JSPM's Jayawantrao Sawant College of









"Creating Academic Excellence through MOODLE"







Sr. No.	Particulars	Page No.
1	Chapter 1. Overview of JSCOE LMS MOODLE	4
2	Chapter 2. Objectives using MOODLE as LMS in JSCOE:	6
3	Chapter 3. Best Practices using MOODLE	7
4	Chapter 4. Evidences	8
5	Chapter 5. Challenges	38
6	Chapter 6: Outcomes	39
7	Chapter 7: Conclusion.	40





Chapter 1. Overview of JSCOE LMS MOODLE

- MOODLE (i.e., Modular Object-Oriented Dynamic Learning Environment) is established by Parent Organization (JSPM) which helps the institute to manage academic activities effectively and efficiently. MOODLE provides self-paced learner centric environment which is conducive to quality education which helps to address the program outcomes of graduating student in terms of knowledge, Problem Solving Skills, Supporting Skills and Attitude.
- ➤ MOODLE allows to design a common platform creating a personalized learning environments for educators, administrators and learners. JSPM's JSCOE has designed the separate courses on MOODLE Platform as per SPPU Syllabus.
- ➤ 4800+ Users (including Students & Faculty Members of all departments of JSCOE, Pune) are benefited using this Learning Management System. New ID is created for every new joining faculty and newly admitted student to the department.
- > JSPM's JSCOE is well equipped with ICT Enabled Classrooms and High-End Computers in laboratories. Students can access the MOODLE in class, labs and also in corridor.
- MOODLE Platform is available 24 x 7 for all users to access materials like recorded videos by faculty members, E-Books, NPTEL Videos, Game Pedagogies, Interactive Videos, SPPU Solutions for Slow Learners, BL-4 Activities for Fast Learners etc.



Major Benefits using MOODLE in JSPM's JSCOE:

- ✓ User Friendly Interface
- **✓** Ease of Integration
- **✓** Content Management
- √ Ease of Access
- **✓ Blended Learning Features**
- ✓ Assessment & Testing
- ✓ Reporting & Tracking
- **✓** Security





Chapter 2. Objectives using MOODLE as LMS in JSCOE

- 1 To make MOODLE accessible to everyone.
 - To enable the creativity of individual teachers to develop coursespecific materials for students
 - To measure and manage learners progress
- To reward and recognize the learners





Chapter 3. Best Practices using MOODLE

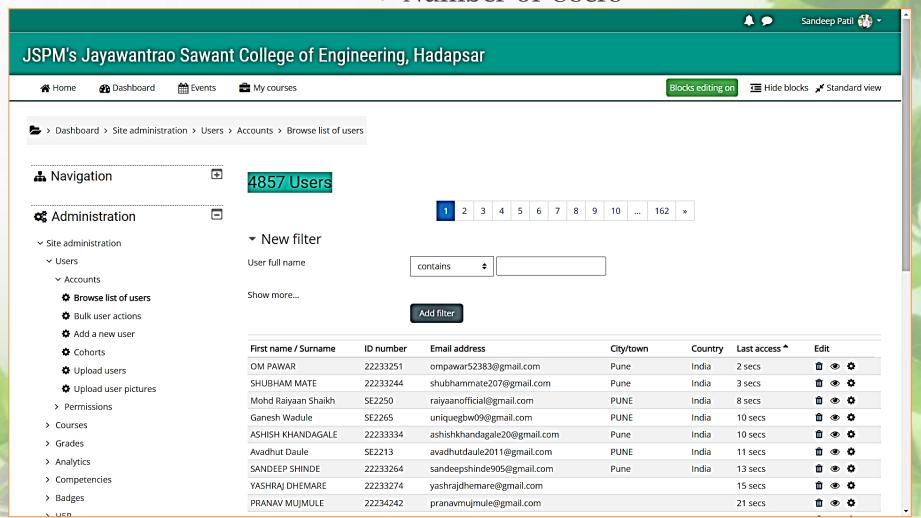
- Active participation of students in ICT enabled classrooms using MOODLE Activities like memory-based quizzes; Experiential learning through Flip Classroom, Interactive Videos, Game Pedagogies like Crossword, Millionaire, Cryptex, Sudoku etc.
- Immediate learning feedback for the sessions conducted (especially during online classes)
- MID Term and End Term Examination during Pandemic
- > Students Activities for slow learners like simple quiz, Drag & Drop Image/Text, short text answers etc.
- > Students Activities for Fast Learners like Flip Classrooms, Think Pair & Share, Long Text Answers, Blooms Taxonomy Level 4 Activities etc.
- Students learning progress ensured though gradebook's setup.
- > Students get certified by INSEM & END SEM Certification (if crosses min. 60% in course total)





Chapter 4. Evidences

➤ Number of Users





Personalized Learning Environment

Course content	Tab 2	Tab 1		
Announcements				
OBE Awareness Sess	ion by Dr. P. A. Pa	til Sir		\square
Quiz -Vision, Mission	, PEOs and Outcor	ne Base Educatio	n (OBE) Process Awareness	\square
1 70 of 78 attempted				
Go through the content Quiz.	on Vision-Mission, F	PEOs, Program Out	comes (PO) list, Program Specific Outcomes (PSOs) and Bloom Levels list, before attem	pting the
Announcements				
HVAC & R_Engineerir	ng Svillahus 2019	Course		_
_				\square
Teaching -Learning a		an	Course	lacksquare
Outcome base Educa	ition Documents		Essentials	\square
HVAC Assessment Sh	eet		Lissentials	\square
Refrigeration and Air	-conditioning by C	P Arora		\square
Course Completion C	Certificate			\odot
Restricted Not available	unless: You achieve	a required score ir	Course total	
Course End Survey				\square
! Due 30 November 20	22			
68 of 78 attempted				





 \mathbf{V}

 \square

 $\overline{\mathbf{v}}$

 \square

 \square

Personalized Learning Environment

Course Prerequisites

- Prerequisite Lecture 1:- Basic Refrigeration System
- Prerequisite Lecture 2:- Basic Air-Conditioning System
- Prerequisite Test
 - 64 of 78 attempted
- Prerequisite Test-II
 - 6 63 of 78 attempted
- Video on Introduction to HVAC & R Syllabus

