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Lecture Plan 1

Faculty:- Semester:-I CSE,IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Introduction to subject, books to be referred, syllabus content	5 min
2	Division of the Topic Importance of the subject is told Different units of the subject is discussed in brief Books to be referred were told	35 min
3.	Conclusion	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3)Production Technology by O.P.Khanna

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Lecture Plan 2

Faculty:- Semester:-I CSE,IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Manufacturing Process	5 min
2	Division of the Topic Introduction of manufacturing process. Primary shaping and secondary shaping process. Difference between Primary shaping and secondary shaping process	35 min
3.	Conclusion	5 min
4	Question / Answer Define manufacturing process with example. Explain the various differences between Primary shaping and secondary shaping with example.	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

Lecture Plan 3

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Classification of all manufacturing process with example	5 min
2	Division of the Topic Forming technology Mechanical working of Metal Joining process Machining process Finishing process	35 min
3.	Conclusion	5 min
4	Question / Answer Explain the all manufacturing process with example.	5 min

Assignment to be given:- Explain the various differences between Primary shaping and secondary shaping with example

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

Lecture Plan 4

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Introduction of various recent modernizations in manufacturing process	5 min
2	Division of the Topic Standardization Simplification Automation Mechanization	35 min
3.	Conclusion	5 min
4	Question / Answer Write and explain the various recent manufacturing techniques	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 5

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Accidents & safety precaution in industry	5 min
2	Division of the Topic Type of Accidents: Reported and unreported accidents Major and Minor accidents Causes prevention	35 min
3.	Conclusion	5 min
4	Question / Answer Define accidents and explain the type of accidents	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 6

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction First aid and safety, Industrial factories act	5 min
2	Division of the Topic First aid during burns, injuries, etc Safety precaution in industries Factory act regulation	
3.	Conclusion	35 min
4	Question / Answer Safety precautions taken for fire accident? Explain Accidents, Safety precaution, Factory act regulation	5 min
		5 min

Assignment to be given:- Define accidents and explain the type of accidents
Write and explain the various recent manufacturing techniques
Write short notes on Factory act regulation

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 7

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction. Plant layout.	5 min
2	Division of the Topic Plant lay out and classification.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer	5 min

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 8

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Different type of layout.	5 min
2	Division of the Topic Fixed layout. Process layout.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer	5 min

Assignment to be given:- Explain process layout.

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 9

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-MP

S. No.	Topic :-	Time Allotted:-
1.	Introduction Different type of layout.	5 min
2	Division of the Topic Product layout and Combination layout.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Q. Difference between Product and Process layout? Q.What is advantage of Combination layout?	5 min

Assignment to be given:- Explain in detail Combination layout.

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 10

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:-Welding

S. No.	Topic :-	Time Allotted:-
1.	Introduction Introduction to Welding	5 min
2	Division of the Topic Introduction to welding Classification of welding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

Lecture Plan 11

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Welding

S. No.	Topic :-	Time Allotted:-
1.	Introduction About metal joining processes Definition of welding	5 min
2	Division of the Topic Metal arc welding Application of welding process	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

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Lecture Plan 12

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Welding

S. No.	Topic :-	Time Allotted:-
1.	Introduction About pressure welding process	5 min
2	Division of the Topic Seam welding, spot welding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Describe the uses of spot & seam welding	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

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Lecture Plan 13

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Welding
I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Non pressure welding.	5 min
2	Division of the Topic Elerictic arc welding.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What is function of eleroctrode?	5 min

Assignment to be given:- Define welding process and classify them?

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 14

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Welding

S. No.	Topic :-	Time Allotted:-
1.	Introduction Gas welding MIG welding and TIG welding.	5 min
2	Division of the Topic MIG welding and TIG welding. Defects of welding and their remedies.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What are welding defects?	5 min

Assignment to be given:- Define MIG welding and TIG welding.

