Pre-Solo Written Exam

- 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.** What conditions are necessary for the formation of thunderstorms?
 - A Sufficient water vapor, unstable air, and a lifting mechanism.
 - B High humidity, high temperature, and cumulus clouds.
 - **C** Lifting force, moist air, and extensive cloud cover.
- **5.** Which type of weather briefing should a pilot obtain, when departing within the hour, if no preliminary weather information has been acquired?
 - A An outlook briefing.
 - **B** An abbreviated briefing.
 - **C** A standard briefing.

- **6.** Who is responsible for making the go-no-go decision for each flight?
 - A The Pilot-in-Command.
 - **B** A Certified Flight Instructor.
 - **C** The Chief Flight Instructor.

For questions 7. & 8. The definition of "Official" means to have a record of, or proof of the weather briefing that is recognized by the FAA.

- 7. To obtain "Official" preflight weather briefing information, pilots should use
 - A the current METAR & TAF.
 - **B** DUATS, www.1800wxbrief.com, or call 1-800-WXBRIEF.
 - C www.aviationweather.gov.
- **8.** When using ForeFlight to obtain "Official" preflight weather briefing information you should use
 - A the Weather tab on the Airports page.
 - **B** the Briefing button on the Flights page.
 - **C** do nothing, ForeFlight has taken care of it for you.
- **9.** What information is necessary to make go-no-go decision?
 - A Permission from chief flight instructor, your instructor, 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.
- **10.** Two-way radio communication must be established with the Air Traffic Control facility having jurisdiction over the airspace prior to entering which class airspace(s)?
 - A Class C & D.
 - B Class E.
 - C Class B, C, & D.

- **11.** An Air Traffic Control clearance is required prior to entering which class airspace(s)?
 - A Class B airspace.
 - **B** Class B, C, & D airspace.
 - C Class E airspace.
- 12. An Air Traffic Control clearance is required for landings and takeoffs at
 - A Class B airports.
 - **B** Class B, C, & D airports.
 - **C** Class E airports.
- 13. Which is the correct traffic pattern departure procedure to use at a non-controlled 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.
- **14.** Although not regulatory, an airport's rotating beacon operated during daylight hours indicates
 - **A** the weather at the airport is below three miles ground visibility and/or the ceiling is less than 1000.
 - **B** there are obstructions on the airport.
 - C that at least one runway is closed.
- **15.** The official source of sunrise and sunset times is
 - A the Aeronautical Information Manual.
 - **B** the American Air Almanac.
 - C the Federal Aviation Regulations.
- **16.** You are calling 1-800-WXBRIEF for a flight briefing from KBJC. You plan to depart on your flight at 3:45PM MDT. The briefer asks for your departure time in Coordinated Universal Time. What should you tell them?
 - **A** 0945Z
 - **B** 2145Z
 - C 2245Z

- **17.** To comply with Private Pilot-Airman Certification Standards (ACS), students must perform Turns Around a Point and S-Turns
 - **A** at traffic pattern altitude, while maintaining altitude \pm 100 feet, and airspeed \pm 5 knots, while maintaining coordinated flight.
 - **B** between 600 and 1,000 feet AGL, while maintaining altitude \pm 100 feet, and airspeed \pm 10 knots, while maintaining coordinated flight.
 - C at traffic pattern altitude, while maintaining altitude \pm 50 feet, and airspeed \pm 10 degrees, while maintaining coordinated flight.
- **18.** To comply with Private Pilot-Airman Certification Standards (ACS), the student must perform the Steep Turns maneuver
 - **A** between 600 and 1,000 feet AGL, roll into a 45° bank, while maintaining altitude \pm 100 feet, airspeed \pm 10 knots, and bank \pm 5° while maintaining coordinated flight.
 - **B** while always above 1,500 feet AGL, roll into a 45° bank, while maintaining altitude \pm 100 feet, airspeed \pm 10 knots, and bank \pm 5° while maintaining coordinated flight.
 - C while always above 1,500 feet AGL, roll into a 50° bank, while maintaining altitude \pm 100 feet, airspeed \pm 10 knots, and bank \pm 5° while maintaining coordinated flight.
- **19.** In headwind conditions, the groundspeed will _____ the airspeed.
 - A exceed
 - **B** be less than
 - C be the same as
- 20. 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.
- 21. The numbers 9 and 27 on a runway indicate that the runway is oriented approximately
 - **A** 009° and 027° true.
 - **B** 090° and 270° true.
 - C 090° and 270° magnetic.

- **22.** If two-way radio communication fails at an airport with a control 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 traffic pattern on final approach, and land as soon as possible.
 - C observe the traffic flow, enter the traffic pattern on the downwind, look for light signals from the tower, and squawk 7600 on your transponder.
- 23. 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.
- 24. 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.
- 25. For your first solo flight maximum winds should be
 - A below 10 knots.
 - **B** as PIC it is up to your discretion.
 - **C** at or below the winds stated in your solo endorsement.
- **26.** When you fly as a student pilot solo, you are pilot-in-command, and you are required to have in your personal possession a (Pick two)
 - A student pilot certificate, medical certificate, and photo ID.
 - **B** current 90-day solo endorsement and a copy of the FAR/AIM.
 - C current 90-day solo endorsement and your logbook.
- 27. Student pilots are responsible for all relevant information, rules, and regulations in FAR Parts
 - **A** 61 and 91.
 - **B** 91 and 121.
 - **C** 1 and 67.

- **28.** 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 and/or with a blood alcohol concentration of 0.08 or greater.
 - **B** 8 hours and/or with a blood alcohol concentration of 0.04 or greater.
 - C 12 hours and/or with a blood alcohol concentration of 0.04 or greater.
- **29.** In Colorado and several other states recreational use of marihuana is legal. As a pilot what procedure should you follow?
 - **A** Colorado law has set the THC blood level at 5 nanograms for operation of a vehicle, you should use that as your guide line.
 - **B** Federal law has not published any THC blood level limits, so you should set a cautionary level of marihuana use as your guide line.
 - C Aviation is governed by Federal law, you must comply with FAR §91.17.
- **30.** As a Student Pilot how far away can you fly solo from the airport of departure without a cross-country endorsement?
 - A 10 Nautical miles.
 - **B** 25 Nautica miles.
 - C 49 Nautical miles.
- **31.** As a solo Student Pilot what airport(s) can you land at without a specific endorsement?
 - A Any airport that you have landed at with your instructor.
 - **B** Your home airport (the airport where you receive your training).
 - C Any airport within 25 Nautical miles of your home airport.
- 32. May a student pilot fly to another airport to practice solo takeoff and landings?
 - **A** Yes, with the proper endorsement.
 - **B** No
- **33.** You are using a WASS GPS unit to track an inbound radial of a VOR. To receive the correct information on the OBS you must set the CDI on the GPS unit to
 - A GPS
 - **B** VLOC
 - C either setting, the GPS unit will know what to do.

- **34.** When entering a waypoint into a GPS unit what is the difference between KBJC & BJC?
 - **A** BJC is an airport and KBJC is a VOR
 - **B** KBJC is an airport and BJC is a VOR
 - C Both the same, BJC is an abbreviation for KBJC
- **35.** During ground operations in an airplane equipped with ADS_B OUT the transponders Mode should be set to
 - A SBY
 - **B** ON
 - C ALT
- **36.** Complete the table below:

Symbol or Task	Speed	E		Definition	
T7		20	110-1	100	
V _{S1}		ALC:			-
V _{S0}		131			
V _A					
Vx		3			
VY					
V _{FE}			and the second of		
V _{NO}					
V _{NE}				A. A.	397
Best Glide					
Maneuver entry					
Normal Landing					
Normal Takeoff					
Short-field					
Landing					
Short-field Takeoff					
Soft-field Landing					
Soft-field Takeoff					

y ability using all information y flight instructor.
d model aircraft to be used for solo POH or AFM and will operate the
Date
n Test to 100% with the student, to safely conduct solo flight.
udent Pilot's Aircraft Check-Out
Date