Course Prerequisites





Unit-I:- Gas Cycle Refrigeration and Refrigerants

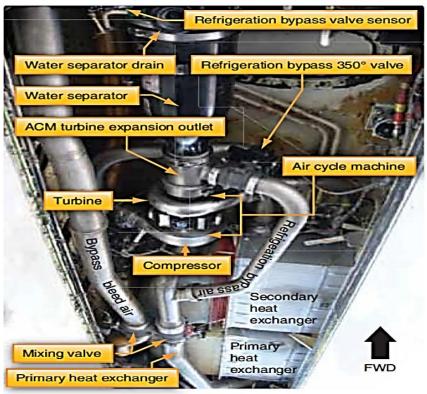
Gas Cycle Refrigeration

Application to air-craft refrigeration, Simple system, Bootstrap, Regenerative, Reduced ambient system, Concept of Dry Air Rated Temperature (DART).

Refrigerants:

Introduction-Definition and requirement, Classification of refrigerants, Designation of refrigerants, Designation of refrigerants properties of refrigerants. Thermodynamic, Chemical and Physical. Properties of ideal refrigerant. Environmental issues like ODP, GWP & LCCP. Selection of environment friendly refrigerants, Alternative refrigerants, Secondary refrigerants, Anti-freeze solutions, Zeotropes and Azeotropes, Refrigerant recovery, reclaims, recycle and recharge.

CO404C.1:- ANALYSE different air-craft refrigeration systems and EXPLAIN the properties, applications and environmental issues of different refrigerants.



Unit-1
Syllabus with CO







10 70 of 78 attempted

Glossary:- Advanced VCS

Hidden from students

- Activity No. 1.2: Numerical Quiz
 - 1 71 of 78 attempted
- Activity No.1.3:- Interactive Video
- Activity No.1.4 Crossword

Unit-1

Refrigerant

contents

- (Fig. 1.5:-Recovery & Recycling of Air-Conditioning System)
- Unit-I Question Bank

Course Material:- Components of RAC

Lecture 3.1.1:-https://fliphtml5.com/tmyfg/acou

Lecture 3.1.2:-https://fliphtml5.com/tmyfg/byev

Lecture 3.1.3:-https://fliphtml5.com/tmyfg/puso

Lecture 3.1.4:-https://fliphtml5.com/gafzn/mldw

Lecture 3.1.5:-https://fliphtml5.com/gafzn/rcxh

Course Material:- Safety Controls

Lecture 3.2.1 :https://online.fliphtml5.com/aceon/ytma/
Lecture 3.2.2:-https://online.fliphtml5.com/aceon/lxzw/

Course Material:- Advanced Air-Conditioning System

Lecture 3.3.1:- https://fliphtml5.com/gafzn/mddf

Lecture 3.3.2:- https://fliphtml5.com/gafzn/mkvn

Lecture 3.3.3:- https://fliphtml5.com/gafzn/tdcu

Lecture 3.3.4:- https://fliphtml5.com/gafzn/fyve

Lecture 3.3.5:-https://fliphtml5.com/gafzn/xiuh

Lecture 3.3.6:- https://fliphtml5.com/tmyfg/bhve

Lecture 3.3.7:- https://fliphtml5.com/tmyfg/ubkm

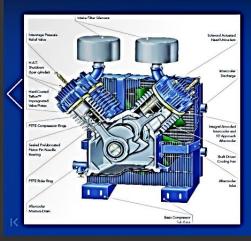




> Personalized Learning Environment



Capacity Controls of Reciprocating Compressors



2. By suction value lift control

-In multi cylinder compressor, the capacity may be controlled by forcing the suction valve to remain open in one or more cylinders & making them ineffective according to the load on the system.

Capacity Controls of Reciprocating Compressors



3. By using multiple compressors.

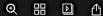
-The multiple compressors of the same capacity can be used to provide capacity control. The operation of all units will provide the maximum desired capacity & the operation of the various combinations of the units will permit efficient capacity reduction.

-When this system of capacity control is used, the units are usually installed with common suction & discharge headers.

> **Flipbook** (QR Code)















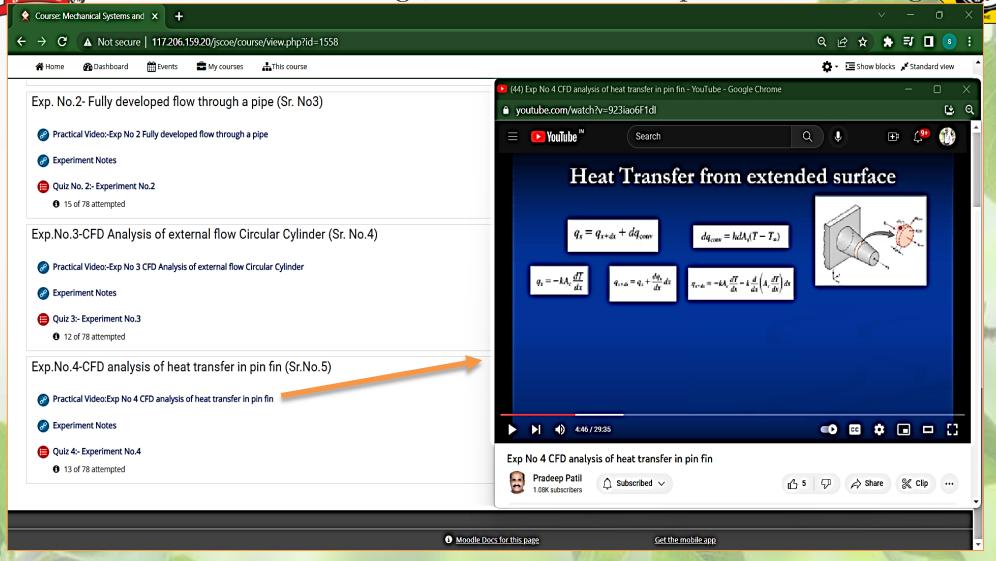




➤ MOODLE Activities **}** - **□** × A Home Αll Activities Resources arks] O E A BigBlueButtonB lers [10 Assignment Attendance Ν Chat Checklist Choice ☆ 0 ☆ 🚯 ☆ 0 ☆ 0 ☆ 0 ☆ 0 සී Custom Game -Feedback certificate Database External tool Crossword Forum ☆ 0 ☆ 0 ☆ 0 ☆ 0 ☆ 0 0 Game - Hidden Game -Game -Game - Snakes Game - Cryptex Picture Millionaire and Ladders Game - Sudoku Hangman 0 0 0 0 0 0 ΗЭР Interactive Glossary H5P Content Lesson Questionnaire Quiz ☆ 0 ₩ 0 ☆ 0 ☆ 0 ☆ 0 117.206.159.20/jscoe/course/view.php?id=1491#activity-4



