

## Lesson Plan

Name of Faculty : Imran Khan  
 Discipline : Workshop (Mech)  
 Semester : 3rd  
 Subject : Welding Workshop  
 Lesson Plan Duration : 15 Weeks (From Aug.2020 to Nov 2020)

| Week            | Theory | Practical | Week | Theory  |
|-----------------|--------|-----------|------|---|
| 1 <sup>st</sup> |        |           | 1    | Job 1. Preparing gas welding joint in vertical/Horizontal position joining M.S. Plate |
|                 |        |           | 2    | Job 2. Exercise on gas cutting of mild steel plate with oxy-acetylene gas torch.      |
| 2 <sup>nd</sup> |        |           | 1    | Job 1. Preparing gas welding joint in vertical/Horizontal position joining M.S. Plate |
|                 |        |           | 2    | Job 2. Exercise on gas cutting of mild steel plate with oxy-acetylene gas torch.      |
| 3 <sup>rd</sup> |        |           | 1    | Job 1. Preparing gas welding joint in vertical/Horizontal position joining M.S. Plate |
|                 |        |           | 2    | Job 2. Exercise on gas cutting of mild steel plate with oxy-acetylene gas torch.      |
| 4 <sup>th</sup> |        |           | 1    | Job 1. Preparing gas welding joint in vertical/Horizontal position joining M.S. Plate |
|                 |        |           | 2    | Job 2. Exercise on gas cutting of mild steel plate with oxy-acetylene gas torch.      |
| 5 <sup>th</sup> |        |           | 1    | Job 3. Exercise on gas welding of cast iron and brass part or component.              |
|                 |        |           | 2    | Job 4. Exercise on preparation of T Joint by arc welding (200 mm x 6 mm Flats)        |
| 6 <sup>th</sup> |        |           | 1    | Job 3. Exercise on gas welding of cast iron and brass part or component.              |
|                 |        |           | 2    | Job 4. Exercise on preparation of T Joint by arc welding (200 mm x 6 mm Flats)        |
| 7 <sup>th</sup> |        |           | 1    | Job 3. Exercise on gas welding of cast iron and brass part or component.              |
|                 |        |           | 2    | Job 4. Exercise on preparation of T Joint by  |

|                  |  |  |   |  |
|------------------|--|--|---|--|
|                  |  |  |   | arc welding (200 mm x 6 mm Flats)  |
| 8 <sup>th</sup>  |  |  | 1 | Job 3. Exercise on gas welding of cast iron and brass part or component.       |
|                  |  |  | 2 | Job 4. Exercise on preparation of T Joint by arc welding (200 mm x 6 mm Flats) |
| 9 <sup>th</sup>  |  |  | 1 | Job 5. Exercise on spot welding/seam welding (any utility item)                |
|                  |  |  | 2 | Job 6. Exercise on MIG and TIG welding   |
| 10 <sup>th</sup> |  |  | 1 | Job 5. Exercise on spot welding/seam welding (any utility item)                |
|                  |  |  | 2 | Job 6. Exercise on MIG and TIG welding   |
| 11 <sup>th</sup> |  |  | 1 | Job 5. Exercise on spot welding/seam welding (any utility item)                |
|                  |  |  | 2 | Job 6. Exercise on MIG and TIG welding   |
| 12 <sup>th</sup> |  |  | 1 | Job 5. Exercise on spot welding/seam welding (any utility item)                |
|                  |  |  | 2 | Job 6. Exercise on MIG and TIG welding   |
| 13 <sup>th</sup> |  |  | 1 | Job 7 Exercise on arc welding pipe joint MS.                                   |
|                  |  |  | 2 | Repair of an iron furniture in institute                                       |
| 14 <sup>th</sup> |  |  | 1 | Job 7 Exercise on arc welding pipe joint MS.                                   |
|                  |  |  | 2 | Repair of an iron furniture in institute                                       |
| 15 <sup>th</sup> |  |  | 1 | Job 7 Exercise on arc welding pipe joint MS.                                   |
|                  |  |  | 2 | Repair of an iron furniture in institute                                       |

## Lesson Plan

Name of Faculty : Surender Kumar  
 Discipline : Workshop (Mech)  
 Semester : 3rd  
 Subject : Pattern Making  
 Lesson Plan Duration : 15 Weeks (From Aug. 2020 to Nov 2020)

