



SNS College of Technology

[An Autonomous Institution]

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COIMBATORE-641 035, TAMIL NADU



Department of Aerospace Engineering

19AST202 AIRCRAFT PRODUCTION TECHNOLOGY

UNIT II METAL FORMING & MACHINING PROCESSES

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| 1 | Briefly explain the classification of machining processes. |
| 2 | Explain the working principle of a lathe machine. |
| 3 | Explain the working mechanism of a shaper machine. |
| 4 | What is the purpose of chuck in a lathe machine? |
| 5 | Differentiate between Four Jaw Chuck and Three Jaw Chuck? |
| 6 | Which type of tool is used in a milling machine? |
| 7 | List the operations performed on a lathe machine. |
| 8 | How is taper turning done on a lathe machine? |
| 9 | Explain the mechanism of a milling operation. |
| 10 | List the various milling operations. |
| 12 | What do you understand by machining? Why it is done? |
| 13 | Describe the working principle of a lathe machine with neat sketches. |
| 14 | Draw a labelled diagram of a lathe machine. List various operations performed on lathe. |
| 15 | List the various operations which may be performed on a lathe machine. |
| 16 | How is taper turning done on a lathe machine? Explain in detail. |
| 17 | Explain various parts of lathe machine with their applications. |
| 18 | Describe at least three methods of taper turning on a centre lathe. |
| 19 | Describe the following operation on a lathe machine: (i) Boring (ii) Drilling (iii) Knurling (iv) Parting off |
| 20 | Briefly explain the use of the following parts of a lathe machine: (i) Head stock (ii) Lead screw (iii) Tailstock (iv) Carriage (v) Compound slide in lathe |
| 21 | What is the difference between a shaper and a planer? List five differences. |
| 22 | With the help of neat sketch, describe the working principle of a drilling machine. Also describe drilling operation. |
| 23 | Draw a labelled diagram of a drill machine. List various operations performed on it. |
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| | Draw a labelled diagram of a universal milling machine. List various operations performed on milling. |
| 26 | What do you understand by a milling machine? For what purpose is milling done? |
| 27 | Differentiate between down milling and up milling. What are the various work holding devices used in milling? Explain their applications and advantages. |
| 28 | What do you understand by a grinding machine? For what purpose is grinding done? |
| | What are the main differences between a shaper and a planer? What kind of driving mechanisms are used in a shaper? Discuss any one in brief with the help of a neat sketch. |
| 29 | Explain the various drilling operations using suitable diagrams. |
| 30 | With the help of neat sketches differentiate between surface grinding and cylindrical grinding. |
| | What is the working principle of grinding machines? Discuss the classification of grinding wheels. |