Assignment No. 6

The due date for submitting this assignment has passed. Due on 2019-09-11, 23:59 IST. As per our records you have not submitted this assignment.

1) In a rolling operation using rolls of diameter 500 mm, if a 25 mm thick plate (under ideal rolling condition) can be atmost reduced to 20 mm in one pass, the coefficient of friction between the roll and the plate is

- 0.1414
- 0.1
- 0.02
- 0.01

No, the answer is incorrect.
Score: 0
Accepted Answers: 0.1414

2) Minimum temperature at which new grains are formed in metal is called

- Eutectic temperature
- Recrystallization temperature
- Eutectoid temperature
- Peritectic temperature

No, the answer is incorrect.
Score: 0
Accepted Answers: Recrystallization temperature

3) The process most commonly used for the forging of bolt heads of hexagonal shape is

- 1 point
Extrusion (unit? unit=40&lesson=43)

Lecture 29: Metal Working Processes: Wire Drawing (unit? unit=40&lesson=44)

Lecture 30: Metal Working Processes: Press (unit? unit=40&lesson=45)

Quiz : Assignment No. 6 (assessment? name=105)

Solution for Assignment No. 6 (unit? unit=40&lesson=125)

1) In forward extrusion process
1. The ram and the extruded product travel in the same direction.
2. The ram and the extruded product travel in the opposite direction.
3. The speed of travel of the extruded product is same as that of the ram.
4. The speed of travel of the extruded product is greater than that of the ram.
Which of these statements are correct?

- 1 and 3
- 2 and 3
- 1 and 4
- 2 and 4

No, the answer is incorrect.
Score: 0
Accepted Answers: 1 and 4

2) Match column-I and column-II by choosing the correct option:

<table>
<thead>
<tr>
<th>Column-I</th>
<th>Column-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Connecting rods</td>
<td>1. Welding</td>
</tr>
<tr>
<td>B. Pressure vessels</td>
<td>2. Extrusion</td>
</tr>
<tr>
<td>C. Machine tool bed</td>
<td>3. Forging</td>
</tr>
<tr>
<td>D. Collapsible tube</td>
<td>4. Casting</td>
</tr>
</tbody>
</table>

- A-2, B-1, C-4, D-3
- A-3, B-1, C-4, D-2
- A-2, B-4, C-1, D-3
- A-3, B-4, C-1, D-2

No, the answer is incorrect.
Score: 0
Accepted Answers: A-3, B-1, C-4, D-2

3) A forging method for reducing the diameter of a bar and in the process making it longer is termed as

- Fullering
- Punching
- Upsetting
- Blanking

No, the answer is incorrect.
Score: 0
Accepted Answers: Fullering

4) In forward extrusion process

5) In forward extrusion process
1. The ram and the extruded product travel in the same direction.
2. The ram and the extruded product travel in the opposite direction.
3. The speed of travel of the extruded product is same as that of the ram.
4. The speed of travel of the extruded product is greater than that of the ram.
Which of these statements are correct?

- 1 and 3
- 2 and 3
- 1 and 4
- 2 and 4

No, the answer is incorrect.
Score: 0
Accepted Answers: 1 and 4

6) In a rolling process, sheet of 30 mm is rolled to 20 mm thickness by using rolls of diameter 300 mm. The angle subtended by the deformation zone at the roll centre is (in radians)
8) In wire drawing process, the bright shining surface on the wire is obtained if one 1 point
   - Not using a lubricant
   - Low tooling cost
   - Uses thick paste lubricant
   - Use thin fluid lubricant

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Use thin fluid lubricant

9) In a wire drawing operation, diameter of a steel wire is reduced from 10 to 8 mm. The mean flow stress of the material is 400 MPa. The ideal force required for drawing (neglecting friction and redundant work) is 1 point
   - 4.48 kN
   - 8.97 kN
   - 20.11 kN
   - 31.41 kN

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   8.97 kN

10) Hydraulic press is used for the 1 point
    - Small capacity
    - High capacity
    - Medium capacity
    - All of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   High capacity