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| Discipline :MECHANICAL ENGG | Semester :3 rd | Name of the Teaching Faculty:JAYADEV DASH |
| Subject:Producti on Technology | No. of days/per week class allotted:0 4 | Semester From date : 01.09.2020 To Date:19.03.2021 No. of Weeks: 15 |
| Week | Class Day | Theory / Practical Topics |
| 1 ST | 1 ST | Extrusion:Definition&Classification |
| | 2 ND | Explainedirect,indirectandimpact extrusionprocess. |
| | 3 RD | Definerolling.Classifyit. |
| | 4 TH | Definerolling.Classifyit. |
| 2 ND | 1 ST | Differentiatebetweencoldrollingandhotrollingprocess |
| | 2 ND | Listthedifferenttypesofrollingmillsused inRollingprocess |
| | 3 RD | Listthedifferenttypesofrollingmillsused inRollingprocess |
| | 4 TH | Defineweldingand classifyvarious weldingprocesses. |
| 3 RD | 1 ST | Defineweldingand classifyvarious weldingprocesses |
| | 2 ND | Explainfluxesusedinwelding. |
| | 3 RD | ExplainOxy-acetyleneweldingprocess. |
| | 4 TH | Explainvarioustypesof flamesusedinOxy-acetylenewelding process. |
| 4 TH | 1 ST | ExplainArcweldingprocess. |
| | 2 ND | Specifyarcweldingelectrodes. |
| | 3 RD | Defineresistanceweldingandclassifyit. |
| | 4 TH | Defineresistanceweldingandclassifyit. |
| 5 TH | 1 ST | Describevarious resistanceweldingprocesses such as butt welding,spotwelding,flashwelding,projectionweldingandseamwelding |
| | 2 ND | Describevarious resistanceweldingprocesses such as butt welding,spotwelding,flashwelding,projectionweldingandseamwelding. |
| | 3 RD | Describevarious resistanceweldingprocesses such as butt welding,spotwelding,flashwelding,projectionweldingandseamwelding. |
| | 4 TH | ExplainTIGandMIGweldingprocess |
| 6 TH | 1 ST | Statedifferentweldingdefectswithcausesandremedies |
| | 2 ND | Statedifferentweldingdefectswithcausesandremedies |
| | 3 RD | Statedifferentweldingdefectswithcausesandremedies |
| | 4 TH | DefineCastingandClassifythevarious Castingprocesses. |
| 7 TH | 1 ST | DefineCastingandClassifythevarious Castingprocesses |
| | 2 ND | DefineCastingandClassifythevarious Castingprocesses |
| | 3 RD | Explaintheprocedureof Sandmouldcasting. |
| | 4 TH | Explain different types of molding sands with their composition and properties |
| 8 TH | 1 ST | Explain different types of molding sands with their composition and properties |
| | 2 ND | Classify different pattern and state various pattern allowances |
| | 3 RD | Classify different pattern and state various pattern allowances |
| | 4 TH | Classifycore. |
| 9 TH | 1 ST | Describe construction and working of |

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| | | cupola and crucible furnace |
| | 2 ND | Describe construction and working of cupola and crucible furnace. |
| | 3 RD | Explain die casting method. |
| | 4 TH | Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application. |
| 10 TH | 1 ST | Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application. |
| | 2 ND | Explain various casting defects with their causes and remedies |
| | 3 RD | Explain various casting defects with their causes and remedies |
| | 4 TH | Define powder metallurgy process. |
| 11 TH | 1 ST | Define powder metallurgy process. |
| | 2 ND | State advantages of powder metallurgy technology technique |
| | 3 RD | Describe the methods of producing components by powder metallurgy technique. |
| | 4 TH | Describe the methods of producing components by powder metallurgy technique |
| 12 TH | 1 ST | Explain sintering. |
| | 2 ND | Economics of powder metallurgy |
| | 3 RD | Describe Press Works: blanking, piercing and trimming. |
| | 4 TH | Describe Press Works: blanking, piercing and trimming. |
| 13 TH | 1 ST | List various types of die and punch |
| | 2 ND | Explain simple, Compound & Progressive dies |
| | 3 RD | Explain simple, Compound & Progressive dies |
| | 4 TH | Describe the various advantages & disadvantages of above dies |
| 14 TH | 1 ST | Describe the various advantages & disadvantages of above dies |
| | 2 ND | Define jigs and fixtures |
| | 3 RD | State advantages of using jigs and fixtures |
| | 4 TH | State the principle of locations |
| 15 TH | 1 ST | Describe the methods of location with respect to 3-2-1 point location of rectangular jig |
| | 2 ND | Describe the methods of location with respect to 3-2-1 point location of rectangular jig |
| | 3 RD | List various types of jig and fixtures. |
| | 4 TH | List various types of jig and fixtures. |

Learning Resouces:

01. ProductionTechnology, Vol-I& IIbyO.P.Khanna,DhanpatRaiPublication
02. Workshoptechnology,Vol-I&II by B.SRaghuwanshi, DhanpatRai&Co
03. Manufacturing technology, Vol-&II byP.N.Rao, TMH
04. Manufacturingtechnology,Vol-I byP.C.Sharma, S.Chand

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