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan15

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :-	Time Allotted:-
1.	Introduction Definition Classification Hot working and cold working	5 min
2	Division of the Topic Hot working and cold working and difference between two Wire drawing Rolling, Principle of rolling Direct and indirect extrusion	35 min
3.	Conclusion	
4	Question / Answer Differentiate between Hot working and cold working? Direct and indirect extrusion?	5 min
		5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

Lecture Plan16

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :-	Time Allotted:-
1.	Introduction Re-crystallization temperature Need of cold working Sheet metal work	5 min
2	Division of the Topic Hot working operation Rolling Forging Cold working operation Sheet metal work	35 min
3.	Conclusion	
4	Question / Answer Re-crystallization temperature? Sheet metal operation?	5 min
		5 min

Assignment to be given:- Differentiate between the hot working and cold working processes
Explain the various sheet metal operations
Explain the principle of rolling and the various types of rolling
Briefly explain the extrusion process

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 17

Faculty:- Semester:-I CSE,IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :-	Time Allotted:-
1.	Introduction Hot working and cold working	5 min
2	Division of the Topic Rolling and forging operations	
3.	Conclusion	35 min
4	Question / Answer	5 min
		5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

Lecture Plan 18

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :	Time Allotted:-
1.	Introduction Rolling and forging process	5 min
2	Division of the Topic Different types of rolling machines Different types of forging machines	35 min
3.	Conclusion	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 19

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :	Time Allotted:-
1.	Introduction Hot working and cold working	5 min
2	Division of the Topic The difference between hot working and cold working. Recrystallisation temperature	35 min
3.	Conclusion	5 min
4	Question / Answer What is recrystallisation temperature?	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 20

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :	Time Allotted:-
1.	Introduction Hot working and cold working	5 min
2	Division of the Topic Extrusion, piercing and wire drawing.	35 min
3.	Conclusion	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 21

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Forming

S. No.	Topic :	Time Allotted:-
1.	Introduction Hot working and cold working	5 min
2	Division of the Topic Hot Extrusion Tube extrusion Advantage and disadvantage of hot working and cold working	35 min
3.	Conclusion	5 min
4	Question / Answer	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 22

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Foundry

S. No.	Topic :-	Time Allotted:-
1.	Introduction Concept of foundry technology , Definition of Casting and molding Difference between Casting and molding Application , advantages and disadvantages	5 min
2	Division of the Topic Pattern and types of pattern Pattern allowances Procedure for making mold and casting with step by step neat diagram	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Definition of Casting and molding? Difference between Casting and molding Explain the green sand molding process or casting process with step by step neat diagram. Explain the pattern and types of pattern with pattern allowance	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

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Lecture Plan-23

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Foundry

S. No.	Topic :-	Time Allotted:-
1.	Introduction Moulding sand	5 min
2	Division of the Topic Properties, types, additives, binders	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Required properties of good moulding sand? Types of sand?	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

Lecture Plan 24

Faculty:- Semester:-I CSE, IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Foundry

S. No.	Topic :	Time Allotted:-
1.	Introduction Core sand, binders	5 min
2	Division of the Topic Core sand binders sand preparation and conditioning Types of moulding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Types of Core sand? binders used? Explain method for sand preparation and conditioning?	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) ProductionTechnology by O.P.Khanna

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Lecture Plan 25

Faculty:- Semester:-I CSE,IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Foundry

S. No.	Topic :-	Time Allotted:-
1.	Introduction Cupola furnace	5 min
2	Division of the Topic construction operation and chemical reaction	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer explain the operation of the Cupola	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna

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Lecture Plan 26

Faculty:- Semester:-I CSE,IT
Course Code:- ME-105F Subject:-Workshop Technology Unit:- Foundry

S. No.	Topic :-	Time Allotted:-
1.	Introduction Inspection, quality control and casting defect	5 min
2	Division of the Topic Inspection, Quality control Casting defects	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Explain the various casting defects.	5 min

Assignment to be given:-

Reference Readings:- 1) Workshop Technology, vol 1 & 2 by B.S. Raghuvanshi
2)Workshop Technology , vol 1 & 2 by S.K. Hajra Choudhary
3) Production Technology by O.P.Khanna