

Unit 5 - Week 4

Course outline

How does an NPTEL online course work?

Week 1

Week 2

Week 3

Week 4

● Processing of polymer composites

○ Hand lay-up

● Spray lay-up

● Compression molding

● Injection molding

○ Quiz : Assignment 4

○ Solution For Assignment 4

Week 5

Week 6

Week 7

Week 8

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WEEKLY FEEDBACK

Assignment 4

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

Due on 2020-02-26, 23:59 IST.

1) In spray lay-up method, the function of a spray gun is to spray pressurized resin, catalyst and reinforcement in the form of chopped fibers. **1 point**

- True
 False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

2) Lower the length to diameter (L/D) ratio, greater opportunity for mixing of polymer and fiber; **1 point**

- True
 False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

3) Hand lay-up process is mostly appropriate for processing of thermoplastic based polymer composites. **1 point**

- True
 False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

4) Choose the ODD one out of the following; **1 point**

- Transfer molding
 Compression molding
 Injection molding
 Spray lay-up

No, the answer is incorrect.
Score: 0

Accepted Answers:
Spray lay-up

5) The mechanical properties of polymer matrix composites depend on; **1 point**

- 1 Properties of matrix (polymers)
2 Properties of fibers
3 Fiber volume fraction

- 1, 2 and 3
 1 and 2
 1 and 3
 2 and 3

No, the answer is incorrect.
Score: 0

Accepted Answers:
1, 2 and 3

6) Select the process which is an open mold process; **1 point**

- Reaction injection molding
 Hand lay-up
 Transfer molding
 Injection molding

No, the answer is incorrect.
Score: 0

Accepted Answers:
Hand lay-up

7) In _____, it's a challenge to control the fiber volume fraction; **1 point**

- Hand lay-up
 Injection molding
 Pultrusion
 Spray lay-up

No, the answer is incorrect.
Score: 0

Accepted Answers:
Spray lay-up

8) Hand lay-up method can be easily used for manufacturing the; **1 point**

- Automotive parts
 Dash board
 Boat hulls
 All of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of these

9) The correct statements in context of spray lay-up method are; **1 point**

- 1 Spray lay-up is similar to hand lay-up process, the only difference lies in application of resin and fiber to the mold.
2 It is a closed mold process.
3 The process is well suitable 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: 0

Accepted Answers:
1 and 3

10) The important issues to be considered while selecting any manufacturing process are: **1 point**

- 1 Economic viability of the process
2 Technical versatility
3 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: 0

Accepted Answers:
1, 2 and 3