interactive learning approach that emphasizes collaborative efforts among students to collectively address challenges or respond to

questions related to assigned readings. Within this framework, students are tasked with presenting their findings, distinctly highlighting each member's unique contributions to the group effort. Teachers have integrated these activities into the classroom to elevate the teaching-learning dynamic and contribute to the holistic development of students. The incorporation of TPS not only enriches the educational experience but also fosters an environment that nurtures overall student growth.

Example presentation of group project/assignment



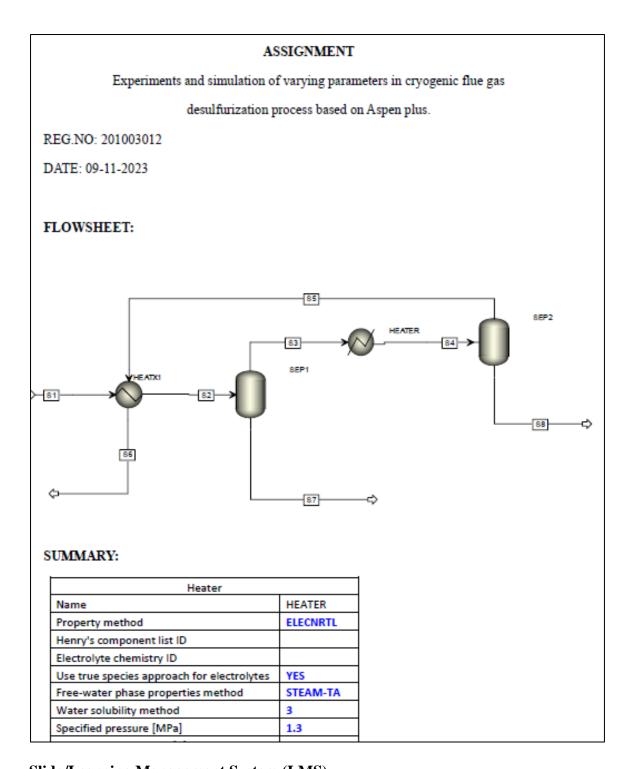
iii. Problem solving with tool: In the field of chemical engineering, proficiency in fundamental engineering computing and data visualization is crucial. This entails the ability to adeptly solve both linear and differential equations, leveraging contemporary mathematical tools such as MATLAB. Students within this discipline are presented with specific assignments that require them to apply these modern tools to address a set of questions. These assignments serve as a practical means for students to enhance their understanding and application of engineering computational techniques, through the utilization of MATLAB perse.

Example of a problem statement from reaction engineering and solving it by MATLAB

```
Tutorial – 3: Chemical Process Modeling and Simulation
Problem: Find the concentration C along a PFR given by \frac{dC}{dV} = -0.5C^{1.25} with C(0) = 1 for
reactor volumes (V) ranging from 0 to 12. Use ODE45 routine in MATLABS and Plot V vs C
ANS: MATLAB Script by R S Aaditya
% PFRsolnCvsV.m
% The file PFRsolnCvsV.m is having the contents below
% to solve for C
close all;
% initialation
C0 = 1;
parameter(1) = -0.5;
parameter(2) = 1.25;
Vspan = 0:0.1:12:
size(Vspan)
% [VSol,CSol] = ode45('pfrfun', Vspan, C0);
options = odeset('RelTol',1e-5,'AbsTol',1e-5);
[VSol, CSol] = ode45(@(V,C)pfrfun(V,C,parameter), Vspan, C0, options);
%to plot
plot(VSol, CSol)
```

iv. Solving literature problem: Assigning literature-related problems as assignments offer multiple advantages for students and offers a thorough assessment of their comprehension of literary works. These assignments foster critical thinking, deepen textual understanding, enhance problem-solving abilities, and cultivate research skills. For example, students may be tasked with addressing a literary problem and executing it using a tool like ASPEN, thereby integrating practical application into their exploration of literature. This approach not only engages students in analytical thinking but also emphasizes the practical relevance of their literary understanding.

Example of an literature problem as an assignment and solving it in ASPEN



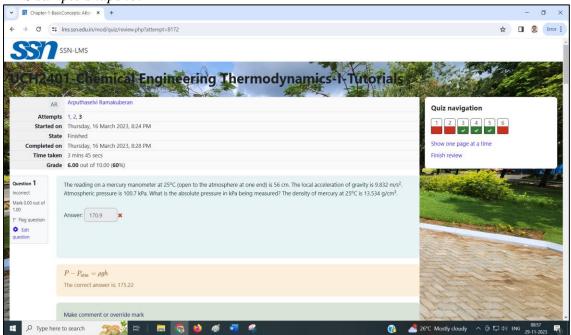
v. Slido/Learning Management System (LMS)

In order to enrich the learning environment, innovative and interactive learning techniques are incorporated, utilizing tools such as Slido, MS Teams, Learning Management Systems (LMS), and Google Forms. These tools, exemple Slido, play a pivotal role in amplifying student engagement, facilitating real-time interaction, improving the quality of Q&A sessions, and fostering increased focus and attention within the classroom. Below are examples of a sample Slido quiz page and snapshots of an in-line quiz within the Learning Management System (LMS):

Slido sample snapshot



LMS sample snapshot



2.3.1 Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Following innovative teaching learning methods are adapted by the department:

- Slido Quiz: To enhance the learning ability, disruptive learning is adapted and implemented using tools like Slido.
- Various types of online quizzes (drag and drop, calculated quiz, safety and environment quizzes)
- Self-Learning Assessment were conducted where each student needs to select a component and explain the manufacturing steps involved to fabricate the same. These details need to be entered a the given format.
- Live chat sessions were conducted where three videos are shared to the students and collect their doubts in a google sheet. A live session for answering and clarification in the class.

SLIDO PROOFS:

6.9.23 III Hour UHV



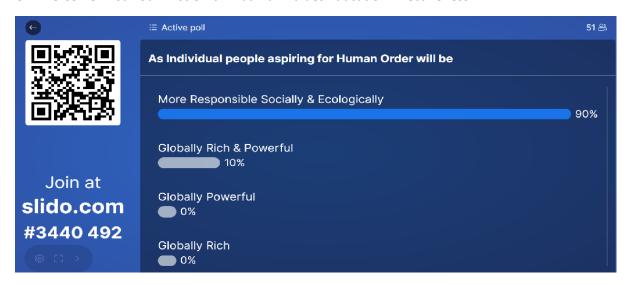
13.9.2023 UHV



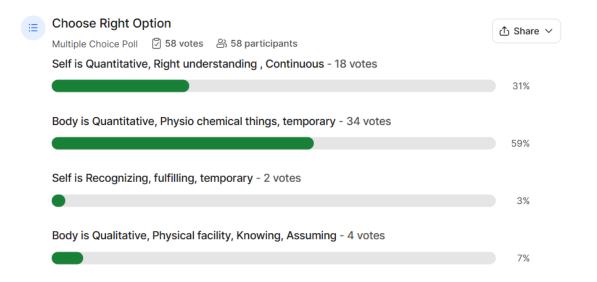
14.9.2023 UHV Right Understanding



UHV 25.09.23 First Hour First Unit - Huaman Values Education Effectiveness

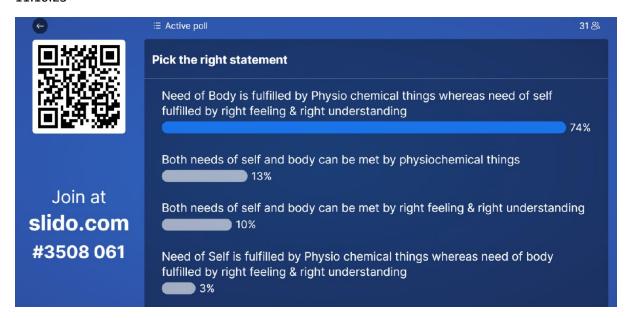


9.10.2023

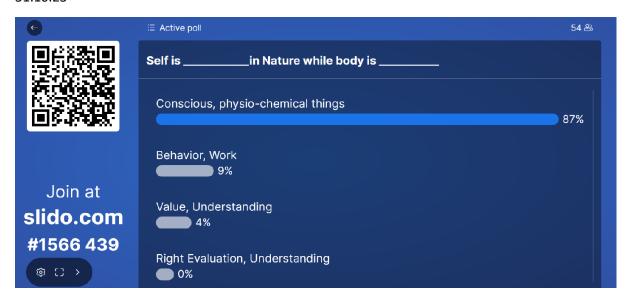




11.10.23



31.10.23





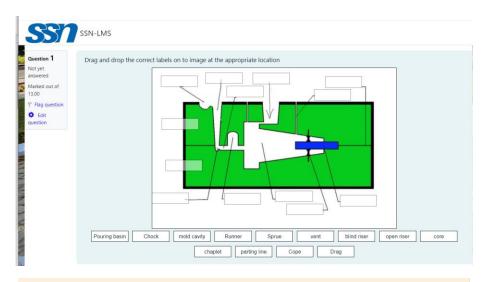
2.11.2023

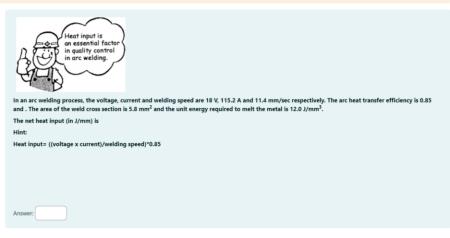
UME2303 Manufacturing Processes (Theory cum Practice)

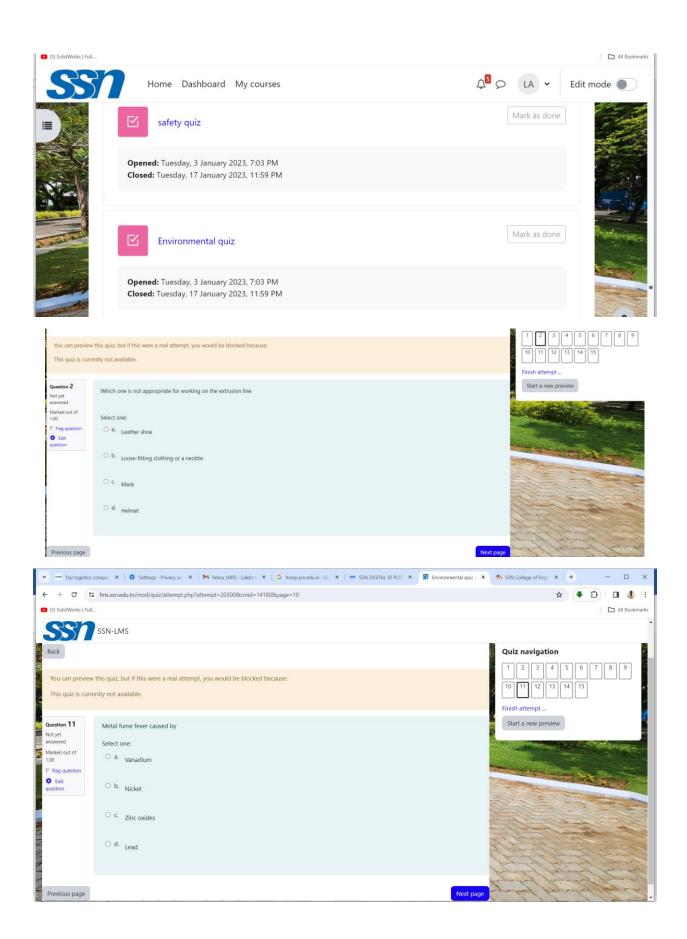
Course Instructor: Dr. A.K. Lakshminarayanan

Innovative Teaching Methodology

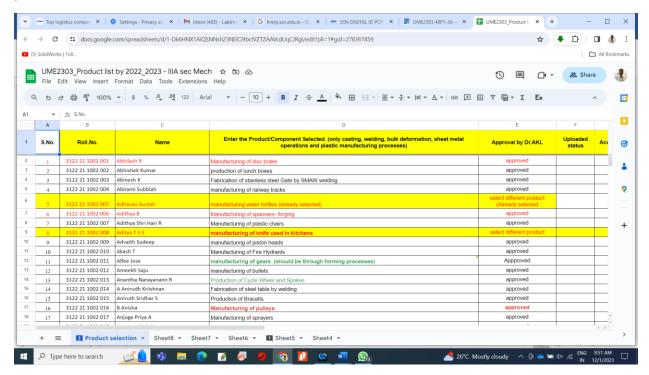
Sl.No	Approach
1	Various types of online quizzes (drag and drop, calculated quiz, safety and environment quizzes)
2	Self-Learning Assessment Each student needs to select a component and explain the manufacturing steps involved to fabricate the same. These details need to be entered in the given format.
3	Live chat sessions Three videos are shared to the students and collect their doubts in a google sheet. A live session for answering and clarification in the class.







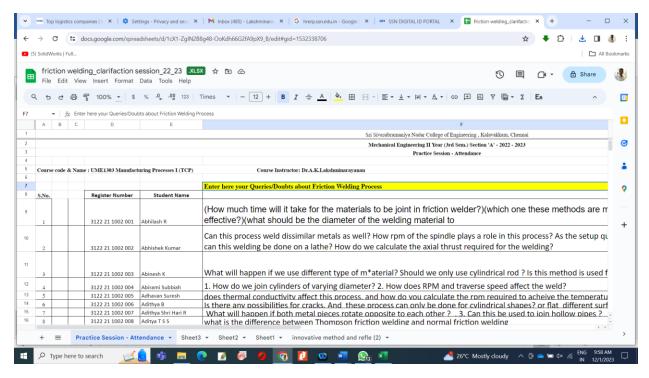
Component selection and entries in the google sheets (need approval from the course instructor to proceed further)



Video based Q & A sessions



Questions posted by the students





III SEMESTER Mechanical "A" section 2022-2023 ODD

Self Learning Assignment and Evaluation of Students Understanding on the Component / Product fabrication by different manufacturing processes

Student Name:	V. Mithila	
Register Number:	3122211002049	
Product/Component selected: (write the		
name and attach an image)		
	Screw driver	
	Screw driver	
Application of the Product/Component	screwdrivers are widely used for machine screws, wood	
	screws, mechanical assemblies, building and construction,	
	bolt assemblies, and fastener assemblies. They are often	
	used in the home and construction settings.	
Materials used to fabricate the	The screwdriver shank is made of tough steel, and the tip is	
product/component	hardened to minimize wear. The handle is made of wood,	
	metal, or plastic.	
Manufacturing Processes used to fabricate	e it (Consider only casting, welding, bulk deformation, sheet	
metal and plastic manufacturing).		
Bulk deformation(annealing straightening	, cold forming, extrusion, handle making using extrusion)	
Daik deformation armodiling, straightering	, cold forming, extraction, manage making using extraction)	
Steps involved in manufacturing the product		
Included the images for the steps involved		
1. Coils are taken and then drawn into wires of required diameter and length		





2. after the wire is drawn it is annealed to get the required tensile strength



3. Next, the wire is straightened by a string forge and then transferred to a cold forming press, which cuts the wire to the appropriate length and forms the tip of the screwdriver. This actually forms the shaft of the screw driver

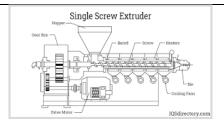


4. After the cold forming press (step #3 above) cuts the wire, the screwdriver is sent to a "swage and grind" operation, where dies form blades for the tip from the heated wire. The tool is then ground and the wings are formed.

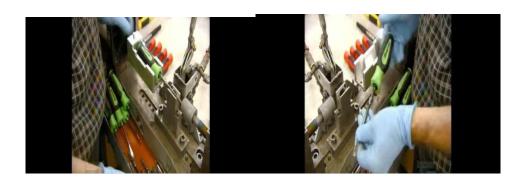


5. Next, the cellulose acetate pellets are fed into another extruder that extrudes the materials for the handles in bars. A hole is then drilled in the handle where the bar will be inserted.





6. Professional models are assembled individually on a horizontal assembly machine that hydraulically forces the bar into the plastic handle.



Video links that you are suggesting	https://www.youtube.com/watch?v=UMxtqmKQ-sI
Your understanding about the product	Screwdrivers are a type of hand tool used for the insertion
including different components	and removal of screws. They are available in a multitude of
	variations to correspond to the correct screw drive. The
	drive or head of a screw has a shaped cavity and
	protrusion that fits the screwdriver tip. Several processes
	have been made use of in the manufacturing of them.
	Processes like annealing, cold pressing and extrusion are
	kind of the most important processes involved. The
	handles are made of plastic whereas the shaft is made of
	metal (usually steel). There are several types of



	screwdrivers as well depending on their heads and grooves
	they tighten like Philips, flat type, etc.
What are the challenges in fabricating	The tip of standard, commercially available screwdrivers
the selected component/product?	are too thin; if one begins with a commercially available
	screwdriver and grinds the opposing surfaces of the bit
	parallel, the bit will be so thin that it will break easily.
Is there any suggestion to make it	a standard, commercially available screwdriver can grind
easier?	the tip down until the bit has at least the minimum
	thickness disclosed and preferred, and then grind the
	opposing sides of the bit until they are parallel.



III SEMESTER Mechanical "A" section 2022-2023 ODD

Self Learning Assignment and Evaluation of Students Understanding on the Component / Product fabrication by different manufacturing processes

Student Name:	Anjuga Priya A	
Register Number:	3122211002017	
Product/Component selected: (write the	Agricultural sprayer	
name and attach an image)	Ton-Emular of Sony talk-13	
Application of the Product/Component	*Its major use in agriculture to spray fertilizer.	
	*In city and urban area, it can use for spraying water on	
	lawn.	
	*It may be exercise device at morning during utilize in lawn.	
	*Use from spray chemical Pesticide in plants in farm.	
	*It is use for spray painting in industry.	
	*It is use for spray water in garden on the plants.	
	*It is use for transfer water from one place to its nearer	
	place.	
Materials used to fabricate the	Materials used:	
product/component	*Chain	
	*Sprocket	
	*Wheel	



*Chassis (frame) with handle
*Connecting rod
*How and a pump
*Square tubes are used for the fabrication of the chassis.
Parts : sprocket, chain, wheel, and pump are the standard
parts.

Manufacturing Processes used to fabricate it (Consider only casting, welding, bulk deformation, sheet metal and plastic manufacturing).

Casting, welding, sheet metal and plastic manufacturing processes are used to fabricate the sprayer

Steps involved in manufacturing the product

Included the images for the steps involved

This sprayer contains a chain, sprocket, wheel, chassis (frame) with handle, connecting rod, and a pump.

Square tubes are used for the fabrication of the chassis.

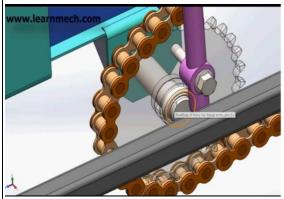
All other parts such as sprocket, chain, wheel, and pump are the standard parts.

The chain sprocket mechanism will be used for pumping purposes. Sprocket is mounted with ball bearing.

The connecting rod is engaged with the piston of the sprayer which reciprocates causing pumping action resulting in increased pressure inside the pump which is further used to spray chemicals when the nozzle is opened on the sprayer line.









