WCFC C-172 Skyhawk Quiz

Review before : 2027-02-10

Quiz ID : **27492**

Instructor :		Date :
Pilot :	Member # :	Score :

Instructor : Please note the final score (subtract 3.0 points from 100 for each wrong answer) on the checkout form and file the quiz in the Pilot Records folder.

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1 : If the engine-driven fuel pump should fail in flight, the pilot should:

A : Select different power settings and enrichen the mixture

B : Reduce engine power immediately and select a suitable forced landing field

C : Lean the mixture to the recommended lean setting for cruise flight

D : Immediately turn on the auxiliary fuel pump to restore engine power

2 : The correct type of fuel for the C172SP is

A : Aviation 80, 100LL, or 100/130 fuel

B : Automotive high test

C : Aviation 100LL or 100/130 fuel (100LL preferred)

D : Aviation 100LL (light blue) or 100 fuel only

3 : Which of the following is true about the C172SP electrical system?

A : 28 volt direct current electrical system power by a 60 amp alternator and a 24 volt battery located on the firewall

B : 24 volt direct current electrical system powered by a 60 amp alternator and a 24 volt battery

C : A 12-volt system with a 60 amp alternator and a 12 volt negative-ground battery located in the engine compartment

D : It is a 24-volt system with a 24 amp alternator and a battery located under the rear passenger seat similar to the Piper Warrior.

4 : The rated power of the engine as installed in a Cessna 172 SP is

A : 172 HP

B : 14.2 lbs/hp

C : 200 BHP

D : 180 BHP

5 : Best angle-of-climb speed for the C172SP at gross weight at sea level is:

A : 85 KIAS

B : 80 KIAS

C : 62 KIAS

D : 67 KIAS

6 : In the event of a complete engine failure in flight, what is the best glide speed for the C172SP?

A : 105 KIAS

B : 95 KIAS

C : 98 KIAS

D : 68 KIAS

7 : The C172SP engine should not be operated on fewer than how many quarts of oil?

A : 4 quarts

B : 5 quarts

C : 6 quarts minimum, 8 quarts maximum

D : 7.5 pounds minimum, 10 pounds max

8 : Takeoffs and landings should be made with the fuel selector in what position?

A : The fuel selector should be set on BOTH for landing and takeoff

B : It doesn't matter. The tanks are interconnected.

C : Always on the left tank in a left-hand pattern to avoid unporting

D : On the fullest tank

9 : The type of oil in normal use after the initial engine break-in period in the WCFC Skyhawk 172 SP airplanes is:

A : MIL-L-6082 Aviation Grade Straight Mineral Oil

B : MIL-L-22851 Aviation Grade Ashless Dispersant Oil

C : Phillips approved synthetic oil

D : Oil approved by the Textron Continental Service Instruction No. 1014

10 : What is the C172SP speed that corresponds to the following definition and what is its symbol?

- "The speed that should not be exceeded at any time in any operation"

A : 160 KIAS Vne

B : 129 KIAS Vno

C : 163 KIAS Vne

D : 105 KIAS Va

11 : Given these loadings in this C172, what would be a minimally inconvenient loading change that would suffice to bring this aircraft within Normal Category weight and balance limits?

- (Assume BEW=1659.4, Arm=39.277, Moment=65177. These are the actual W&B numbers without wheelpants.)
- Front seats: 145 lb pilot and 45 lb child passenger
- Rear seats: one 200 and one 190 lb passenger
- Fuel: fueled to tabs
- Baggage area 1 (forward of baggage door latch): 50 lbs
- Baggage area 2 (aft of baggage door latch): 50 lbs

A : No change is necessary.

B : Leave 50 lbs of baggage behind.

C : Offload at least one passenger.

D : Ask the 45 pound child in the front seat and the 200 pound rear seat passenger to exchange seats.

12 : The recommended entry altitude for an intentional 6-turn spin and recovery would be _____ feet above ground level.

13 : The total usable quantity of fuel when both left and right tanks are fueled to the bottom of the filler indicator tabs is:

A : 53 U.S. gallons

B : 35 U.S. gallons

C : 48 U.S. gallons

D : 44 U.S. gallons

14 : In the event of an engine failure in flight, with the best glide speed established, the prop windmilling, and no wind, what height above terrain would be required for the C172 to glide 12 miles?

A : 5000 feet

B : 7000 feet

C : 8000 feet

D : 12000 feet

15 : If over-priming has flooded the engine, the recommended starting procedure is as follows:

A : Turn off the auxiliary fuel pump, place mixture to idle cutoff position, open throttle 1/2 travel to fully open and crank the engineWhen engine fires, advance mixture to full rich and retard throttle promptly.

B : Turn off the auxiliary fuel pump, place mixture to full rich until a stable fuel flow is indicated

C : Open throttle 1/4 (one quarter) inch, set mixture to idle cutoff, and advance mixture only after start

D : Open throttle 1/4 (one quarter) inch, set mixture to full rich, and prime before starting

16 : Stall speed, power-off, without flaps for the C172SP is

A : 53 KIAS

B : 53 KCAS

C : 48 KCAS

D : 40 KIAS

17 : In hours and minutes, what would be the longest VFR cross country flight leg a WCFC member may plan in a WCFC C172 while complying with WCFC SOP IV-3? Assume a cruise altitude of 6,000 feet, 65% power, standard temperature, and maximum usable fuel to begin. Assume the maximum takeoff weight in the Normal Category. Assume the leaning procedure specified in the performance chart. Round to the nearest minute as necessary.

