Unit 8 - Process waste handling, Electroplating

Course outcome

Process waste handling, Electroplating

Process Waste and Electroplating Assignment

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

1. Chromium plating is used for:
   - Corrosion resistance
   - Decorative purpose
   - Wear resistance
   - All of the above
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - All of the above

2. Hydrogen embrittlement must be avoided in electroplating because:
   - It reacts with carbon
   - It reacts with iron
   - Builders are formed on surface
   - It causes blisters on surface
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - All of the above

3. If the gas interference ratio is high for a sensor, it indicates:
   - Sensitivity is high
   - Sensitivity is low
   - Life expectancy is high
   - Life expectancy is low
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - Sensitivity is high

4. Electrolysis of cyanide using Pt/Ti electrode produces:
   - Hydrocyanic acid
   - Carbon dioxide
   - Nutrient solution
   - Nutrient waste
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - Nutrient solution

5. Chromium reduction with \( \text{Fe}^{3+} \) is not preferred in electroplating waste treatment because:
   - It is a hydrous way
   - Does not form precipitate
   - Produces too much precipitate
   - Produces foul sludge
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - Produces too much precipitate

6. Hydroxide precipitation is more common than sulphate precipitation in effluent treatment even though sulphate precipitation has lower solubility product. This is because:
   - Metal sulphates are not as easy to filter as metal hydroxides
   - Maximum metals do not form hydroxides
   - Maximum metals do not form sulphides
   - Diverse sulphates is the effluent can be toxic
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - Diverse sulphates is the effluent can be toxic

7. Polyamides are used as an additive in effluent treatment from electroplating wastes, because:
   - It helps to precipitate dispersions
   - Surface tension is reduced between organic and oily layers
   - It increases the precipitate and aid in filtration
   - It decreases the precipitate
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - It increases the precipitate and aid in filtration

8. \( \text{Cu}^{2+} \) in the effluent should be less than:
   - 10 ppm
   - 0.01 ppm
   - 0.1 ppm
   - 1 ppm
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - 0.01 ppm

9. Oxidation such as \( \text{X.AS}^{3+} \) and \( \text{X.AS}^{4+} \) are used in electrochemical fuel cells as:
   - Redox reactions
   - Faradaic reactions
   - Biodiesel
   - Electrochemical
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answers:
     - Electrochemical

10. Recovery of process baths is carried out by:
    - Precipitation
    - Electrolysis
    - Electroplating
    - Unplating
    - No, the answer is incorrect.
    - Score: 1
    - Accepted Answers:
      - Electrolysis