

Lecture Plan 1

Faculty:-Mr.Achin Srivastava
Code:- ME 103 E
Subject:- Manufacturing Processes

Semester-II

Class : CSE-I,II Course

Unit:- I

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 Students were introduced to the subject and made aware of the syllabus they are going to study	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 2Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

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 Above topics has been discussed satisfactorily	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:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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 Above topics has been discussed satisfactorily	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:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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 Above topics has been discussed satisfactorily	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

Lecture Plan 5Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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 Above topics has been discussed satisfactorily	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) Production Technology by O.P.Khanna

Lecture Plan 6Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Safety precautions taken for fire accident? Explain Accidents, Safety precaution, Factory act regulation	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) Production Technology by O.P.Khanna

Lecture Plan 7Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Concept of Stress & strain diagram	5 min
2	Division of the Topic Stress strain diagram for steel, and description of elastic limit, plastic limit, upper yield point, lower yield point, breaking point, maximum limit. ,Hookes law, modulus of elasticity Ferrous and non ferrous metals Preparation of iron and steel in various furnaces.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer elastic limit, plastic limit? upper yield point, lower yield point? breaking point, maximum limit.? Hookes law, modulus of elasticity?	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 8Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Properties of engineering materials	5 min
2	Division of the Topic Various important properties of Engineering materials. Mechanical properties- Ductility ,Malleability, Hardness, Strength, Toughness, stress &strain ,fatigue, creep, Rigidity. Physical properties	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Various important Mechanical properties?	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 9

Faculty:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Importance of thermal and electrical property in a material	5 min
2	Division of the Topic Electrical properties Thermal properties	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Different thermal and electrical properties of materials?	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 10Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Classification of Iron .	5 min
2	Division of the Topic Important properties, composition, application, manufacturing process of cast iron, wrought iron, pig iron, chilled cast iron.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Discuss the important properties, composition, application, manufacturing process of cast iron, wrought iron, pig iron, chilled cast iron?	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:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Classification of Iron .	5 min
2	Division of the Topic malleable cast iron, ductile cast iron, white cast iron, grey cast iron	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Differentiate malleable cast iron, ductile cast iron? Differentiate white cast iron, grey cast iron?	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 12Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Study of steel	5 min
2	Division of the Topic Important properties, composition, application, manufacturing process of mild steel, low carbon steel, medium carbon steel.	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Discuss Important properties, composition, application, manufacturing process of mild steel, low carbon steel, medium carbon steel	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 13Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Study of Steel	5 min
2	Division of the Topic Important properties, composition, application of high speed steel. Preparation of iron and steel in various furnaces	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer High speed steel?	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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Faculty:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About alloys	5 min
2	Division of the Topic Effects of alloying elements on different kind of iron Effects of alloying elements on different kind of steel	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer	5 min

Assignment to be given:- Discuss the important properties, composition, application, manufacturing process of cast iron, wrought iron, pig iron, chilled cast iron?
Discuss Important properties, composition, application, manufacturing process of mild steel, low carbon steel, medium carbon steel, high speed steel
Explain the Various important Mechanical properties

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 15Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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 Above topics has been discussed satisfactorily	5 min
4	Question / Answer Differentiate between Hot working and cold working? Direct and indirect extrusion?	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 16

Faculty:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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 Above topics has been discussed satisfactorily	5 min
4	Question / Answer Re-crystallization temperature? Sheet metal operation?	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) Production Technology by O.P.Khanna

Lecture Plan 17

Faculty:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Class test of the topics which is already covered. And question given	5 min
2	Division of the Topic Manufacturing process Accidents and safety Engineering material and properties. Mechanical working of metals	35 min
3.	Conclusion Class test held satisfactorily.	5 min
4	Question / Answer Explain the various types of manufacturing process with eg? What are the safety measures recommended with reference to factory act regulation. Classify accidents and suggest methods for prevention of accidents? Differentiate between hot working and cold working processes? Explain the principle of rolling?	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 18Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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

Lecture Plan 19

Faculty:- Mr.Achin Srivastava

Semester-II Class : CSE-I,II

Course Code:- ME 103 E Subject:-

Manufacturing Processes

Unit:- I

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) Production Technology by O.P.Khanna