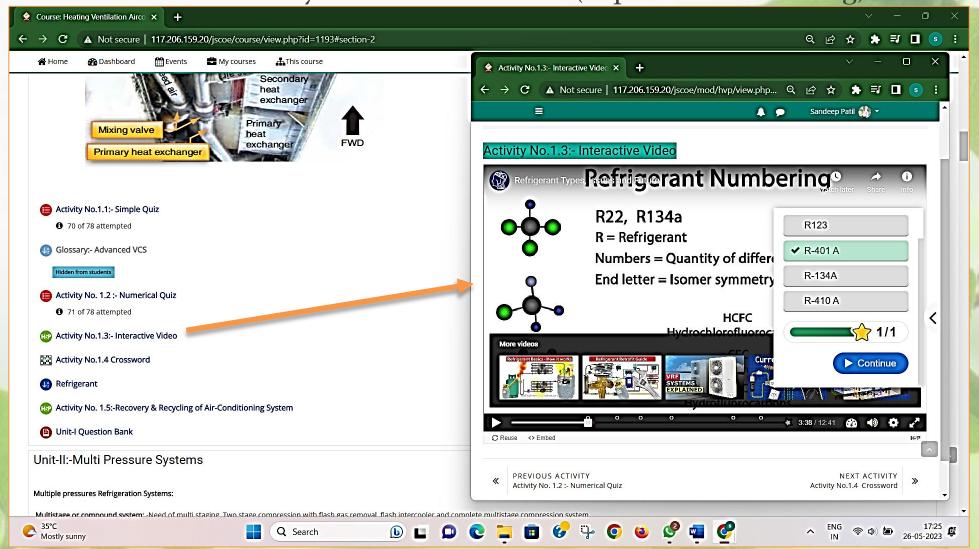
Self-Paced Learning (Practical Video - Experiential Learning)







Activity - Interactive Video (Experiential Learning)







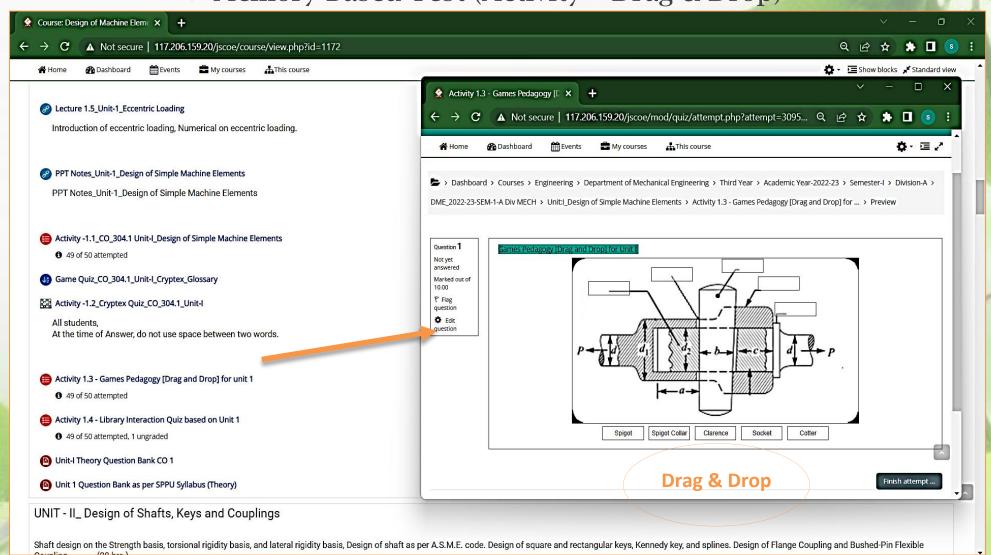
► Memory Based Test (Activity - Simple Quiz)

Question 4 Not yet answered Marked out of 1.00 **Flag question **Edit question	Write ODE equation (written in Scilab) Answer: Short Answer Text
Question 5 Not yet answered Marked out of 1.00 *F Flag question Edit question	Match the following syntax with their function uo Choose
Question 6 Not yet answered Marked out of 1.00 *F Flag question *Edit question	In part-1 of the experiment. through pipe is analyzed to develop equation for . One numerical discussed in order to understand . Inpart-2, is written to velocity and shear stress variation in pipe w.r.t Plot is developed using plot function. Iaminar flow velocity and shear stress distribution laminar flow analysis through pipe. Scilab code investigate radius Drag & Drop





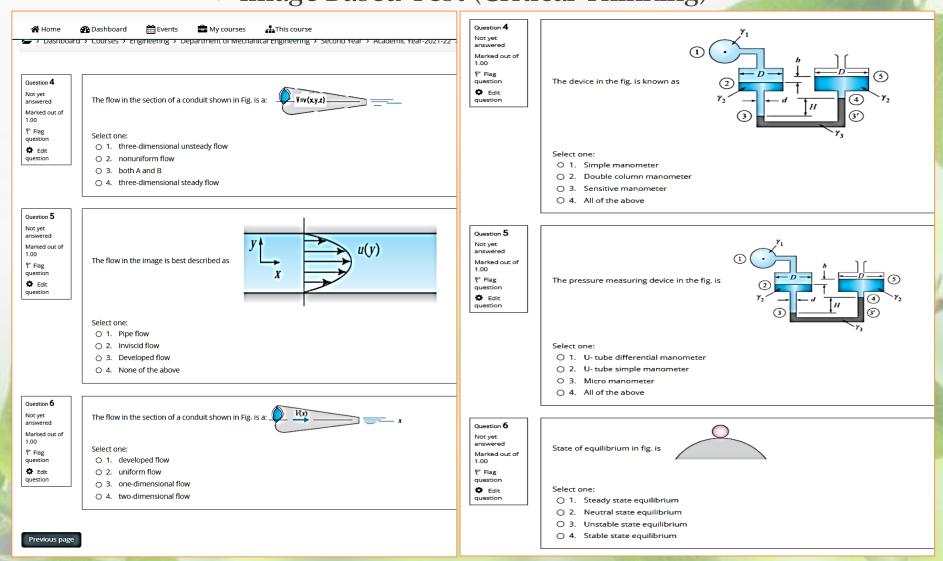
➤ Memory Based Test (Activity - Drag & Drop)







