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Courses » Weldability of Metals

Announcements

Course

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## Unit 2 - Week 1

Register for  
Certification exam

### Course outline

#### How to access the portal

#### Week 1

● Understanding  
Weldability:  
Introduction I

● Understanding  
Weldability:  
Introduction II

● Metal  
Properties &  
Weldability I

● Metal  
Properties &  
Weldability II

● Weldability of  
Work  
Hardenable  
Metals

○ Quiz :  
Assignment 1

○ Solution for  
Assignment No.  
1

#### Week 2

#### Week 3

#### Week 4

## Assignment 1

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment. **Due on 2019-03-13, 23:59 IST.**

1) Weldability of metals is function of

1 point

- (i) Process  
(ii) Purpose  
(iii) Fabrication condition

- I only  
 I and II  
 II & III  
 All of above

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*All of above*

2) Micro level plastic deformation between faying surfaces takes place in

1 point

- Ultrasonic welding  
 Fusion welding  
 Friction stir welding  
 Gas metal arc welding

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Ultrasonic welding*

3) Weldability of a metal is considered good if it is welded with

1 point

- (i) Higher effort  
(ii) Higher quality  
(iii) Lower cost

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**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*II and III*

4) Flame cutting is not preferred for edge preparation of hardenable steels because of **1 point**

- Formation of hard and brittle structure
- Formation of hard and ductile structure
- Formation of soft and ductile structure
- Formation of soft and high strength structure

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Formation of hard and brittle structure*

5) Needle type precipitates or intermetallic compounds if formed at particle-matrix interface near the weld zone, then it may lead to **1 point**

- (i) Easy crack nucleation
- (ii) Increase in ductility
- (iii) Reduction in toughness
- (iv) Increase in fatigue resistance

- I and III
- II and III
- II, III and IV
- All of above

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*I and III*

6) Generally, the different zones formed in friction stir weld joint of work hardenable steel in an annealed condition in increasing order of their average hardness are **1 point**

- Base metal, weld zone, HAZ
- Weld zone, HAZ, base metal
- Base metal, HAZ, weld zone
- HAZ, weld zone, base metal

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Base metal, HAZ, weld zone*

7) High residual stress is induced during fusion welding if weld metal has **1 point**

- Low yield strength and high ductility
- High yield strength and low ductility
- High yield strength and high ductility
- Low yield strength and high ductility

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:***High yield strength and low ductility*

8) Work hardening of metals like steels results in

**1 point**

- Increase in yield strength and decrease in ductility
- Decrease in yield strength and increase in ductility
- Increase in yield strength and increase in ductility
- Decrease in yield strength and decrease in ductility

**No, the answer is incorrect.****Score: 0****Accepted Answers:***Increase in yield strength and decrease in ductility*

9) Plastic deformation based welding as compared to fusion welding in general results in

**1 point**

- Narrow width of heat affected zone
- Higher strength
- Favourable grain structure
- All of above

**No, the answer is incorrect.****Score: 0****Accepted Answers:***Narrow width of heat affected zone*

10) A weld joint is said to be defective if it contains

**1 point**

- Pores
- Inclusions
- Solidification cracks
- All of above

**No, the answer is incorrect.****Score: 0****Accepted Answers:***All of above*[Previous Page](#)[End](#)

