

1. Do not operate with less than ___ quarts of oil; fill to ___ quarts for normal flights less than 3 hours.
 - a. 4 / 8
 - b. 8 / 12
 - c. 10 / 11
 - d. 9 / 10

2. The engine in the 1975 C-182P is a
 - a. Lycoming IO-520J 250 HP
 - b. Continental O450T 330 HP
 - c. Continental O-470S 230 HP
 - d. Lycoming O-360A 180 HP

3. Normal takeoff procedure is to raise the nose wheel at ___ mph and climb at ___ mph until all obstacles are cleared.
 - a. 65 / 95
 - b. 60 / 90
 - c. 55 / 80
 - d. 75 / 95

4. The flap setting for a maximum-performance (short-field) takeoff is ___ degrees.
 - a. 30
 - b. 10
 - c. 35
 - d. 20

5. Normal takeoffs are accomplished using full throttle and 2,600 RPM. One reaching a safe altitude, the pilot may reduce power to normal cruise climb power of ___ in. manifold pressure and _____ RPM.
 - a. 20 / 2200
 - b. 22 / 2500
 - c. 23 / 2350
 - d. 23 / 2450

6. Standard fuel load before parking the C-182P at the RAFA is ___ gallons per side.
 - a. 34.5
 - b. 39
 - c. 10
 - d. 70

7. The best rate of climb (Vy), flaps up, for the C-182P is:
 - a. 78 mph
 - b. 66 mph
 - c. 89 mph
 - d. 70 mph

15. Maneuvering speed (V_A) at max gross weight is:
- a. 109 mph b. 100 mph c. 145 mph d. 126 mph
16. The maximum extended speed for the first 10° of flaps is _____. The remaining flaps (20 – 40 deg) may be extended when at or below _____:
- a. 126 / 68 mph b. 160 / 110 mph c. 198 / 110 mph d. 160 / 85 mph
17. As shown on the airspeed indicator, the stall speeds clean (no flaps) and dirty (full flaps) are, respectively:
- a. 47 / 41 mph b. 63 / 53 mph c. 68 / 63 mph d. 57 / 52 mph
18. Maximum glide airspeed is:
- a. 96 mph b. 105 mph c. 85 mph d. 80 mph
19. The maximum certificated weight for takeoff and landing is:
- a. 3100 lbs b. 2900 lbs c. 2950 lbs d. 2775 lbs
20. You are to depart an airport with a field elevation of 3750 ft, outside temperature of 45° f, an aircraft weight of 2,950 lbs, flaps 20°, hard runway surface, and a welcomed headwind of 10 knots. What is the total distance to clear a 50' obstacle.
- a. 1930' b. 1397' c. 1807' d. 1015'
21. In the event of an electrical fire in flight, the first action of the pilot is to:
- a. Activate fire extinguisher c. Turn OFF Master switch
b. Open cabin vents d. Pull circuit breakers

22. Compute the total weight and center of gravity for the C-182 airplane loaded in the following manner:

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Airplane	1826.1		65337.29
Fuel, 50 gals	300.0	48.0	14400.00
Pilot & Passenger	370.0	37.0	13690.00
Second Row Passenger	150.0		
Baggage Area "A"	50.0		

(note: ascertaining the average arm from the sample airplane in POH will provide better result for CG answer)

- | | |
|---------------------------|---------------------------|
| a. Weight 2696.1, CG 52.1 | c. Weight 2845.1, CG 40.2 |
| b. Weight 2845.1, CG 39.4 | d. Weight 2696.1, CG 40.5 |

23. The C-182P is certificated in which airplane category?

- | | | | |
|------------|-----------|------------|--------------|
| a. Regular | b. Normal | c. Utility | d. Transport |
|------------|-----------|------------|--------------|

24. Cruising at 7,500 feet, mixture properly leaned, 2300 RPM at approximately 66% brake horsepower, a pilot can expect a true airspeed and fuel consumption of:

- | | |
|-----------------------|-----------------------|
| a. 158 mph / 12.2 gph | c. 154 mph / 11.6 gph |
| b. 149 mph / 11.4 gph | d. 144 mph / 10.7 gph |

25. Recent safety articles discuss the nose heavy tendency during landing of the C-182 when operating with front seat occupants only. In some cases, it is recommended that a maximum of 20 deg of flaps be used when landing with this slight forward CG configuration. Caution should be taken when in this configuration as it is also known that the final power reduction/chop over the landing threshold will result in a:

- | | |
|--------------------------------------|---------------------------------------------|
| a. Pitch up and possible tail strike | c. Pitch down and possible main gear strike |
| b. Pitch up and a "float" | d. Pitch down and possible nose gear strike |