

Update notices for this book will be available online at [www.actechbooks.com/revisions.html](http://www.actechbooks.com/revisions.html)  
If you would like to be notified when changes occur, please join our mailing list at [www.actechbooks.com](http://www.actechbooks.com)

VERSION	EFFECTIVE DATE	DESCRIPTION OF REVISION(S)
001	2016.01	Module creation and release.
002	2017.02	Format updates and minor type corrections.
003	2019.11	Submodule 3 revisions. Typo corrections in Submodules 3, 4 and 8.
004	2020.02	Enhanced or modified content within the following Submodules: 13.3: Added Autopilot Modes of Operation 13.4: Reorganized based on Part-66 2018 changes; added content: ADS-B and Datalink; Corrected Figures 4-78 and 4-79. 13.7: Added Fly-By-Wire Failsafe and Fly-By-Wire operation.
004.1	2021.04	Enhanced or modified content within the following Submodules: 13.4: Corrected 150 Mhz to 150 Hz. 13.8: Corrected Figure 8-12; Engine Pressure Ratio (EPR) 14.7 psi to 14.5 psi.
004.2	2022.10	Inclusion of Measurement Standards for clarification, page iv. Minor appearance and format updates.
004.3	2023.04	Minor appearance and format updates.
005	2024.12	Regulatory update for EASA 2023-989 compliance.
005.1	2026.06	Replaced practice questions and answers in Submodule 11.

# SUBMODULE 11 PRACTICE QUESTIONS

---

**Question 11-1**

What is the significance of "cabin differential pressure"?

**Question 11-2**

What device (system) ultimately controls the pressure within the cabin of an aircraft?

**Question 11-3**

What causes a cabin pressure safety valve to open?

**Question 11-4**

What three gauges give indication to the flight crew (or the cabin pressurization computer) of the current pressurization status?

**Question 11-5**

What is the first step in cooling bleed air before it can be used for pressurization or air conditioning?

**Question 11-6**

What is accomplished by adjusting a manual cabin temperature selector?

**Question 11-7**

In what way is water vapor (humidity) removed from air prior to entering the cabin.

**Question 11-8**

What type of vapor cycle refrigerant is being phased out because of environmental reasons?

**Question 11-9**

What is the fundamental theory of vapor cycle air conditioning?

**Question 11-10**

What is the primary safety concern subject to constant monitoring regarding aircraft environmental systems?

# SUBMODULE 11 PRACTICE ANSWERS

---

**Answer 11-1**

It is the pressure which must be contained within pressurized sections of the fuselage.

**Answer 11-2**

The cabin pressure outflow valve.

**Answer 11-3**

If the primary outflow valve fails to open, a preset pressure differential automatically opens the safety valve.

**Answer 11-4**

1. Cabin Altimeter
2. Cabin Rate of Climb Indicator
3. Cabin Differential Pressure Indicator

**Answer 11-5**

It is mixed with the cooler outside air.

**Answer 11-6**

The mixture valve controlling the ratio of bleed air and outside ram air is adjusted.

**Answer 11-7**

Condensing and swirling the humid air caused droplets to form and flow out of a water separator unit.

**Answer 11-8**

R12 dichlorodifluoromethane based systems are being replaced with R134a tetrafluoroethane systems.

**Answer 11-9**

Excess cabin heat is transferred to a liquid refrigerant which then transfers its heat to the outside air.

**Answer 11-10**

Overheating within the pneumatic ducting.