

## Unit 9 - Week 7

## Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Function Structure ( Flow Method)

Flow Method Examples

Laboratory Exercise - 6

Lecture materials

Quiz : Assignment 7A

Assignment 7B

Functional and Conceptual Design : Week 7 Feedback Form

Sample report for 7B

Week 8

Week 9

Week 10

Week 11

Week 12

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## Assignment 7A

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

Due on 2020-11-04, 23:59 IST.

1) The advantages of functional common basis are

1 point

- A common vocabulary of functions and flows  
 Comparing products across domain is easy  
 Minimizes the customer needs  
 Major changes to product are restricted

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
A common vocabulary of functions and flows  
Comparing products across domain is easy

2) A functional common basis aids in finding

1 point

- When functional decomposition should be stopped  
 Correctness of functional decomposition  
 Restricting major changes to product  
 Secondary functions

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
When functional decomposition should be stopped

3) \_\_\_\_\_ gives internal decision making capability for a device

1 point

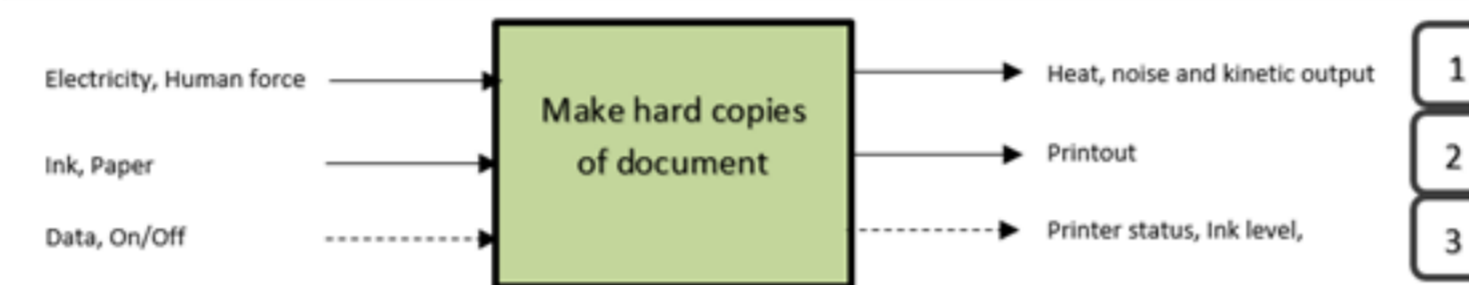
- Product values  
 Material of the product  
 Information  
 Energy

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Information

4) Given below is the black box model of an Inkjet printer. Identify the I/O flow

1 point



1. Information, 2. Energy, 3. Material  
 1. Energy, 2. Information, 3. Signal  
 1. Signal, 2. Information, 3. Material  
 1. Energy, 2. Material, 3. Information

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
1. Energy, 2. Material, 3. Information

5) \_\_\_\_\_ provides a systematic approach for decomposing a product design problem into simpler subproblems

1 point

- Product simplification  
 Product disintegration  
 Functional modelling  
 Conceptual design

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Functional modelling

6) What is the next step after the functional decomposition?

1 point

- Customer requirements  
 Marketing the product  
 Functional analysis  
 Product architecture

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Product architecture

7) Which of the following is the part of product architecture?

1 point

- Physical components  
 Building blocks  
 Product assembly  
 Functional elements  
 Direct needs

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Physical components  
Building blocks  
Functional elements

8) What are the considerations for product architecturing?

1 point

- Ability to offer product variety  
 Product cost  
 Design lead time  
 All of the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
All of the above

9) Flow method is also referred to as \_\_\_\_\_ since the box with inputs and outputs is used to define the functions of the product

1 point

- FAST method  
 System approach  
 Product approach  
 Customer approach

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
System approach

10) \_\_\_\_\_ helps in the early stage identification of product architecture

1 point

- Concept scoring  
 Customer need analysis  
 Functional modelling  
 Product dissection

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Functional modelling