



Unitas Flying Club

Flying Training Operations

Student License Exam

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Pre-Solo Examination

Name: _____ Date: _____

Aircraft type for student license: _____

Answer all the questions. A grading of 80% is required to pass this test. The Aircraft Owner's Manual, Student Guide and any other material you may possess may be used as reference.

1. List the required airspeeds in each of the following situations:

- a) Maximum Angle of climb
- b) Maximum Rate of climb
- c) Cruise Climb
- d) Normal landing approach, no flaps
- e) Normal landing approach, with flaps extended
- f) Short field landing
- g) Stall speed, no flaps
- h) Stall speed, with flaps extended
- I) Manoeuvring speed

2. Define the following terms:

- a) Rate one turn
- b) Medium turn
- c) Steep turn
- d) V_{ne}
- e) V_{fe}
- f) V_x
- g) Cross-wind leg
- h) Base Leg.
- i) Go-around
- j) Orbit

3. List your Vital Actions in each of the following cases:

- a) Power check
- b) 50' AGL after take-off
- c) Down-wind
- d) Base leg
- e) Final approach
- f) Overshoot (go-around)
- g) Engine failure after take-off

4. Describe what your "Crew Briefing" consists of.**5. On the final approach for landing, what controls the**

- a) Airspeed?
- b) Altitude?

6. Describe what you understand by the following terms:

- a) Aircraft Attitude
- b) Aircraft configuration
- c) Idle Check RPM
- d) Stall
- e) Left-hand downwind
- f) AGL

7. What is the required height above the ground for each of the following?

- a) Turning onto the crosswind leg
- b) Circuits
- c) Lifting the flaps after take-off
- d) Low-level circuits

8. Fire drill: what actions should you go through if you develop a cockpit fire in the air?**9. The first thing to do with an electrical fire in the air is to:**

- a) Close all the air vents.
- b) Apply the fire extinguisher.
- c) Switch off the master switch.

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10. Name three things, which *you* consider the most important points about flying a proper circuit.
11. When doing the power run-up and you check the magnetos, what are you checking for and what are you expecting to observe? (I.e. what is right and what is wrong?)
12. In your own words, what are the three laws of Newton?

Knowing your airport

13. State the radio frequency at Vereeniging.
14. State the airport elevation for Vereeniging.
15. What is the circuit height at Vereeniging?
16. Draw a diagram of the airfield runways and show the circuit pattern flown for each runway, as well as the runway lengths.
17. Which altimeter sub-scale setting do we use in the Vereeniging circuit?
 - a) Standard pressure of 1013.2 hPa.
 - b) Vereeniging QNH
 - c) Vereeniging QFE
 - d) Johannesburg QNH

Air Regulations

18. You may fly solo in an aircraft while you are a student:
 - a) After the instructor endorses your logbook.
 - b) When you are authorised by the instructor in your presence to fly solo
 - c) When the aircraft you wish to fly solo is printed in your license.
 - d) All of the above.
19. When should you start receiving NOTAMs and AICs?
 - a) As soon as you have ordered them from CAA.
 - b) Once you have received your student license.
 - c) Once you have received your private pilot license.
 - d) If you go to CAA and ask in person for your name to be added to a mailing list.
20. The class A NOTAMs contain:
 - a) Notices for local flights only.
 - b) Notices only concerning runway closures.
 - c) Notices important to international flights.
21. If you lost radio communication with the control tower while flying circuits and you see the tower issuing you a steady red light signal, what does it mean?
 - a) Continue circling and give way to other aircraft.
 - b) Do not land since the aerodrome is unsafe.
 - c) Cleared to land once you establish that the runway is clear.

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Official Use Only:

Marks Obtained: _____ %

Exam marked by: _____

License number and signature: _____