

Unit 5 - Week 3

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

● Lecture 8 : Technology to Solution by Prof. Ramesh Singh Part 1

○ Lecture 9 : Technology to Solution by Prof. Ramesh Singh Part 2

● Lecture 10 : A Collaborative Excellence by Prof. B. Ravi & Prof. B. K. Chakravarthy Part 1

● Lecture 11 : A Collaborative Excellence by Prof. B. Ravi & Prof. B. K. Chakravarthy Part 2

○ Weekly Feedback

○ Download Videos

○ Quiz : Assignment 3

○ assignment 3 solutions

Week 4

Week 5

Week 6

Week 7

Week 8

Assignment 3

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.

1) Which industry was the Vent cleaning system made for?

1 point

- Diamond Industry
 Biomed Industry
 Tyre Industry
 None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Tyre Industry

2) In the case of Digitally Personalized Jewellery, how did Prof Ramesh solve the problem of unique code on the merchandise?

1 point

- He made a code with arrays of holes using micromachining
 Adhesively bonded the microsticker on the jewellery
 He engraved the code using a pantograph
 He used photo etching to mark the code

No, the answer is incorrect.
Score: 0

Accepted Answers:
He made a code with arrays of holes using micromachining

3) Tools used for micro-machining have a resolution close to ____?

1 point

- A point of a needle
 A fine laser beam
 One fourth of a human hair
 None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
One fourth of a human hair

4) Which of the following is NOT a type of additive micro-machining?

1 point

- Laser machining process
 Stereolithography
 Fine Welding
 Micro casting

No, the answer is incorrect.
Score: 0

Accepted Answers:
Laser machining process

5) Why was the 5 axis positioning system adopted instead of a 3 axis positioning system while designing the vent cleaning system?

1 point

- To position the laser normal to the vent hole
 To identify the clogged vents.
 All of the above
 None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
To position the laser normal to the vent hole

6) What was the advantage of an indigenously developed knee joint

1 point

- Size is suitable for indian patients
 Can bend more than 90 degrees
 Slight twist movement was added to mimic natural knee like movement
 All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

7) The Knee prosthesis was designed to be

1 point

- Modular with different parts which can be mixed and matched
 Assembled from factory to avoid confusion
 Two separate assembly for femur and tibia for all sizes
 All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Modular with different parts which can be mixed and matched

8) Titanium is poor in constant wear, therefore the moving knee parts are made up of an alloy called

1 point

- Cobalt chromium molybdenum
 Nickel chrome Steel
 Vanadium chromium
 Titanium Chromium alloy

No, the answer is incorrect.
Score: 0

Accepted Answers:
Cobalt chromium molybdenum

9) What is the weight of the Mega prosthesis

1 point

- 1 kg
 2 kg
 3 kg
 4 kg

No, the answer is incorrect.
Score: 0

Accepted Answers:
1 kg

10) What is used to fix the bone and the titanium stem

1 point

- Body compatible glue
 Special screw
 Special cement
 Interference fit

No, the answer is incorrect.
Score: 0

Accepted Answers:
Special cement