

(These items were developed by teachers for the Technical Skills Assessment. Below is a sample item for each program standard.)

Question 1 of 15

What manufacturing process produces the smallest amount of waste material?

- ☐ A) Collaborative
- ☐ B) Additive
- ☐ C) Divisive
- ☐ D) Subtractive

Question 2 of 15

What are two ESSENTIAL characteristics of a workstation?

- ☐ A) Safety, green technology
- ☐ B) Functionality, design
- ☐ C) Cleanliness, access
- ☐ D) Cleanliness, safety

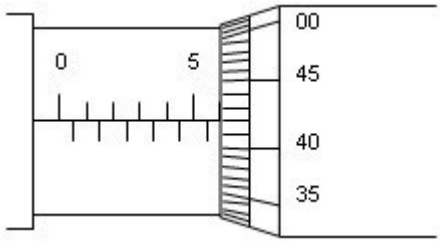
Question 3 of 15

What fit tolerance may require the use of a press?

- ☐ A) Locational Clearance fit (LC)
- ☐ B) Locational Interference fit (LN)
- ☐ C) Running Fit (RF)
- ☐ D) Force or Shrink fit (FN)

Question 4 of 15

What is the CORRECT reading of the metric micrometer shown?



- ☐ A) 6.92 mm
- ☐ B) 5.42 mm
- ☐ C) 6.40 mm
- ☐ D) 5.92 mm

Question 5 of 15

How does tempering change the properties of a hardened piece of tool steel?

- ☐ A) Increases toughness
- ☐ B) Increases brittleness
- ☐ C) Hardens
- ☐ D) Anneals

Question 6 of 15

What is the MOST LIKELY problem while drilling a hole with a new bit on the drill press if it makes a squealing sound?

- ☐ A) Drill feed is too fast.
- ☐ B) Drill RPM is too fast.
- ☐ C) Drill chuck wobbles.
- ☐ D) Drill is dull.

Question 7 of 15

At which angle is the compound rest set to cut a 60-degree standard thread?

- ☐ A) 29.5 degrees
- ☐ B) 35 degrees
- ☐ C) 50 degrees
- ☐ D) 89.5 degrees

Question 8 of 15

What is the PURPOSE of inspecting the condition of cutting tools?

- ☐ A) To define cut
- ☐ B) To determine wear
- ☐ C) To measure surfaces
- ☐ D) To prepare parameters

Question 9 of 15

What is the step AFTER installing a wheel on the surface grinder?

- ☐ A) Check the RPM rating of the wheel.
- ☐ B) Ring test the wheel.
- ☐ C) Dress the wheel.
- ☐ D) Visually inspect the wheel.

Question 10 of 15

What function MUST be activated for a CNC machine to read M01 command?

- ☐ A) Optional stop
- ☐ B) Vice stop
- ☐ C) Emergency stop
- ☐ D) Block delete

Question 11 of 15

Which part of a CNC lathe holds the tools?

- ☐ A) Tool post
- ☐ B) Chuck
- ☐ C) Spindle
- ☐ D) Turret

Question 12 of 15

What is the PURPOSE of the manual jog wheel?

- ☐ A) To change tools
- ☐ B) To move coolant
- ☐ C) To move the axis
- ☐ D) To run the spindle

Question 13 of 15

Which step is part of the CAD process?

- ☐ A) Dry running a program
- ☐ B) Post-processing
- ☐ C) Tool path creation
- ☐ D) Solid modeling

Question 14 of 15

What is CAM?

- ☐ A) Computation Aligned Manufacturing
- ☐ B) Computer Aided Manufacturing
- ☐ C) Communication Advertising and Marketing
- ☐ D) Computer Aided Mainframe

Question 15 of 15

Which file type should be imported into the 3D printing program for printing?

- ☐ A) STL
- ☐ B) PNG
- ☐ C) PWG
- ☐ D) JPEG

Precision Machining Sample Test Answer Key

Question	Answer
1.	B
2.	D
3.	D
4.	D
5.	A
6.	B
7.	A
8.	B
9.	C
10.	A
11.	D
12.	C
13.	D
14.	B
15.	A