A : 5 hours and 53 minutes

B : 4 hours and 53 minutes

C : 3 hours and 45 minutes

D : 4.5 hours

18 : When the engine is operating and the master switch is ON, the ammeter, located on the lower left side of the instrument panel, indicates

A : The voltage supplied to the primary bus by the alternator

B : The voltage of the battery

C : The battery discharge rate if the alternator is not functioning

D : The current supplied by the generator to the primary bus and battery

19 : At 2200 pounds the normal category maneuvering speed published for the C172SP is:

A : 95 KIAS

B : 98 KIAS

C : 102 KIAS

D : 105 KIAS

20 : What is the recommended action for an excessive rate of charge and what harm might be done?

A : If the amperage annunciator light illuminates, check the voltage gauge and if the voltage has dropped below 24 volts, land as soon as practical because low voltage will be insufficient to generate an adequate spark in the cylinders.

B : If an excessive rate of charge is noted, turn off the alternator and immediately terminate the flight because insufficient voltage will not provide sufficient spark to continue engine operation.

C : If an excessive rate of charge is noted, turn off the BATTERY side of the master switch, which will protect the electronic components.

D : If an excessive rate of charge is noted, Turn off the alternator, shed load, and terminate flight as soon as practical. An excessive rate of charge can damage electrical componenets and overheat the battery and evaporate electrolyte.

21 : This G5 is configured with a ...



A : sky pointer

B : ground pointer

22 : If the "low voltage" warning light illuminates in flight, what actions should be taken to attempt to restore charging function?

A : None. The annunciator is advisory in nature. Report it to maintenance (squawk it) after the flight

B : Alternator off / electrical equipment off / terminate the flight immediately

C : Avionics master off / alternator (field) circuit breaker in / master off / master on / low voltage annunciator check off / Avionics master on

D : Alternator field circuit breaker off / Magnetos off / monitor ammeter for discharge condition

23 : Above what speed should we not make rapid control movements when operating in the utility category?

A : 98 CAS

B : 103 KIAS

C : Vne

D : 98 KIAS

24 : Abrupt use of controls is prohibited above what speed when operated in the normal category?

A : 105 CAS

B : 130 KIAS

C : 105 KIAS

D : Vne

25 : A pilot observing an altimeter that does not respond to changes in altitude should

A : Break the case of the vertical speed indicator to admit static air to the system

B : Suspect a pitot tube blockage and turn on the pitot heat

C : Turn on the alternate static source and expect maximum airspeed variation of 4 knots from normal and 30 feet of altitude over the normal range of flight

D : Suspect a broken or leaking static line and squawk it for maintenance

26 : When starting a hot (recently-operated) C172SP in hot weather

A : The injector nozzle lines remain full of fuel

B : Priming will be required to overcome fuel vaporization

C : Start with both throttle and mixture fully open to assure an adequate flow of cool, non-vaporized fuel

D : Starting is facilitated by advancing the mixture to 1/3 open as soon as the engine starts and then advancing to full rich as power is developed.

27 : According to the Cessna checklist in the C172SP AFM/POH the auxiliary boost pump should be ON for:

A : Priming, starting, takeoff and landing

B : Priming, takeoff and landing

C : Priming and starting

D : Priming only

28 : We are taking the C172SP to the mountains. We will be landing and departing the private airport at Boone, NC, NC14, located in the northwest corner of the NORTH side of the Charlotte Sectional. Since we are unfamiliar with the airport, we will assume that we may have the proverbial 50-foot obstacles to clear on landing and takeoff. We are at maximum gross weight. Assume a hot summer day a with 30-degree Celsius temperature. We will use the recommended short field technique found in the POH for both landing and takeoff and have calm winds and a paved, level runway. What would our landing and takeoff distances be?

- Landing? ____ feet
- Takeoff? ____ feet

29 : Please calculate the CG (Center of Gravity) at takeoff for an imaginary C172SP with the following characteristics:
- BEW=1690, Moment (lb. inches/1000)=69.29

The aircraft is loaded as follows:
- Fuel=53 gallons
- Front seat pilot and passenger=360 pounds
- No rear passengers
- Baggage in Area #1 = 60 pounds
- Use the average seating positions and Stations given in the Weight and Balance Section of the POH or Information Manual
- Allow 1.5 gallons of fuel for start, taxi, and runup

Note: We are calculating the Center of Gravity, not the Moment
- Use the information in Section 6 (Weight and Balance) in the Cessna 172S Information Manual including Figures 6-3, 6-5 and Figure 6-8.

A : 42.64

B : 42.66

C : 103144

D : 103574

30 : At a pressure altitude of 6000 feet under standard temperature conditions, leaned as recommended in the POH, at 65% power, the Cessna 172 SP burns approximately

A : 10.6 gallons per hour

B : 9.0 gallons per hour

C : 10.5 gallons per hour

D : 10.4 gallons per hour