

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

Question 1 of 10

Which statement is TRUE when made in reference to a parallel circuit?

- ☐ A) The current is equal in all portions of the circuit.
- ☐ B) The current in amperes can be found by dividing the EMF in volts by the sum of the resistors in ohms.
- ☐ C) The current is no greater than the smallest resistor.
- ☐ D) The total current is equal to the sum of the currents through the individual branches of the circuit.

Question 2 of 10

Which statement describes the BEST use for schematic diagrams?

- ☐ A) Displaying the visual details of individual components in a system
- ☐ B) Depicting a cross-sectional view of a given component
- ☐ C) Troubleshooting system malfunctions
- ☐ D) Showing the overall location of components in a system

Question 3 of 10

In a balance computation of an aircraft from which an item located aft of the datum was removed, what weight composition is used?

- ☐ A) (+) weight X (+) arm (-) moment
- ☐ B) (-) weight X (+) arm (-) moment
- ☐ C) (-) weight X (-) arm (+) moment
- ☐ D) (+) weight X (-) arm (-) moment

Question 4 of 10

What is the color of an AN steel flared tube fitting?

- ☐ A) Black
- ☐ B) Blue
- ☐ C) Silver
- ☐ D) Red

Question 5 of 10

What happens to a heat-treated metal when reheated with a welding torch?

- ☐ A) Reheating has no effect if the part is normalized after heating.
- ☐ B) Reheating can significantly alter a metal's properties in the reheated area.
- ☐ C) Reheating has little or no effect on the metal's properties in the reheated area.
- ☐ D) Reheating has an enhancement effect on the metal's original heat treatment area.

Question 6 of 10

What should be done FIRST when starting to move an aircraft when taxiing?

- ☐ A) Remove gear safety pins
- ☐ B) Monitor the instruments
- ☐ C) Notify the control tower
- ☐ D) Test the brakes

Question 7 of 10

What is the effect of using caustic cleaning products on aluminum structures?

- ☐ A) Passive oxidation
- ☐ B) Molecular breakdown
- ☐ C) Corrosion
- ☐ D) Improved corrosion resistance

Question 8 of 10

What does the signature of an authorized person on the records for maintenance performed indicate when work on an aircraft has been completed satisfactorily?

- ☐ A) Verification that maintenance or alterations were performed using approved data
- ☐ B) Returning the aircraft to a serviceable condition
- ☐ C) Approval for return to service only for work performed
- ☐ D) Acceptable return to service if authorized person holds an inspection authorization

Question 9 of 10

What is the speed of the pinion gear with 14 teeth when driving a spur gear with 42 teeth at 140 RPM?

- ☐ A) 420 RPM
- ☐ B) 252 RPM
- ☐ C) 588 RPM
- ☐ D) 126 RPM

Question 10 of 10

When using magnetic particle inspection, what conditions identify a part with a fatigue crack?

- ☐ A) Discontinuity is in a moderately stressed area
- ☐ B) Discontinuity is found in a non-stressed area
- ☐ C) Discontinuity pattern is straight
- ☐ D) Discontinuity is found in a highly stressed area

Aircraft Mechanics Sample Test Answer Key

Question	Answer
1.	D
2.	C
3.	B
4.	A
5.	B
6.	D
7.	C
8.	C
9.	A
10.	D