Video links that you are suggesting	https://youtu.be/JwfLdW6-j4l https://youtube.com/shorts/cS5u5nxp8a0?feature=share
Your understanding about the product	Though it is manually done ,it is very efficient specially in
including different components	the field of agriculture.It has different components which is
	cost efficient and can be fabricated without heavy
	machines.
What are the challenges in fabricating	Sheet metal work is huge here and connecting minute bolts
the selected component/product?	and nuts are a bit challenging.



Sri Sivasubramaniya Nadar College of Engineering Department of Mechanical Engineering UME 2303 Manufacturing Processes – I (TCP)

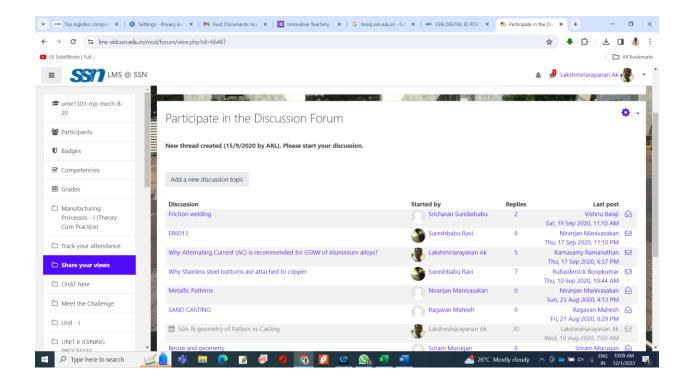
Is there any suggestion to make it	In this sprayer only single nozzle is present .What I suggest
easier?	is that multi nozzle can be used and larger area of field can
	be sprayed. It can be changed as multi sprinkle system.

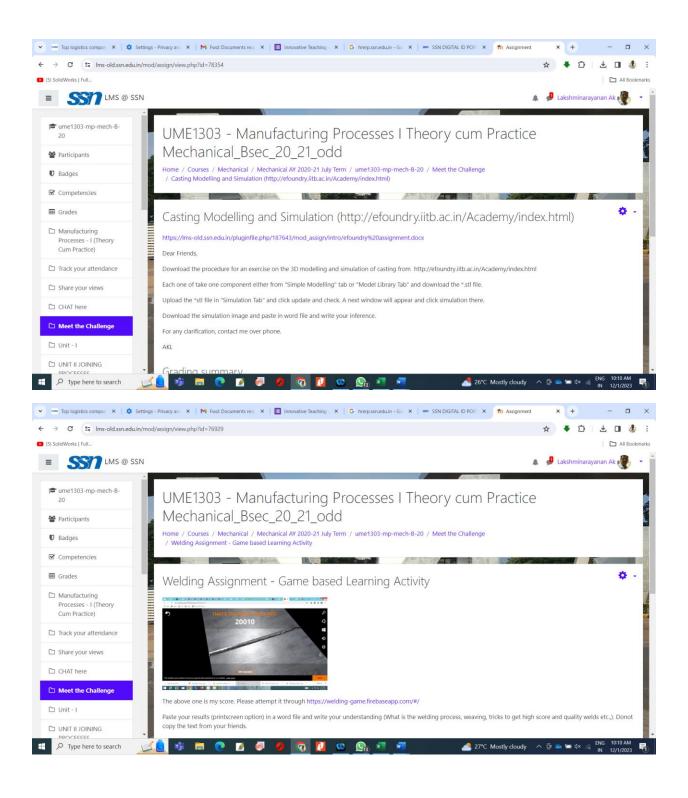
UME1303 Manufacturing Processes (Theory cum Practice)

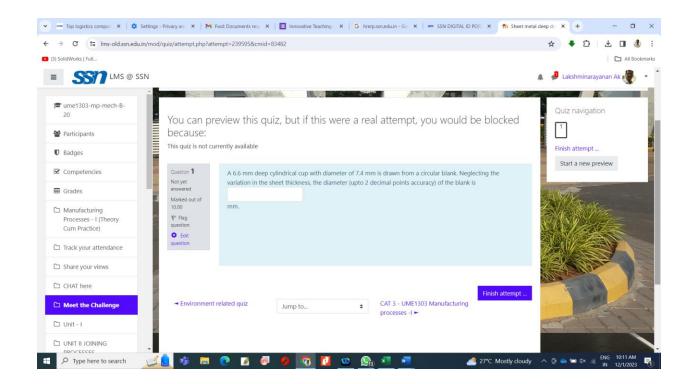
Course Instructor: Dr. A.K. Lakshminarayanan

20-21

- 1. Discussion forum
- 2. Game based activity learning
- 3. Online casting simulation
- 4. Self learning assignment





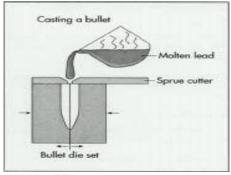


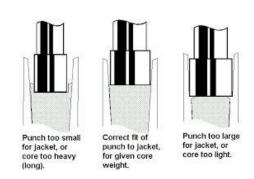
Self Learning Assignment and Evaluation of Students Understanding on the Component
/ Product fabrication by different manufacturing processes

Student Name:	Palvannan B						
Register Number:	191002077						
Product/Component selected: (write the	Bullet in firearms						
name and attach an image)							
Application of the Product/Component	A bullet is a projectile and a component of a firearm ammu nition that is expelled from a gun barrel during shooting. Fir earms are used for hunting and for security purposes by the cops or other security personnel.						
Materials used to fabricate the product/c omponent	Traditional bullet- lead or lead alloy Traditional bullet jackets- copper or alloy of copper and zin c.						
Manufacturing Processes used to fabricate	it (Consider only casting, welding, bulk deformation, sheet						
metal and plastic manufacturing). Casting Cutting and Filing Punching Annealing							

Steps involved in manufacturing the product

Included the images for the steps involve





CASTING A BULLET

- 1 Casting is pouring molten metal into a mold. This mold is hinged and when closed has a hollow space that is the shape of the bullet. The metal is melted in a crucible and then poured into the mold.
- 2 After the metal has cooled, the mold is opened and the bullet falls or is knocked out. Any imperfection s are removed by cutting or filing. If the bullet is extremely deformed, it can be melted down and the process repeated.
- 3 To cast a bullet with multiple sections of different materials, the first material is poured into the mold to partially fill it. After this material has cooled and partially or completely solidified, the second molten material is poured into the mold to fill it partially or completely. This can be done several times, but most often is done twice to create a bullet with a heavier section (for penetration) behind a softer section (for expansion).

THE BULLET JACKET

Some bullets have jackets of harder metal surrounding a softer core.

- 5 A coin-shaped piece of jacket metal is punched out of a strip or a sheet. The punch is usually a round metal cylinder that is pushed through the jacket material into a depression in a table. Some punches ar e rounded so that the piece of metal is shaped like a cup. Sometimes, tubing is used instead of a coin or a cup of metal.
- 6 If the jacket material is too hard to be formed easily, it can be annealed. Annealing is heating the met al, often with a gas flame, to soften it and make it more workable.
- 7 The jacket material is then placed in a die or over a punch and the punch is forced into the die. There may be several different punches and dies used to form specific features in the jacket. One of usual st eps is to make sure that jacket is of uniform thickness. The thickness is typically 0.03-0.07 in (0.08-0.17 cm). Some bullets have a thin jacket electroplated onto the core.

BULLET ASSEMBLY

- 8 Jackets and multiple bullet parts can be joined by methods such as swaging them together, casting o ne section on top of another, soldering, gluing, or electrical welding. If the joining method is not strong enough, the bullet may fall apart prematurely.
- 9 Next, grooves may be cut or pressed into the shank of the bullet. The grooves can be pressed into a soft bullet by rotating the bullet against a ridge on a metal wheel, or they can be cut into the bullet on a lathe. Many cast bullets already have grooves.

Video links that you are suggesting	Bullet- https://youtu.be/fDkKHBMU6E4 Core- https://youtu.be/4q99EeYUf1w Jacket- https://youtu.be/o0JVm76Y37I
Your understanding about the product in cluding different components	Bullet has two parts a core and a bullet jacket. Bullet jacket is the hard outer covering of the bullet and core is the inne r solid. Core can easily be made by casting and jacket is m ade using lunching.
What are the challenges in fabricating the selected component/product?	Defects may occur during casting of bullet. Finding the right size of punch for bullet jacket can be challenging and die n eeds to have perfect dimensions for a clear shot.
Is there any suggestion to make it easier ?	Since casting of core may introduce defects, a bullet shape d piece can be cut from a bar or sheet and can be machine d to make a bullet core.



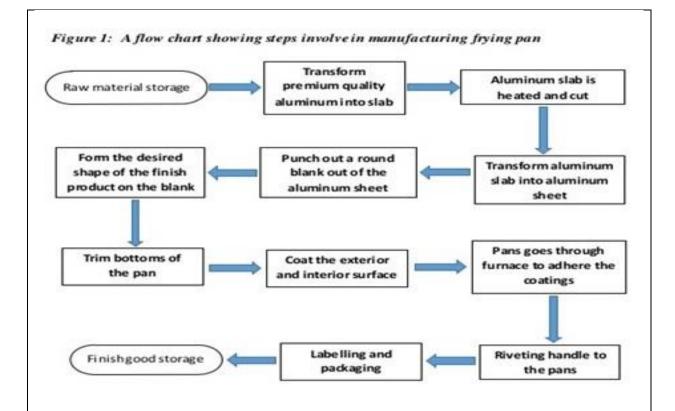
Self Learning Assignment and Evaluation of Students Understanding on the Component
/ Product fabrication by different manufacturing processes

Student Name:	Naveen M
Register Number:	191002071
Product/Component selected: (write the	Iron Pan
name and attach an image)	
Application of the Product/Component	In construction sites and as cooking utensils
Materials used to fabricate the product/component	Alloys of iron like carbon steel and stainless steel, Aluminium or anodized aluminium, copper, polytetrafluoroethylene (PTFE), silicone, enameled cast iron, Rivets, Diamond coating, ceramic coating.
Manufacturing Processes used to fabricate	e



1) Metal Forming
Hot rolling process
Stamping Metal process
2) Machining
Pickling
3) Thermal Coating
4) Joining
Riveting
Thermoplastic Injection molding
Alternate Process
Gravity die casting
In this process production rate is faster compared to other process.
Steps involved in manufacturing the product
Steps involved in manufacturing the product





 In continuous hot rolling machine, the slabs are rolled in number of passes until it reaches the thickness of the sheet







 Round blanks are cut out from aluminum sheets and the remaining material is used for recycling



 The round blank is next put into this machine and the machine will punch out the desired shape of the frying pan.





 Frying pans will receive ceramic coating using plasma flame, where each pans spins on the fixtures as a plasma flame melts ceramic coating onto it exterior surface



 Next, frying pans will go through a furnace to improve adhesion of the coatings to the frying pans.





 Frying pans bottom are accurately trim to a perfectly flat base to ensure stability of the pans on the stove.



• By using this machine, we can manufacture thermoplastic handle of the frying pans.





The handle and the flat-bottomed	pans are joined together with the rivet.
Video links that you are suggesting	https://youtu.be/ukHzaJAvkfY
	https://youtu.be/itqTL3knVeM
	https://youtu.be/alBt0uFwjY8
Your understanding about the product	Iron pan is made up of two parts, which are flat-bottomed
including different components	pan and handle. It is used for several types of cooking
	methods such as frying and browning foods. It is made out
	of metals, so that the heat transmitted to the food rapidly
	and effectively. While the handle enable user to handle the
	frying pan while the pans are in heated condition. It serves
	the purpose of protecting user's hands from getting burn
	while cooking. The handle is normally made out of non-
	metal, which has poor thermal conductivity. It means that
	the heat from stove will be transmitted to the handle rapidly
	while cooking.
What are the challenges in fabricating	Production downtime and failure in machines
the selected component/product?	Shortage of raw materials
Is there any suggestion to make it	It can be reduced by periodically servicing the
easier?	machines.
	macinies.

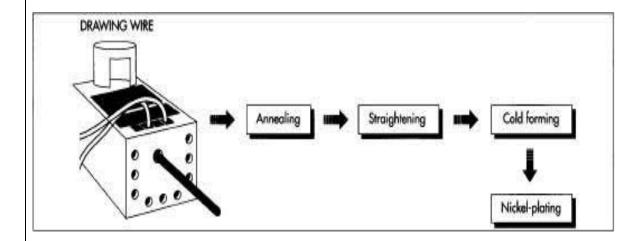


Self Learning Assignment and Evaluation of Students Understanding on the Component
/ Product fabrication by different manufacturing processes

Student Name:	M.Mukesh
Register Number:	191002069
Product/Component selected: (write the	PHILLIPS SCREWDRIVER
name and attach an image)	a screwdriver that is designed to be used with a type of screw
	(called a Phillips-head screw) that has a slot in its top that looks
	like a cross
Application of the Product/Component	A screwdriver is a tool, manual or powered, used for screwing
, application of the Frederic Component	
	(installing) and unscrewing (removing) screws.
Materials used to fabricate the	The raw materials steel wire, plastic, nickel, and chromium are
product/component	used to produce screwdrivers. The steel wire is used to make the
	screwdriver bar, plastic is used to make the handle, and either
	nickel or chromium is used to plate the steel tips of the
	screwdriver.
Nuit (Consider only casting, welding, bulk	deformation, sheet metal and plastic manufacturing).



To make the steel rod, wire is machine-drawn to the appropriate diameter, annealed (heat-treated), straightened, and then cold-formed to the proper shape. The cold forming press cuts the wire to the desired length and forms the tip of the screwdriver and the "wings" that will fit into the handle.



Steps involved in manufacturing the product

Included the images for the steps involved

Making the steel bar

- 1 First, coils of green wire (wire that has not yet been drawn to final size) are delivered to a factory in large coils, some as heavy as 3,000 pounds (1,362 kilograms). The wire is usually about. 375 inch (.95 centimeter) in diameter. The wire is then machine-drawn to the diameter necessary for the production run; one adjustable drawing machine can produce any required diameter. In drawing, wire is fed through a die with a reducing aperture until it assumes the proper size.
- 2 After the wire is drawn, it is annealed (heat treated) to obtain the correct tensile strength in the metal. This process involves baking the wire at a temperature of about 1,350 degrees Fahrenheit (732 degrees Celsius) for 12 hours.
- 3 Next, the wire is straightened by a string forge and then transferred to a cold forming press, which cuts the wire to the appropriate length and forms the tip of the screwdriver and the "wings" that will fit into the handle.



These wings can be seen through a clear or semi-clear plastic handle. The newly formed "bar" (the actual screwdriver without Ats handle) is then heat treated in an in-line furnace at approximately 1,555 degrees Fahrenheit (846 degrees Celsius). This is a continuous flow process, and as the bars come through the furnace they fall into an oil quench for cooling. The bars are then placed in a draw back oven (450 to 500 degrees Fahrenheit or 232 to 259 degrees Celsius) and baked to a specified hardness.

4 Consumer model screwdrivers are nickel-plated—covered with a protective coating of nickel—before assembly. If the screwdriver is designated for professional use, it is transferred to a hand-grinding department, where the tip is ground to size. The shank is chemically milled and then polished. The screwdriver then goes to a nickel flash bath and is electrically chrome plated.

The plastic handles are made by mixing cellulose acetate with a plasticizer and then extruding the mixture into bar form. After further shaping, the bars are drilled so that the rods can be inserted, cleaned to remove dirt, and dipped in an acetone vapor bath, which melts and smooths the outside of the handle.

The plastic handles are made by mixing cellulose acetate with a plasticizer and then extruding the mixture into bar form. After further shaping, the bars are drilled so that the rods can be inserted, cleaned to remove dirt, and dipped in an acetone vapor bath, which melts and smooths the outside of the handle.

Phillips screwdrivers

5 After the cold forming press (step #3 above) cuts the wire, the screwdriver is sent to a "swage and grind" operation, where dies form blades for the tip from the heated wire. The tool is then ground and the wings are formed.

6 If a professional model is being produced, the bar goes to a tipping operation (an automatic tipping machine that creates the bullet point), and then to a profilator machine (a machine that cuts a "profile"). This latter machine cuts the four grooves or slots on the sides above the point. The wire is then winged, and heat-treated in the same way as the flat-tip screwdriver bars. Consumer model Phillips screwdrivers are nickel plated, while the professional model is polished and nickel/chrome plated.

Handles



7 The handles of a screwdriver are usually made of cellulose acetate; it is delivered to the factory in powder form (cellulose acetate rosin) and then mixed with a liquid plasticizer in a giant blender that holds approximately 1,000 pounds (454 kilograms) of the mixed material. If a colored handle is desired, pigments are added into the blender. The resulting paste, which has the consistency of thick cake batter, then goes to an extruder (a machine that forces a material out through an opening, the way a meat grinder forces out strings of meat), which extrudes a solid piece of cellulose acetate. The cellulose acetate is then cut into small pellets.

8 Next, the pellets are fed into another extruder that extrudes the materials for the handles in bars that are 8 to 10 feet (2.4 to

The oldest and most common type of screwdriver is the slotted screwdriver, which fits a screw with a single slot in the head. There are perhaps thirty different types of screwdrivers available today in a variety of sizes, all with different purposes and all designed to fit into special screws.

The oldest and most common type of screwdriver is the slotted screwdriver, which fits a screw with a single slot in the head. There are perhaps thirty different types of screwdrivers available today in a variety of sizes, all with different purposes and all designed to fit into special screws.

3 meters) in length. If a two-color handle is desired, a second extruding machine can be attached to the first to extrude a single, two-color rod. The rods are then put into an automatic turning machine, which shapes the handles and cuts them to the final length. A hole is then drilled in the handle where the bar will be inserted.

9 The handles are machine washed and dried to remove grease, oil, and excess scraps from the turning machine and the extruder. Next, the handles are immersed in an acetone vapor bath, which melts and smooths the outside of the handle. The acetone vapor is highly flammable, and this process takes place inside an explosion-proof room.

Assembly

10 The method of final assembly depends on the quality of the tool being produced. Professional models are assembled individually on a horizontal assembly machine that hydraulically forces the bar into the plastic handle. The handles are branded by a hot stamp immediately before going into the assembly machine. This assembly process requires one skilled operator for each machine.



Other models might be assembled on hydraulic presses, three at a time. The least expensive models are assembled six at a time on one machine and placed by robot on a skin card machine that packages the screwdrivers for mass-market sale.

11 Before packaging, the screwdrivers might be fitted with a special handle cover, depending on need. A rubber cap fitted over a screwdriver handle, for example, might be more comfortable for a professional using his tool five or six hours a day.

Video links that you are suggesting	1) https://youtu.be/-EoldN2kNSU
	2)https://youtu.be/gd2YBXRLEsM
	3)https://youtu.be/T5dGKWfhNnQ
	4)https://youtu.be/R-mDqKtivul
	5)https://youtu.be/LwqbYWBkHWE
Your understanding about the product	1)These drivers are intentionally designed to cam out (i.e. slip
including different components	out of the head when a certain torque limit is exceeded), which
	is considered both a strength and weakness.
	Because of their usefulness, you'll find Phillips screwdrivers in
	almost every field. While they will never fully replace slotted
	screwdrivers, they now tend to be the most preferred type of
	screwdriver and head combination and the best screwdriver sets
	will always include multiple Phillips screwdrivers.
What are the challenges in fabricating	1)while fabrication of the screwdriver tip the steel wire may be
the selected component/product?	broken.
	2)The improper dimension of the tip may occurs during the
	fabrication it's leads to unfeat environment for screw and
	screwdriver.



