Assignment 4

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

All are compulsory:

1. What is the unit of specific surface area?
   - m²/g
   - m²/kg
   - m²/l
   - None of the above
   Answer: m²/g

2. Which of the following is the main reason for the agglomeration of nanoparticles?
   - High surface energy
   - Low surface energy
   - High aspect ratio
   - Low aspect ratio
   Answer: High surface energy

3. An example of a functional coating is:
   - Anti-corrosion coating
   - Anti-reflection coating
   - Self-healing coating
   - All of these
   Answer: All of these

4. Which of the following properties of Tin dioxide makes it suitable as a photo-catalyst in various environmental applications?
   - Mechanically stable
   - Not photostable in the ultraviolet region
   - High photoactivity
   - Both (a) and (b)
   Answer: High photoactivity

5. Which of the following materials can be deposited using cold spray techniques?
   - Metals
   - Polymers
   - Ceramic
   - None of the above
   Answer: All of the above

6. Which of the following gases is used in high velocity oxy-fuel processes?
   - Hydrogen
   - Nitrogen
   - Helium
   - Oxygen
   Answer: Oxygen

7. The wear can be due to a combined action of rubbing and sliding where:
   - V₁ = V₂
   - V₁ > V₂
   - V₁ = V₂
   - V₁ < V₂
   Answer: V₁ = V₂

8. In pin-on-disc method, the wear path is:
   - Linear
   - Modified
   - Circular
   - Irregular
   Answer: Modified

9. Which type of binder can be used for in-situ growth via rich coating?
   - Polymer-based
   - Silicate-based
   - Teflon-based
   - Boro-based
   Answer: Teflon-based

10. Choose the incorrect sentence related to the thermal spray techniques.
    - It provides hard coatings.
    - HVOF is a thermal spray technique.
    - HVOF is a thermal spray technique.
    - CVD is a thermal spray technique.
    Answer: CVD is a thermal spray technique