

USAF Academy
Flight Training Center
Cessna 172 Aircraft Exam
Updated February 2024

Instructions

Complete the following exam using the answer sheet provided. Do not assume information not specifically provided in the questions. You will need the Cessna 172 M/N and P model Information Manuals and the Supplemental Type Certificate for Cessna 172 M model. Questions 1 - 25 are open book. The closed book exam (emergency procedures) will be on a separate answer sheet.

I. General

1. A C-172 M aircraft with standard fuel tanks can hold _____ gallons of fuel. Total **usable** fuel is _____ gallons. Long-range tanks for this model can hold _____ gallons with a total usable fuel of _____ gallons.
 - a. 43, 40 and 52, 50
 - b. 42, 38 and 52, 48
 - c. 42, 38 and 54, 50
 - d. 42, 40 and 52, 54

2. C-172N and P models with standard fuel tanks can hold _____ gallons of fuel. Total usable fuel is _____ gallons. Long-range tanks for these models can hold _____ gallons with a total usable fuel of _____ gallons.
 - a. 42, 40 and 54, 50
 - b. 43, 40 and 52, 48
 - c. 43, 40 and 54, 50
 - d. 42, 44 and 54, 52

For Question 3 and 4 reference the appropriate aircraft's metal binder Supplemental Type Certificate and updated weight and balance information. Our Aircraft are upgraded to 180hp engines, which changes the aircraft weight and balance from the POH.

3. The maximum certified takeoff and landing weight for the C-172 M/N/P in the normal category is _____ lbs. In the utility category, it is _____ lbs.
 - a. 2550 / 2050
 - b. 2450 / 2050
 - c. 2300 / 2000
 - d. 2550 / 2100

4. Due to the 180hp Supplemental Type Certificate upgrade, the maximum flap travel has been reduced from _____° down to _____°.
 - a. 40 / 30
 - b. 45 / 35
 - c. 35 / 25
 - d. 30 / 20

II. Limitations

5. The maximum flap extended speed (Vfe) for the C-172 M & N is _____, while the P is _____.
 - a. 85 KIAS / 100 KIAS
 - b. 85 KIAS / 110 KIAS
 - c. 85 mph / 100 mph
 - d. 90 KIAS / 105 mph

6. The maximum flap extended speed (Vfe) with flaps 10°-30° for the C-172P is ____ kts.
 - a. 110 KIAS
 - b. 85 KIAS
 - c. 95 KIAS
 - d. 85 KCAS

7. Never Exceed Speed (Vne) in the C-172 N is _____, and in the C-172P is _____ kts.
 - a. 128 KIAS / 158 KIAS
 - b. 160 KIAS / 158 KIAS
 - c. 160 KIAS / 127 KIAS
 - d. 155 KIAS / 125 KIAS

8. Maximum Structural Cruising Speed (Vno) in the C-172M&N is _____, while in the C-172P it is _____.
 - a. 128 KIAS / 127 KIAS
 - b. 140 KIAS / 127 KIAS
 - c. 160 KIAS / 127 KIAS
 - d. 155 KIAS / 125 KIAS

9. The demonstrated crosswind limit in C-172 aircraft is ____ kts.
 - a. 10
 - b. 15
 - c. 18
 - d. 20

III. Normal Procedures

10. After starting the engine, the oil gage should show pressure within _____ seconds in the summer and within _____ seconds in very cold weather.
 - a. 30 / 45
 - b. 30 / 60
 - c. 30 / 30
 - d. 60 / 90

11. The mixture in the C-172M/N/P should be leaned prior to takeoff from fields above _____ feet elevation.
- 7500
 - 6500
 - 3000
 - 2500
12. In bailed landing (go-around) climb, reduce the flap setting to _____ immediately after full power is applied.
- 0°
 - 20°
 - 30°
 - 10°
13. Flap settings greater than _____ are not approved for takeoff.
- 10°
 - 20°
 - 30°
 - 40°
14. The stall warning horn sounds _____ kts above the stall in all configurations.
- 5 – 10
 - 0 – 5
 - 5 – 7
 - 8
15. If you enter a spin, the following recovery should be used:
- 1) Throttle – IDLE, Ailerons – NEUTRAL
 - 2) Apply and **hold** full rudder opposite to the direction of rotation
 - 3) Just **after** the rudder reaches the stop, move the control wheel **briskly** forward far enough to brake the stall
 - 4) **Hold** these control inputs until rotation stops
 - 5) As rotation stops, neutralize rudder, and make a smooth recovery from the resulting dive.
- True
 - False
16. The best glide speed in the C-172M, N, or P is _____ knots.
- 70
 - 65
 - 68
 - 60

IV. Performance

17. The true airspeed (TAS) in Colorado is always _____ than the indicated airspeed (IAS).
- a. Lower
 - b. Higher
 - c. No different

18. To climb from the academy airfield to 9,500 feet MSL in a 2400lb C-172 P would take _____ minutes, with _____ gallons of fuel used, and distance of _____ NM traveled.

Note: *Don't add fuel for taxi*

- a. 10 / 1.5 / 11
- b. 9.5 / 1.5 / 13
- c. 8.0 / 1.8 / 12
- d. 7.5 / 2.5 / 14

V. Airplane Systems

19. The engine in the C-172P has _____ spark plug(s) in each cylinder and _____ engine driven magneto(s).

- a. 1, 1
- b. 1, 2
- c. 2, 2
- d. 2, 1

20. Fuel flows by _____ from the two wing tanks to a four-position selector valve in the C-172M/N/P.

- a. Gravity
- b. an electric pump
- c. a hydraulic pump
- d. an aneroid mixture valve

21. The C172 braking system has a single-disc, hydraulically-actuated brake on each main landing gear wheel. Each brake is connected by a hydraulic line to a master cylinder attached to each of the pilot's rudder pedals.

- a. True
- b. False

22. The C-172P model with:

Standard fuel tanks can hold _____ U.S. gallons of fuel,

Extended range fuel tanks hold _____ U.S. gallons.

Total standard unusable fuel is _____ U.S. gallons,

Total extended unusable fuel is _____ U.S. gallons.

- a. 53, 43, 4, 3
- b. 43, 54, 3, 4
- c. 54, 44, 2, 3
- d. 43, 50, 4, 3

23. There are _____ points from which to drain fuel for the C-172P.

- a. 5
- b. 8
- c. 3
- d. 15

24. The fuel shutoff valve is located _____ in the C-172P.

- a. on the floor between the pilots seats
- b. above and to the right of the fuel selector control
- c. below the primer
- d. under the pilot's/left seat

25. What is the oil capacity of the C-172P models?

- a. 8
- b. 10
- c. 6
- d. 7