## USAF Academy Flight Training Center

Cessna 172S Aircraft Exam May 2023

## **Instructions**

Complete the following exam using the answer sheet provided. Do not assume information not specifically provided in the questions. Questions are open book. The closed book exam (emergency procedures) will be on a separate answer sheet.

I.	Gener	al
		172S can hold gallons of fuel. Total <b>usable</b> fuel is gallons. a. 43 and 52 b. 56 and 53 c. 48 and 56 d. 52 and 43
	no	e maximum certified takeoff and landing weight for the C-172S in the rmal category is lbs. In the utility category, it is lbs. a. 2500 / 2000 b. 2500 / 2200 c. 2550 / 2000 d. 2550 / 2200
II.	Limita	ntions
		e maximum flap extended speed (Vfe) for the C-172S is IAS. a. 120 / 90 kts b. 110 / 85 kts c. 85 kts d. 110 / 90 mph
		ver Exceed Speed (Vne) in the C-172S is KIAS. a. 158 b. 163 c. 175 d. 180
		ximum Structural Cruising Speed (Vno) in the C-172S is KIAS. a. 118 b. 120 c. 129 d. 163
		e demonstrated crosswind limit in C-172S aircraft is kts. a. 10 b. 15 c. 18 d. 20

III.	Normal Procedures 7. The mixture in the C-172S should be leaned prior to takeoff from fields above feet elevation. a. 7500 b. 6500 c. 3000 d. 2500			
	<ul> <li>8. In balked landing (go-around) climb, reduce the flap setting to immediately after full power is applied.</li> <li>a. 0°</li> <li>b. 10°</li> <li>c. 20°</li> <li>d. 30°</li> </ul>			
	<ul> <li>9. Flap settings greater than are not approved for takeoff.</li> <li>a. 10°</li> <li>b. 20°</li> <li>c. 30°</li> <li>d. 40°</li> </ul>			
	<ul> <li>10. The stall warning horn sounds kts above the stall in all configurations.</li> <li>a. 0 - 5</li> <li>b. 5 - 7</li> <li>c. 5 - 10</li> <li>d. 8 - 10</li> </ul>			
	<ul> <li>11. The best glide speed in the C-172S</li> <li>a. 60</li> <li>b. 65</li> <li>c. 68</li> <li>d. 70</li> </ul>			
IV.	Performance  12. The true airspeed (TAS) in Colorado is always than the indicated airspeed (IAS).  a. Lower  b. Higher  c. No different			
	13. To climb from the academy airfield to 9,500 feet MSL in a C-172S would take minutes, with gallons of fuel used, and distance of NM traveled. Note: Don't add fuel for taxi.  a. 7.5 / 1.3 / 10  b. 7.5 / 2.5 / 14  c. 8.0 / 1.8 / 12  d. 10 / 1.5 / 11			

V.	Airplane Systems  14. The engine in the C-172S is rated at horsepower at RPM.  a. 160, 2500  b. 160, 2700  c. 180, 2700  d. 180, 2800
	<ul> <li>15. There are total fuel sump quick drain valves. Only must be checked during the C-172S preflight if no contaminants are found.</li> <li>a. 3, 3</li> <li>b. 5, 3</li> <li>c. 13, 11</li> <li>d. 15, 13</li> </ul>
	<ul> <li>16. The fuel shutoff valve is located in the C-172S.</li> <li>a. on the floor between the pilot's seats</li> <li>b. above and to the right of the fuel selector control</li> <li>c. below the primer</li> <li>d. under the pilot's/left seat</li> </ul>
	<ul> <li>17. What is the total oil capacity of the C-172S model?</li> <li>a. 6</li> <li>b. 7</li> <li>c. 9</li> <li>d. 10</li> </ul>
	<ul> <li>18. A LOW FUEL annunciator warning will light when either tank drops below gallons for more than 60 seconds.</li> <li>a. 0</li> <li>b. 2</li> <li>c. 5</li> <li>d. 10</li> </ul>
	<ul> <li>19. Priming the engine is completed using:</li> <li>a. Primer knob</li> <li>b. Gravity</li> <li>c. Auxiliary fuel pump</li> <li>d. Priming is not required</li> </ul>
	<ul> <li>20. How can autopilot be disengaged?</li> <li>a. Press A/P disconnect on pilot side yoke</li> <li>b. Press AP on KAP 140</li> <li>c. Pull A/P circuit breaker</li> <li>d. Turn Avionics Master Off</li> <li>e. All of the above</li> </ul>