

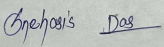


UTKAL INSTITUTE OF ENGINEERING & TECHNOLOGY

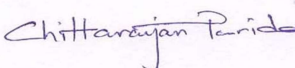
| DISCIPLINE: | SEMESTER: | NAME OF THE TEACHING FACULTY: | | |
|---|---|---|---------|----------------|
| MECHANICAL | 4TH Sem | Er.SARADA SWAIN | | |
| SUBJECT: MANUFACTURING TECHNOLOGY | No of Days/Per week class allotted: 4 Class P/W(60) | Semester From Date:16/01/2024 To Date:26/04/2024 No. Of Weeks: 15 | | |
| WEEK | CLASS DAY | THEORY TOPICS | REMARKS | |
| 1 st | 1 st | Composition of various tool materials | Date | Dean/Principal |
| | 2 nd | Composition of various tool materials | | |
| | 3 rd | uses of such tool materials. | | |
| | 4 th | uses of such tool materials. | | |
| 2 nd | 1 st | and tools such as Chisel, hacksaw blade, dies and reamer | | |
| | 2 nd | and tools such as Chisel, hacksaw blade, dies and reamer | | |
| | 3 rd | and purpose of tool angle | | |
| | 4 th | Machining process parameters (Speed, feed and depth of cut) | | |
| 3 rd | 1 st | in machining and purpose | | |
| | 2 nd | in machining and purpose | | |
| | 3 rd | Machine.Construction and working of lathe and CNC lathe ☑ Major components of a lathe and their | | |
| | 4 th | in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling) | | |
| | 5 th | reinforced | | |
| 4 th | 1 st | over-reinforced and limiting section | | |
| | 2 nd | neutral axis co-efficient | | |
| | 3 rd | moment of resistance and limiting percentage of steel required for limiting singly R.C. section | | |
| | 4 th | Safety measures during machining | | |
| | 1 st | Difference with respect to engine lathe | | |

| | | | | |
|------------------|-----------------|--|--|--|
| 5 th | 2 nd | Major components and their function | | |
| | 3 rd | Define multiple tool holders | | |
| | 4 th | Difference with respect to capstan lathe. Major the components and their function | | |
| 6 th | 1 st | areas of a shaper machine | | |
| | 2 nd | reinforcement; Minimum shear reinforcement in beams (Explain through examples only). | | |
| | 3 rd | Major components and their function | | |
| | 4 th | Explain the automatic able feed mechanism | | |
| | 5 th | Explain the construction & working of tool head mechanism through sketch | | |
| 7 th | 1 st | State the specification of a shaping machine. | | |
| | 2 nd | Application area of a planer and its difference with respect to shaper | | |
| | 3 rd | Major components and their functions | | |
| | 4 th | The table drive mechanism | | |
| | 5 th | Working of tool and tool support | | |
| 8 th | 1 st | Clamping of work through sketch. | | |
| | 2 nd | Doubt Clear Class | | |
| | 3 rd | Doubt Clear Class | | |
| | 4 th | Doubt Clear Class | | |
| 9 th | 1 st | machine and operations performed by them and also same for CNC milling machine | | |
| | 2 nd | Doubt Clear Class | | |
| | 3 rd | Explain work holding attachment | | |
| | 4 th | Explain work holding attachment | | |
| 10 th | 1 st | Construction & working of simple dividing head, universal dividing head | | |
| | 2 nd | Procedure of simple and compound indexing | | |
| | 3 rd | Illustration of different indexing methods | | |
| | 4 th | Illustration of different indexing methods | | |
| 11 th | 1 st | Major components and their function | | |
| | 2 nd | working of slotter machine | | |
| | 3 rd | working of slotter machine | | |
| | 4 th | Tools used in slotter | | |

| | | | | |
|------------------|-----------------|---|--|--|
| 12 th | 1 st | Tools used in slotter ASSIGNMENT | | |
| | 2 nd | Significance of grinding operations | | |
| | 3 rd | Manufacturing of grinding wheels Manufacturing of grinding wheels | | |
| | 4 th | Criteria for selecting of grinding wheels | | |
| 13 th | 1 st | Specification of grinding wheels with | | |
| | 2 nd | Surface Grinder ☐ Centreless Grinde | | |
| | 3 rd | Surface Grinder ☐ Centreless Grinde | | |
| | 4 th | Working of ☐ Bench drilling machine ☐ Pillar drilling machine ☐ Radial drilling machine | | |
| 14 th | 1 st | Working of ☐ Bench drilling machine ☐ Pillar drilling machine ☐ Radial drilling machine | | |
| | 2 nd | of Boring ☐ Different between Boring and drilling | | |
| | 3 rd | of Boring ☐ Different between Boring and drilling | | |
| | 4 th | Broaching(pull type, push type) ☐ Advantages of Broaching and applications | | |
| 15 th | 1 st | Broaching(pull type, push type) ☐ Advantages of Broaching and applications | | |
| | 2 nd | Definition of Surface finish | | |
| | 3 rd | explain their specific cutting. | | |
| | 4 th | Doubt Clear Class | | |



HOD



DEAN



PRINCIPAL