► Image Based Test (Critical Thinking)







► Image Based Test (Critical Thinking)

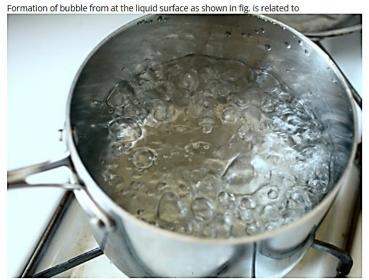
Question 1

Not answered

Marked out of 1.00

P Flag question

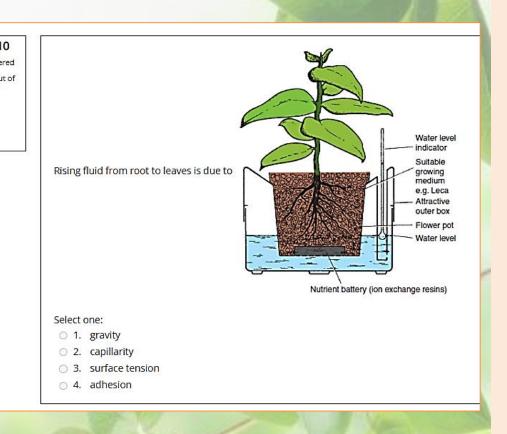
Edit question



Select one:

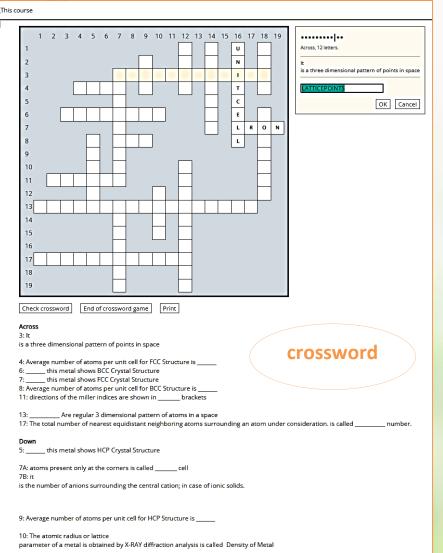
- 1. Vapour pressure
- 2. Saturation pressure
- 3. Boiling temperature
- 4. All of the above

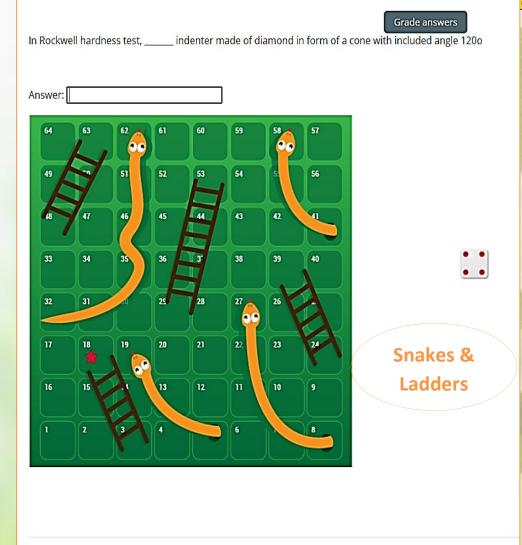






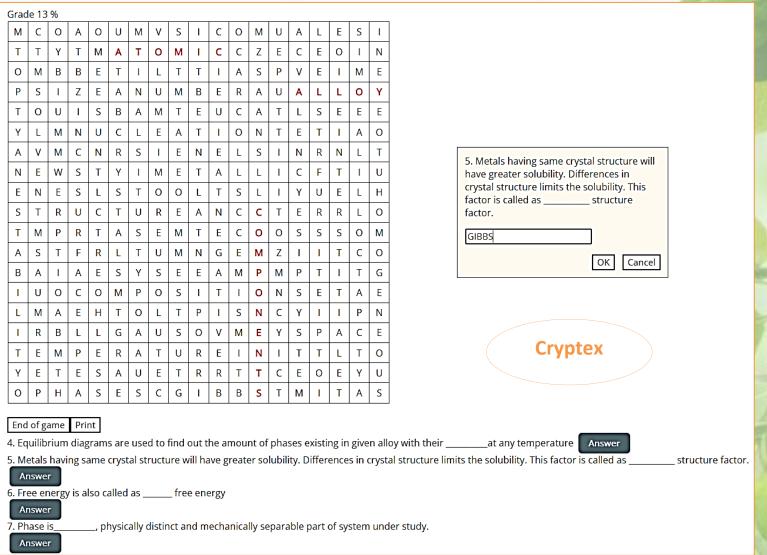
Fun & Learn Activities (Game Pedagogies)







Fun & Learn Activities (Game Pedagogies)