Lecture Plan 20Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

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) Production Technology by O.P.Khanna

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Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Core	5 min
2	Division of the Topic Cores- core making core assembly types of moulding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What is meant by core? Types of moulding process?	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 22Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction gating system & mould assembly	5 min
2	Division of the Topic Runner riser gates terms related to mould assembly	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Runner ?riser ?gates ? different terms related to mould assembly?	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 23Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About melting of metals	5 min
2	Division of the Topic Melting- cupola furnace Working, zones, construction detail, advantages, limitations	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Explain the working of cupola furnace?	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 24

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Pouring temperature, ladles	5 min
2	Division of the Topic Pouring fettling	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Importance of pouring temperature? Different fettling operations?	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 25Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About defects	5 min
2	Division of the Topic Casting defects causes remedies	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Various defects in casting?	5 min

Assignment to be given:-

Explain the various casting defects giving their causes and remedies ?

Explain the constructional detail, working and various zones of cupola furnace?

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 26

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Importance of plant layout	5 min
2	Division of the Topic Plant layout -objectives of good layout advantages & limitations Types of layout- fixed layout Process layout Product layout combined layout	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer objectives of good layout? advantages & limitations of plant layout ? Types of layout?	5 min

Assignment to be given:-

- What are the objectives of good layout?
- Write the advantages & limitations of each type of plant layout ?
- Explain with examples the various types of 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) Production Technology by O.P.Khanna

Lecture Plan 27

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About metal joining processes Definition of welding	5 min
2	Division of the Topic Classification, Spot & Seam Resistance welding, MIG & TIG welding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Difference between MIG & TIG welding? Spot & Seam Resistance 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

Lecture Plan 28Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About non pressure welding process	5 min
2	Division of the Topic Metal arc, oxy-acetylene welding	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Metal arc welding? oxy-acetylene 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

Lecture Plan 29

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Importance of metal removal processes	5 min
2	Division of the Topic Single point cutting tool, tool wear, tool life ,coolants	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Tool nomenclature? Use of cutting fluids?	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 30

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction About machine tools	5 min
2	Division of the Topic Uses and specifications of Lathe, Milling machine, Drilling machine , Slotter and Shaper machines	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Specification of lathe?	5 min

Assignment to be given:- Explain lathe, shaper, and planer with specification, neat diagram, parts description and their application, operation performed?
Draw Cutting tool geometry, Chip formation for single point cutting tool?

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 31Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Importance of welding defects	5 min
2	Division of the Topic Soldering, Brazing, welding Defects	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer Spot and seam resistance welding? Difference between TIG & MIG welding? Difference between soldering and brazing?	5 min

Assignment to be given:- Define welding process and classify them?
Difference between TIG & MIG welding?
Difference between soldering and brazing?

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 32

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Introduction Machine Tools	5 min
2	Division of the Topic Constructions and specification of Lathe	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What are Machine tools? How specification of lathe machine is decided?	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 33Faculty:- Mr.Achin SrivastavaSemester-II Class : CSE-I,IICourse Code:- ME 103 ESubject:- Manufacturing ProcessesUnit:- I

S. No.	Topic :-	Time Allotted:-
1.	Machine tools	5 min
2	Division of the Topic Construction ,specification and working of Shaper and Planer	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What is difference between shaper and planer?	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 34

Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Machine tools	5 min
2	Division of the Topic Cutting tool and its geometry Material of cutting tool	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What is HSS? What is cemented carbide tool?	5 min

Assignment to be given:- What is HSS?
What is cemented carbide tool?
Define cutting tool geometry with diagram.

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

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Faculty:- Mr.Achin Srivastava
Course Code:- ME 103 E

Semester-II Class : CSE-I,II
Subject:- Manufacturing Processes

Unit:- I

S. No.	Topic :-	Time Allotted:-
1.	Machine tools Slotter machine	5 min
2	Division of the Topic Chip formation and types of chips. Construction ,specification and working of slotter machine	35 min
3.	Conclusion Above topics has been discussed satisfactorily	5 min
4	Question / Answer What are the different types of chips? Explain specification of slotter machine.	5 min

Assignment to be given:- describe a slotter machine with neat sketch.

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