

## Unit 11 - Week 9

## Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

● Lecture 22: Forms of corrosion: Intergranular corrosion (Part-II)

● Lecture 23: Forms of corrosion: Intergranular corrosion (Part-III)

○ Lecture 24: Forms of corrosion: Intergranular corrosion (Part-IV)

○ Quiz : Assignment 7

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Week 12

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## Assignment 7

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.

**Due on 2020-11-25, 23:59 IST.**

### INSTRUCTIONS:

(A) The marks that each question carries is marked against the question.  
(B) There can be more than one correct answers for a question.

1) Weld decay occurs in the following alloys

2 points

- 304 stainless steel  
 410 stainless steel  
 Carbon steel  
 Brass  
 Titanium metal

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
304 stainless steel  
410 stainless steel

2) Stainless steel having a similar carbon content becomes most susceptible to intergranular corrosion if it is

2 points

- Ferritic  
 Austenitic  
 Duplex  
 Martensitic

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Ferritic

3) Stainless steel having a similar carbon content become least susceptible to intergranular corrosion if it is

2 points

- Ferritic  
 Austenitic  
 Duplex

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Duplex

4) For welding thick plates/pipes the following stainless steels cannot be used

2 points

- 304L SS  
 904L SS  
 321 SS  
 347 SS

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
321 SS  
347 SS

5) A stainless steel cannot be made resistant to intergranular corrosion by

2 points

- Merely increasing its Cr content  
 Adding Ti to it  
 Adding Nb and Ta to it  
 Merely lowering its C content

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Merely increasing its Cr content

6) Which of the following metal/alloys suffer pitting corrosion in seawater?

3 points

- 304 stainless steel  
 Aluminum  
 Carbon steel  
 Brass  
 Titanium metal

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
304 stainless steel  
Aluminum

7) In principle it is possible to weld a thin sheet of 304 SS without causing IGC

2 points

- Yes  
 No

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Yes

8) Dealloying increases in the order

3 points

- a. Cu-15% Zn  
b. Cu-30% Zn  
c. Cu-10% Ni  
d. Cu-30% Ni

Choose the correct one

- c < d < a < b  
 c < a < d < b  
 c < a < b < d  
 d < b < a < c

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
c < a < d < b

9) Some of the following do not affect erosion corrosion

2 points

- Nobility of alloying element  
 Passivating tendency of the alloy  
 Alloying elements to increase hardness of the alloy  
 Stagnancy in the pipeline  
 None of the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
None of the above