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 31 : Components of machine tool
- Lecture 32: Components of machine tool (Contd.)
- Lecture 33 : Components of machine tool (Contd.)
- Lecture 34 : Components of machine tool (Contd.)
- Lecture 35 : Components of machine tool (Contd.)
- Lecture 36 : Demonstration of Micromachining Center
- Week 7: Lecture Material
- Quiz : Assignment 7
- Week 7 Feedback Form

Week 8

Week 9

Week 10

Week 11

Week 12

DOWNLOAD VIDEOS

Text Transcripts

Assignment Detailed Solution

Live Interactive Session

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.

1) Which of the following materials has the widest range of Young's modulus and density? — 1 point

a) Metal
b) Granite
c) Ceramic
d) Foam

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

2) Which of the following material is often used as a packing material? — 1 point

a) Polymer
b) Plastic
c) Foam
d) Elastomers

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
c)

3) Which of the following material(s) is/are most widely used for construction of machine tool and slideways? — 1 point

a) Granite
b) Cast steel
c) Cast iron and aluminium
d) Granite and Cast iron

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

4) What are the constituents of granite which is used as a construction material for machine tool? — 1 point

a) Mica, quartz, and sandstone
b) Sandstone, feldspar, and mica
c) Mica, quartz, and sandstone
d) Quartz, mica, and feldspar

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

5) What is the purpose of choosing steel and granite combination for constructing machine tool? — 0 points

a) It improves damping vibration capacity
b) It increase wear resistance
c) It prevents the problem of stresses and bending in the interfaces
d) It provides excellent endurance life

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
c)

6) According to the definition of basic static load rating — 1 point

a) Diameter of the rolling element is 10 times the total permanent deformation of the rolling element
b) Diameter of the rolling element is 100 times the total permanent deformation of the rolling element
c) Diameter of the rolling element is 1000 times the total permanent deformation of the rolling element
d) Diameter of the rolling element is 10000 times the total permanent deformation of the rolling element

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

7) Assumption in the definition of basic static load rating __ — 1 point

a) Load is constant in magnitude but varying in direction
b) Load is constant in direction but varying in magnitude
c) Load is constant in direction and magnitude
d) Load is varying in direction and magnitude

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
c)

8) According to the definition of basic dynamic load rating — 1 point

a) A bearing can carry 1000000 revolutions with 99% reliability
b) A bearing can carry 100000 revolutions with 99% reliability
c) A bearing can carry 1000000 revolutions with 95% reliability
d) A bearing can carry 1000000 revolutions with 90% reliability

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

9) Backlash in the machine parts affects — 1 point

a) Accuracy in the motion
b) Precision of the motion
c) Force applied by the tool
d) All of the above
e) only (a) and (c)
f) only (b) and (c)

a) b) c) d) e) f)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

10) Geometric error in X direction while traveling in Z direction can be represented as — 1 point

a) EXZZ
b) EZX
c) EZY
d) EXZ

a) b) c) d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)