PRE-SOLO KNOWLEDGE TEST [STAGE 1]

FLIGHT SCHOOL

Name : .....

Date : .....

Pilot Cert : .....

Aircraft Type: .....

Aircraft Tail #: .....

FUEL

Total Fuel Capacity:	Quantity per tank:
Useable Fuel:	Minimum Fuel Grade:
Unuseable Fuel:	Color:

Question 1. What are the minimum fuel reserves required for day VFR?

Question 2. What are the minimum fuel reserves required for night VFR?

OIL

Total Oil Capacity:	Minimum Oil Capacity:
Oil Grade/Type:	Normal Oil Capacity:

WEIGHT & BALANCE

Max Gross Weight:	Empty Weight:	CG Range (MGW):
Max Takeoff Weight:	Empty Weight CG:	Utility Weight:

Question 3. What's the maximum Fuel you can carry with yourself, a passenger weighing 170lbs, & 30lbs of baggage? Please attach any scratch paper you used for your calculations & ensure you're within the CG envelope.

Question 4. How many pounds of baggage can you carry with yourself, a passenger weighing 130lbs, & half tanks? Please attach any scratch paper you used for your calculations & ensure you're within the CG envelope.

ENGINE

Question 5. What type of engine does this aircraft have? Check the correct answer.

- [ ] Carbureted
- [ ] Fuel Injected

Question 6. If this is a fuel injected aircraft, when do you operate the fuel pump?

Question 7. If this is a carbureted engine, is it possible for carb ice to develop even in 90°F weather? Briefly explain your answer.

SPEEDS

Assume max gross weight

Va:	Vg:	Vy:
Vx:	Vso:	Vs1:
Vne:	Vno:	Vr:

TAKEOFF & LANDING

Question 8. T/O Ground Run at SL & standard temperature, 0 headwind:

Question 9. T/O Ground Run at 2,500' & 85°F, 5 kts headwind:

Question 10. Landing Ground Roll at SL & standard temperature, 0kt headwind:

Question 11. Landing Ground Roll at 1,500' & 90°F, 0 kt headwind:

Question 12. Please explain a soft field takeoff & landing technique.

Takeoff:

Landing:

Question 13. Please explain a short field takeoff & landing technique.

Takeoff:

Landing:

AIRPORT INFORMATION

Question 14. What is your home airport? What runways does it have?

Question 15. What is the traffic pattern for each runway?

Frequencies

TOWER/CTAF:	GROUND:
CLEARANCE DLVRY:	WEATHER:
APPROACH/DEPT:	UNICOM:

Question 16. Is your airport towered or non-towered?

- [ ] Towered
- [ ] Non-Towered

Question 17. What is the airspace around your airport & its weather minimums?

Airspace:

Wx Minimums:

What airports are nearby & their associated airspaces?

Airport:	Airspace:
Airport:	Airspace:
Airport:	Airspace:

Question 18. What taxiway path do you typically take for each runway you use?

Runway #

Runway #

Runway #

Runway #

Please write out the associated radio calls with each position. Select the most common runway you utilize at your airport.

Before Taxi:

Holding Short Runway #:

Departure:

Crosswind:

Downwind:

Base:

Final:

Clear of the Runway:

Question 19. What FBO(s) do you have at your airport?

GENERAL QUESTIONS

Question 20. You're flying & suddenly your engine sputters & your RPMs drop. What could be happening?

Question 21. In the event of carburetor icing, what is the first step you take to remedy the issue?

Question 22. How do you detect an alternator failure?

Question 23. What is the source of hot air for the cabin heat?

Question 24. Why does your RPM drop when you introduce carb heat?

Question 25. During the run up, you check the R&L magnetos. When you switch from BOTH to LEFT, the RPMs remain the same & there's no drop. What is the issue?

Question 26. What actions do you take for an engine fire?

Question 27. What actions do you take for an engine failure?

Question 28. You've experienced an alternator failure. What components of the plane will no longer operate?

Question 29. If one aircraft is on their base leg at 500' AGL, & another is on a 3 mile final at 1,000' AGL, who has the right of way?

Question 30. What are the minimum safe altitudes for congested & non-congested areas?

Congested:

Non-Congested:

Question 31. Who is responsible for the airworthiness condition of the aircraft?

- [ ] The aircraft owner
- [ ] A certified mechanic
- [ ] The PIC
- [ ] An FAA Inspector

Question 32. What are the Go Around procedures for this aircraft? What situations would cause you to Go Around?

Question 33. What inspections are required for this aircraft?

Question 34. What documents must be in the aircraft at all times?

Question 35. What documents must a student have on them when operating solo?

Question 36. You walk up to preflight the aircraft for a daytime VFR flight & discover the beacon light is not working. Can you still fly?

- [ ] Yes
- [ ] No

Question 37. When you discover INOP equipment that may or may not prevent you from flying, what are the proper documentation procedures? Choose the correct answer.

- [ ] Deactivate the item, mark it as INOP & squawk it on the paper sheet/online
- [ ] Nothing. The A&P is responsible for all maintenance related documentation.
- [ ] Contact the Owner/Operator.

Question 38. What is an incipient spin? How do you recover from it?

Reviewed by (Check Pilot) : .....

Date : .....

- [ ] Satisfactory
- [ ] Unsatisfactory