

# Stage 2 Exam

## Solo

### Pre-Solo Written

Name: \_\_\_\_\_

Grade: \_\_\_\_\_ Date: \_\_\_\_\_

Instructor: \_\_\_\_\_

*Circle the most correct answer choice.*

1. If the outside air temperature (OAT) at a given altitude is warmer than standard, the density altitude is
  - A —equal to pressure altitude.
  - B —lower than pressure altitude.
  - C —higher than pressure altitude.
2. 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.
3. If the temperature/dew point spread is small and decreasing, and the temperature is 62°F, what type of weather is most likely to develop?
  - A —Freezing precipitation.
  - B —Thunderstorms.
  - C —Fog or low clouds.
4. 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.
5. 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.
6. When telephoning a weather briefing facility for preflight weather information, pilots should state
  - A —the full name and address of the pilot-in-command.
  - B —the intended route, destination, and type of aircraft.
  - C —the radio frequencies to be used.
7. 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.
8. 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.
9. 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.
10. 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.

- 11.** Which is the correct traffic pattern departure procedure to use at a noncontrolled 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.
- 12.** An airport's rotating beacon operated during daylight hours indicates
- A —that weather at the airport located in Class D airspace is below basic VFR weather minimums.
  - B —there are obstructions on the airport.
  - C —the Air Traffic Control tower is not in operation.
- 13.** The official source of sunrise and sunset times is
- A —the *Aeronautical Information Manual*.
  - B —the American Air Almanac.
  - C —the Federal Aviation Regulations.
- 14.** An aircraft departs an airport in the Eastern Daylight Time Zone at 0945 EDT for a 2-hour flight to an airport located in the Central Daylight Time Zone. The landing should be at what coordinated universal time?
- A —1345Z.
  - B —1445Z.
  - C —1545Z.
- 15.** In order to comply with Private Practical Test Standards, students must perform Turns Around a Point and S-turns
- A —at traffic pattern altitude, while maintaining altitude  $\pm 100$  feet, and airspeed  $\pm 10$  knots, while maintaining coordination.
  - B —between 600 and 1,000 feet AGL, while maintaining altitude  $\pm 100$  feet, and airspeed  $\pm 10$  knots, while maintaining coordination.
  - C —at traffic pattern altitude, while maintaining altitude  $\pm 100$  feet, and heading  $\pm 10$  degrees, while maintaining coordination.
- 16.** In order to comply with Private Practical Test Standards, the student must perform Rectangular Course
- A —between 600 and 1,000 feet AGL, while maintaining altitude  $\pm 100$  feet, and airspeed  $\pm 10$  knots, while maintaining coordination.
  - B —between 600 and 1,000 feet AGL, entering  $45^\circ$  to the downwind, while maintaining coordination.
  - C —at traffic pattern altitude, while maintaining altitude  $\pm 100$  feet, and airspeed  $\pm 10$  knots, while maintaining coordination.
- 17.** In headwind conditions, the groundspeed will \_\_\_\_\_ the airspeed.
- A —exceed
  - B —be less than
  - C —be the same as
- 18.** 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.
- 19.** The numbers 9 and 27 on a runway indicate that the runway is oriented approximately
- A — $009^\circ$  and  $027^\circ$  true.
  - B — $090^\circ$  and  $270^\circ$  true.
  - C — $090^\circ$  and  $270^\circ$  magnetic.
- 20.** If two-way communication fails at an airport with a tower and cannot be restored, the recommended procedure is to
- A —make an off-airport landing.
  - B —turn on your landing light, enter the airport area on final approach, and land as soon as possible.
  - C —observe traffic flow, enter the traffic pattern on the downwind, look for light signals from the tower, and squawk 7600 on your transponder.
- 21.** In an in-flight emergency requiring emergency action, the pilot-in-command
- A —may deviate from any rule of 14 CFR Part 91 to the extent required to meet that emergency.
  - B —must not deviate from any rule of 14 CFR Part 91.
  - C —may deviate from any rule of 14 CFR Part 91 but only after receiving prior permission from ATC.

- 22.** 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.

- 23.** Normal and crosswind takeoffs and landings should take place
- A —with the wind.
  - B —into the wind.
  - C —perpendicular to the wind.

- 24.** 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, photo ID, and medical certificate.
  - C —CFI solo endorsement, and copy of the FAR/AIM.

- 25.** Student pilots are responsible for all information, rules, and regulations in Parts
- A —61, and 91.
  - B —91, and 121.
  - C —1, and 67.

- 26.** 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.

- 27.** List the airspeeds and their definitions, for the training aircraft to be used for solo flight; *explain the terms :*

	Speed	Definition / Explanation
<i>Angle of Attack</i>		
<i>Adverse Yaw</i>		
Normal takeoff		
Normal landing		
<i>Left Turning Tendencies</i>		
<i>Region of Reversed Command</i>		
Practice private pilot maneuvers		
V <sub>SI</sub>		
V <sub>S0</sub>		
V <sub>A</sub>		
V <sub>X</sub>		
V <sub>Y</sub>		
V <sub>FE</sub>		
V <sub>NO</sub>		
V <sub>NE</sub>		
Best Glide		
<i>Forward Slip</i>		
<i>Side Slip</i>		

- 28.** List the grade and capacity of the fuel and oil to be used in the training aircraft used for solo flight:

	Grade	Capacity
Fuel	_____	_____
Oil	_____	_____

- 29.** What do each of the following ATC light signals mean?

	in flight	on the ground
Steady green	_____	_____
Flashing green	_____	_____
Steady red	_____	_____
Flashing red	_____	_____
Flashing white	_____	_____
Alternating red and green	_____	_____

- 30.** What actions will you take for an engine failure:

Immediately after takeoff \_\_\_\_\_  
 \_\_\_\_\_  
 50 feet after takeoff \_\_\_\_\_  
 \_\_\_\_\_  
 Downwind, in the traffic pattern \_\_\_\_\_  
 \_\_\_\_\_  
 In the practice area \_\_\_\_\_  
 \_\_\_\_\_