

## Unit 8 - Week 7

### Course outline

How does an NPTEL online course work?

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

● Microencapsulation Processes

○ Microencapsulation: Kinetics of release

● Plating of Nanocomposite Coatings - I

○ Plating of Nanocomposite Coatings - II

● Advantages of Microencapsulation over Other Conventional Methods

○ Quiz : Assignment 7

○ Solution for Assignment 7

Week 8

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## Assignment 7

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

**Due on 2020-03-18, 23:59 IST.**

All are compulsory

1) Core shell encapsulation can be done using \_\_\_\_\_ flow through a nozzle and an additional vibration of the nozzle

1 point

- Turbulent  
 Laminar  
 Steady-state  
 Uniform

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Laminar

2) What is the size range of the products obtained from microencapsulation?

1 point

- 100 to 10000  
 10 to 10000  
 0.5 to 2000  
 None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:  
0.5 to 2000

3) Select a suitable salt that can be used for controlled drug-release by osmotic pressure?

1 point

- NaBr  
 Glucose  
 NaCl  
 KBr

No, the answer is incorrect.

Score: 0

Accepted Answers:  
NaCl

4) What should be the suitable acceleration voltage for taking SEM photomicrographs of microcapsules?

1 point

- 40 KV  
 50 KV  
 20 KV  
 10 KV

No, the answer is incorrect.

Score: 0

Accepted Answers:  
20 KV

5) What is the full name of TBT?

1 point

- Tributyl tin  
 Tributyl bromide  
 Tetrabutyl tin  
 None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Tributyl tin

6) Select a material that is well suitable for self-cleaning coatings?

1 point

- Potassium chloride  
 Barium nitride  
 Titanium oxide  
 Tin oxide

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Titanium oxide

7) Which of the following factors that are dependent for the microstructure of plated nanocomposites prepared via thermal spray technique?

1 point

- Impact velocity  
 Degree of particle melting  
 None of the above  
 Both (a) & (b)

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Both (a) & (b)

8) Which of the following factor will determine the coating thickness, in electrostatic coating?

1 point

- The operating pressure  
 The compatibility between paint material and substrate  
 The time for which substrate is immersed and the time for which charge remains active  
 All of these

No, the answer is incorrect.

Score: 0

Accepted Answers:  
The time for which substrate is immersed and the time for which charge remains active

9) Which of the following core material is nonvolatile liquid?

1 point

- Vitamin-A palmitate  
 Progesterone  
 Activated charcoal  
 Isosorbide dinitrate

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Vitamin-A palmitate

10) What is the aim of a microencapsulation?

1 point

- The isolation of the core from its surrounding  
 The shell must get ruptured at the time of use  
 Both (a) and (b)  
 None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:  
Both (a) and (b)