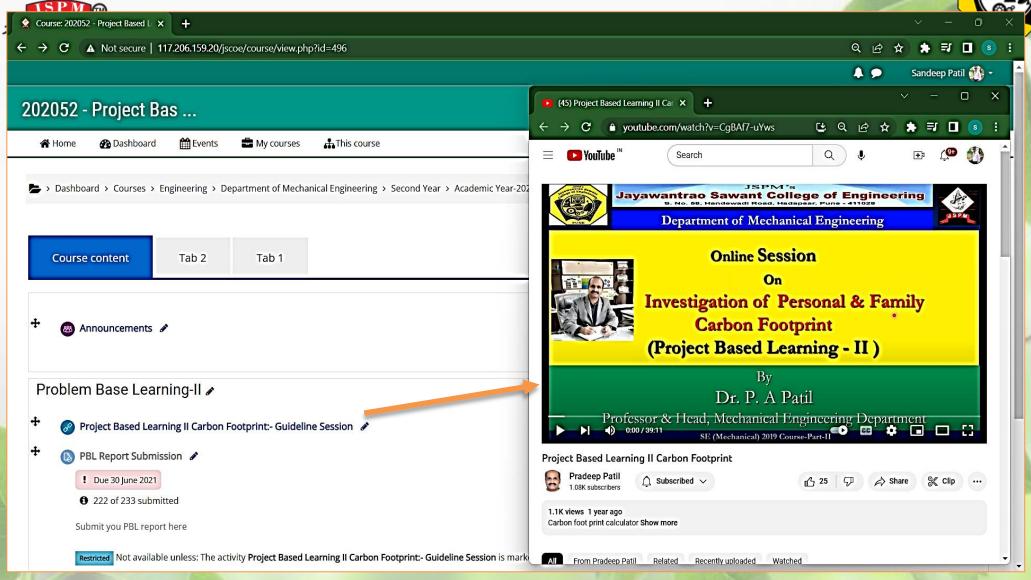
Fun & Learn Activities (Game Pedagogies)







Participative Learning (Problem Based Learning)







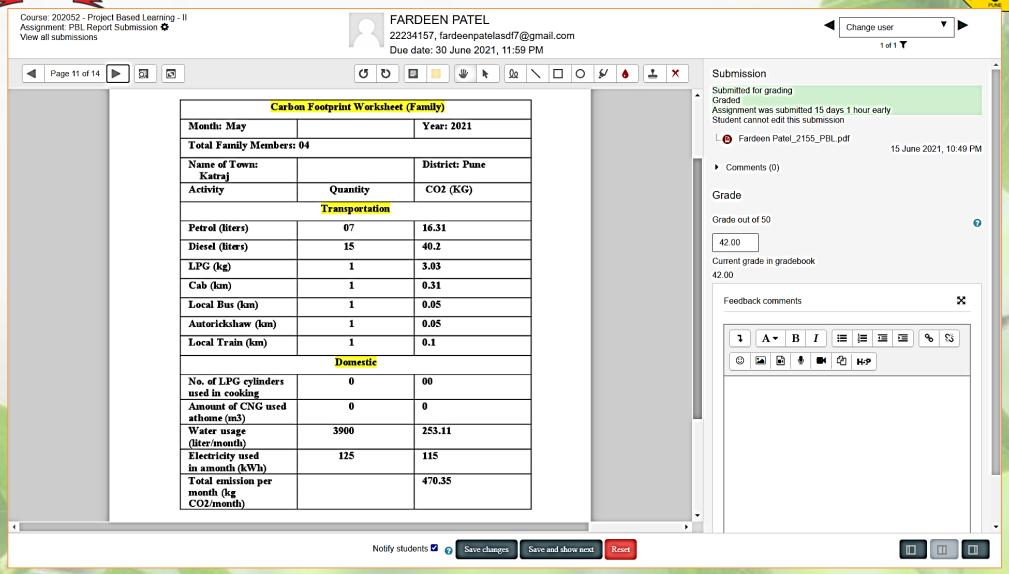


	Course content	Tab 2	Tab 1		
					Edit ▼
ŀ	Announcements	ø		Edit 🕶 🔏	Ł
				+ Add an activity or res	ource
Pr	roblem Base Lea	rning-II 🌶			Edit •
	Project Based Le	arning II Carbon F	ootprint:- Guidelii	ne Session 🏕 Edit 🕶	
	B PBL Report Subm	nission 🎤		Edit 🕶 🔏	
	! Due 30 June 202	1			
	1 222 of 233 sub	mitted			
	Submit you PBL rep	ort here			
	Restricted Not availa	able unless: The acti	vity Project Based L	Learning II Carbon Footprint:- Guideline Session is marked complete	
	Personal Carbon	Footprint Calculat	tor 🌶	Edit ▼	\square
•	Family Carbon Fo	otprint Calculator	· *	Edit ▼	\square
	👝 Study Material, N	lotice, formats, fro	ont pages 🔗	Edit ▼	\square
				+Add an activity or res	ource



Critical Thinking (Problem Based Learning)

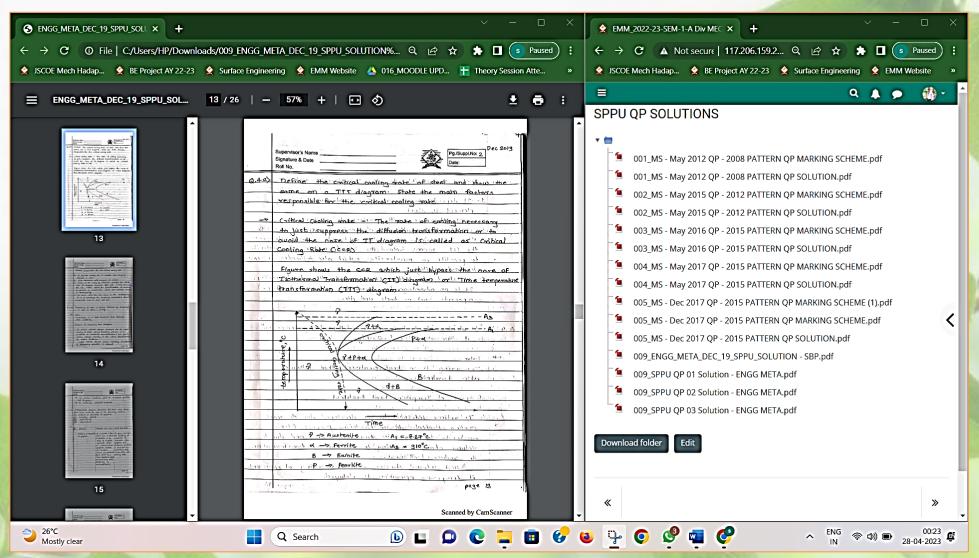








> SPPU Question Paper Solutions for slow learners







MID Term and End Term Examination during Pandemic

Exam Section F

Edit

Edit

MID-TERM TEST - [30 Marks] - [CO1]

