

**Week 10 Assignment 10**

The due date for submitting this assignment has passed. **Due on 2018-04-04, 23:59 IST.**

**Submitted assignment**

1) ________________ is an example of ragging material used in coal jigging.  
- [ ] Feldspar  
- [ ] Magnetite  
- [ ] Quartz  
- [ ] Sphalerite

*No, the answer is incorrect.*  
*Score: 0*  
*Accepted Answers: Feldspar*

2) Easily wettable particles in flotation are called ________________ .  
- [ ] Hydrophobic  
- [ ] Hydrophilic  
- [ ] Plastic  
- [ ] None

*No, the answer is incorrect.*  
*Score: 0*  
*Accepted Answers: Hydrophilic*

3) Movement of fine particles through the void spaces between the coarse coal to the bottom of the jig is known as ________________ .  
- [ ] Differential acceleration  
- [ ] Consolidation trickling  
- [ ] Hindered settling

*No, the answer is incorrect.*  
*Score: 0*
4) For particles with a similar terminal velocity a _______ jigging cycle would be necessary for separation.

- Short
- Long
- Average
- Slower

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

5) Parameters which determine the cycle frequency of jig include the feed rate, feed size and density and the ____________

- Ragging material
- Hutch
- Jig design
- None

No, the answer is incorrect.
Score: 0
Accepted Answers:
Jig design

6) A jig pulsation is a case of_________________.

- Simple harmonic motion
- Linear motion
- Reciprocal motion
- Brownian

No, the answer is incorrect.
Score: 0
Accepted Answers:
Simple harmonic motion

7) The feed rate must be ___________ with the discharge rate of the heavy fraction so that a steady state operation can be maintained.

- Same
- Different
- More
- Less

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

8) What is the normal feed size of coal for jigging operation ______________.

- 50 micron - 20 mm
- 0.5 - 200 μm
- 0.5 - 200 mm
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer Options</th>
<th>Correct Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) The basis of froth flotation is the difference in ________________ of different minerals.</td>
<td>Wettabilities, Size, Shape, Density</td>
<td>Wettabilities</td>
<td>0</td>
</tr>
<tr>
<td>10) ________________ is an example of naturally hydrophobic material.</td>
<td>Hematite, Magnetite, Coal, Quartz</td>
<td>Coal</td>
<td>0</td>
</tr>
<tr>
<td>11) Flotation is a ________________ separation process that utilizes the difference in the surface properties of the valuable and gangue minerals.</td>
<td>Physical, Chemical, Mechanical, Physico-chemical</td>
<td>Physico-chemical</td>
<td>0</td>
</tr>
<tr>
<td>12) In direct flotation, __________ is attached to the froth.</td>
<td>Gangue, Wanted mineral, Both, None</td>
<td>Wanted mineral</td>
<td>0</td>
</tr>
<tr>
<td>13) ________________ is mixed with slurry to render the desired mineral Hydrophobic.</td>
<td>50 – 200 μm</td>
<td>50 – 20 μm</td>
<td>2</td>
</tr>
</tbody>
</table>

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

50 – 20 μm

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

Wettabilities

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

Radiations
14) In reverse flotation, ____________ is attached to the froth
   - Gangue
   - Wanted mineral
   - Both
   - None
   No, the answer is incorrect.
   Score: 0
   Accepted Answers: Collector

15) Contact Angle depends on ________________.
   - Frother
   - Modifiers
   - Collectors
   - pH regulators
   No, the answer is incorrect.
   Score: 0
   Accepted Answers: Collectors