Assignment 4

Due on 2020-02-28, 23:59 IST.

1. In spray lay-up method, the function of a spray gun is to spray pressurised resin, catalyst and reinforcement in the form of chopped fibers.
   - True
   - False
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: False

2. Lower the length to diameter (L/D) ratio, greater opportunity for mixing of polymer and fiber.
   - True
   - False
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: False

3. Hand lay-up process is mostly appropriate for processing of thermoplastic based polymer composites.
   - True
   - False
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: False

4. Choose the ODM one out of the following:
   - Transfer molding
   - Compression molding
   - Injection molding
   - Spin lay-up
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: Spin lay-up

5. The mechanical properties of polymer matrix composites depend on:
   - Properties of matrix polymer
   - Properties of fibers
   - Fiber volume fraction
     - 2 and 3
     - 1 and 2
     - 1 and 3
     - 2 and 3
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: 3. 2

6. Select the process which is an open mold process:
   - Reaction injection molding
   - Hot lay-up
   - Transfer molding
   - Injection molding
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: Hot lay-up

7. In .... , it’s a challenge to control the fiber volume fraction.
   - True
   - False
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: False

8. Hand lay-up method can be easily used for manufacturing:
   - Automotive parts
   - Ducts
   - Tubing
   - All of these
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: All of these

9. The correct statements in context of spray lay-up method are:
   - Only resin is applied to hand lay-up method, the only difference lies in application of resin and fiber to the mold.
   - It is a closed mold process.
   - This process is well suited for small to medium volume production.
     - 1 and 3
     - 1 and 2
     - 2 and 3
     - 1, 2 and 3
   - No, the answer is incorrect.
   - Score: 1
   - Accepted Answer: 1 and 3

10. The important issues to be considered while selecting any manufacturing process are:
    - Economic viability of the process
    - Surface finish
    - Quality of product to be manufactured
      - 1 and 2
      - 1 and 3
      - 2 and 3
      - 1, 2 and 3
    - No, the answer is incorrect.
    - Score: 1
    - Accepted Answer: 1, 2 and 3