Is there any suggestion to make it	1)Use the correct tool make the tip of the screwdriver
easier?	2)Keep the work tools well maintain

Student Centric Methods Proof

Course Code: PBA2329: Banking Services Management

Course Code: PBA2329

Semester: 3

Batch: 2021 - 2023

Year: 2022 - 2023

Faculty: Dr. Kavitha M.

Program: MBA

Student Centric Methods Used with Proof:

1. Performance Analysis of Banks is a project for this course. Course material is shared with students with a list of activities which need to be completed during the class. This helps them to apply the topics they have learned.

Performance Analysis of Banks

- 1. This is a group activity.
- 2. Each group will be assigned one bank, and they are supposed to analyze the performance of the bank as per the parameters given for a period of two years.
- 3. All the details of the mentioned parameters are available in the annual reports of the bank.
- 4. The calculation must be done based on the formulas for the figures that are available in the annual report.
- 5. All these data will be updated in the google docs by each group as they progress, and thus consolidated details of all banks will be available in google docs.
- 6. From this consolidated data, each group must make an inter-bank comparison with another bank assigned to them.
- 7. Result must be interpreted, and a comparison report must be prepared.
- 8. Presentation must be done by each group for 10 min duration to highlight the performance of the banks.

Unit	Session No.	Торіс	Video	Book readings (Chapter or Page nos)	Discussions / Other references					
	1	Banking - Introduction - Functions of a Bank - Discussions		T1 - Chapter 1 (12 - 14) T1 - Chapter 1 (15 - 26)	Additional Material - Functions of a bank					
1	2	Sources of Bank Funds - Capital Adequacy, Objectives, Concept, Capital Fund, CAR Calculation - Problems	Basic Functions of Banks	T1 - Chapter 4 (107 - 108)	Discusssion - Major functions of Bank. Workings of Bank - Any problems faced as a customer.					
	3	Overview of BASEL norms - Rules governing SLR and CRR		T1 - Chapter 11 (408 - 416)						
	4	Deposits and non-deposit sources - Types of deposits		T1 - Chapter 4 (108 - 112)	Banking Functions - Savings Account is not an investment tool					
	5	Types of Deposits - Discussions	Types of Deposits	T1 - Chapter 4 (108 - 112)	Discussion - Types of Deposits, Pros & Cons of Each deposit schemes. Current Interest rate of each deposit schemes.					
	6	Non Deposit sources of funds, Designing of Deposit Schemes, Pricing of Deposit Schemes		T1 - Chapter 4 (113 - 119), (129 - 131)						
	7	Applications of Bank Funds - Bank Investments - Lending Functions - Fund based, Non - Fund based & Asset based functions		T1 - Chapter 5 (145 - 148), T1 - Chapter 5 (158 - 162)						
	8	Types of Loans - Classification based on activity, based on purpose wise - Pricing of loans, Customer profitability analysis.		T1 - Chapter 6 (196 - 199) T1 - Chapter 6 (202 - 209), T1 - Chapter 5 (163 - 166), Chapter 6 (199 - 201)	Additional Material					
	9	Case Study			Discussion - HDFC borrows in the international market through masala bonds					
	10	Written Case Analysis								
				-						
	27	Presentation - Performance Analysis of Banks								
	28	Presentation - Performance Analysis of Banks								

Rubrics – Performance Analysis of Banks

PBA 2329 - Banking Services Management

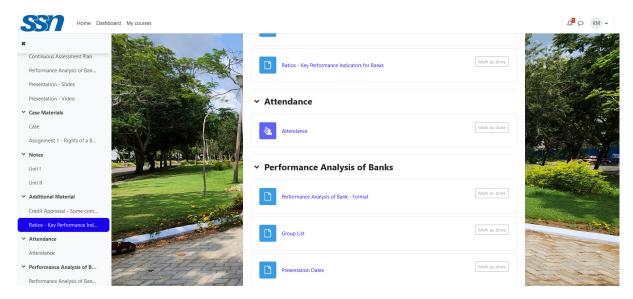
Performance Analysis of Banks - Rubrics (2022 - 24)

Figures (*with formulas wherever required)	25	Good/Moderate/Average	25/15/10		
Interpretation & Comparison	25	Good/Moderate/Average	35/25/15		
Presentation					
Content	15	Good/Moderate/Average	15/10/5		
Individual Participation	15	Good/Moderate/Average	15/10/5		
Uniqueness in Answering	10	Good/Moderate/Average	10/6/4		
Peer review	10	Good/Moderate/Average	10/6/4		
Total	100				

Format - Performance Analysis of Banks

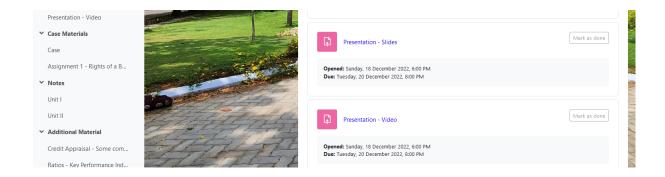
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					Public	Sector Banks					-	ld		Tillate bebo	l build		N	ev			
			- 9	81		ank of India		a Bank	Kana M	ysya Bank	City Ho	ion Bank	Lakehmi	Vilas Bank	Korak Mal	hindra Bank	Yes		HDF	C Bank	
Parameters	Formula	Figures	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 23	2021 - 22	2022 - 2	
Capital & Liabilities																					
Capital																					
Authorized Capital																					
Issued Capital																					
Paid up Capital																					
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Term Deposits																					
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Deposits of branches outside India																					
Borrowings in India			_												_					_	
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Other Liabilities & Provisions			_		_		_				_	_	-		_	-				-	
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Advances in India																				_	
Priority Sector Advances																				_	
Public Sector Advances																					
Banks																					
Ohers																					
Advances outside India																					
																				_	
Fixed Assets			-	_		_														_	
Other Assets			_																	\vdash	
Net NPA (%)			+				_	_	_	-	_	_			_			_		+	
Operational & Financial Ratio																					
Earnings Per Share (Rs) Dividend Per Share (Rs)			_																	_	
Dividend Per Share (Rs)																					
Book NAVIShare (RS)			\perp																	\perp	
Margin Ratios			+				_	_		-	_	_			_					_	
field on Advances			_	_									 			 					

LMS Page view



Group Members – LMS view

Groups (7)	Group members	User count (43)
Group A	DH4RSHIN V (S122218001033), dharchina/13087/8/son eduin, MBA], Manojlumar S (S122218001061, manojlumar/13086/8/son eduin, MBA], Nirmal Palraj (S122218001063, nirmal/130043/9/son.eduin, MBA], SUSHAITHAR R (S12221800107, submithal/130005/9/son.eduin, MBA], Shalihish S112218001023, bahithish/130031/9/son.eduin, MBA], Anuyathini T K (S112218001018, anuyathini/130025/9/son.eduin, MBA], Shalihi Sarathy (S122218001103, sruth/13003/9/son.eduin, MBA)	7
Group 8	HARPRASANTH V R. (312218001934, harjaraenth 13011 figuraeduri, MBA), Anantha Nasyaman (312218001912, amantha 13008) gunaeduri, MBA), Jegadeschwaran J (312218001951, jegadeschwaran 130075 gunaeduri, MBA), Arjun Kannadasan (312218001021, ayun 130115 gunaeduri, MBA), Aninuthan P (312218001014, aninuthan 130081 gunaeduri, MBA), Achwin Ramana Sekaraj (312218001021, ashwiramana 130103 gunaeduri, MBA)	6
Group C	KEERHAMA G (312218001056; keerhama/13055/@on.eduin, MEA), Alkaoth A (312218001007; akaot/130081@on.eduin, MEA), S SRKRGHMAA (31218001007; akaot/1	б
Group D	Jeyarani S (3122718001052, jayarani 230641 (bun aduin, MBA), Rajalakohmi G R (3122718001081, rajalakohmi 23005 (bun aduin, MBA), Rahal Raja (3122718001073, rahalargi 23005 (bun aduin, MBA), Rahal Raja (3122718001073, rahalargi 23005 (bun aduin, MBA), Rahal Raja (3122718001074, taniha273005 (bun aduin, MBA), Akash (3122718001074, akash 23004 (bun aduin, MBA), Akash (3122718001074, akash 23004 (bun aduin, MBA)	6
Group E	MADHJAMTHAS G122218001055 madhumitha273002@son.edu.in, MBAJ, PBMN ANANTH K.G122218001057, peminanath273004@son.edu.in, MBAJ, Chellem M. G122218001028, chellam2130000@son.edu.in, MBAJ, Balamunai Vadvielan G122218001044, birthick2130056@son.edu.in, MBAJ, Heithick Kumar G122218001043, birthick2130051@son.edu.in, MBAJ, Inbarasu R.G122218001043, inbarasu R.G122218001043, madhali MBAJ	б
Group F	NITH/HAS-98EE 8.0132219001099; nithysohree21930448/svaneduin, MBAI, Swetha Kumar (3122219001111), swetha2190008/svaneduin, MBAI, ABBAM SUBBAIAH (3122219001004, abinm2130318/svaneduin, MBAI, Sethink S. (312219001004, sathink21300778/svaneduin, MBAI, Sawang Srinivasan (3122218001089, sawang2130098/svaneduin, MBAI, PHUIA RAW (3122218001074, phujip2130058/svaneduin, MBAI)	6
Group G	Erbit Maran (512218001039) erbit 218117/Bosneduin, MBAL, DENA NAKAKI SPICTHE KUNAR (512218001031, deisanayaki 23002/Bosneduin, MBAL) Indira R (3122218001045, indira 213095/Braneduin, MBAL) DHAKIA P (512218001044, idhaya 2130106/Braneduin, MBAL) Priyadharshirii Ramkumar (312218001078, priyadharshirii 213005/Braneduin, MBAL) DK RAJA DURAL (5122218001080, raja 213005/Braneduin, MBAL)	б



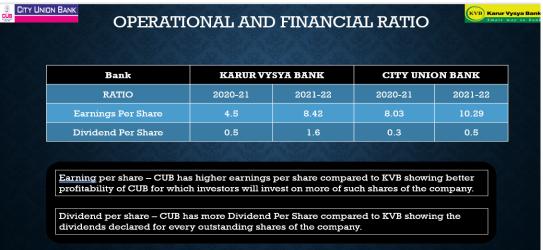
Presentation Dates

		Performance A	nalysis of Banks			
1	3122218001068	Nirmal Palraj N				
2	3122218001107	Sushmitha R				
3	3122218001023	Bal Nithish S				
4	3122218001061	Manojkumar S	SBI Bank	SBI Bank Vs HDFC Bank	Group A	14th Dec 2023
5	3122218001103	Sruthi Sarathy		Bulk		
6	3122218001018	Anuyazhini T K				
7	3122218001033	Dharshini V				
1	3122218001050	Jegadeeshwaran J				
2	3122218001020	Arjun K		CBI Vs Canara Bank	Group B	
3	3122218001012	Anantha Narayanan H	Central Bank of			9th Dec 2023
4	3122218001014	Aniruthan P	India			
5	3122218001021	Ashwin Ramana S				
6	3122218001042	Hariprasanth V R				
1	3122218001007	Akaash A				
2	3122218001056	Keerthana G				
3	3122218001003	Abirami R	Canara Bank	Canara Bank Vs KVB	Group C	14th Dec 2023
4	3122218001038	Evelin S	Cariara barik	Candid Dalik VS KVB	Group C	1401 Dec 2023
5	3122218001101	Srikrishnaa S				
6	3122218001065	Nandhini V				

PPT submission - LMS view







Outcome: This will enable the students to understand how the banks are analysed on various parameters and different ratios. Also, how to compare the banks with another banks on the parameters given. e.

2. Written Case Analysis

- 1. Written case analysis is conducted to evaluate the analytical and written skills.
- 2. The session scheduled for written case analysis will be intimated in advance (8 10 days).
- 3. Students can prepare by any means to understand the case and connect with concepts.
- 4. Written case analysis to be done individually during a class session for evaluation.
- 5. Each case analysis will be for 25 marks which will have 5 6 questions. The questions will be given on the day of evaluation.

Session Plan:

Unit	No.	Торіс	Video	(Chapter or Page nos)	Discussions / Other references
	1	Banking - Introduction - Functions of a Bank - Discussions		T1 - Chapter 1 (12 - 14) T1 - Chapter 1 (15 - 26)	Additional Material - Functions of a bank
1	2	Sources of Bank Funds - Capital Adequacy, Objectives, Concept, Capital Fund, CAR Calculation - Problems	Basic Functions of Banks	T1 - Chapter 4 (107 - 108)	Discusssion - Major functions of Bank. Workings of Bank - Any problems faced as a customer.
	3	Overview of BASEL norms - Rules governing SLR and CRR		T1 - Chapter 11 (408 - 416)	
	4	Deposits and non-deposit sources - Types of deposits		T1 - Chapter 4 (108 - 112)	Banking Functions - Savings Account is not an investment tool
	5	Types of Deposits - Discussions	Types of Deposits	T1 - Chapter 4 (108 - 112)	Discussion - Types of Deposits, Pros & Cons of Each deposit schemes. Current Interest rate of each deposit schemes.
	6	Non Deposit sources of funds, Designing of Deposit Schemes, Pricing of Deposit Schemes		T1 - Chapter 4 (113 - 119), (129 - 131)	
п	7	Applications of Bank Funds - Bank Investments - Lending Functions - Fund based, Non - Fund based & Asset based functions		T1 - Chapter 5 (145 - 148), T1 - Chapter 5 (158 - 162)	
	8	Types of Loans - Classification based on activity, based on purpose wise - Pricing of Ioans, Customer profitability analysis.		T1 - Chapter 6 (196 - 199) T1 - Chapter 6 (202 - 209), T1 - Chapter 5 (163 - 166), Chapter 6 (199 - 201)	Additional Material
	9	Case Study			Discussion - HDFC borrows in the international market through masala bonds
	10	Written Case Analysis			



Loan to Vulnerable Customer

r J was a young, single man with some learning difficulties. H lived independently but relied on his family and his communit support worker, Mrs Y, for help in managing his finances.

Mr J had only been in work for a few months - as a warehouse assistant when the factory that employed him closed down. He realised there was n real likelihood of finding immediate employment, so he decided to start hi own business as a handyman. He approached his bank and asked for a loa in order to buy a small van and some tools.

As his literacy skills were limited, Mr J had not prepared any kind of business plan. However, the lending officer told him this would not be necessary and that the computer showed he was "good for the credit". So the bank gave Mr J ₹ 40,000 as a personal loan.

Excited by the prospect of his new venture, Mr J went ahead and bought a small second-hand van and some tools.

Unfortunately, however, he was unable to find any work as a handyman. His current account quickly became overdrawn and he was unable to meet the loan repayments. Without any prior discussion with Mr J, the bank passed his details to its debt recovery section, who in due course wrote to him.

Extremely alarmed by the tone and content of this letter, Mr J panicked. Within a couple of days he had managed to sell his van - at a significant loss - to try and pay back some of what he owed.

Mr J then asked his community support worker, Mrs Y, for advice. With Mr J's consent, she complained on his behalf to the bank, saying it should not have lent the money in the first place. When the bank refused to uphold the complaint, Mrs Y referred it to us.

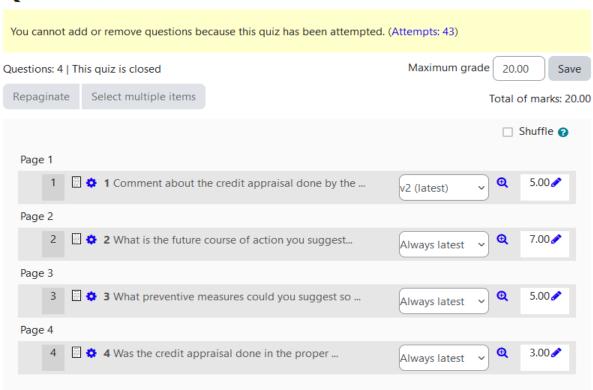
Questions - LMS view

pba2329-bsm-22 / Written Case Test I / Questions

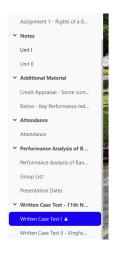


Quiz Settings Questions Results Question bank More •

Questions

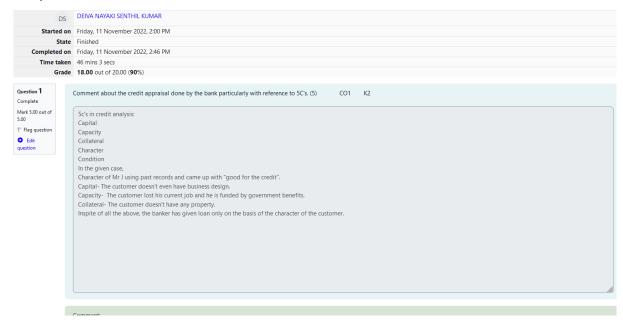


Evaluation - LMS view



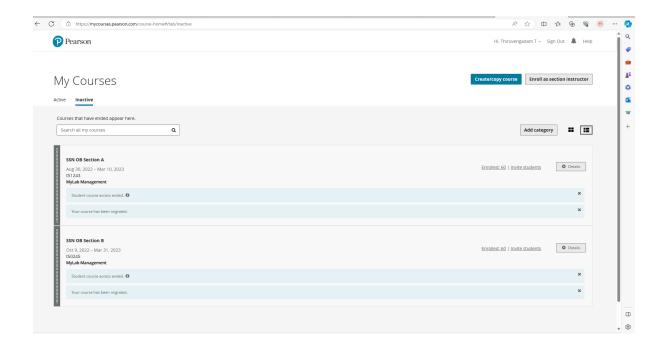
	First name / Last name	ID number	Email address	Department	State	Started on		Time taken	Grade/20.00	Q. 1 /5.00	Q. 2 /7.00	Q. 3 /5.00	Q. 4 /3.00
DS	DEIVA NAYAKI SENTHIL KUMAR Review attempt	3122218001031	deivanayaki 2130022@ssn.edu.in	MBA	Finished	11 November 2022 2:00 PM	11 November 2022 2:46 PM	46 mins 3 secs	18.00	✓ 5.00	☑ 6.00	☑ 4.00	✓ 3.00
SS	Saarang Srinivasan Review attempt	3122218001089	saarang 2130039@ssn.edu.in		Finished		2022 3:15	1 hour 13 mins	14.00	✓ 5.00	☑ 4.00	☑ 3.00	2.00
SK	Swetha Kumar Review attempt	3122218001111	swetha 2130009@ssn.edu.in		Finished		11 November 2022 3:15 PM	1 hour 13 mins	18.00	✓ 5.00	✔ 7.00	☑ 3.00	✓ 3.00
RV	Rishi V Review attempt	3122218001087	rishi2130108@ssn.edu.in		Finished	11 November 2022 2:01 PM		37 mins 45 secs	15.00	✓ 5.00	☑ 3.00	☑ 4.00	✓ 3.00
SR	SUSHMITHA R Review attempt	3122218001107	sushmitha 2130005@ssn.edu.in		Finished	11 November 2022 2:01 PM	2022 3:05	1 hour 3 mins	17.00	✓ 5.00	2 6.00	✓ 4.00	☑ 2.00
DD	D K RAJA DURAI Review attempt	3122218001080	raja2130063@ssn.edu.in		Finished	11 November 2022 2:02 PM	11 November 2022 3:15 PM	1 hour 12 mins	16.00	✓ 5.00	☑ 6.00	☑ 3.00	☑ 2.00

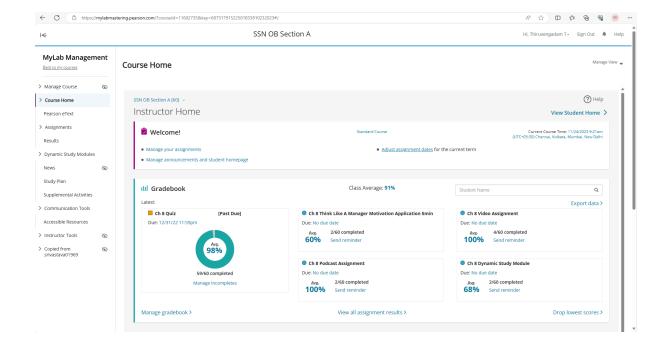
Sample - LMS view

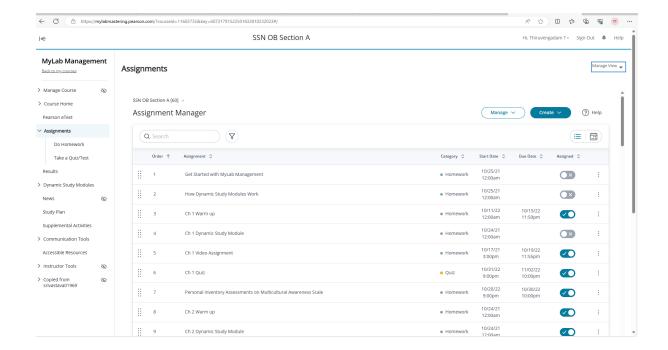


Outcome: Written case analysis helps the students to apply the banking concepts learning in the course.