Edit

Edit

! Due 16 September 2021

6 45 of 56 submitted

CLASS: SE [A] A.Y.2021-22 (SEM-I) MID-TERM TEST TIME: 02:00 PM to 04:00

PM

SUBJECT WITH CODE: 202044 DATE: 16/09/2021 MAX MARKS: 30

Q.	Posselation .			Attain	ment of
No.	Description	Marks	co	BL	PI
Q.1 a)	Represent Millers Indices for plane and directions for the following intercepts. i. (1 4 0) ii. (-1 0 1) iii. (1 -2 1) iv. (0 2 1)	4	1	3	1.1.3, 1.4.3
Q. 1 b)	Compare dislocation methods according to Burgers vector (with neat diagrams)	6	1	3	1.4.3
Q.1 c)	Carbon is allowed to diffuse through a steel plate 10 mm thick. The concentrations of carbon at the two faces are 0.85 and 0.40 kg C/cm³ Fe, which are maintained constant. If the pre-exponential and activation energy are 6.2×10^{-7} m²/s and $80,000$ J/mol, respectively, compute the temperature at which the diffusion flux is 6.3×10^{-10} kg/m²-s.	5	1	4	1.1.3, 1.4.3 2.1.1







MID-TERM TEST - [30 Marks] - [CO2]

Edit 🕶 🚨 📝

! Due 16 September 2021

45 of 56 submitted

CLASS: SE [A] A.Y.2021-22 (SEM-I) MID-TERM TEST TIME: 02:00 PM to 04:00 PM SUBJECT WITH CODE: 202044 DATE: 16/09/2021 MAX MARKS: 30

Q. 2 a)	Differentiate between Brinell and Vickers hardness test with reference to load, indenter, formula and application	4	2	2	1.4.3, 12.1.1
Q. 2 b)	Draw self-explanatory diagram for Erichsen cupping and impact test and explain	8	2	3	1.4.3, 12.1.1
Q. 2 c)	By which hardness test will you test the following? Justify. 1. Window glass 2. High speed tool steel 3. Thin blade	3	2	4	1.4.3, 12.1.1

Common Points after Assessment of Mid Term Test 1

Edit ▼ ☑

- 1. Lack of Book Reading
- 2. Not used Pencil for drawing
- 3. Structure drawn is not CUBIC by almost all students, must use Drawing Tools.
- 4. Height of Copy of Q. 1 C (How Carburizing Temperature is 8500+ degrees kelvin. Answer is 900 degrees kelvin or 626 degrees Celsius)
- 5. Q 2 a Where is the Impact Test Diagram
- 6. Check the corrections in your submission by clicking Annotated PDF





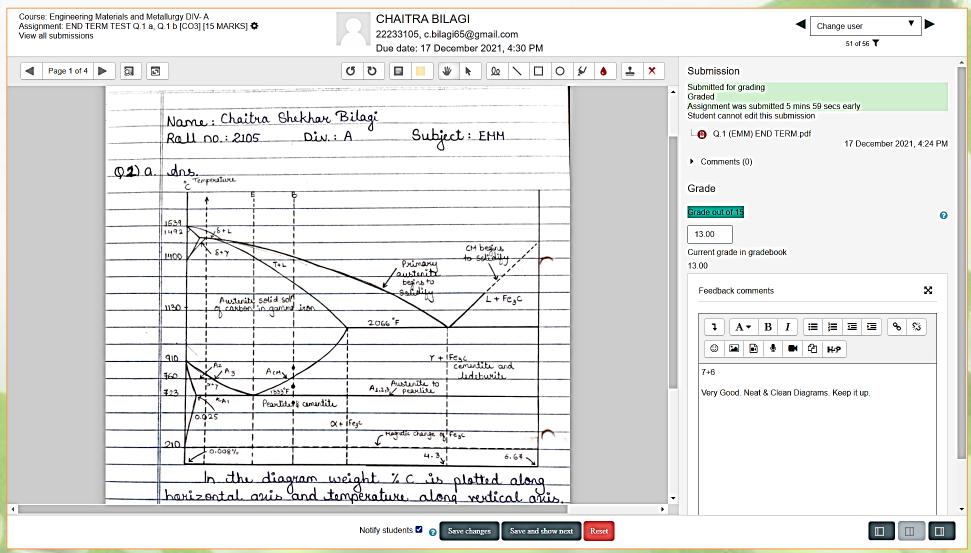
> MID Term and End Term Examination during Pandemic

4	EMM END TERM TEST QUESTION PAPER 21-22 SEM 1	Edit ▼	S
4	(S) END TERM TEST Q.1 a, Q.1 b [CO3] [15 MARKS]	Edit 🕶 🛔	\square
	! Due 17 December 2021		
	• 43 of 56 submitted		
	Upload PDF File of Q. 1 a and Q.1 b here		
4	(b) END TERM TEST Q.2 a, Q.2 b, Q. 2 c [CO4] [15 MARKS]	Edit 🕶 🛔	S
	! Due 17 December 2021		
	1 45 of 56 submitted		
	Upload PDF File of Q. 2 a, Q. 2 b and Q. 2 c here		
4	END TERM TEST Q.3 a, Q.3 b, Q. 3 c [CO5] [15 MARKS]	Edit 🕶 🛔	⊘
	! Due 17 December 2021		
	1 45 of 56 submitted		
	Upload PDF File of Q. 3 a, Q. 3 b and Q. 3 c here		
4	BND TERM TEST Q.4 a, Q.4 b [CO6] [15 MARKS]	Edit 🕶 🚨	\rightarrow
	! Due 17 December 2021		
	• 41 of 56 submitted		
	Upload PDF File of Q. 4 a and Q. 4 b here		
		+Add an activity or reso	urce





