

# Pre-solo Knowledge Test

1. Who is responsible for ensuring an aircraft is in airworthy condition prior to any flight?
2. If two aircraft of the same category are converging on a head-on collision course with one another, what action should be taken by which pilot?
3. Describe the minimum safe altitudes at which you may operate an aircraft.
4. What is the purpose of adjusting the fuel to air mixture for density altitude?
5. Describe the pitot/static system and which instruments would be affected by a clog in either system's port.
6. What are the purpose of wing flaps and describe how they work?
7. Why is it important to stay coordinated during a stall?
8. In the event of an engine failure while in-flight, what is the first thing you should do?

9. What certificate(s) are required to be on board the aircraft prior to flight in order for the aircraft to be considered airworthy?
10. What are the indications of carburetor icing and what can a pilot expect when applying carburetor heat to alleviate or prevent ice?
11. Who controls which areas of an airport?
- a) Taxiways at a towered airport?
  - b) Taxiways at an untowered airport?
  - c) Runways at a towered airport?
  - d) Runways at an untowered airport?
  - e) Local airspace above a towered airport?
  - f) Local airspace above an untowered airport?
12. What is a hold short line, what does it look like, and where is it located?
13. What actions must be performed prior to crossing any hold short lines at an airport?
14. To legally operate in the following airspaces, what equipment is needed?
- a) Class A
  - b) Class B
  - c) Class C
  - d) Class D
  - e) Class E

15. What actions are required prior to entering the following airspaces
- a) Class A
  - b) Class B
  - c) Class C
  - d) Class D
  - e) Class E
16. During a landing, when should a pilot go-around and what is the proper procedure for doing so?
17. What is the proper procedure to recover from a stall? A spin?
18. How should a pilot address an engine fire on the ground during engine start?
19. What should a pilot do if an engine failure occurs immediately after takeoff with no usable runway remaining?
20. What action(s) can be taken to cool an overheating engine while in-flight?
21. Describe detonation and pre-ignition and list possible causes of each.
22. When can a student pilot log PIC time?

23. What limitations are placed on a student pilot's operating privileges?

24. What pre-flight information/action is required before any flight?

25. What certificates and documents must a person have in his/her possession to act as pilot-in-command? Where should they be kept?

26. List the following information for your aircraft:

- a) Aircraft make and model \_\_\_\_\_
- b) Empty weight \_\_\_\_\_ Gross weight \_\_\_\_\_
- c) Total fuel \_\_\_\_\_ Useable fuel \_\_\_\_\_
- d) Oil minimum \_\_\_\_\_ Oil maximum \_\_\_\_\_

V-speed	How is it marked?	What is it?
V <sub>s0</sub>		
V <sub>s1</sub>		
V <sub>r</sub>		
V <sub>y</sub>		
V <sub>g</sub>		
V <sub>fe</sub>		
V <sub>no</sub>		
V <sub>ne</sub>		

27. What is the maximum demonstrated crosswind component for your aircraft and what does that mean?

28. When are you required to have the following light systems operating?

- a) Beacon?
- b) Strobes?
- c) Position lights?
- d) Landing light?

29. Describe the electrical system on your aircraft.

30. Who has the final authority in determining whether it is safe to fly?

31. What limitations will you set for yourself when solo flying?

32. How do you determine whether or not you are physically and mentally fit to fly?