OB course uses MYLab which is a digital learning platform by Pearson. It helps personalized learning.







Student Centric Methods Proof

Course Code and Name: PBA2102: Organizational Behaviour

Semester: 1

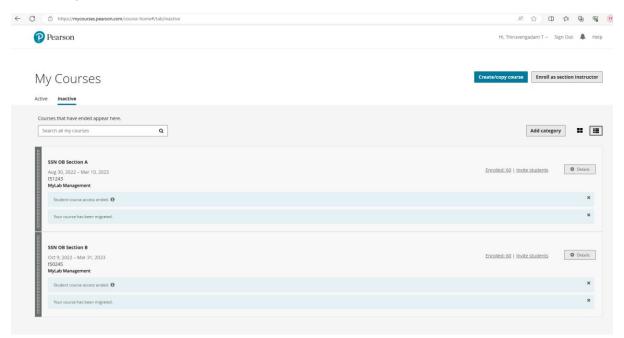
Batch: 2022- 2024

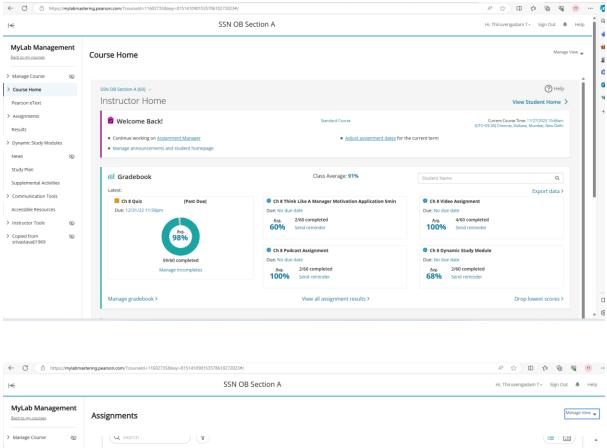
Faculty: Dr. Thiruvenkadam. T

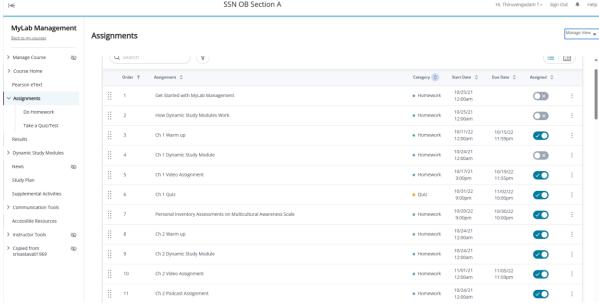
Program: MBA

Student Centric Methods Used with Proof:

1. **Pearson MyLab: Computer Assisted Activities** used for organizational Behaviour course. Pearson MyLab tool was used to provide homework, assignments, Video Case Studies, Self-assessment tools, Psychological Tools, Quizzes etc. All the 120 students were given individual access with login id and password.







Outcome: Computer aided self-learning tools helped the students to get in depth knowledge on the subject.

2. Group Project

Group project has been given to the students to select a particular topic in OB and do research on the topic by collecting primary data with the use of questionnaire and analyze the data, present the results. This enabled the students to apply the concepts studies in the subject. Rubrics was developed to assess the reports submitted by the students.

SSN School of Management MBA Batch 2022-24 PBA2102, ORGANIZATIONAL BEHAVIOR

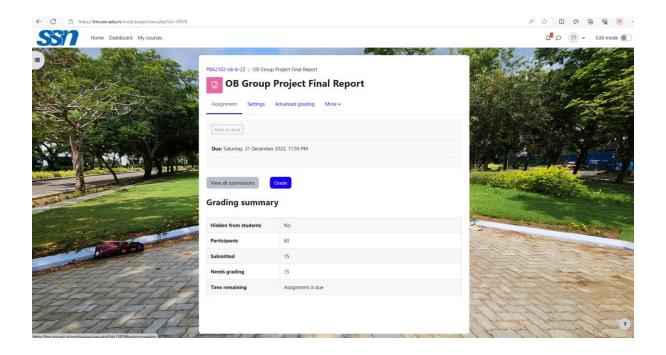
Internal Assessment Plan

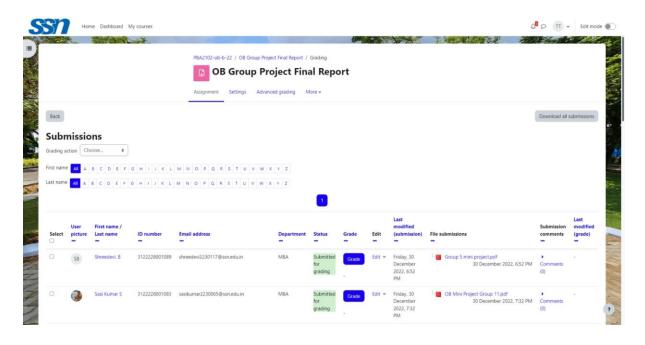
S. No	Assessment type	Weightage	CO Mapping	PO Mapping
1	Cycle Tests (2 x 60 Marks)	120	CO1 to 4	1, 2,3
2	Pearson My Lab Assessments	40	CO1 to 5	3
4	OB Group Project	40	CO2,3,4	2,3,4
	Total	200		

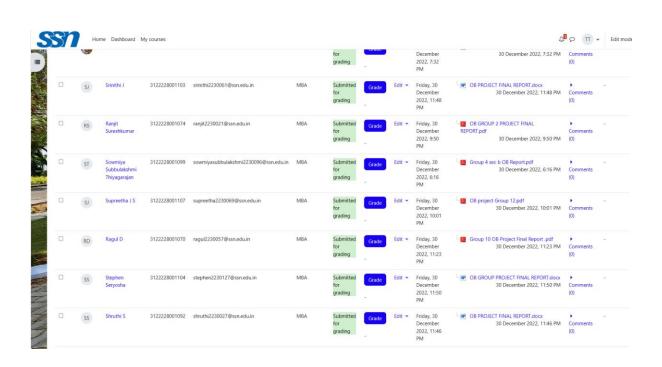
OB Survey Project Rubrics

		Excellent	Good	Average	Need Improvement
S.		Executive	3000	Average	mprovement
No	Weigtage	100	75	50	25
1	Quality of Questionnaire (20 marks)				
	Sample Size & Target Respondents (20				
2	marks)				
3	Data Analysis (30 marks)				
4	Report Writing (30 marks)				
	Total (100 Marks)				

	Task	Tentative Schedule
1	Topic confirmation	05-Nov-22
2	Questionnaire Design	10-Nov-22
3	Approval of Questionnaire (faculty)	20-Nov-22
4	Completion of Survey/Data Collection	30-Nov-22
5	Completion of analysis	10-Dec-22
6	Submission of rough draft	15-Dec-22
7	Final report submission	25-Dec-22







Outcome: Mini Project helps the students to apply the concepts learned in the course.

Student Centric Methods Proof

Course Code: PBA2324:

Course Name: Sales and Distribution Management

Semester: 3

Batch: 2021- 2023

Year: 2022-2023

Program: MBA

Sales Manager Interview (to be done as a team)

Students have to identify, get an appointment, and meet (face-to-face) with an experienced sales manager. You have to discuss with him/her various aspects (distribution system, territory management, incentives, information systems, 'how to be good in sales', sales process etc.). A template of questions (given below) will be provided to students. This has to be used by you to engage the interviewee. However, please do not read out the questions to the interviewee.

Students have to share the insights that they learn in a 7 to 10 page (max) Report and a presentation

Do not interview one of your classmates (even if they have had experience), but you may, of course, use your classmates for help in finding a salesperson to interview. You may want to consider interviewing a sales manager in the industry in which you hope to work upon graduation.

The sales manager should have at least 5 years experience in sales (some people may have total experience of 5 years but not entirely in sales- these profiles are not accepted)

The illustrative list of questions you may use are given below:

- How do you allocate territories?
- How do you fix targets?
- How do you evaluate sales performance? (is it only target achievement or other factors also)
- How is your Distribution system structured?
- How does your company ensure the smooth functioning of the Distribution system?
- How do you inform management about market/competitor information?
- What core values should every salesperson possess?
- What makes you a good sales person?

- How do you research prospects before a call or meeting? What information do you look for?
- What system do you follow /maintain for prospect/customer information? (funnel)
- How do you update yourself on product & competition knowledge?
- How do you handle objections from customers?
- When can we know that a customer is willing to buy?
- What can we learn from a lost sale?
- What kind of training do you provide for sales people?

Sales assignment

Team members: Bhavani Sruthi, Parthiban, Vigneshwaran

Interviewee name: Mr. Kesavan

Designation: Team Manager, Head of sales department

Experience: 9 Years

Company name: Casagrande

Insights from the interview

1. Collecting information about the competition and market:

Depends upon the organization in Casagrande they have separate for data collection.

The perform field study and understand the pricing, product details about the

competitors and they understand the market trend from the past industry and the

company past data.

2. Distribution system and its smooth functioning:

They understand the pulse of the location and the check with the demand. They are

obtained through market research and decide the budget depending upon the location.

Distributions are carried through exclusive through their outlets and websites.

- 3. Core values of a salesperson:
 - Basic knowledge about the product
 - Good in customer relationship
 - Confidence
 - Communication
 - Good in market research
 - Time keeping
 - Ability to convert the wants of customers to needs
- 4. System to maintain customer information:

Verb is a tool that is more predominantly used by the marketers and cell.co is a software that is used by the sales team to store the data in serial number and if a customer calls back then the Serial number is displayed along with the name of the customer and the customer care support calls back them to handle queries.

5. Allocate territories and targets

It is initially done on a trial-and-error basis for a period of 1-3 months. The knowledge, Ability to covert leads to customers, market trend, current and future stocks expected the company. Based on this the salespersons are classified as quick converters, following up again and again and converting and some completely assigned for high end customers. It all starts from offering a type of drink to customers and the way the salespersons dress up themselves. It's the pride of the organization and it should be realistic

6. Salespersons evaluation:

90% of the performance of the salesperson are evaluated based on the results in reality and the remaining 10 % depends upon the customer rampo rate and other after sales services. And this also depends upon the product/service and the external market. It includes the team referrals that are brought into the company. Generally the monthly targets are divided into weekly targets and are evaluated based on that.

7. Training for salespersons:

Initial training is provided by the L&D team of HR department and are trained in certain soft skills followed by that a 2 week the trainees are assigned to the sales trainee and are trained in about the company, the product and services, ongoing projects, lead generation, ongoing marketing campaigns. This is to ensure the salespeople understand the value that the organization invest and the value that is been expected from the salespeople.

8. Compensation:

For salespeople the compensation mainly includes the variable pay according to them the variable pay greatly motivates the employees. It also includes incentives, insurance, international trip along with bonuses and they do provide employee home option and employee stock options where the employee after completing certain period of experience they can avail them. This helps to retain the efficient salespeople.

9. Customer willingness to buy:

The most important role of the salesperson is to convert the want to need. First and the most important thing every salesperson should understand that every customer will not buy this will help to avoid unrealistic expectation. They should understand the customer rampo rate, should understand the urgency, budget and the decision-making authority of the salespeople.

10. Handling objections:

They will review the market by the pilot project and understand the prior objections that might arise from the customer side and these data should be kept confidential and, in this account, google review plays a very important role.

Student Centric Methods Proof

Course Name: Strategic Brand Management

Course Code: PBA2326

Semester: 3

Batch: 2021- 2023

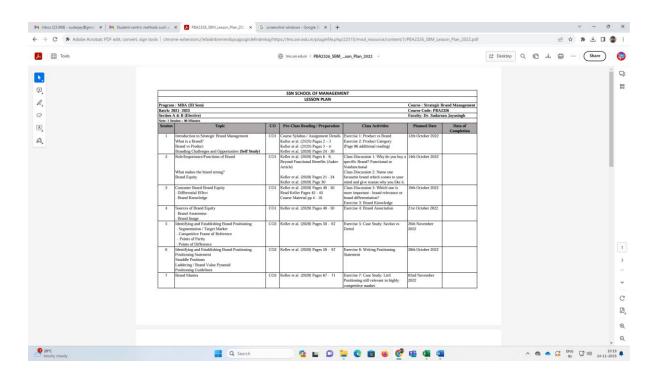
Year: 2022-2023

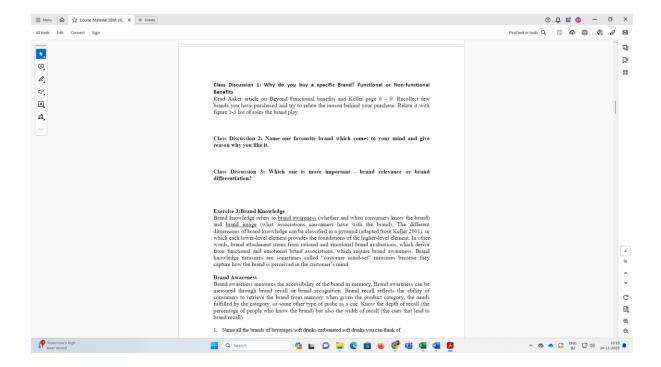
Faculty: Dr. Sudarsan Jayasingh

Program: MBA

Student Centric Methods Used with Proof:

1. **Experiential Learning Method** is used for strategic brand management course. Course material is shared with students with a list of activities which need to be completed during the class. This helps them to apply the topics they have learned.

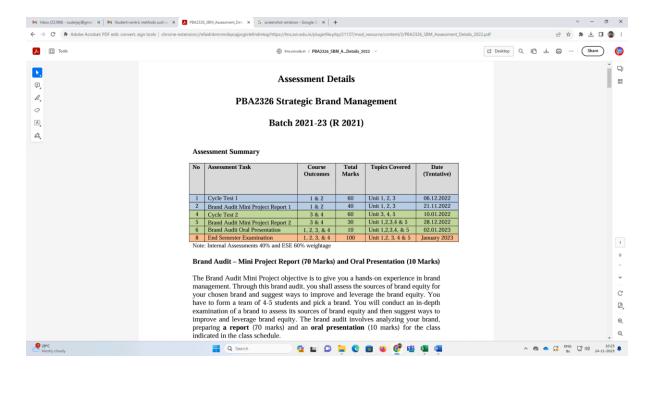


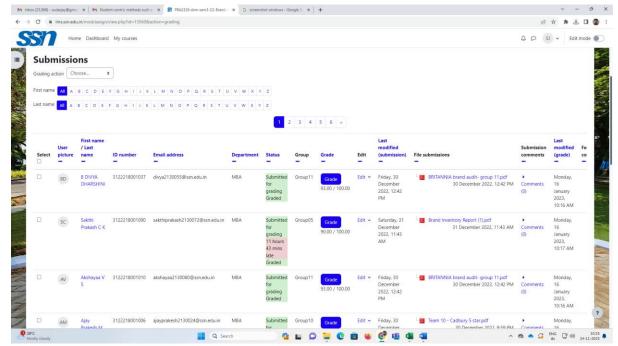


Outcome: Experiential Learning activities help the students to apply the branding concepts covered in the course.

2. Mini Project - Brand Audit

The Brand Audit Mini Project objective is to give students a hands-on experience in brand management. Through this brand audit, students assess the sources of brand equity for their chosen brand and suggest ways to improve and leverage the brand equity. They have to form a team of 4-5 students and pick a brand. Students will conduct an in-depth examination of a brand to assess its sources of brand equity and then suggest ways to improve and leverage brand equity. The brand audit involves analyzing selected brand, preparing a report (70 marks) and an oral presentation (10 marks) for the class indicated in the class schedule.

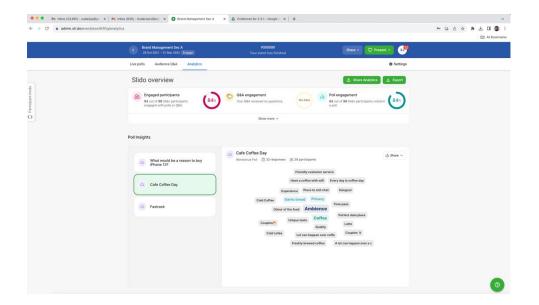




Outcome: Mini Project helps the students to apply the branding concepts learning in the course.

3. Slido is the Q&A and polling platform

Slido helps us to keep people involved and capture feedback instantly during the class session.



Department of Physics (Theory and Practical)

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Teaching-learning method: The Teaching-learning activities are made effective through crystal models, equipment's, and special (after college working hours) classes for rural, Tamil medium and weak students. Lessons are taught through PowerPoint presentations and practical videos to make learning interesting besides oral presenting methods.

Lecture method: This conventional method is commonly adopted by all teachers. This method facilitates the teacher to explain the content of a text, derivations, and problem solving's for better understanding of the subject by the students.

Interactive method: The faculty members make learning interactive with students by motivating student participation in assignment, subject quiz, graph analysis, discussion, and ppt presentation and answers on theory and practical subjects.

Experiential Learning: Laboratory Sessions are conducted with content beyond syllabus experiments.

Problem-solving methods: Physics department encourages students to gain and develop problem solving skills through regular assignments based on problems, and class presentations

2.3.2 Teachers use ICT-enabled tools including online resources for effective teaching and learning

Use of Learning Management Systems (LMS) and timely availability of COs/ Course Plan/ Lecture Notes/ PPTs etc.

The lectures are delivered by the faculty members through a set of teaching aids and adopting various teaching methods. Classrooms are equipped with laptop, Internet, LCD projector, UPS, Public address system and WiFi connectivity to aid teaching and learning process. In the classroom, the availability of computers has made a huge impact on the way teachers deliver the course content to their students. They present multimedia power point presentations (PPTs) and animated videos. E-learning through college intranet/LMS, with pre-class, post-class and in-class reading materials makes study materials available for the students round the clock. This facilitates students to learn on-the-go and enables them to be in constant touch with the subjects.

Google colab and Online compilers were used for effective teaching learning. To enhance the learning ability, disruptive learning is adapted and implemented using tools like Slido, MS Teams, LMS and Google forms. Following contents are maintained in LMS pages for theory and practical courses.

Theory Course:

- Vision Mission
- PO, PEO
- Text Books
- Syllabus, Course and Assessment Plans
- Materials for every unit
- CAT Question Papers Answer Key
- Assignment Question Papers
- CO Feedback

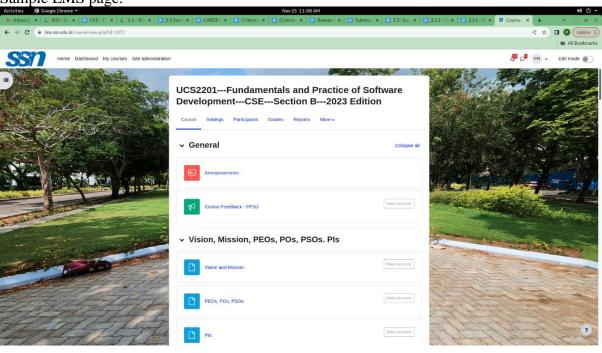
Lab Course:

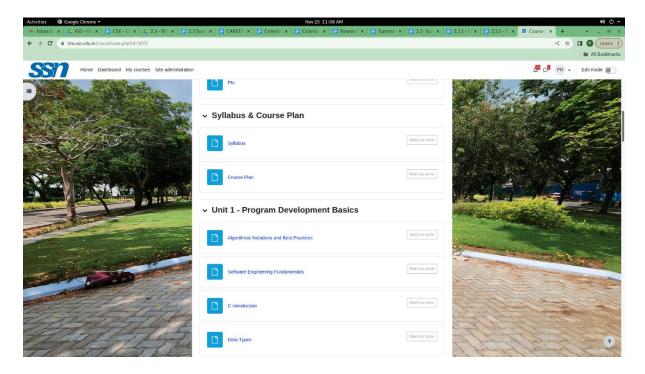
- Vision Mission
- PO, PEO
- Syllabus, Course and Assessment Plans
- Exercises with the submission of students code
- Mini Project Report (if any)
- Record (if submitted)
- CO Feedback

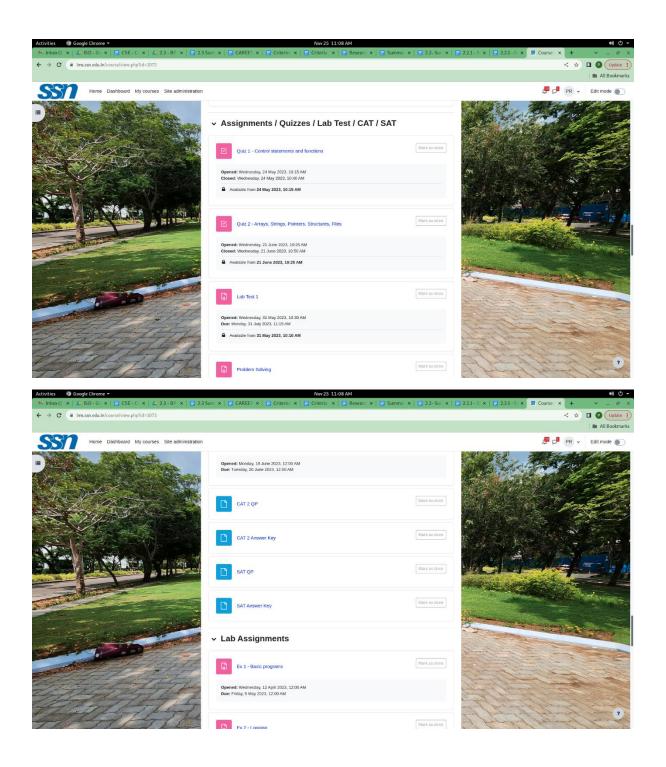
Theory cum Practical Courses:

- Vision Mission
- PO. PEO
- Text Books
- Syllabus, Course and Assessment Plans
- Materials for every unit
- CAT Question Papers Answer Key
- Assignment Question Papers
- Lab assignment questions
- Lists of projects (Studio course)
- CO Feedback

Sample LMS page:



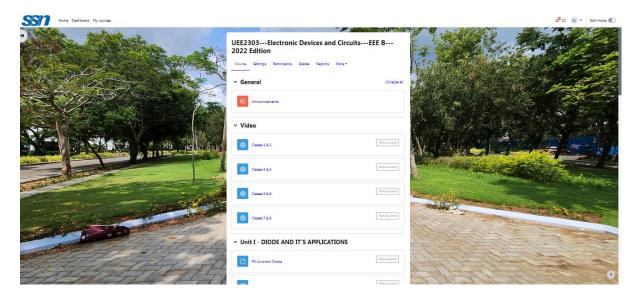




Department of Electrical Electronic Engineering:

2.3.2 Teachers use ICT-enabled tools including online resources for effective teaching and learning

Using Learning Management Systems (LMS) for theory and practical courses.



Department of Biomedical Engineering:

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

The Department of Biomedical Engineering focuses on creating a conducive teaching learning environment to provide excellent support to our students. Through innovative teaching we impart rationale thinking and self-sufficient thought process in the mindsets of students by making them more proactive. At SSNCE, the LMS offers classroom management for instructor-led trainings, open book tests, Panopto videos or a flipped classrooms for advanced learning and better understanding of concepts and courses. It allows students to keep up with assignment deadlines with the in-built LMS calendar. Students are asked to refer to the recent research papers with respect to the topic/unit and they discuss the various techniques or features related to it so that they can correlate with the basic concepts that they have learned during the regular class. It goes like discussion with their peers and with the faculty through presentations related to recent technology in the respective areas. They actively conduct self-help technical programs through professional societies such as ABE, IEEE EMBS and BDC etc.,

The ICT-enabled tools help our faculty to deliver their lectures in a faster and efficient manner thereby allowing the students to keep abreast of technological advancements.

Few of the innovative teaching techniques adopted in the department are briefly given below: Providing quick access to the Instructional material, PPTs, Question Bank etc., by hosting them on MOODLE LMS platform (lms.ssn.edu.in) to help students to learn the concepts at their convenient time.

Video lectures are delivered Panopto which is video platform to record and stream videos.

Conducting online Quiz, open book tests, flipped class rooms on MOODLE through the Institution website. Use of modern teaching aids like LCD projectors, SMARTBOARD, Document Camera, wireless Keyboard and mouse, Powerpoint Laser Presenter, Wireless Presenter, USB wireless pen mouse, Slide Changer, Smart Podium and Wi-Fi enabled laptops, Internet/WiFi facility are employed in classrooms and other student learning environments.

Access to campus wide MATLAB to conduct virtual and regular lab sessions Access to digital libraries (eBooks, journals such as IEEE, Elsevier, etc.,), Separate Reference, Periodical, Circulation, Digital Library section and reading room facility is available in the Library.

✓ General Collapse all Announcements UIT1701 Syllabus Mark as done ✓ Unit 1 Introduction & Roots of Cloud Computing



Desired Features of Cloud Computing

Mark as done

Mark as done



Layers of Cloud Computing

Mark as done



Types of Cloud Computing Models

Mark as done



Cloud Computing Challenges and Risks

Mark as done



Advantages & Disadvantages of Cloud Computing



E-Book - cloud-computing-principles-paradigms (Unit I) - Chapter I

Mark as done



Unit I Question Bank

Mark as done



Recap of Basic Cloud Concepts

Mark as done



Class Work 01

Mark as done



Assignment 01

Mark as done

Opened: Tuesday, 22 August 2023, 12:00 AM **Due:** Friday, 25 August 2023, 12:00 AM

Continuous Assessment Test 1

The first continuous assessment test will be conducted on **Tuesday the 05th of September 2023**.

Topics to be covered:

- Cloud Computing Basics
- Analysis and Assessment of Cloud Architectural models
- Cloud Computing Models
- Cloud computing services
- Advantages and Characteristics of Cloud Computing.
- Components and Benefits of Virtualization
- Cloud resource virtualization
- Virtualization Levels
- Virtualization Architectures

∨ Unit 2











Mark as done















E-Book - Virtualization for Dummies(for your basic understanding)

Mark as done



E-Book Virtualization - A Beginers Guide (Seven Layers of virtualization - Unit II) - Chapter 2

Mark as done



E-Book Virtualization Essentials (Understanding Virtualization & Hypervisor - Unit II) - Chapter 2, 3

Mark as done



Distributed and Cloud Computing E-book (Chapter 3)

Mark as done



Question Bank for Unit II

Mark as done



<u>Assignment 02 - Understanding Hypervisor</u>

Mark as done

Opened: Friday, 1 September 2023, 12:00 AM **Due:** Monday, 4 September 2023, 12:00 AM



Supporting Material for VM Creation

Mark as done



Demo on Creating VM & Settings

Mark as done



Assignment 03: Virtual Block Attachment and Check data persistent

Mark as done

Opened: Monday, 11 September 2023, 12:00 AM

Due: Thursday, 14 September 2023, 12:00 AM



Assignment 04: Migration Services and Storage Controller Installation using Opennebula

Mark as done

Opened: Monday, 11 September 2023, 12:00 AM **Due:** Sunday, 17 September 2023, 12:00 AM

✓ Unit 3



NIST Cloud Computing Reference Architecture

Mark as done



NIST Reference Architecture (Study Material)

Mark as done



Cloud Architectures

Mark as done



Cloud Service and Deployment Models

Mark as done



Data Center

Mark as done



<u>Distributed and Cloud Computing -E-Book (Chapter 4)</u>

Mark as done



Question Bank Unit III

Mark as done



Design Pattern for Data center



Reference for GAE QUIZ

Mark as done



Quiz on GAE

Mark as done

Opened: Tuesday, 10 October 2023, 11:00 AM **Closed:** Wednesday, 11 October 2023, 5:00 PM



Hadoop/EUCALYPTUS demostration

Mark as done

Opened: Tuesday, 10 October 2023, 11:00 AM **Due:** Sunday, 15 October 2023, 12:00 PM

CAT II Portions

UNIT II

<u>Virtual Machines Provisioning and Migration Services</u>

Virtualization Architectures

Virtualization of CPU, Memory and I/O devices

Virtualization Structures / Tools of Virtualization

UNIT III CLOUD ARCHITECTURE

A Generic Cloud Architecture Design

Layered cloud Architectural Development -

Evaluation and Analysis of physical data center

Architectural Design Challenges

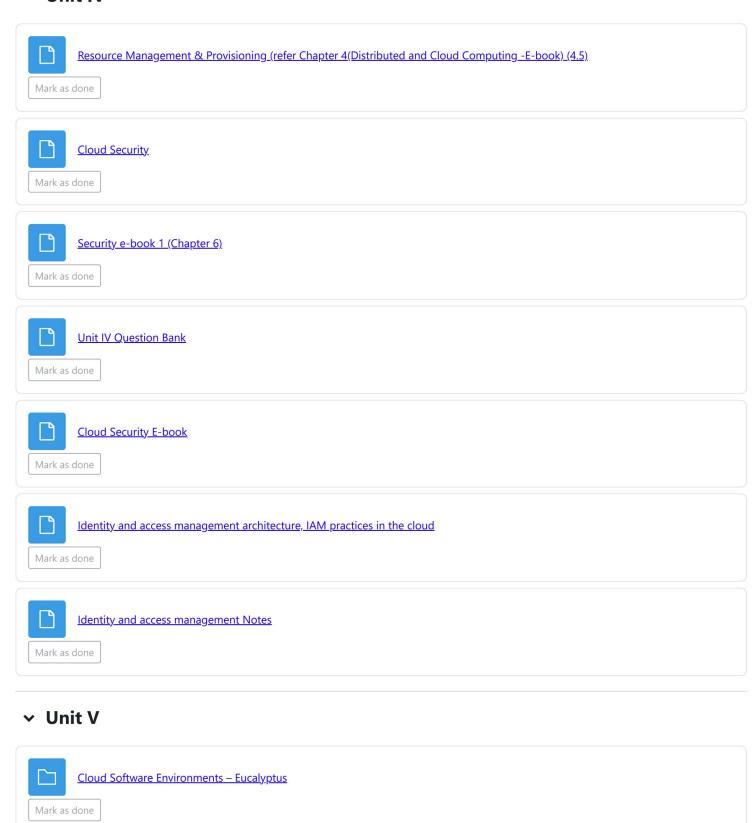
Cloud Storage and architecture

Public Cloud Platforms: Scalability and on-demand services.

GAE, Azure & AWS

Hadoop MapReduce

→ Unit IV





https://lms.ssn.edu.in/course/view.php?id=1503







Open Nebula

Mark as done









Launching Virtual Machine using TryStack from OpenStack

Mark as done



Opened: Wednesday, 1 November 2023, 12:00 AM **Due:** Tuesday, 7 November 2023, 12:00 AM

In modern day research and education there is a constant need for dedicated server Installations for both staff and students. Typically, there is need for access to computational power, network connectivity and specialized software. The classical solution for this problem is to delegate physical hardware for all these needs. This is unpractical and results in an inefficient use of hardware, electricity and administrative resources. A self-service virtualization system could benefit these institutions by making computing resources more easily available to its students and researchers, and by improving the utilization of hardware resources.

Identify the suitable requirements for such a system, by installing and configuring a prototype private cloud solution for students at the college. Explore the deployment of private cloud using OpenStack Components like Nova or Docker, Swift, Horizon and OwnCloud to achieve the following goals:

- Storage of Documents of the students. (e-Portfolio)
- An e-Assessment service for managing student assessments.
- Sharing paper Individual Instance for assignment/exam /practical.
- An online community service that teachers use to interact with peers and share lesson plans.
- Storage for student and teacher on any device, laptop, mobile devices from anywhere in the college campus.



Scheduling sample using CloudSim

Mark as done



Simulate a cloud scenario using CloudSim and run a scheduling algorithm that is not present in CloudSim.

Mark as done



CAT 4 - Assignment 1 - CloudSim

Mark as done

Opened: Wednesday, 1 November 2023, 12:00 AM **Due:** Tuesday, 28 November 2023, 12:00 AM

One of the fundamental issues in the cloud computing environment is

related to task scheduling. Cloud task scheduling is an NP-hard optimization problem and many meta-heuristic algorithms have been proposed to solve it. A good task scheduler should adapt its scheduling strategy to the changing environment and the types of tasks. Compare and contrast the various existing task scheduling algorithms in cloud environment including Round Robin (RR), Maximum-Minimum (MaxMin), Minimum-Minimum (MinMin), First Come First Service (FCFS), Minimum Completion Time (MCT), Particle Swarm Optimization (PSO), and Genetic Algorithm (GA) based on their Makespan (in ms).

To carry out the comparison, create a test bed using CloudSim Simulator, Java & NetBeans with one data centre, one scheduler, and 5 virtual machines. In the next phase increase the number of virtual machines by 15 and 30 respectively to test the performance of the algorithms.

Accounting on your understanding suggest the task scheduling algorithm and justify the same for the following applications:

- Geo-distributed data centers
- MapReduce
- HPC as a service on the cloud (HPCaaS)



IAM Seminar Presentation by Gokul

https://drive.google.com/drive/folders/1HhkBloghxfviaDdD6AtlrtzgKZiSdKkm?usp=sharing



Open Stack presentation by Adithya

Mark as done

Hidden from students



CloudSem presentation - Arun Pradeep & Bhavna M

Mark as done

Hidden from students



GAE - Harshitaa

Mark as done

Hidden from students



HerokuTutorial

Mark as done



CAT 4 Assignment - Heroku

Mark as done

Opened: Thursday, 16 November 2023, 12:00 AM **Due:** Tuesday, 28 November 2023, 12:00 AM

Having written a nice application using MEAN Stack (Previous semester), it's time to think about how we're going to deploy it to the use of real users. Running an Express server hosted on Heroku is one of the simplest ways to get going.

Here are the high-level steps: Setting up with Heroku, Git, npm Create an Express.js server Create static files

It's undoubtedly a long process to get this done. But the important thing is that it can be done! After deployment fill out the following details for evaluation:

• Notable design choices

Including any packages that you used.

- Frontend Firebase URL
- Backend Heroku URL
- Known bugs

Deploy to Heroku

- Only report bugs related to what you have implemented.
- Time taken

Hidden from students



Opened: Thursday, 16 November 2023, 12:00 AM **Due:** Thursday, 30 November 2023, 12:00 AM

Having written a nice application using MEAN Stack (Previous semester), it's time to think about how we're going to deploy it to the use of real users. Running an Express server hosted on Heroku is one of the simplest ways to get going.

Here are the high-level steps:

- 1. Setting up with Heroku, Git, npm
- 2. Create an Express.js server
- 3. Create static files
- 4. Deploy to Heroku

It's undoubtedly a long process to get this done. But the important thing is that it can be done! After deployment fill out the following details for evaluation:

- Notable design choices
 - o Including any packages that you used.
- Frontend Firebase URL
- Backend Heroku URL
- Known bugs
 - o Only report bugs related to what you have implemented.
- Time taken

→ CAT III Portions

Unit IV

- <u>Cloud security</u> mechanism: <u>Cloud security</u> threats and attacks Encryption Hashing Key privacy issues in the cloud Cloud based security groups.
- Cloud Infrastructure security: network, host, and application level aspects of data security, provider data and its security
- Identity and access management architecture, IAM practices in the cloud
- Cloud Security and Trust Management

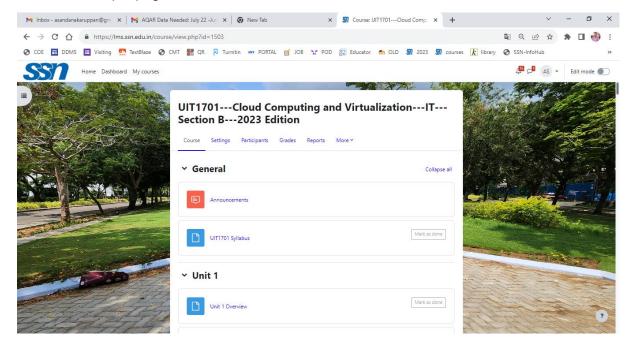
Unit V

- Eucalyptus
- Open Nebula
- Open Stack

Department of B Tech Information Technology

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning.

Teachers uses the Learning Management System for the evaluation process. Teachers host their materials to Learning Management System (LMS) and students will make use of the teachers' materials. LMS helps to conduct the all the evaluation for the students by the teachers. Sample page for the course enclosed with this document.



