



Pre-Solo Written Exam

C172 N

01JAN2021

Name: _____ Date: _____

Airplane Tail #:N737GZ

Answer the following questions in the space provided, using the FARs, AIM, AFD and POH. If you reference one of these sources for an answer, be sure to note it for your future reference.

Engine

What type of engine does the N737GZ have?

What is the engine horsepower?

What is the total capacity of the fuel tanks?

What is the total usable fuel capacity of the fuel tanks?

What are the approved fuel grades & colors?

What type of oil should be used for N737GZ?

When cold, how many quarts of oil should N737GZ have before the flight?

Speeds

V-Speeds: Please provide both definitions and KIAS for each

	KIAS	Definition		KIAS	Definition
V_R			V_{NO}		
V_X			V_A		
V_Y			V_{FE}		
V_G			V_S		
V_{NE}			V_{S0}		

What is the maximum demonstrated crosswind component?

Weight & Balance

What is the Maximum Takeoff/Landing Weight (normal category)?

What are the C.G Limits (normal category)?

What is the empty weight for N737GZ?

With full tanks, what is the Useful Load?

Performance

Assume: Max Takeoff Weight
 Paved, Level, Dry Runway
 Zero Wind
 20 degrees C
 Pressure Alt = 6000ft

What is the Takeoff Distance (Ground Roll)?

What is the Takeoff Distance (Clear a 50ft Obst)?

What is the Max Rate of Climb (FPM)?

What is the Landing Distance?

Emergency Procedures

List the steps for each emergency

Engine Failure During Flight

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Engine Fire in Flight

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Cabin Fire

- 1.
- 2.
- 3.

WARNING –

- 4.

Fire During Start on Ground

1.

If engine starts:

2.

3.

If engine fails to start:

4.

5.

6.

7.

8.

a.

b.

c.

9.

10.

Landing with a Flat Main Tire

1.

2.

Over-Voltage Light Illuminates

- 1.
- 2.
- 3.
- 4.
- 5.

If over-voltage light illuminates again:

- 6.

Ammeter Shows Discharge

- 1.
- 2.
- 3.

Regulations

What preflight actions are required before a flight not in the vicinity of an airport? Before any flight?

How do you determine if inoperative equipment is required for your flight?

What are the limitations for consuming alcohol and flying?

What altitude should you fly when operating in level cruise above 3,000ft AGL?

What documents are you required to have in your possession when acting as PIC?

What documents are required to be on board the aircraft?

When are the PIC and passengers required to wear a safety belt/Shoulder harness?

What is the minimum altitude you can fly over congested areas? Non-congested areas?

Who has the final authority & responsibility for the operation of the aircraft?

What are the minimum fuel requirements for Day VFR flight? Night VFR flight?

List at least 3 situations when it would be advisable / necessary to conduct a Go-Around? What is the procedure for a Go-Around?

Home Airport

Draw Diagram of KSQI runways (include runway lengths and numbers):

What is traffic pattern altitude for KSQI?

List the following frequencies at KSQI:

What airspace is KSQI?

MISCELLANEOUS

Why is it necessary to drain fuel from the fuel sumps? When should this be done?

Will the engine run with the master switch turned off? Why?

Do you need your logbook in your possession when you fly solo? Why/Why not?

If the altimeter setting is not available at an airport, what setting should you use before departing on a local flight?

When two aircraft of the same category are converging head-on, which way do you turn to avoid the other aircraft?

Instructor: _____ Instructor Signature: _____

Student Signature: _____ Score: _____ Corrected to: _____

Date of Review/Logbook Endorsement: