Assignment 8

Due on 2020-03-26, 23:59 IST.

1. The element(s) of ultrasonic machining (USM) process is/are _________.
   - Oscillator
   - Horn
   - Tool
   - Bridge power unit
   - Transducer
   Accepted Answers: Oscillator, Horn

2. Conversion efficiency of electrical to mechanical energy in ultrasonic machining is (approx.) ________%.
   - 90%
   - 80%
   - 70%
   - 50%
   Accepted Answers: 90%

3. The correct statement for abrasive jet machining (AJM) is _________.
   - The standoff distance is maintained at 2.5 mm to 5 mm for getting the maximum material removal rate.
   - It is used for machining hard and brittle materials.
   - The fluid used in AJM can be gas as well as water along with abrasive particles.
   - The abrasive jet is used to access the internal portion of a workpiece in machining.
   Accepted Answers: The fluid used in AJM can be gas as well as water along with abrasive particles.

4. The elements of the abrasive water jet machining (AWJM) system includes _________.
   - Magnets
   - Vacuum
   - Magnetic deflecting coil
   - High voltage cable
   Accepted Answers: Magnets, Vacuum, Magnetic, deflecting coil, High voltage cable

5. The pressure(s) capable of removing material with atomic level of accuracy are _________.
   - Magneto-thermochemical finishing process
   - Elastic energy machining
   - Laser beam machining
   - Focused ion beam machining
   Accepted Answers: Magneto-thermochemical finishing process

6. The correct statement for Chemical machining (CM) processes is _________.
   - Material is removed by chemical reaction
   - Material is applied in the surface that are going to be etched
   - Material is applied to the surface that are going to be extracted
   - Material is deposited on the surface that are going to be stick
   Accepted Answers: Material is removed by chemical reaction

7. The correct statement for plasma arc cutting (PAC) processes is _________.
   - Transformed type arc has higher efficiency than non-transformed type
   - Transformed type arc has lower efficiency than non-transformed type
   - Vacuum of plasma is created for plasma cutting
   - Transformed type arc has higher efficiency than non-transformed type
   Accepted Answers: Transformed type arc has higher efficiency than non-transformed type