✓ General <u>Collapse all</u>



∨ Lesson Plan



UCE1704 Lesson Plan 2022-23

Mark as done

▼ Text Books



Railway Engineering Satish Chandra and Agarwal

Mark as done



Airport Engineering Ashford, Mumayiz and Wright

Mark as done



Harbour, Dock and Tunnel Engineering Srinivasan

Mark as done

∨ UNIT I - Railway Planning and Construction

Elements of permanent way - Rails, sleepers, ballast, rail fixtures and fastenings - Selection of gauges - Track stress, coning of wheels, creep in rails, defect in rails - Route alignment surveys, conventional and modern methods - Geometric design of railways, gradient, superelevation, widening of gauge on curves - Level crossings.

CO1: Describe the elements of permanent way and design the track geometrics.



1.01 Permanent Way

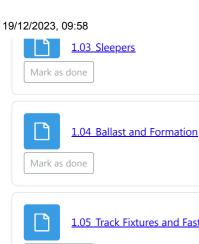
Mark as done



1.02 Rails

Mark as done





1.05 Track Fixtures and Fastenings

Mark as done









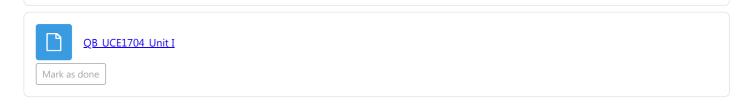








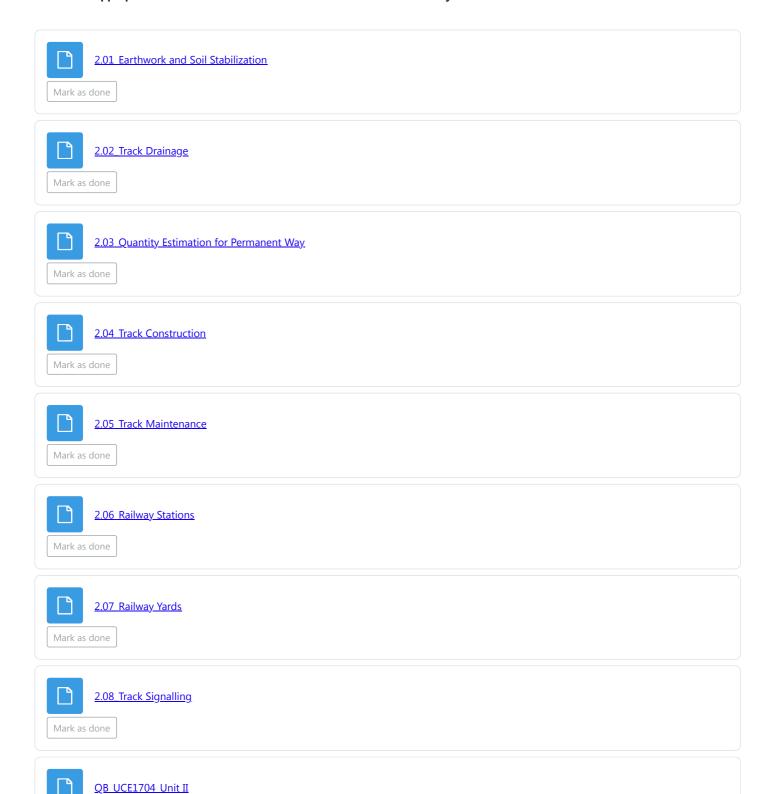




∨ UNIT II - Railway Construction and Maintenance

Earthwork - Stabilization of track on poor soil - Track drainage - Calculation of materials required for track laying - Construction and maintenance of tracks - Railway stations and yards and passenger amenities - Signalling.

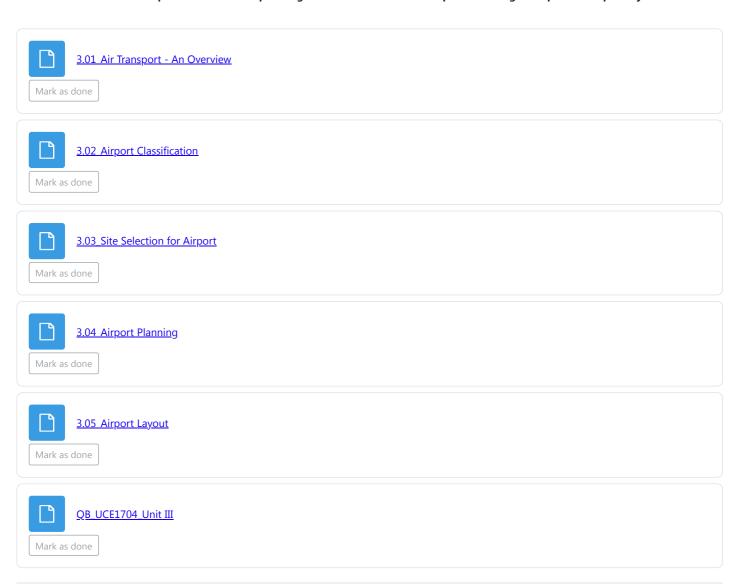
CO2: Select appropriate methods for the construction and maintenance of railway track and other infrastructure.



∨ UNIT III - Airport Planning

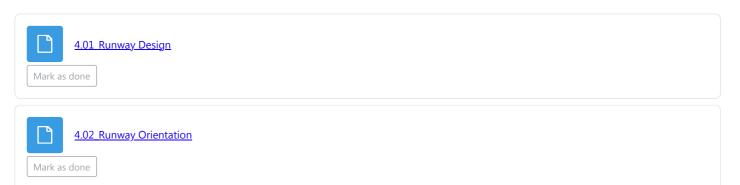
Air transport characteristics - Airport classification - ICAO - Airport planning: Site selection, Typical airport layouts, Case studies, Parking and circulation area.

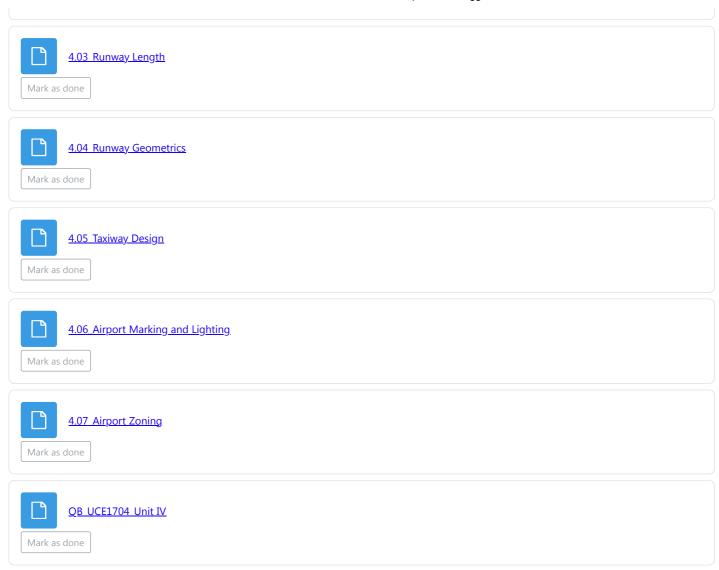
CO3: - Summarize the concepts and elements in planning and site selection for an airport and design an optimum airport layout.



Runway design: Orientation, wind rose diagram - Problems on basic and actual length, Geometric design - Elements of taxiway design - Airport zones - Passenger facilities and services - Runway and taxiway markings and lightings.

CO4: Design the runway, taxiway and related infrastructure in an airport.

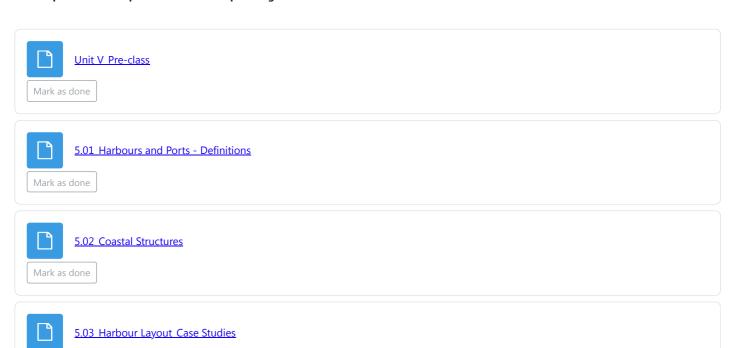




∨ UNIT V - Harbour Engineering

Definition of basic terms: Harbour, port, satellite port, docks, waves and tides - Planning and design of harbours: Harbour layout and terminal facilities - Coastal structures: Piers, breakwaters, wharves, jetties, quays, spring fenders, dolphins and floating landing stage - Inland water transport - Wave action on coastal structures and coastal protection works - Coastal Regulation Zone, 2011.

CO5: Explain the concepts and elements in planning the harbour infrastructure.





5.04 Coastal Regulation Zones (CRZ)

Mark as done



QB UCE1704 Unit V

Mark as done

→ Assignments



Case Study of a Railway Infrastructure

Mark as done

Due: Saturday, 5 November 2022, 12:00 AM

- Group assignment (not more than four students in a group).
- Each group should visit a railway infrastructure (railway station/ yard, metro station) and critically study/ analyse the infrastructure.
- The observations should be reported in .ppt/ .pptx format and presented for discussion.

The presentation should contain sufficient photographs taken during your site visit.

- Photo of the railway track
- Photo of any one track signal
- Photo of any one track sign
- Satellite image of the railway infrastructure

The presentation/ discussion should outline the following.

- Name of the railway infrastructure
- Location (city/ town/ village, GPS co-ordinates)
- Function of the railway infrastructure
- Railway track specifications, Track signal and Track sign specifications
- Significance of the infrastructure/ contributions to the society
- Brief discussion/ comments on the layout of the infrastructure
- Suggestions to improve the functionality, efficiency, sustainability of the infrastructure



Case Study of an Airport

Mark as done

Due: Friday, 25 November 2022, 12:00 AM

Choose an airport for case study satisfying the following conditions.

- Major civil airport handling both domestic and international air traffic
- Can be located anywhere across the globe
- The airport location's first letter should be the same as the first letter of your name (example: Name Dinesh, Airport International Airport at Denver, USA)

Use satellite images and other online resources for a thorough study of the airport specifications and layout. The report should contain the following.

• Satellite image of the airport.

- Location, history and significance of the airport.
- Runway specifications (number of runways, orientation, configuration, etc.).
- Free hand sketch of the airport layout (not to scale), clearly showing all airside and terminal side components.



<u>Airport Runway Design</u>

Mark as done

Due: Monday, 14 November 2022, 12:00 AM

- Design the airport runway for the site conditions given in the attached file.
- Submit scanned pages of hand written solutions.



Help and documentation



You are logged in as Sumetha R (Log out)

Reset user tour on this page

Data retention summary

Get the mobile app

Powered by Moodle

Due: Friday, 25 November 2022, 12:00 AM

Choose an airport for case study satisfying the following conditions.

- Major civil airport handling both domestic and international air traffic
- Can be located anywhere across the globe
- The airport location's first letter should be the same as the first letter of your name (example: Name Dinesh, Airport - International Airport at Denver, USA)

Use satellite images and other online resources for a thorough study of the airport specifications and layout. The report should contain the following.

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- Free hand sketch of the airport layout (not to scale), clearly showing all airside and terminal side components.

Grading summary

Hidden from students	No
Participants	62
Submitted	54
Needs grading	54
Time remaining	Assignment is due



Help and documentation



You are logged in as Sumetha R (Log out) **Data retention summary**

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Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam - 603 110 (An Autonomous Institution, Affiliated to Anna University, Chennai)

DEPARTMENT OF CHEMICAL ENGINEERING

2.3.1 Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

Following innovative teaching learning methods are adapted by the department:

- Slido Quiz
- Inline Quiz through LMS

The lectures are delivered by the faculty members through a set of teaching aids and adopting various teaching methods. Classrooms are equipped with laptop, Internet, LCD projector, UPS, Public address system and WiFi connectivity to aid teaching and learning process. In the classroom, the availability of computers has made a huge impact on the way teachers deliver the course content to their students. They present multimedia power point presentations (PPTs) and animated videos. This facilitates students to learn on-the-go and enables them to be in constant touch with the subjects.

To enhance the learning ability, disruptive learning is adapted and implemented using tools like Slido, MS Teams, LMS and Google forms. Following contents are maintained in LMS pages for theory and practical courses.

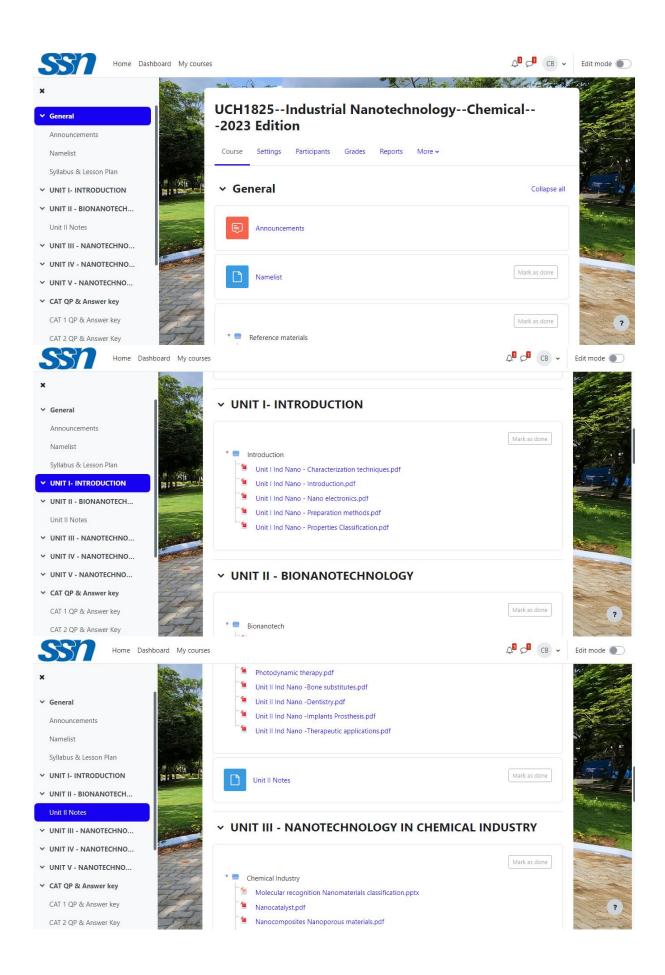
Theory Course:

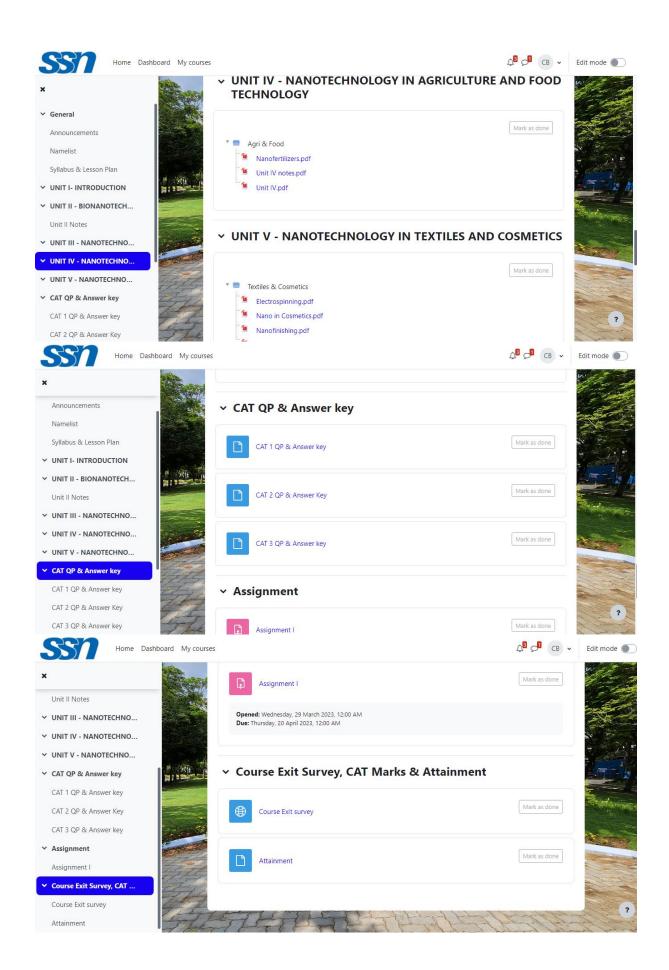
- Syllabus, Course and Assessment Plans
- Text Books
- Materials for every unit
- CAT Question Papers Answer Key
- Assignment Question Papers

Lab Course:

- Syllabus, Course and Assessment Plans
- Lab Manual

Sample LMS page:





2.3.2 Teachers use ICT-enabled tools including online resources for effective teaching and learning

Use of Learning Management Systems (LMS) and timely availability of COs/ Course Plan/ Lecture Notes/ PPTs etc.

The lectures are delivered by the faculty members through a set of teaching aids and adopting various teaching methods. Classrooms are equipped with laptop, Internet, LCD projector, UPS, Public address system and WiFi connectivity to aid teaching and learning process. In the classroom, the availability of computers has made a huge impact on the way teachers deliver the course content to their students. They present multimedia power point presentations (PPTs) and animated videos. E-learning through college intranet/LMS, with pre-class, post-class and in-class reading materials makes study materials available for the students round the clock. This facilitates students to learn on-the-go and enables them to be in constant touch with the subjects.

To enhance the learning ability, disruptive learning is adapted and implemented using tools like Slido, MS Teams, LMS and Google forms. Following contents are maintained in LMS pages for theory and practical courses.

Theory Course:

- Vision Mission
- PO, PEO
- Syllabus, Course and Assessment Plans
- Materials for every unit
- Assignment Question Papers

Lab Course:

- Vision Mission
- PO, PEO
- Syllabus, Course and Assessment Plans
- Exercises with the submission of students code
- Mini Project Report (if any)
- Record (if submitted)

Theory cum Practical Courses:

- Vision Mission
- PO. PEO
- Syllabus, Course and Assessment Plans
- Materials for every unit
- Assignment Question Papers
- Lab assignment questions
- Lists of projects (Studio course)







∨ General

Announcements

Syllabus

Assignment 1

Assignment 2 - Organizati...

→ SHOP FLOOR PRACTICES

Introduction to Quality

Introduction to Six Sigma

Vendor Evaluation, Rating ...

Introduction to Taguchi Me...

