Assignment 8

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

Due on 2020-11-11, 22:59 IST.

All the questions are multiple choice questions (MCQ) with only one correct answer.

1) Which of the following has a requirement of powder with particle size distribution (PSD) between 50 μm to 150 μm? 1 point
   - Direct Metal Laser Sintering
   - Electron Beam Melting
   - Multi-Jet Fusion
   - Binder Jetting
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Direct Metal Laser Sintering

2) Identify the primary characteristic of the feedstock used for laser powder bed fusion. 1 point
   - Particle Size Distribution
   - Flowability
   - Temperature
   - Material Stability
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Particle Size Distribution

3) Which of the following methods can be used for analyzing the particle size distribution of the powder used in AM? 1 point
   - Dynamic Image Analysis
   - Laser Diffraction
   - Material Stability
   - None of the above
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - None of the above

4) Knoop hardness and C. index are functions of the following property? 1 point
   - Fatigue
   - Plastic Shape
   - Particle Size Distribution
   - None of the above
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - None of the above

5) All materials that are preferred for fabricating tools with conformal cooling channels for injection molding processes is 1 point
   - SI3N4
   - NiTi
   - Aluminum
   - AH1
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Aluminum

6) Bowden Extrusion is preferred to Direct Extrusion due to the following functional reason 1 point
   - Ease of Assembly
   - Lower Particles
   - Lower Cost
   - Higher Heat Rate
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Lower Cost

7) Filaments of metal polymer composites need the following steps during post-processing: 1 point
   - Debending and Skimming
   - Milking and Wire Cutting
   - Heat Treatment and Sheet Peeling
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Heat Treatment and Sheet Peeling

8) The most affordable option for making extrusion-based AM parts deals with following material 1 point
   - Thermoplastic/Polyurethane (TPU)
   - Polymer Matrix Composite (PMC)
   - Polyamide (PLA)
   - Polyether Ether Ketone (PEEK)
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Polyamide (PLA)

9) The movement of the robot is connected with the following phenomena in additive manufacturing 1 point
   - Free and Open Source Hardware Printer
   - New AM Material with High Strength
   - Usage of Robotic & IOT
   - Low cost tooling
   - No, the proven is incorrect.
   - Score: 0
   - Accepted Answers:
     - Low cost tooling

10) The following AM process use micro mirrors 1 point
    - Electron Beam Melting
    - Direct Light Processing
    - Metal Additive Laser
    - No, the proven is incorrect.
    - Score: 0
    - Accepted Answers:
      - Direct Light Processing