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| **Discipline**:- Mechanical Engg. | **Semester**:- **3rd** | **Name of the Teaching Faculty:-**Er. GANESH CHANDRA PANDA |
| **Subject**:-**PRODUCTION TECHNOLOGY** | **No. Of days/week class allotted** - **05** | **Semester from**: 01.08.2023To: 30.11.2023 |
| No. Of weeks:- 17 |
| **Week** | **No. Of Period** | **Theory Topics** |
| 01.08.2023To05.08.2023 | 1st | Extrusion: Definition & Classification |
| 2nd | Explain direct, indirect extrusion process |
| 3rd |  Impact extrusion process, Define rolling (introduction) |
| 4th | Classification of rolling , discussion of hot rolling |
| 5th | Cold rolling process, Differentiate between cold rolling and hot rollingprocess |
| 07.08.2023To 12.08.2023 | 1st | List the different types of rolling mills used in Rolling process |
| 2nd | Discussion of previous year question from the first chapter |
| 3rd | Define welding process and classify various welding processes  |
| 4th | Explain fluxes used in welding |
| 5th | Explain Oxy-acetylene welding process |
| 14.08.2023To 19.08.2023 | 1st | Explain various types of flames used in Oxy-acetylene welding process |
| 2nd |  **INDEPENDENCE DAY** |
| 3rd | Explain Arc welding process |
| 4th | Specify arc welding electrodes, Define resistance welding |
| 5th |  Classification of resistance welding |
| 21.08.2023To26.08.2023 | 1st | Describe various resistance welding processes such as butt welding, spot welding |
| 2nd | Discussion flash welding, projection welding and seam welding |
| 3rd | Explain TIG and MIG welding process |
| 4th | State different welding defects with causes andremedies |
| 5th | Discussion of previous year Important question from the first chapter |
| **Week** | **No. Of period** | **Theory Topics** |
| 28.08.2023To 02.09.2023 | 1st | Define Casting and Classify the various Casting processes |
| 2nd | Explain the procedure of Sand mould casting |
| 3rd | Explain different types of molding sands with their composition and process |
| 4th | Classify different pattern and state various pattern allowances |
| 5th | Explain centrifugal casting such as true centrifugal casting |
| 04.09.2023To09.09.2023 | 1st | Explain centrifuging casting , advantages and disadvantages of centrifugal & centrifuging |
| 2nd | Area of application of centrifugal & centrifuging. Explain various casting defects with their causes and remedies. |
| 3rd | Discussion of previous year Important question from the first chapter |
| 4th | Define powder metallurgy process, advantages of powder metallurgy technology technique |
| 5th | Describe the methods of producing components by powder metallurgy technique |
| 11.09.2023To16.09.2023 | 1st | Explain sintering with its working principle and methode |
| 2nd | Economics of powder metallurgy (cost management of the powder metallurgy ) |
| 3rd | Discussion of previous year Important question from the first chapter |
| 4th | Press work definition & press work working principle |
| 5th | Blanking, piercing and trimming |
| 18.09.2023To23.09.2023 | 1st | List various types of die |
| 2nd | **GANESH CATURTHI** |
| 3rd | List various types of punch |
| 4th | Explain simple die with diagram |
| 5th | Explain compound die with diagram |

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| **Week** | **No. Of period** | **Theory Topics** |
| 25.09.2023To 30.09.2023 | 1st | Explain progressive die with diagram |
| 2nd | Describe the various advantages of various above die |
| 3rd | Describe the various dissvantages of various above die |
| 4th |  **BIRTHDAY OF MAHAMMAD** |
| 5th | Revision of the previous chapter and discussion of the important question. |
| 02.10.2023To 07.10.2023 | 1st |  **GANDHI JAYANTI** |
| 2nd | Discuss short question on above chapter (2 marks) |
| 3rd | Discuss long question on above chapter |
| 4th | Class test of the first & second chapter |
| 5th | Define jigs and fixtures |
| 09.10.2023To 14.10.2023 | 1st | Working principle of jigs and fixtures |
| 2nd | State advantages of using jigs |
| 3rd | State advantages of using fixtures |
| 4th | State the principle of locations |
| 5th |  **MAHA LAYA** |
| 16.10.2023To 21.10.2023 | 1st | Working principle and diagram locations |
| 2nd | Describe the various methods of location |
| 3rd | Define 3-2-1 location  |
| 4th | 3-2-1 location working principle |
| 5th | Revision on location concept |
| 23.10.2023To 28.10.2023 |  |  **DURGA PUJA HOLIDAY** |
|  30.10.2023 To 04.11.2023 | 1st | List various types of jig |
| 2nd | List various types of jig diagram |
| 3rd | Rectangular jig location define |
| 4th | Rectangular jig location principle |
| 5th | List various types of fixtures. |

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| **Week** | **No.of period** | **Theory Topics** |
| 06.11.2023To 11.11.2023 | 1st | List various types of fixtures diagram |
| 2nd | Revision of the previous chapter and discussion of the important question. |
| 3rd | Discuss short question on above chapter (2 marks) |
| 4th | Discussion of previous year Important question from thelast chapter |
| 5th | Discuss long question on above chapter (10 marks) |
| 13.11.2023To18.11.2023 | 1st | Discussion of previous year Important question from the chapter |
| 2nd | Revision |
| 3rd | Revision |
| 4th | Revision |
| 5th | Revision |
| 20.11.2023To 25.11.2023 | 1st | Revision of the previous chapter and discussion of the important question |
| 2nd |  **ANALA NAVAMI** |
| 3rd | Discuss short type of previous year asked question |
| 4th | Discuss previous year asked question |
| 5TH | Discuss the long type of theory previous year asked question |
| 27.11.2023To30.11.2023 | 1st |  **RAHAS PURNIMA** |
| 2nd |  Revision |
| 3rd | Discuss the long type of theory previous year asked question |