Taguchi Slides

7 QC Tools

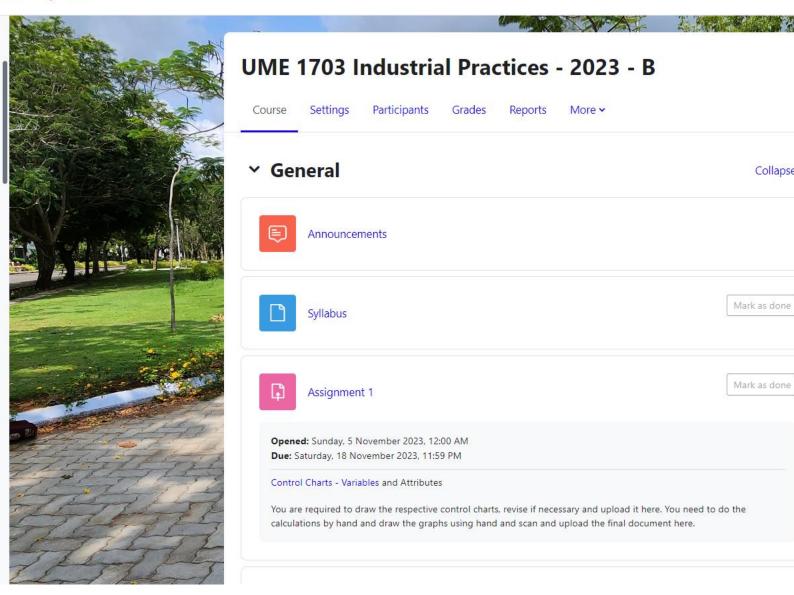
MSA and Gage R&R

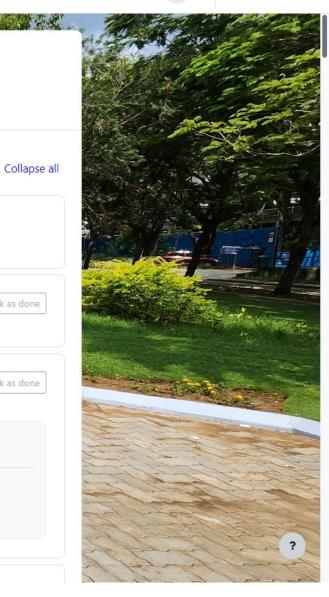
Sample RFQ - Railways

QFD Slides

5S Slides - Dr. Annamalai VE

Total Production Managem...





Mark as done



Edit mode

▼ SHOP FLOOR PRACTICES

Introduction to Quality

Introduction to Six Sigma

Vendor Evaluation, Rating ...

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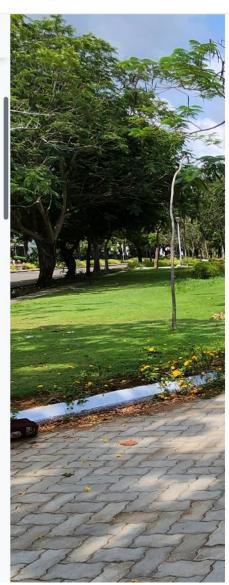
Line Balancing

Spaghetti Diagram

Reliability Centered Mainte...

Make vs. Buy

Make vs. Buy Solved Probl...



Assignment 2 - Organizational and Individual Certifications

Opened: Sunday, 5 November 2023, 12:00 AM Due: Saturday, 18 November 2023, 11:59 PM

You are required to record yourselves on video while presenting your topic and upload your slides over here as a PDF. Your faces should be clearly visible in the video if not your full self. The video should be uploaded on YouTube and a link to that video should be present in the last slide of your PPT which you will upload here. Name your PPT with your team number clearly identified. Ex: TEAM_21_Title.PDF

For Organizational Certifications you need to include,

- · criteria for eligibility,
- process of application
- · past winners.

For Individual Certifications, you need to include,

- · criteria for eligibility,
- process of application
- · who can use that particular certificate and where.

SHOP FLOOR PRACTICES

UNIT I SHOP FLOOR PRACTICES

Quality Management: Six Sigma- DMAIC and DMADV methodology - Seven Quality Control tools -Measurement System Analysis - Gauge R &R-Value stream mapping -QFD-Vendor rating and Value Analysis - Robust Design and Taguchi Method -Case Study of initiating Six Sigma DMAIC in Manufacturing - November quality month celebrations Production Management: 5S - Lean manufacturing tools - Changeover/setup time (SMED) -Production levelling -Line balancing -Spaghetti diagram - TPM-Objectives and functions -





Edit mode

Assignment 2 - Organizati...

Introduction to Quality

Introduction to Six Sigma

Vendor Evaluation, Rating ...

Introduction to Taguchi Me...

Taguchi Slides

7 QC Tools

MSA and Gage R&R

Sample RFQ - Railways

QFD Slides

5S Slides - Dr. Annamalai VE

Total Production Managem...

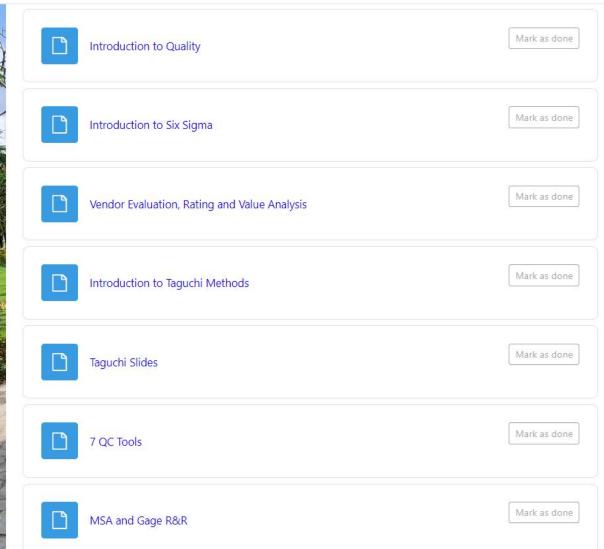
Line Balancing

Spaghetti Diagram

Reliability Centered Mainte...

Make vs. Buy











Edit mode

Assignment 2 - Organizati...

▽ SHOP FLOOR PRACTICES

Introduction to Quality

Introduction to Six Sigma

Vendor Evaluation, Rating ...

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7 QC Tools

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Sample RFQ - Railways

QFD Slides

5S Slides - Dr. Annamalai VE

Total Production Managem...

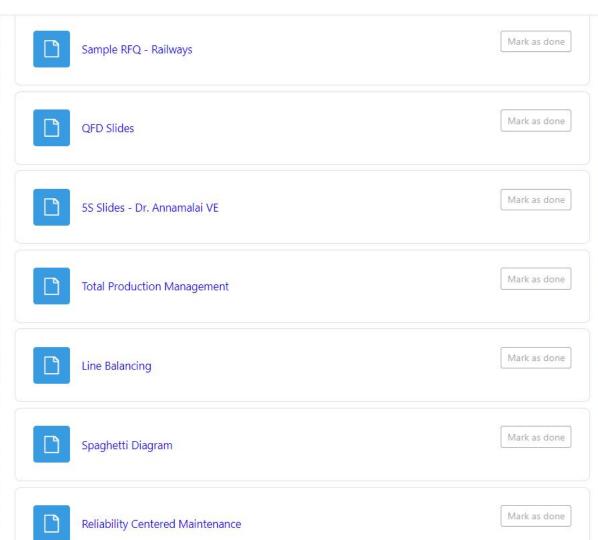
Line Balancing

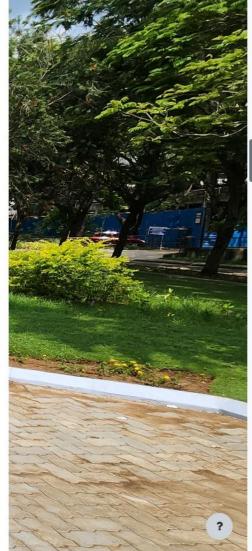
Spaghetti Diagram

Reliability Centered Mainte...

Make vs. Buy











Edit mode

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Introduction to Quality

Introduction to Six Sigma

Vendor Evaluation, Rating ...

Introduction to Taguchi Me...

Taguchi Slides

7 QC Tools

MSA and Gage R&R

Sample RFQ - Railways

QFD Slides

5S Slides - Dr. Annamalai VE

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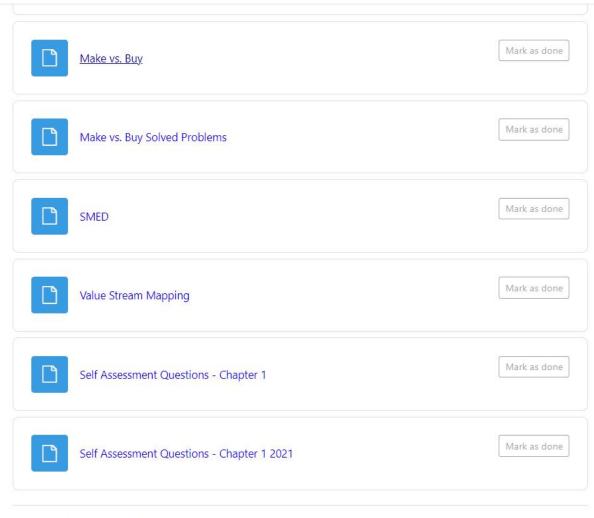
Reliability Centered Mainte...

Make vs. Buy

Make vs. Buy Solved Probl...

SMED







UNIT II STATISTICAL METHODS FOR ENGINEERS



Edit mode

Spaghetti Diagram

Reliability Centered Mainte...

Make vs. Buy

Make vs. Buy Solved Probl...

SMED

Value Stream Mapping

Self Assessment Questions ...

Self Assessment Questions ...

▼ STATISTICAL METHODS ...

Statistical Quality Control -...

Control Charts - Variables

Control Charts - Attributes

Process Capability

Process Capability - Proble...

OCAP, Process Capability a...

Process Capability Info

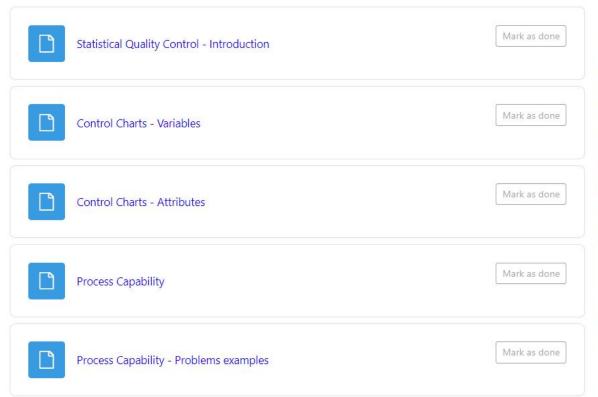
Self Assessment Questions ...



STATISTICAL METHODS FOR ENGINEERS

UNIT II STATISTICAL METHODS FOR ENGINEERS

Control Chart for Attributes - Control Chart for Non-Conformance - P Chart and NP Chart -Control Chart for Non-conformities- C and U Charts- Choice between Attributes and Variable Control Charts-State of Control and Process out of Control Identification in Charts, Pattern Study- Process Capability Analysis and Ratios - Application and Case study











Value Stream Mapping

Self Assessment Questions ...

Self Assessment Questions ...

→ STATISTICAL METHODS ...

Statistical Quality Control -...

Control Charts - Variables

Control Charts - Attributes

Process Capability

Process Capability - Proble...

OCAP, Process Capability a...

Process Capability Info

Self Assessment Questions ...

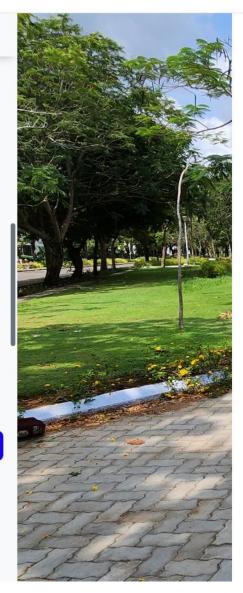
▼ RESEARCH AND DEVELO...

R&D Practices

TRIZ

Theory of Organizational C...

Self Assessment Questions ...

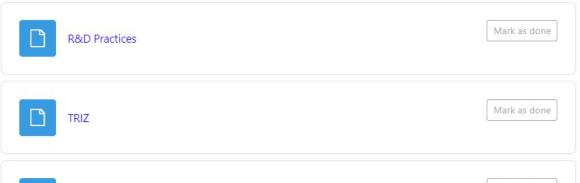




RESEARCH AND DEVELOPMENTAL PRACTICES

UNIT III RESEARCH AND DEVELOPMENT PRACTICES

Organizational role in creativity, types of innovation-Processes in creativity ICEDIP -Inspiration, Clarification, Evaluation, Distillation, Incubation and Perspiration -six thinking hats, lateral thinking-TRIZ methodology for Inventive Problem Solving-Eight-Dimensional (8D) Approach to Ideation-Manufacturing Scale up – Pilot to Production- Project Evaluation Techniques





Theory of Organizational Creativity

Mark as done

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Edit mode

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Control Charts - Variables

Control Charts - Attributes

Process Capability

Process Capability - Proble...

OCAP, Process Capability a...

Process Capability Info

Self Assessment Questions ...

→ RESEARCH AND DEVELO...

R&D Practices

TRIZ

Theory of Organizational C...

Self Assessment Questions ...

Y QUALITY AND EXCELLEN...

ISO Certifications

Organizational Certifications

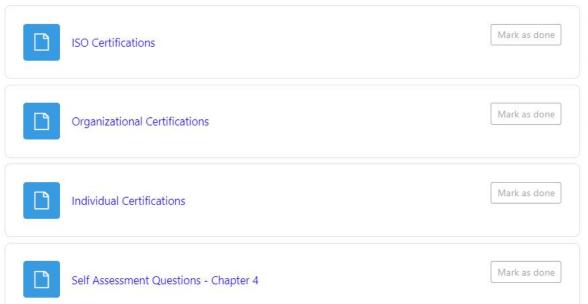
Individual Certifications

Self Assessment Questions ...



QUALITY AND EXCELLENCE

Institutional: Quality systems – ISO 9000 – 2000-Quality auditing – QS – 9000 – ISO – 14000-concepts, requirements and benefits –EFQM excellence model-Malcolm Baldridge quality award-Golden Peacock Nationality awards -Deming's Price-Rajiv Gandhi National Quality Award (RGNQA)-IMEA Award -Kanji Business Excellence Model- Capability Maturity Model (CMMI)-IEI Industry Excellence award – PSE-Awards -The IMC Ramakrishna Bajaj National Quality AwardIndividual: PMI – PMP, PgMP, CAPM, PBA,ACP ASQ – Master Black belt, CRE, CSQP, CSQE. Six Sigma green and yellow belts –Quality Auditor – ASNT – Certification programs –CEA certifications









Self Assessment Questions ...

→ PERSONAL EFFECTIVENE...

Unit 5 Slides

Understanding Behaviours_...

AL_Etiquette Skils

AL Formal Emails

AL_Minutes of Meeting

AL_Sample_Minutes of Me...

AL_Resume_Writing

AL_Delegation

AL_Learning from Mistakes

AL_LfM_Amitabh Mishra

AL_Team Building

AL_Patent Portfolio_VeA

Self Assessment Questions ...

AL_Resume Writing

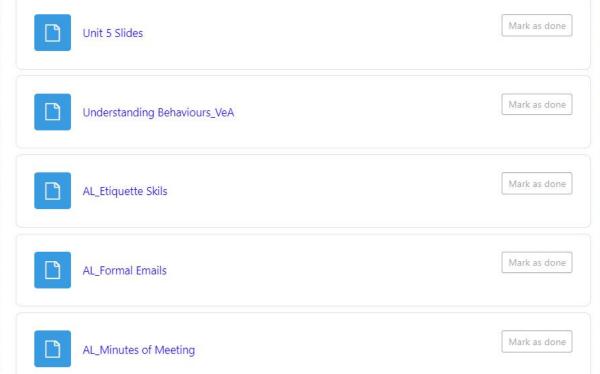
AL_Self_Introduction_1

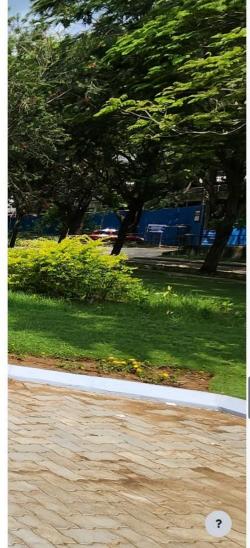


PERSONAL EFFECTIVENESS TOOLS

PERSONAL EFFECTIVENESS TOOLS

E-mail etiquette, minutes, reports of different kinds – annual report, status report, survey report, proposals, memorandums, presentations, interviews, profile of institutions, speeches, responding to enquiries, learning from mistakes complaints, resumes, applications, summarizing, strategies for writing- Effective communication, understanding behaviours-Team building and Delegation Techniques









Edit mode

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Self Assessment Questions ...

→ PERSONAL EFFECTIVENE...

Unit 5 Slides

Understanding Behaviours_...

AL_Etiquette Skils

AL_Formal Emails

AL_Minutes of Meeting

AL_Sample_Minutes of Me...

AL_Resume_Writing

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AL_Team Building

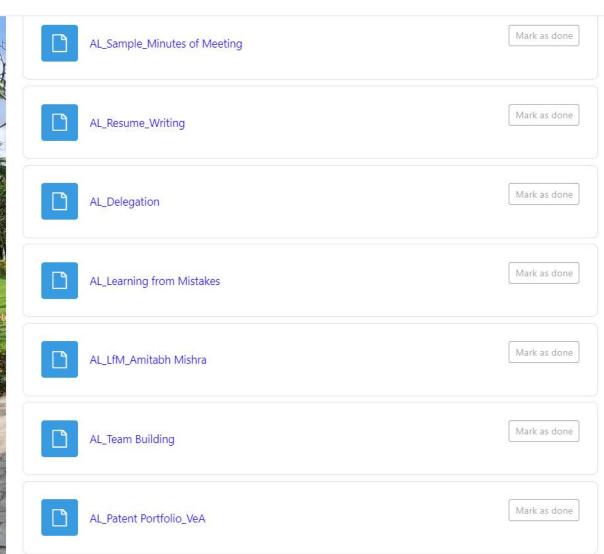
AL_Patent Portfolio_VeA

Self Assessment Questions ...

AL_Resume Writing

AL_Self_Introduction_1









Self Assessment Questions ...

→ PERSONAL EFFECTIVENE...

Unit 5 Slides

Understanding Behaviours_...

AL_Etiquette Skils

AL Formal Emails

AL_Minutes of Meeting

AL_Sample_Minutes of Me...

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AL_Delegation

AL_Learning from Mistakes

AL_LfM_Amitabh Mishra

AL_Team Building

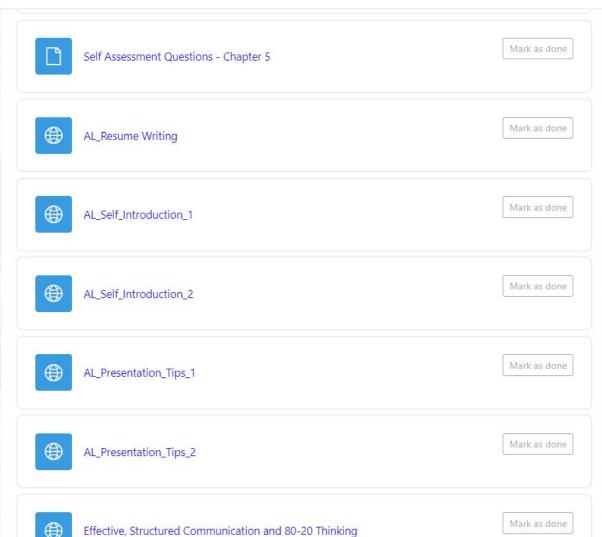
AL_Patent Portfolio_VeA

Self Assessment Questions ...

AL_Resume Writing

AL_Self_Introduction_1







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Mark as done







AL_Resume_Writing

AL_Delegation

AL_Learning from Mistakes

AL_LfM_Amitabh Mishra

AL_Team Building

AL_Patent Portfolio_VeA

Self Assessment Questions ...

