

Unit 11 - Week 10

Course outline

How does an NPTEL online course work?

[week 1](#)

[week 2](#)

[Week 3](#)

[Week 4](#)

[Week 5](#)

[Week 6](#)

[Week 7](#)

[week 8](#)

[Week 9](#)

[Week 10](#)

[Role of Secondary Cooling - Part 1](#)

[Role of Secondary Cooling - Part 2](#)

[Typical Cracks and Defects : Part I](#)

[Typical Cracks and Defects : Part II](#)

[Quiz : Assignment 10](#)

[Week 10 Feedback :Steel Quality: Role of Secondary Refining and Continuous Casting](#)

[Week 11](#)

[Week 12](#)

[Download Videos](#)

Assignment 10

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

Due on 2020-04-08, 23:59 IST.

Either One or Two Solutions are Correct for Each Question .

When One Solution is Correct , choice of only the Correct One will give ONE mark. Choice of more than One will result in ZERO mark .

When Two Solutions are Correct , choice of only the TWO CORRECT will give ONE mark . Choice of more than Two will result in ZERO mark . One Correct Solution will give 0.5 mark

1) **Secondary cooling** of cast strand is carried out with application of :

1 point

- air
 water
 air + water
 None of this

No, the answer is incorrect.
Score: 0

Accepted Answers:
water
air + water

2) The following feature of secondary cooling gives optimum temperature :

1 point

- Intensity
 Uniformity
 None of this

No, the answer is incorrect.
Score: 0

Accepted Answers:
Intensity
Uniformity

3) **Overcooling** of strand may result in :

1 point

- Bulging
 Crack
 Central looseness
 Internal stress

No, the answer is incorrect.
Score: 0

Accepted Answers:
Crack
Internal stress

4) **Undercooling** of strand may result in :

1 point

- Bulging
 Crack
 Central looseness
 Internal stress

No, the answer is incorrect.
Score: 0

Accepted Answers:
Bulging
Central looseness

5) **Optimum secondary cooling** depends on :

1 point

- C content
 Solidification characteristic
 Type of caster

No, the answer is incorrect.
Score: 0

Accepted Answers:
C content
Solidification characteristic

6) The following is a typical internal defect in cast bloom / slab :

1 point

- Diagonal crack
 Depression
 Triple-point crack
 Oscillation mark

No, the answer is incorrect.
Score: 0

Accepted Answers:
Diagonal crack
Triple-point crack

7) Shrinkage of solid shell creates air gap between mould wall and solid shell , and may result in the following :

1 point

- No effect
 High cooling rate
 Slow cooling rate
 Coarse grain

No, the answer is incorrect.
Score: 0

Accepted Answers:
Slow cooling rate
Coarse grain

8) Carbon steel with 0.05 % C and AISI 430 stainless steel are prone to following defect

1 point

- Coarse grain
 Internal crack
 Bulging
 Surface depression

No, the answer is incorrect.
Score: 0

Accepted Answers:
Internal crack
Bulging

9) Carbon steel with 0.12 % C and AISI 304 stainless steel are prone to following defect

1 point

- Coarse grain
 Internal crack
 Bulging
 Surface depression

No, the answer is incorrect.
Score: 0

Accepted Answers:
Coarse grain
Surface depression

10) The following cast steel is prone to central segregation and central looseness :

1 point

- 0.05 % C
 0.12 % C
 0.18 % C
 0.50 % C

No, the answer is incorrect.
Score: 0

Accepted Answers:
0.50 % C