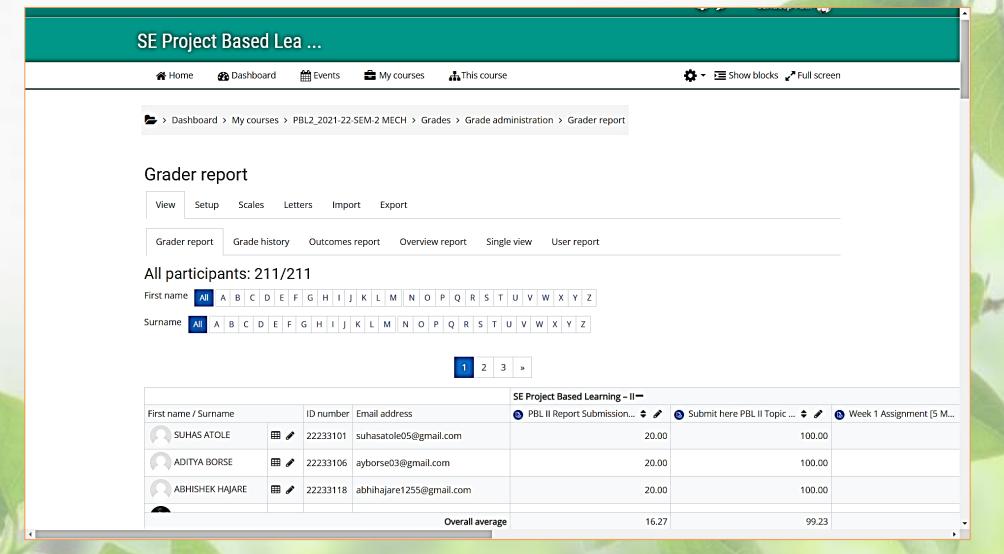
MID Term and End Term Examination during Pandemic







> Student's Grading System







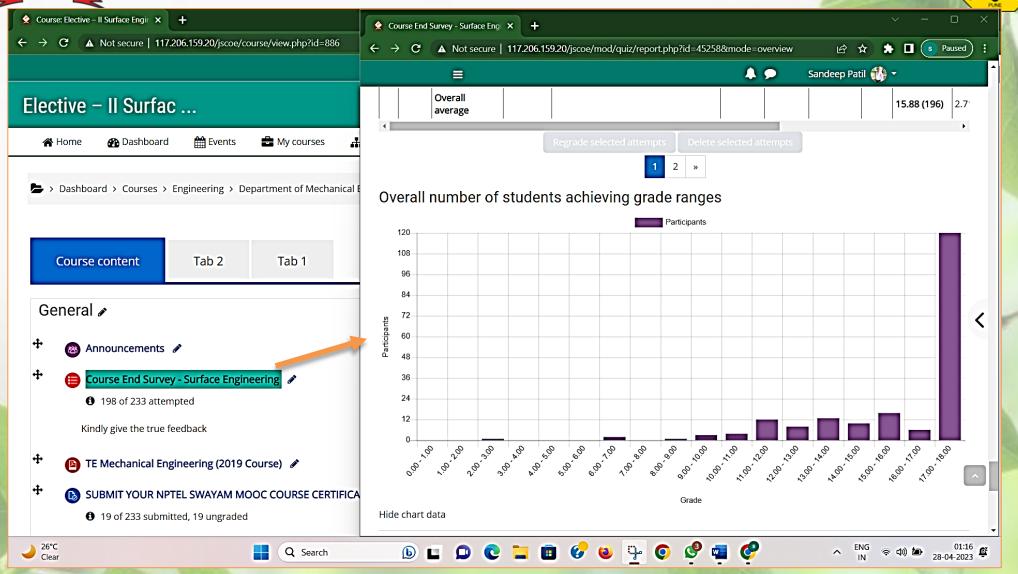
Student's Grading System

First name / Surname	t [5 M 💠 🥜		Week 4 Assignment [5 M		Week 6 Assignment [5 M	∑ Course total ^ 🏕
ANUP KULKARNI	5.00	4.00	4.00	4.00	4.00	141.00
VISHAL RAJMANE	5.00	4.00	4.00	4.00	4.00	141.00
RUSHIKESH SUPEKAR	4.00	5.00	4.00	4.00	4.00	141.00
ANUJ CHIPLUNKAR	4.00	3.00	3.00	5.00	4.00	141.00
PRAVIN GARUD	3.00	4.00	3.00	4.00	5.00	141.00
OMKAR KALE	3.00	3.00	3.00	5.00	4.00	141.00
AVINASH KAMBALE	4.00	4.00	4.00	4.00	4.00	140.00
TEJAS KUNDALE	3.00	4.00	3.00	4.00	4.00	140.00
VYANKAT SHINDE	4.00	3.00	3.00	4.00	4.00	140.0
ROHAN JAGTAP	4.00	4.00	4.00	4.00	4.00	140.0
ANIKET RAUT	4.00	4.00	4.00	4.00	4.00	140.0
YOGESH RIKIBE	4.00	4.00	4.00	4.00	4.00	140.0
SIDDH KADAM	3.00	3.00	3.00	4.00	4.00	139.0
SHUBHAM SHINDE	4.00	3.00	3.00	4.00	4.00	139.0
ANIKET KOLI	3.00	3.50	3.50	4.00	3.00	138.5
CHAITRA BILAGI	5.00	4.00	0.00	4.00	5.00	138.0
UMESH LAWATE	3.50	4.00	3.50	4.00	3.50	138.0
RUSHIKESH TEKALE	4.00	3.50	4.00	3.50	3.50	138.0
Overall average	4.05	4.01	4.12	4.15	4.19	110.0









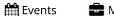


> Student's Course Completion Certification



















 \odot

Course Completion Certificate

Restricted Not available unless:

- You achieve a required score in Course total
- You achieve a required score in COURSE END SURVEY
- You achieve a required score in QUIZ 001 PRACTICAL NO. 1 [INTERACTIVE VIDEO] [10 Marks] [CO2]
- You achieve a required score in QUIZ 002 PRACTICAL NO. 2 [INTERACTIVE VIDEO] [10 Marks] [CO2]
- You achieve a required score in QUIZ 003 PRACTICAL NO. 3 Game Pedagogy Crossword [10 Marks] [CO2]
- You achieve a required score in QUIZ 004 PRACTICAL NO. 4 [10 Marks] [CO5]
- You achieve a required score in QUIZ 005 PRACTICAL NO. 5 [10 Marks] [CO6]
- You achieve a required score in QUIZ 006 PRACTICAL NO. 6 [INTERACTIVE VIDEO] [10 Marks] [CO4]
- You achieve a required score in QUIZ 007 PRACTICAL NO. 7 Game Pedagogy Crossword [10 Marks] [CO4]
- You achieve a required score in QUIZ 008 Miniature Assignment 1 Virtual Lab Creep Test [10 Marks] [CO1]
- You achieve a required score in QUIZ 009 Miniature Assignment 2 Virtual Lab Fluorescence Microscope [10 Marks] [CO2]
- You achieve a required score in QUIZ 010 Industrial Visit to LPR Global, Inc. Massenhausen Germany [INTERACTIVE VIDEO] [10 Marks]

COURSE END SURVEY

78 attempted

Hidden from students

OBE Awareness Session by Dr. P. A. Patil Sir

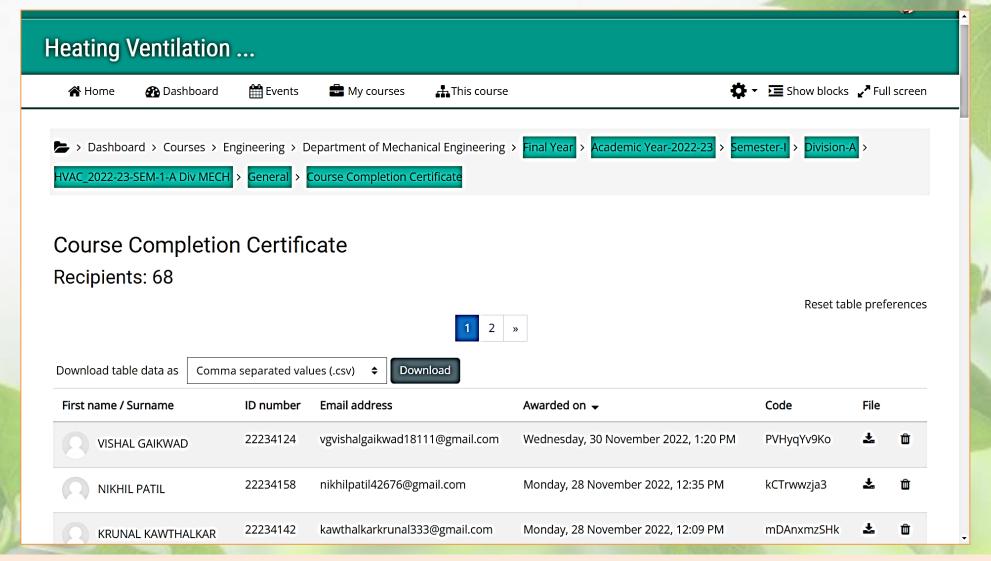
 \square

 \square





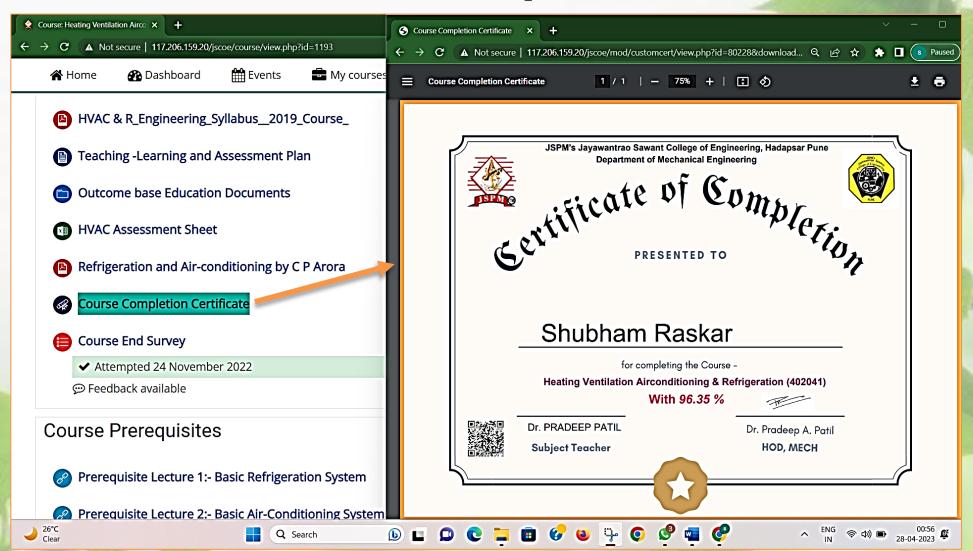
> Student's Course Completion Certification







> Student's Course Completion Certification







Chapter 5. Challenges

- Solar connectivity to internet server rooms for uninteruppted MOODLE Services
 - updates require for browsers for smooth functioning of MOODLE.

3 Maintenance is required in JSCOE Computers Labs.





Chapter 6. Outcomes

- Ease of understanding the topics taught in classes along by participating in MOODLE Activities
 - Ease of Assessment and tracking of activity completion through grades by both faculty members and students.
 - Learners progress is measured through total grades obtained for respective MOODLE Course
 - 4 Motivated the students by recognizing week toppers
- Rewarding course completion certificate who completes the course with more than 60% grades.





Chapter 7. Conclusion

- MOODLE provides opportunity to student as well as faculty to have one to one discussion on various aspects including learning styles and evaluation. Institute facilitates MOODLE platform 24x7 for
 - 1. Planning of Curriculum Enrichment Activity before commencement of the semester
 - 2. learning material like recorded videos by faculty members, E-Books, NPTEL Videos, SPPU Question Paper Solutions for Weak Students and
 - 3. Assessment tools like online quiz, game pedagogies, interactive videos, Course End Survey for Continuous Assessment of the student.
 - 4. Organization of Club Events, if any
- MOODLE provides self-paced learner centric environment which is conducive to quality education which helps to address the program outcomes of graduating student in terms of knowledge, Problem Solving Skills, Supporting Skills and attitude.