

References: Pilot's Operating Handbook for the 1975 Cessna 182P Model; RAFA SOP, Refueling Instructions (in front of POH and airplane flyaway book), and The Pilots Handbook of Aeronautical Knowledge.

1. Do not operate with less than \_\_\_ quarts of oil for normal flights of less than 3 hours; fill to \_\_\_ quarts for extended flights.
  - a. 4 / 8
  - b. 8 / 12
  - c. 7 / 11
  - d. 10 / 12
2. The engine in the 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.
  - 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. Whenever possible, reduce power to normal cruise climb power of \_\_\_ in. manifold pressure and \_\_\_\_\_ RPM as soon as practical to reduce engine wear.
  - a. 20 / 2200
  - b. 22 / 2500
  - c. 23 / 2350
  - d. 23 / 2450
6. According to the POH, how much of that fuel is unusable in each tank?
  - a. 3 gallons
  - b. 5 gallons
  - c. 10 gallons
  - d. 1 gallon
7. The best rate of climb ( $V_y$ ), flaps up, for this C-182 is:
  - a. 78 mph
  - b. 66 mph
  - c. 89 mph
  - d. 70 mph
8. The best angle of climb ( $V_x$ ) (obstacle-clearance speed) with 20° flaps is \_\_\_ mph and with 0° flaps (clean) is \_\_\_ mph.
  - a. 78 / 80
  - b. 60 / 70
  - c. 70 / 80
  - d. 69 / 75
9. The before landing checklist requires the pilot to set the propeller to \_\_\_\_\_ RPM.

- a. 2600      b. 2500      c. 2450      d. High RPM

10. Final approach speed is \_\_\_ to \_\_\_ mph with flaps extended.

- a. 70-80      b. 70-85      c. 65-75      d. 60-90

11. In the event of an electrical fire in flight, the first action of the pilot should be:

- a. Activate fire extinguisher      c. Cabin vent open  
b. Master Switch off      d. Check circuit breakers

12. With the long range tanks installed on our C-182P and as stated in Cessna's Revised Fuel Quantity Data sheet (found near front of manual), the maximum usable fuel capacity is \_\_\_\_\_gallons.

- a. 40      b. 85      c. 75      d. 65

13. Fuel from both tanks flows by gravity to a selector valve; this valve should be in the BOTH position:

- a. Always      c. For takeoff, climb, and landing  
b. Only when cruising      d. When taxiing to prevent sloshing

14. This airplane is equipped with a \_\_\_ volt battery supplied by a \_\_\_ volt, engine-driven alternator. The battery is located \_\_\_\_\_:

- a. 24 / 18 / under the seat      c. 24 / 28 / right side of firewall  
b. 12 / 22 / in the nose      d. 12 / 14 / aft of baggage compartment

15. To determine proper alternator and voltage regulator operation prior to takeoff, you may load the electrical system by turning on the \_\_\_\_\_. If the ammeter remains within \_\_\_\_\_ of zero, the system is operating properly.

- a. Navigation lights / two inches      c. Heater blower / two dots  
b. Prop control / two needle widths      d. Landing light(s) / one needle width

16. Power setting for normal enroute cruise climb of 100 to 120 mph should be accomplished at \_\_\_ inches manifold pressure and \_\_\_\_\_ RPM.

- a. 23 / 2450      b. 25 / 2300      c. 22 / 2400      d. 22 / 2600

17. The zero/full flap stall speeds as shown on the ASI:

- a. 55/60 MPH
- b. 70/73 Knots
- c. 66/66 MPH
- d. 68/63 MPH

18. The engine is tightly cowled for control of cooling. Cowl flaps should be open during \_\_\_\_\_ and adjusted to maintain the cylinder head temperature at about \_\_\_\_\_ of the green arc during cruise.

- a. Taxi & Takeoff, 2/3
- b. At all times, Halfway
- c. Never, 1/2
- d. Only when parked, The bottom

19. For optimum operation of the engine in cold weather:

- a. Crank the engine with carburetor heat on
- b. Use carburetor heat during warm-up
- c. Use the minimum carburetor heat for smooth operation during takeoff, climb, and cruise
- d. Answers b. and c.

20. Maneuvering speed ( $V_A$ ), the maximum speed at which abrupt control movements may be used, is:

- a. 109 mph
- b. 100 mph
- c. 145 mph
- d. 126 mph

21. The first 10° of flaps may be lowered when airspeed is \_\_\_\_\_. The remaining flaps (20-40 deg) may be extended when at or below \_\_\_\_\_:

- a. 89/63 mph
- b. 160/110 mph
- c. 175/110 mph
- d. 110/85 mph

22. The maximum certificated weight for takeoff and landing is:

- a. 3100 lbs.
- b. 2900 lbs.
- c. 2950 lbs
- d. 2775 lbs.

23. You are preparing for a short field takeoff. The plane weighs 2,950 lbs, there is a 10 knot headwind, the temperature is 50° F, pressure altitude is 2,500 feet and you have a hard surface runway.. Determine the ground roll and the total distance to clear a 50 foot obstacle.

- a. 325 / 955
- b. 595 / 1625
- c. 595/1245
- d. 490 / 1245

24. When performing the magneto check during run up, set RPM to 1700, and note RPM drop on right position “R” and left position “L”. RPM drop should not exceed \_\_\_\_\_ RPM on either magneto or show greater than \_\_\_\_\_RPM between magnetos.

- a. 175/25.
- b. 160/40,
- c. 150/50
- d. 200/150

25. Maximum glide airspeed ( $V_{BG}$ ) is:

- a. 96 mph
- b. 105 mph
- c. 85 mph
- d. 80 mph

26. Compute the center of gravity for this airplane with full fuel, 210 lb. pilot, and a 230 lb. passenger in the front seats.

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
<u>Airplane</u>	1826.28	36.28	
<u>Fuel (75 Gallons)</u>		48.0	21600.0
<u>Pilot &amp; Passenger</u>	440.0		16280.0
<u>Total</u>	2716.28		

- a. 45.67 inches
- b. 38.34 inches
- c. 23.16 inches
- d. 41.29 inches

27. Is N1298M approved for intentional spins?

- a. Yes
- b. No

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

- a. 158 mph / 12.2 gph
- b. 149 mph / 11.4 gph
- c. 154 mph / 12.4 gph
- d. 144 mph / 10.7 gph

29. With respect to leaning the mixture:

- a. Peak EGT operation is not authorized except to establish peak for reference

- b. Operation on the lean side of peak, or within 25° of peak, is not permitted
  - c. If engine roughness occurs prior to peak EGT, use the onset of engine roughness as the reference point for leaning rather than peak EGT
  - d. All of the above are good practices
30. An unexplained drop in manifold pressure and eventual engine roughness may result from the formation of carburetor ice. To clear the ice:
- a. Apply full carburetor heat
  - b. Apply full power
  - c. Descend to a warmer temperature
  - d. Both A & B
31. The emergency locator transmitter is located in the tail cone behind the baggage compartment bulkhead area. To check for inadvertent activation of the ELT,
- a. Turn on the aircraft radio and monitor frequency 122.2
  - b. Monitor frequency 121.5 for the emergency tone
  - c. Call approach control and ask if they hear an ELT
  - d. Stand beside the airplane and listen for the emergency tone
32. During cruise flight you notice a rise in oil temperature and a loss of oil pressure. What should you suspect?
- a. Engine overheating due to excessive leaning.
  - b. A magneto has failed causing delayed detonation
  - c. Reason to expect imminent engine failure (POH 3-8)
  - d. Reading errors due to instrumentation failure.