| Week             | Theory | Practical | Week | Theory  |
|------------------|--------|-----------|------|---|
| 1 <sup>st</sup>  |        |           | 1    | Job 1. Preparation of solid/single piece pattern. |
|                  |        |           | 2    | Job Continued                                     |
| 2 <sup>nd</sup>  |        |           | 1    | Job 1. Preparation of solid/single piece pattern. |
|                  |        |           | 2    | Job Continued                                     |
| 3 <sup>rd</sup>  |        |           | 1    | Job 1. Preparation of solid/single piece pattern. |
|                  |        |           | 2    | Job Continued                                     |
| 4 <sup>th</sup>  |        |           | 1    | Job 1. Preparation of solid/single piece pattern. |
|                  |        |           | 2    | Job Continued                                     |
| 5 <sup>th</sup>  |        |           | 1    | Job 2. Preparation of two piece/split pattern     |
|                  |        |           | 2    | Job 3. Preparation of a pattern on wooden lathe   |
| 6 <sup>th</sup>  |        |           | 1    | Job 2. Preparation of two piece/split pattern     |
|                  |        |           | 2    | Job 3. Preparation of a pattern on wooden lathe   |
| 7 <sup>th</sup>  |        |           | 1    | Job 2. Preparation of two piece/split pattern     |
|                  |        |           | 2    | Job 3. Preparation of a pattern on wooden lathe   |
| 8 <sup>th</sup>  |        |           | 1    | Job 2. Preparation of two piece/split pattern     |
|                  |        |           | 2    | Job 3. Preparation of a pattern on wooden lathe   |
| 9 <sup>th</sup>  |        |           | 1    | Job 4. Preparation of a self cored pattern        |
|                  |        |           | 2    | Job Continued                                     |
| 10 <sup>th</sup> |        |           | 1    | Job 4. Preparation of a self cored pattern        |
|                  |        |           | 2    | Job Continued                                     |
| 11 <sup>th</sup> |        |           | 1    | Job 4. Preparation of a self cored pattern        |
|                  |        |           | 2    | Job Continued                                     |
| 12 <sup>th</sup> |        |           | 1    | Job 4. Preparation of a self cored pattern        |
|                  |        |           | 2    | Job Continued                                     |
| 13 <sup>th</sup> |        |           | 1    | Job 5. Preparation of a core box.                 |
|                  |        |           | 2    | Job 5. Preparation of a core box.                 |
| 14 <sup>th</sup> |        |           | 1    | Job 5. Preparation of a core box.                 |
|                  |        |           | 2    | Job 5. Preparation of a core box.                 |
| 15 <sup>th</sup> |        |           | 1    | Job 5. Preparation of a core box.                 |
|                  |        |           | 2    | Job 5. Preparation of a core box.                 |

## Lesson Plan

Name of Faculty : Sandeep Karwasra  
 Discipline : Workshop (Mech)  
 Semester : 3rd  
 Subject : Foundry Shop  
 Lesson Plan Duration : 15 Weeks (From Aug.2020 to Nov 2020)

| Week             | Theory | Practical | Week | Theory   |
|------------------|--------|-----------|------|--|
| 1 <sup>st</sup>  |        |           | 1    | Job 1. Preparation of mould with solid pattern on floor.                             |
|                  |        |           | 2    | Job 2. Preparation of floor mould of solid pattern using cope.                       |
| 2 <sup>nd</sup>  |        |           | 1    | Job 1. Preparation of mould with solid pattern on floor.                             |
|                  |        |           | 2    | Job 2. Preparation of floor mould of solid pattern using cope.                       |
| 3 <sup>rd</sup>  |        |           | 1    | Job 1. Preparation of mould with solid pattern on floor.                             |
|                  |        |           | 2    | Job 2. Preparation of floor mould of solid pattern using cope.                       |
| 4 <sup>th</sup>  |        |           | 1    | Job 1. Preparation of mould with solid pattern on floor.                             |
|                  |        |           | 2    | Job 2. Preparation of floor mould of solid pattern using cope.                       |
| 5 <sup>th</sup>  |        |           | 1    | Job 3. Preparation of floor mould of split pattern in cope and drag of moulding box. |
|                  |        |           | 2    | Job Continued  |
| 6 <sup>th</sup>  |        |           | 1    | Job 3. Preparation of floor mould of split pattern in cope and drag of moulding box. |
|                  |        |           | 2    | Job Continued  |
| 7 <sup>th</sup>  |        |           | 1    | Job 3. Preparation of floor mould of split pattern in cope and drag of moulding box. |
|                  |        |           | 2    | Job Continued  |
| 8 <sup>th</sup>  |        |           | 1    | Job 3. Preparation of floor mould of split pattern in cope and drag of moulding box. |
|                  |        |           | 2    | Job Continued  |
| 9 <sup>th</sup>  |        |           | 1    | Job 4. Moulding and casting of a solid pattern of aluminum                           |
|                  |        |           | 2    | Job 5. Preparing a mould of step pulley and also preparing core for the same.        |
| 10 <sup>th</sup> |        |           | 1    | Job 4. Moulding and casting of a solid pattern of aluminum                           |
|                  |        |           | 2    | Job 5. Preparing a mould of step pulley and also preparing core for the same.        |
| 11 <sup>th</sup> |        |           | 1    | Job 4. Moulding and casting of a solid pattern of aluminum                           |
|                  |        |           | 2    | Job 5. Preparing a mould of step pulley and also preparing core for the same.        |
| 12 <sup>th</sup> |        |           | 1    | Job 4. Moulding and casting of a solid pattern of aluminum                           |
|                  |        |           | 2    | Job 5. Preparing a mould of step pulley and also preparing core for the same.        |

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|------|--|--|---|--|
| 13th |  |  | 1 | Testing of moisture contents and strength of moulding sand.  |
|      |  |  | 2 | Testing of moisture contents and strength of moulding sand.  |
| 14th |  |  | 1 | Testing of moisture contents and strength of moulding sand.  |
|      |  |  | 2 | Testing of moisture contents and strength of moulding sand.  |
| 15th |  |  | 1 | A visit to cast iron foundry should be arranged to have first hand knowledge of cast iron melting pouring and casting. |
|      |  |  | 2 | A visit to cast iron foundry should be arranged to have first hand knowledge of cast iron melting pouring and casting. |