

Unit 2 - Week 0

Course outline

How does an NPTEL online course work?

Week 0

Quiz : Assignment 0

Week 1

Week 2

Week 3

Week 4

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Assignment Detailed Solution

Live Interactive Session

Assignment 0

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

Due on 2020-02-24, 23:59 IST.

1) A gear box is having a motor at its input point. The motor is rotating at 1440 rpm. At the output point of the gear box, there is a cutter which should rotate at 1200 rpm. In that case, the gear box may contain **1 point**

- a. Motor shaft - rotating gear of 300 teeth – meshing with gear of 250 teeth – rotating cutter
- b. Motor shaft - rotating worm of 2 starts – meshing with worm gear of 240 teeth – rotating cutter
- c. Motor shaft - rotating gear of 250 teeth – meshing with gear of 300 teeth – rotating cutter
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

c. Motor shaft - rotating gear of 250 teeth – meshing with gear of 300 teeth – rotating cutter

2) Rectilinear motion can be obtained from circular motion by **1 point**

- a. Miter gears
- b. Worm of single start and worm gear with pitch diameter 40 cm
- c. Screw-nut mechanism
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

c. Screw-nut mechanism

3) Mild steel refers to **1 point**

- a. A type of material with iron = 80% and carbon = 20%
- b. A type of material with mainly iron and with carbon around 0.2 %
- c. An alloy of iron and Molybdenum
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

b. A type of material with mainly iron and with carbon around 0.2 %

4) A non-rigid shaft is rotating at 1200 rpm. It delivers power from a motor to a rotating drill which is drilling a hole in metal. **1 point**

- a. The shaft will undergo a twist
- b. The shaft will not undergo any twist

No, the answer is incorrect.

Score: 0

Accepted Answers:

a. The shaft will undergo a twist

5) A point in space can be defined unambiguously as the intersection of **1 point**

- a. Two skew straight lines
- b. Three planes
- c. Two planes
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

b. Three planes

6) In a worm and worm gear assembly, if it is attempted to rotate the worm by rotating the worm gear **1 point**

- a. The worm will never rotate
- b. The worm will definitely rotate
- c. The worm may or may not rotate

No, the answer is incorrect.

Score: 0

Accepted Answers:

c. The worm may or may not rotate

7) High speed steel is an alloy used for **1 point**

- a. Structural parts of high speed racing cars
- b. Structural parts of rocket engines
- c. Making cutting tools
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

c. Making cutting tools

8) In engineering practice, friction between two surfaces is commonly reduced by application of **1 point**

- a. Oil
- b. Alcohol
- c. SiC powder
- d. None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

a. Oil