Assignment 3

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

1. 3) Eddy current testing can be used to:
   - Detect surface and near surface cracks
   - Detect internal flaws
   - Measure the thickness of non-conductive coatings on plastics
   - Both A and B
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Copper
   Aluminium

2. The highest area enclosed by the lift-off curve in impedance plane will be:
   - Air
   - Water
   - Copper
   - All of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

3. If eddy current testing, changing the frequency of current from 150 kHz to 1 MHz in a brass coil will be visible in the impedance plane as:
   - Increase in the area under the lift-off curve
   - Decrease in the area under the lift-off curve
   - Disappearance of lift-off curve
   - None of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

4. "Lift-off" in eddy current testing is:
   - Change in the inductance of probe
   - Distance between probe and sample surface
   - Signal for noise in Impedance plane
   - Surface discontinuity of the testing sample
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

5. If eddy current testing (typically used frequency range of AC):  
   - 1 kHz - 10 kHz
   - 10 kHz - 100 kHz
   - 100 kHz - 1 MHz
   - 1 MHz - 10 MHz
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

6. Eddy Current Testing reveals flaws as:
   - Inclined indications
   - Great indications
   - Induction coils on the sample surface
   - VP in cone-shaped conductors
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

7. Direction of induced current is given by:
   - Faraday's Law
   - Lenz's Law
   - Ohm's Law
   - None of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

8. All other variables being same, Induced EMF in a coil with 40 turns will be:
   - Double of a coil with 20 turns
   - Half of a coil with 20 turns
   - 3/2 times of a coil with 20 turns
   - 25% more than a coil with 10 turns
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

9. The induced current in a coil opposes change in its magnetic flux:
   - To conserve energy
   - To enhance the induced voltage
   - To decrease the eddy resistance
   - All of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:

10. As the frequency of the current, conductivity and magnetic permeability of the sample is increased, the standard penetration depth:
    - Decreases
    - Increases
    - Remains constant
    - Cannot be determined
    No, the answer is incorrect.
    Score: 0
    Accepted Answers:

Due on 2023-02-18, 23:58 IST.