Pre-Solo Written Knowledge Exam

Name: _____ Date: _____

Multiple Choice

- 1. Which combination of atmospheric conditions will reduce aircraft takeoff and climb performance?
 - a. Low temperature, low relative humidity, and low density altitude.
 - b. High temperature, low relative humidity, and low density altitude.
 - c. High temperature, high relative humidity, and high density altitude.
- 2. Which type of weather briefing should a pilot request when departing within the hour, if no preliminary weather information has been received?
 - a. An outlook briefing.
 - b. An abbreviated briefing.
 - c. A standard briefing.
- 3. What conditions are necessary for the formation of thunderstorms?
 - a. High humidity, lifting force, and unstable conditions.
 - b. High humidity, high temperature, and cumulus clouds.
 - c. Lifting force, moist air, and extensive cloud cover.
- 4. Who is responsible for making the "go/no go" decision for each flight?
 - a. Pilot-in-command.
 - b. Certified flight instructor.
 - c. Chief flight instructor.
- 5. What information is necessary in order to make a "go/no go" decision?
 - a. Permission from the chief flight instructor, chief mechanic, and weather briefer.
 - b. Acceptable weather conditions, an airworthy aircraft, and an airworthy pilot.
 - c. Permission from the weather briefer, an airworthy aircraft, and an airworthy pilot.
- 6. Two-way radio communication must be established with the Air Traffic Control facility having jurisdiction over the area prior to entering which class airspace?
 - a. Class C
 - b. Class E
 - c. Class G

- 7. Unless otherwise authorized, two-way radio communications with Air Traffic Control are required for landings and takeoffs?
 - a. At all tower controlled airports within Class D airspace only when weather conditions are less than VFR.
 - b. At all tower controlled airports regardless of weather conditions.
 - c. At all tower controlled airports only when weather conditions are less than VFR.
- 8. Which is the correct traffic pattern departure procedure to use at an uncontrolled airport?
 - a. Comply with any FAA traffic pattern established for the airport.
 - b. Depart in any direction consistent with safety after crossing the airport boundary.
 - c. Make all turns to the left.
- 9. In headwind conditions, the groundspeed will ______ the airspeed?
 - a. Exceed
 - b. Be less than
 - c. Be the same as
- 10. To maintain a desired track over the ground, apply?
 - a. A wind correction angle into the wind.
 - b. A wind correction angle out of the wind.
 - c. Power and a steeper bank angle.
- 11. The numbers 9 and 27 on a runway indicate that the runway is oriented approximately?
 - a. 009 and 027 degrees true
 - b. 090 and 270 degrees true
 - c. 090 and 270 degrees magnetic
- 12. In an in-flight emergency requiring emergency action, the pilot-in-command?
 - a. May deviate from any rule of FAR Part 91 to the extent required to meet that emergency.
 - b. Must not deviate from any rule of FAR Part 91.
 - c. May deviate from any rule of FAR Part 91 but only after receiving prior permission from ATC.
- 13. When approaching another aircraft head-on, each pilot must alter his/her course?
 - a. To the left
 - b. To the right
 - c. With a descent

- 14. Normal and crosswind takeoffs and landings should take place?
 - a. With the wind
 - b. Into the wind
 - c. Perpendicular to the wind
- 15. When you fly solo, you are pilot-in-command, and you are required to have in your personal possession a?
 - a. Pilot certificate and logbook
 - b. Pilot certificate, government issued photo-ID, and medical certificate
 - c. CFI solo endorsement, and copy of the FAR/AIM
- 16. A person may not act as a crewmember of a civil aircraft if alcoholic beverages have been consumed by that person within the preceding?
 - a. 8 hours
 - b. 12 hours
 - c. 24 hours

Open-Ended/Fill-In The Blanks

17. Fill in the V-speed definitions and the corresponding airspeed:

V-Speed	Definition	Airspeed
Vr		
VS1		
VS0		
VX		
VY		
VFE		
VA		
VNO		

VNE	
Best Glide	

- 18. What grade of fuel may be used in a C172? Max total and usable gallons?
- 19. Briefly outline the spin recovery procedure:

- 20. During the magneto check in the run-up checklist, what is the maximum allowable RPM drop and what is the maximum difference between the two magnetos?
- 21. What is the traffic pattern altitude at KOKK in the aircraft you are using?
- 22. What does CTAF stand for, and what is the CTAF frequency at KOKK?
- 23. When two aircraft are on final approach at the same time, which aircraft has right of way?
- 24. If two aircraft are converging, which aircraft has right of way?

- 25. What is the minimum fuel reserve for day VFR flight, and on what cruise speed is the fuel reserve based?
- 26. During engine run up, you cause rocks, debris, and propeller blast to be directed toward another aircraft or person. Could this be considered careless or reckless operation of an aircraft?
- 27. Describe the powerplant:

- 28. What aircraft certificates and documents must be on board during flight?
 - A -
 - R -
 - R -
 - O -
 - W -

Is there any exception to the above documents?

29. Describe what actions you would take if you experienced engine-failure in the following conditions:

After rotation with usable runway left:

50ft after rotation with no useable runway left:

Downwind in the traffic pattern:

In the practice area: