

## Unit 3 - week 2

### Course outline

How does an NPTEL online course work?

#### week 1

#### week 2

- Present Scenario on Quality Demands
- Control of Residuals and Impact on Quality
- Non-Metallic Inclusions
- Evaluation of Residuals and Inclusions
- Cleanliness Requirements for Different applications
- Quiz : Week 2 practice Assessment

#### Quiz : Assignment 2

Week 2 Feedback

#### Week 3

#### Week 4

#### Week 5

#### Week 6

#### Week 7

#### week 8

#### Week 9

#### Week 10

#### Week 11

#### Week 12

[Download Videos](#)

## Assignment 2

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

**Due on 2020-02-12, 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) Oxygen in liquid or solid steel is normally present as :

1 point

- Soluble O only
- Oxides only
- Both soluble O and Oxides

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Both soluble O and Oxides

2) Trace elements , like , Zn , As , Sb , Pb normally come in steel from :

1 point

- Iron ore
- Scrap
- Coal
- Limestone

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Scrap

3) The following application demands stringent quality requirements in steel :

1 point

- Ball bearing
- Can for fruit juice
- Construction
- Grill fencing

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Ball bearing  
Can for fruit juice

4) NMI s in steel are normally called **large and harmful** when they are greater than :

1 point

- 1 cm
- 50 micron
- 1 micron
- 1 mm

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
50 micron

5) Oxide cleanliness in killed steel can be **quickly** measured by :

1 point

- Optical microscope
- Total O
- Soluble O
- XRF

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Total O

6) Steel having the following total O is normally considered as **reasonably clean** :

1 point

- 100 ppm
- 10 ppm
- 25 ppm
- None of this

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
10 ppm

7) Large / macro inclusions are harmful because they generate :

1 point

- Lower strength
- Anisotropic properties
- Surface defect

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Anisotropic properties  
Surface defect

8) The following large exogenous inclusion is known to generate defect :

1 point

- Deoxidation product
- Slag entrapment
- Reoxidation product

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Slag entrapment  
Reoxidation product

9) NMIs in steel are generally present as :

1 point

- Carbide
- Oxide
- Phosphide
- Sulphide

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Oxide  
Sulphide

10) Control on the following element is essential to achieve good quality :

1 point

- Si
- P
- Mn
- O
- C

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
P  
O