## **Runway Aviation**

## Pre-solo Written Exam

Name:

Date:

Airplane Make/Model:

Answer the following questions in the space provided, using the FARs, AIM, AFD, and POH. If you reference one of these sources for an answer, be sure to note it for your future reference.

Note: This is not a pass or fail test!!! Many of the Questions may seam like trick Questions but they are merely to stimulate you thinking and generate a dialog between you and your instructor. So relax and have some fun with it!

1. What type of engine does the aircraft have?

2. What is the engine horsepower?	
3. How many gallons of useful fuel does the aircraft hold?	
4. What type of oil should be used in this engine?	
5. What type of coolant is in the aircraft?	
6. Please define in your own words and list the speed for each of the following in the air	rcraft:
Vr	
Vx	
Vy	
Best Glide	
Vne	
Vno	
Va	
Vfe	
Vs1	
Vso	
7. What is the maximum demonstrated crosswind component for the aircraft?	
8. What is the service ceiling of the aircraft?	
9. What is take off the distance to clear a 50 foot obstacle on a standard day?	
10. What is landing the distance over a 50 foot obstacle on a standard day?	
11. What is the maximum RPM setting?	

12. Please describe the loss of engine procedures for the aircraft.

- 13. What is the maximum gross weight of the aircraft?
- 14. What is the empty weight of the aircraft?
- 15. What is the useful load of the aircraft?\_\_\_\_
- 16. With full fuel, how much weight can you carry in the aircraft?
- 17. What preflight actions are required before a flight not in the vicinity of an airport?
- 18. How many hours are required between consuming alcohol and flying?
- 19. Why is it necessary to drain fuel from the fuel sumps? When should this be done?
- 20. What type and grade of fuel is used in the aircraft?
- 21. How do you check the oil level in the aircraft?
- 22. Will the engine run with the master switch turned off?
- 23. Why\_\_\_\_\_
- 24. What is the maximum allowable flap setting for takeoff in the aircraft?
- 25. What documents and endorsements are you required having in your possession to legally operate the airplane as a student pilot?
- 26. Do you need your logbook in your possession when you fly solo? Why/Why not?
- 27. During a magneto check, what is the maximum RPM drop?
- 28. Draw a runway and a traffic pattern and label each leg.

- 29. Which turn direction is standard for a traffic pattern?
- 30. How do you enter and exit the traffic pattern at an uncontrolled airport?
- 31. Describe "Wake turbulence".
- 32. In which type of aircraft and in which configuration is this most prominent?
- 33. What is proper procedure to avoid wake turbulence?
- 34. As PIC When are you required to wear a safety lap belt? And when is a Shoulder harness required?
- 35. What must a pilot do before entering Class D airspace?
- 36. What is the minimum altitude you can fly anywhere?
- 37. Over congested areas?
- 38. Over other than congested areas?
- 39. Over sparsely populated areas or open water?
- 40. List the documents that must be aboard the aircraft at all times.
- 41. Who has the final authority and responsibility for the operation of the aircraft when you are

flying solo?

- 42. Can you operate in Class B airspace as a student pilot?
- 43. What is the minimum fuel requirement for VFR day conditions?
- 44. If the altimeter setting is not available at an airport, what setting should you use before departing on a local flight?
- 45. What are the limitations of a student pilot, as stated in Part 61.89 of the Federal Aviation Regulations?

46. What are the additional limitations on your solo endorsement?

47. What must you do before practicing maneuvers?

- 48. When practicing Steep Turns, Stalls, and Slow Flight, the entry altitude must allow a recovery to be completed no lower than \_\_\_\_\_\_\_feet agl.
- 49. When two aircraft of the same category are converging head-on, which way do you turn to avoid the other aircraft?
- 50. Give three situations that would necessitate a go-around.

List the procedure for a go-around.

Student Signature\_\_\_\_\_

Instructor Signature\_\_\_\_\_

Date of Review/Logbook Endorsement