PILOT_____

INSTRUCTOR_____

DATE_____

Cessna 172R 6-Month Quiz **Tail: N6121V** **6-23-2004**

1. Maximum normal category takeoff gross weight: _____ lbs.
   Useful normal category load: _____ lbs.
   Empty weight: _____ lbs.

2. What is the maximum landing weight? _____

3. Maximum baggage load "A" ____ , "B" ____ . "A" + "B" _____

4. Engine manufacturer _____ , BHP _____@ _____RPM.

5. Propeller type _____ .

6. Fuel capacity of 6121V _____ gals, usable fuel _____ gals.

7. How many fuel system drains are there? _____, where are they located? _____ _____
   _____

8. What are the values for the following (indicated) airspeeds?

Vso	_____	
Vs	_____	
Vx	_____	
Vy	_____	
Va	_____	(at max gross weight)
Vno	_____	
Vne	_____	
Takeoff rotate	_____	
Best glide	_____	(at max gross weight)
Go around	_____	at Flaps _____°
Vle	_____	
Vlo	_____	

   Many retractable gear airplanes operate with a difference between Vle and Vlo speeds.
   Why? _____

9. What is the oil capacity_____.
   a. Minimum oil capacity for short duration flights _____.
   b. Normal oil capacity for flights less than 3 hours _____.
   c. Oil capacity for extended flights _____.

10. What are the approved fuel grades / colors? _____/ _____, _____/_____.

11. Under what category is this airplane certified? _____

12. What maneuvering limits are imposed on this airplane?
_____

13. What prevents landing gear retraction during ground operations and where is it located?
_____ .

14. Should a landing gear position indicating light fail to illuminate, what can be done to verify that the circuit is operating properly? _____

15. Where is the hydraulic power pack located? _____

16. When in the traffic pattern, the downwind leg should be flown ____ of I405.

17. At what altitude should a pilot cross the "white water tower" when directed to cross over it on the 45? _____

18. On approach for landing, what is the minimum descent altitude over the noise sensitive areas of Kennydale and Renton East Hill? _____

19. What concerns override noise abatement procedures? _____ and _____

20. In BEFA complex aircraft, after takeoff the pilot should reduce power to and propeller RPM to _____ at or below what altitude? _____

21. In BEFA complex aircraft, on approach for landing, the pilot should not increase the propeller to full until power has been reduced to a maximum of how many inches Hg? _____.

22. What provision is there to check the hydraulic fluid level?_____.

23. At what intervals of time should the hydraulic fluid level be checked?_____.

24. What are the steps to be taken if the landing gear fails to retract?_____
_____

25. What are the two ways to activate the landing gear warning horn so that an inadvertent gear up landing can be prevented?_____

26. Electrical energy is provided by a _____volt, direct driven system powered by an engine driven _____amp alternator. What is the battery voltage and amp-hour rating?_____

27. During engine starting and shut-down procedures, what action should be taken regarding the avionics?_____

28. What steps should be taken if the electrical system malfunctions and the over voltage light illuminates?_____

29. What is the procedure during cruise if the ammeter indicates a steady discharge?_____

30. During normal operation in cruise flight, should the fuel tank indicator suddenly register empty, what other instruments should be checked in order to determine if there is a zero fuel problem or an electrical problem?_____

31. During cruise flight, the cowl flaps should be _____. This position may be altered as a function of what instrument reading?_____

32. If the fuel pressure falls below _____PSI, what action should be taken to maintain adequate pressure to the engine?_____

33. If an engine failure occurs immediately after take-off what is the best airspeed to achieve with flaps up? _____. With flaps down? _____.

34. What is the desired precautionary landing speed with engine power? _____.

35. What are the desired speeds for landing without engine power with flaps up? _____. With the flaps down? _____.

36. Determine the take-off distance and landing distance for the following conditions: Full fuel and maximum gross weight. Take-off conditions – runway 13, field PA 2000 feet, temperature 85F, wind 120/10, grass surface. Landing conditions – runway 25, field PA 1000 feet, temperature 70F, wind 240/20 grass surface. Find the ground roll _____and total take-off distance over a 50 foot obstacle _____ . Find the landing distance over a 50 foot obstacle , and the ground roll _____.

37. In s fuel critical situation, what is the best altitude (approximately), standard temperature day, for the best range? _____. What is the MP/RPM/KTAS for the best range ____, _____,_____, which equals what % BHP? _____. (Consider the fact that if a climb is necessary to reach optimum altitude, more fuel will be consumed and the altitude advantage will be lost). What is the best altitude for best endurance? _____.

38. For a minimum of one hour of usable fuel in the tanks upon landing, how do you determine the number of gallons this represents? _____. What is your estimate of one hour of usable fuel?_____ .

39. What is the significance of the yellow arc on the carburetor air temp gage?
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