AL_Resume Writing

AL_Self_Introduction_1

AL_Self_Introduction_2

AL_Presentation_Tips_1

AL_Presentation_Tips_2

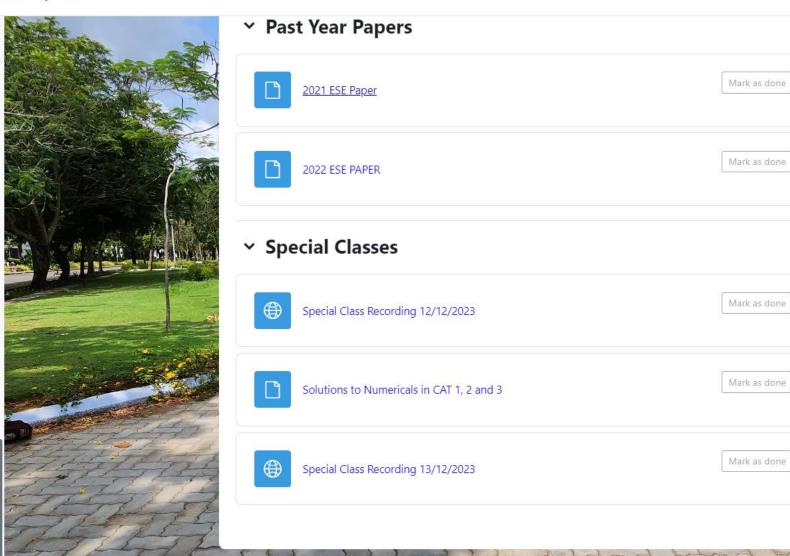
Effective, Structured Comm...

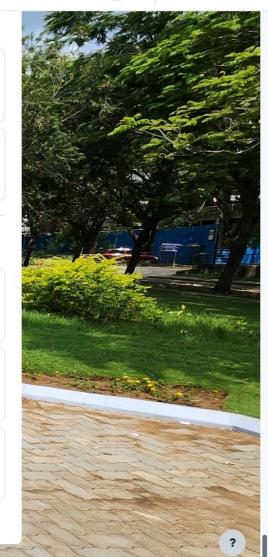
https://lms.ssn.edu.in/mod/resource/view.php?id=37819

2021 ESE Paper

2022 ESE PAPER

Special Classes







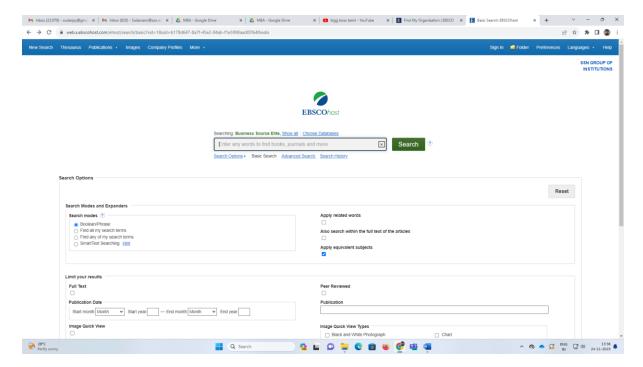
EBSCO International Inc.

5724, Highway 280 East, Brimingham Alabama -35242 USA

E/23-24/	94			Date	24-Apr-23
Received with thanks from Sri Sivasubramaniya		a Nadar College			
Sum of	Rupees Three Laki	h FourtyEight Thousar	nd Three Hun	dred Eleven Paise Fi	fty Only
By Cash/WireTrf/DD/Cheque*	No.	Wire Trf		Dated	20-Apr-23
Drawn on	-				
Towards Subscription of	Business Source Eli	te Plus			
For the Period		<u>1-Jan-23</u>	То	31-Dec-23	
INR * Subject to realization in Bank	<u>3,48,311.50</u>		EBSCO HITTER	FOR EBSCO HAPPA	ational Inc.

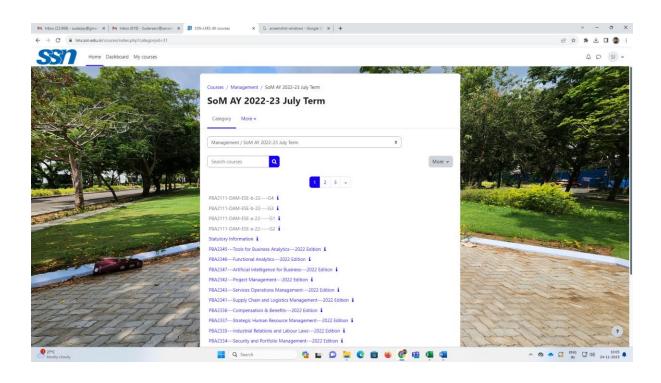
EBSCO host

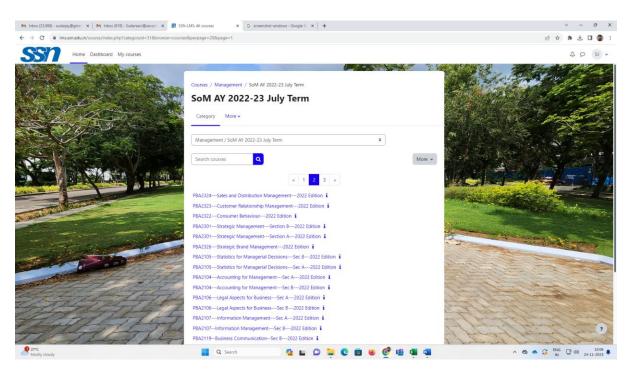
Online Journal Database



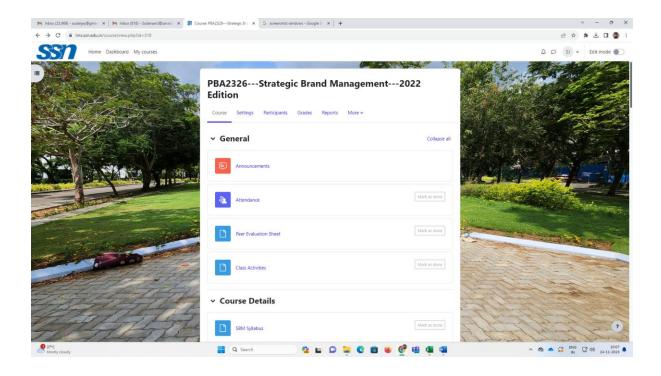
Learning Management System (LMS)

SSN Learning Management Systems (LMS) allows you to create an online course content, and assessments. The LMS allows students to access the course and course resources online. www.lms.edu.in

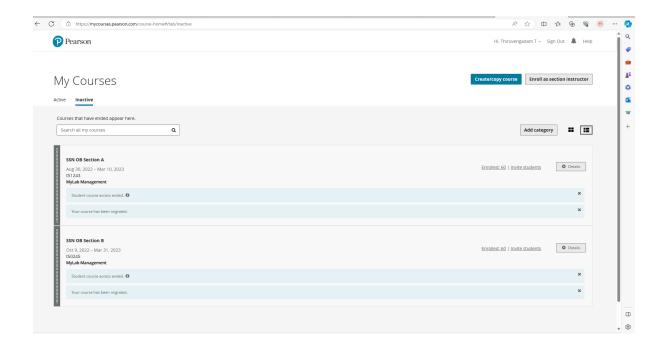


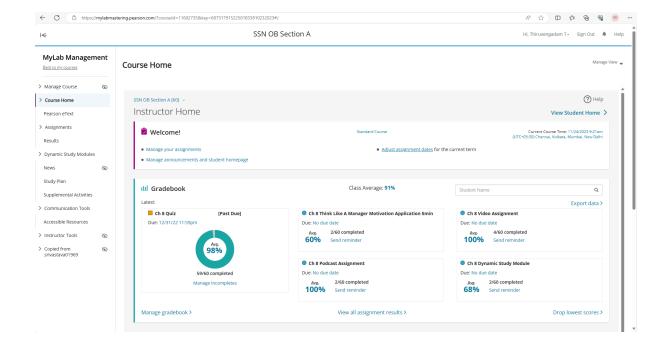


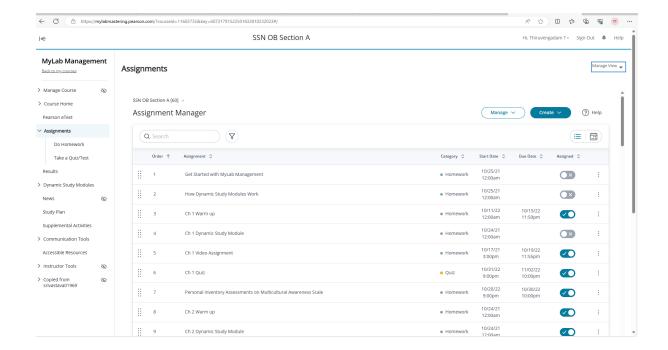
Sample Course



OB course uses MYLab which is a digital learning platform by Pearson. It helps personalized learning.







2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning.

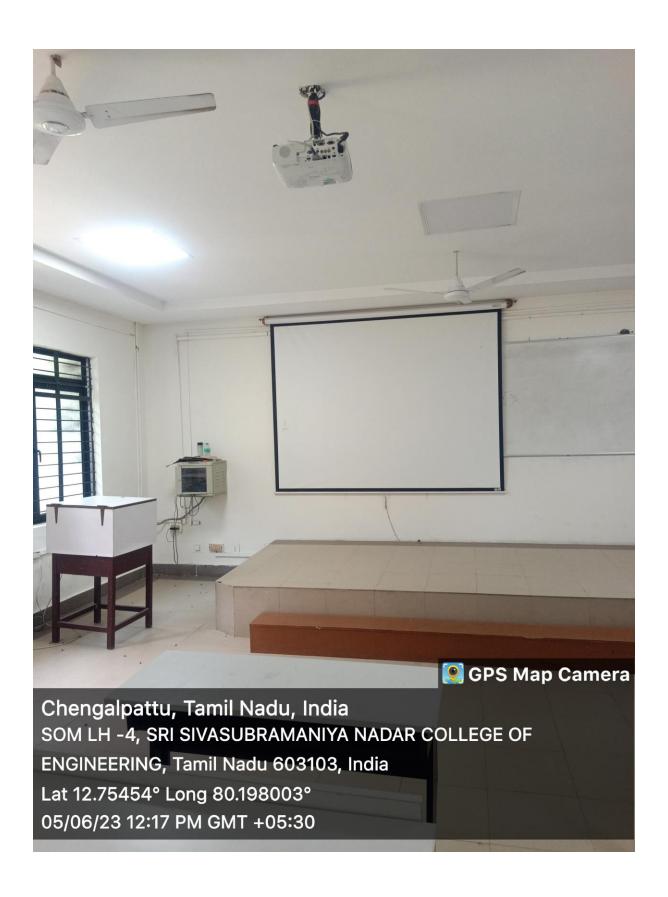
1. Seminar Hall - Smart Classroom

- a. Interactive Display with Laptop
- b. Wireless Mic and Speakers
- c. Wi-Fi enabled classroom



2. Classrooms

- a. LCD Project with Laptop
- b. Wireless Mic and Speakers
- c. Wi-Fi enabled classroom.



3. Computer Lab

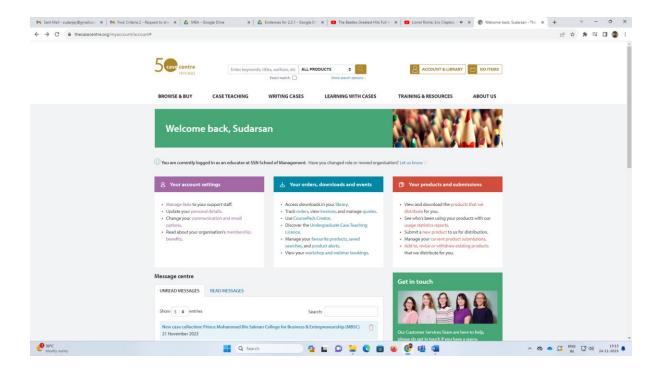
- a. 60 PC with LAN connections
- b. LCD with Labtop.



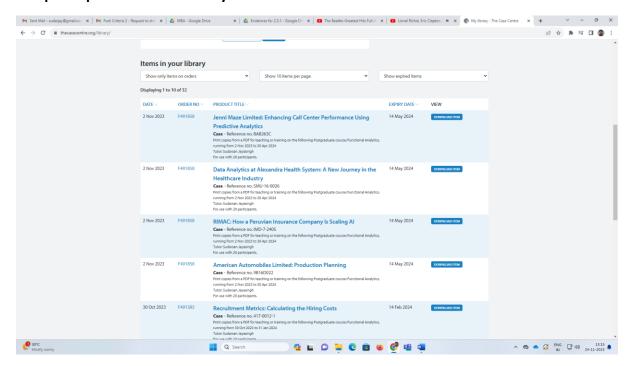


The Case Centre

SSN School of management holds the membership to access and purchase case studies from The Case Centre.



Sample of purchased case study.





CENTRE FOR MONITORING INDIAN ECONOMY PVT. LTD.

RECEIPT

03/07/2023Receipt No: 23249

The Director SSN SCHOOL OF MANAGEMENT old Mahabalipuram road kalavakkam Chennai - 600118 Tamil Nadu - India

Received with thanks from SSN SCHOOL OF MANAGEMENT a sum of Rs. 2,54,880 (Rs. Two Lakhs Fifty-four Thousand Eight Hundred and Eighty), vide TT transaction no. TMBLR52023061300250130 dated 13/06/2023 towards Invoice No: 13960 having total amount Rs. 2,54,880.

CMIE PAN No: AAACC1519P, GSTIN: 27AAACC1519P1ZJ, ARN: AA270317186167W Note: This is system generated receipt and requires no signature.

→ General files SEM-I 2022-2023

Collapse all

Academic calendar Mark as done Time Table SEM I 2022-2023 Mark as done <u>Syllabus</u> Mark as done **Assignment -1 TOPICS** Mark as done Assignment S6 SEM-I Engg.Physics Mark as done Opened: Wednesday, 21 December 2022, 12:00 AM Due: Tuesday, 3 January 2023, 12:00 AM Dear All The deadline for submitting the assignment is 03.01.2023. CAT QUESTION PAPERS (2018-2019)

CAT QUESTION PAPERS (2019-2020)

Mark as done

Mark as done Assignment topics for CAT 2 Mark as done Assignment -II submission Mark as done Opened: Friday, 10 February 2023, 12:00 AM Due: Saturday, 25 February 2023, 12:00 AM → Physics Lab Model exam Model exam Physics Lab -schedule and name list Mark as done UNIT I CRYSTAL PHYSICS Single crystalline, polycrystalline and amorphous materials—Single crystals - Lattice – Unit cell – Bravais lattice – Lattice planes – Miller indices – d spacing in cubic lattice - Calculation of number of atoms per unit cell - Atomic radius - Coordination number - Packing factor for SC, BCC, FCC and HCP structures - Diamond and graphite structures (qualitative treatment) - Crystal Imperfections - Point, Line (Edge and Screw dislocations - Burger vectors), Surface (stacking faults) and Volume defects **Crystal Physics Basics** Mark as done SC & BCC Mark as done **FCC**

Mark as done

Mark as done

HCP

D-spacing_derivation Mark as done
Crystal Planes & Miller Indices Mark as done
Diamond & Graphite Mark as done
Crystal defects Mark as done
Planar density. Mark as done
self-assessment questions Mark as done
Full unit I notes Mark as done

▼ UNIT II PROPERTIES OF MATTER AND THERMAL PHYSICS

Properties of matter: Elasticity- Hooke's law - Relationship between the three moduli of elasticity- stress -strain diagram- Poisson's ratio -Factors affecting elasticity- Torsional stress & deformations - Twisting couple - Torsion pendulum - theory and experiment-Bending of beams -Bending moment-Cantilever: theory and experiment-Uniform and non-uniform bending: theory and experiment-I-shaped girders.

Thermal Physics: Modes of heat transfer – thermal conduction, convection and radiation – thermal conductivity- Newton's law of cooling – Lee's disc method – Radial heat flow – Rubber tube method – conduction through compound media (series and parallel) – Formation of ice on ponds.

Full unit II notes

Mark as done

UNIT 2 QUESTION BANK Mark as done SELF ASSESSMENT QUESTIONS Mark as done

→ UNIT III ACOUSTICS AND ULTRASONICS

Acoustics: Classification and characteristics of Sound - decibel - Weber–Fechner law – Sabine's formula - derivation using growth and decay method —Factors affecting acoustics of buildings and their remedies - Methods of determination of Absorption Coefficient .

Ultrasonics: Production of ultrasonics by Magnetostriction and Piezoelectric methods - Acoustic grating -Non Destructive Testing – Pulse echo system through transmission and reflection modes - A, B and C – scan displays

Full unit III notes Mark as done
sabine formula derivation and absorption coefficient
Mark as done
UNIT 3 QUESTION BANK Mark as done
SELF ASSESSMENT QUESTIONS Mark as done

▼ UNIT IV QUANTUM PHYSICS

Black body radiation – Planck's theory (derivation) – Deduction of Wien's displacement law and Rayleigh – Jeans' Law from Planck's theory – Compton Effect. Theory and experimental verification – Properties of Matter waves – wave particle duality - Schrödinger's wave equation – Time independent and time dependent equations – Physical significance of wave function – Particle in a one dimensional box and extension to three dimensional box – Degeneracy of electron energy states - Scanning electron microscope - Transmission electron microscope.

Mark as done
Black body to de Broglie waves Mark as done
SEM & TEM Mark as done
Question bank Mark as done
Quantum basics Mark as done
SELF ASSESSMENT QUESTIONS Mark as done
→ UNIT V PHOTONICS AND FIBRE OPTICS

Photonics: Spontaneous and stimulated emission- Population inversion -Einstein's A and B coefficients – Conditions for Laser action - Types of lasers – Nd: YAG, CO2, Diode lasers - Industrial and Medical Applications.

Fibre optics: Principle and propagation of light in optical fibres – Numerical aperture and Acceptance angle - Types of optical fibres (material, refractive index, mode) –Losses in fibers - attenuation, dispersion, bending - Fibre Optical Communication system (Block diagram) - Active and passive fibre sensors - pressure and displacement

<u>Full unit V notes</u>		
Mark as done		
<u>Fiber optics</u>		
Mark as done		
Laser notes		

Mark as done
SELF ASSESSMENT QUESTIONS Mark as done
▼ UGS2197 PHYSICS LABORATORY
PHYSICS LAB iD Mark as done
CYCLE OF EXPERIMENTS Mark as done
Band Gap of Semiconductor (BG)-Video Link Mark as done
Air Wedge (AW) Video Link Mark as done
Coefficient of Viscosity (CV) Video Link Mark as done
Torsion Pendulum (TP) Video Link Mark as done
Young's Modulus (YMN)_Video Link Mark as done

Department of Physics

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning.

Teachers uses the Learning Management System for the evaluation process. Teachers host their materials to Learning Management System (LMS) and students will make use of the teachers' materials.

LMS helps to conduct the all the evaluation for the students by the teachers. Sample page for the course enclosed with this document.

