

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

● Lecture 20 : Research to Innovation by Prof. Amaresh Chakrabarti Part 1

● Lecture 21 : Research to Innovation by Prof. Amaresh Chakrabarti Part 2

○ Weekly Feedback

○ Download Videos

○ Quiz : Assignment 7

● Assignment 7 solutions

Week 8

Assignment 7

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

Due on 2020-04-15, 23:59 IST.

1) Govind Sharma and Anup Chander won the Red Dot 2017 award for which of the following invention? **1 point**

- Design of TVS Akula motorcycle
- Cotton picking device
- Non-Splashing Flip Flops
- Affordable bionic arm

No, the answer is incorrect.
Score: 0

Accepted Answers:
Non-Splashing Flip Flops

2) How did Bempu, a wristlet which is designed for babies, save the lives of 25,000 newborns in 15 different countries? **1 point**

- By providing nutrition to the body
- By detecting sudden drops in body temperature
- By providing heat to the body
- By detecting when the baby is awake

No, the answer is incorrect.
Score: 0

Accepted Answers:
By detecting sudden drops in body temperature

3) What is the method called that Grasp Bionics used to make their prosthetic arm Purak minimal and affordable? **1 point**

- They used under-actuation
- They used only one grip style
- They used different actuators for different fingers
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
They used under-actuation

4) Mobile Arm Support, designed by Prof. Amaresh Chakrabarthi, was for people with: **1 point**

- Alzimers
- Cataract
- Muscular Dystrophy
- Dementia

No, the answer is incorrect.
Score: 0

Accepted Answers:
Muscular Dystrophy

5) What is a 'high risk' product as explained by Prof. Amaresh Chakrabarthi? **1 point**

- A product which cannot afford to fail
- A product which is difficult to carry
- A product which can break easily
- A product which prevents high risk scenarios

No, the answer is incorrect.
Score: 0

Accepted Answers:
A product which cannot afford to fail

6) How did the combustion engine designed by Rolls Royce stop the formation of ice at the nose cone? **1 point**

- By heating the cone
- By shaking the cone using a wiggle motor
- By changing the nose cone material to a flexible material
- By hardening the turbine blades using chemicals

No, the answer is incorrect.
Score: 0

Accepted Answers:
By changing the nose cone material to a flexible material

7) Design is the great integrator of which of the following three fields according to Prof. Amaresh Chakrabarthi : **1 point**

- Usability, functionality and aesthetics
- Philosophy, innovation and affordability
- Society, Business and Technology
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Society, Business and Technology

8) What two knowledge bases are required to be good in design discussed in the module 'Research to Innovation' by Prof. Amaresh Chakrabarthi? **1 point**

- Process knowledge and Domain knowledge
- Business knowledge and Domain knowledge
- Process knowledge and Business Knowledge
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Process knowledge and Domain knowledge

9) How did Sickle Innovation as a company manage to survive after they initially failed to empower the cotton pickers? **1 point**

- They started a fruit picking business
- They started a manufacturing genetically designed seeds
- They made high grade fertilisers
- They changed their domain from agricultural solutions to corporate solutions

No, the answer is incorrect.
Score: 0

Accepted Answers:
They started a fruit picking business

10) Complete the sentence : According to Prof. Amaresh Chakrabarthi, when one uses standardized parts, the quality of the part ____: **1 point**

- Increases
- Decreases
- Remains the same
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Increases