Unit 4 - Week 3

Assignment 3

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

Due on 2020-02-19, 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) The following is not a primary steelmaking process : *1 point*

- [ ] EAF
- [ ] VOD
- [ ] LRF
- [ ] BOF

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

2) The following element can be easily controlled in BOF process : *1 point*

- [ ] C
- [ ] S
- [ ] N
- [ ] P

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

3) Primary steelmaking slag is not ideal for refining because slag contains *1 point*

- [ ] CaO
- [ ] FeO
- [ ] MnO
- [ ] SiO_2

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

4) Activity of solute elements C , O , N , S, P , Si in liquid steel is known to follow Henry"s law of dilute solution . Therefore , activity of these can be taken as equal to their : *1 point*

- ( ) Mole fraction
- ( ) Weight %
- ( ) Activity coefficient

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

5) Soluble oxygen in liquid steel at completion of BOF process is about : *1 point*

- ( ) 10 ppm
- ( ) 5 weight %
- ( ) 600 ppm
- ( ) 0.1 weight %

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

6) It may be observed from the **reaction [C] + [O] = CO (gas)** , that **soluble C** is *1 point*

- [ ] proportional to soluble O
- [ ] inversely proportional to soluble O
- [ ] dependent on temperature
- [ ] independent of pressure

No, the answer is incorrect.
Score: 0
Accepted Answers:
inversely proportional to soluble O
dependent on temperature

7) " Killing " of liquid steel is essential to control : *1 point*

- ( ) soluble O
- ( ) soluble C
- ( ) soluble N
- ( ) soluble S

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

8) " S " removal by **reaction [S] + (CaO) = (CaS) + [O]** is favourable when : *1 point*

- [ ] Slag basicity is low
- [ ] deoxidation is high
- [ ] CaO in slag is high

No, the answer is incorrect.
Score: 0
Accepted Answers:
deoxidation is high
CaO in slag is high

9) The following is a very strong deoxidiser in liquid steel : *1 point*

- [ ] Ca
- [ ] Fe
- [ ] Mn
- [ ] Al
- [ ] Cr

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

10) Oxide cleanliness in steel is enhanced during deoxidation in presence of : *1 point*

- [ ] FeO in slag
- [ ] SiO_2 in slag
- [ ] Argon purging
- [ ] CaO in slag

No, the answer is incorrect.
Score: 0
Accepted Answers:
Argon purging
CaO in slag