AIRMAN
FLIGHT TRAINING

AIRMAN
AIRCRAFT CHECKOUT EXAMINATION

PILOT'S NAME: _____ **DATE:** ____/____/____

MAKE AND MODEL AIRCRAFT: _____

ENGINE (1) Manufacturer and type: _____ Horsepower: _____

(2) Normal start procedure: _____

_____

_____

(3) Hot start procedure: _____

_____

_____

(4) If the airplane has a controllable pitch propeller, what does it do if the engine loses oil pressure?

_____

ENGINE POWER SETTINGS (5) Run-up: _____ Takeoff: _____

Maximum continuous: _____ Climb: _____

Cruise, 75% power, 2,000 feet, standard temperature: _____

Cruise, 75% power, 7,000 feet, standard temperature: _____

OIL (6) Grade: _____ wt. Maximum quantity: ____ qts. Minimum quantity: ____ qts.

FUEL (7) Grade: _____ Color: _____ Number of fuel tanks: _____

Total fuel capacity: _____ gal. Useable: _____ gal. Quantity if tanks have tab: _____ gal.

(8) Location of fuel drains: _____

_____

(9) Location of tank vents: _____

_____

(10) Describe fuel system: _____

_____

_____

_____

_____

WEIGHTS (11) Maximum gross takeoff: _____ lbs. Maximum gross landing: _____ lbs.

Empty: _____ lbs. Useful load: _____ lbs. C.G. Range: _____ in.

If multiengine, maximum zero fuel weight: _____ lbs.

AIRSPEEDS (12) V_x _____kts. V_y _____ kts. Cruise climb _____ kts. V_A _____ kts.

V_{no} _____ kts. V_{ne} _____ kts. V_{s1} _____ kts. V_{so} _____ kts.

Best glide _____ kts. V_{fe} _____ kts.

(13) Final approach: Flaps up _____ kts. Flaps full down _____ kts. Short field _____ kts.

If airplane has retractable gear: V_{loe} _____kts. V_{lor} _____ kts. V_{le} _____ kts.

If multiengine airplane: V_{xse} _____ kts. V_{yse} _____ kts. V_{mc} _____ kts.

ALTITUDES (14) Service ceiling: _____ ft. If multiengine, single engine service ceiling: _____ ft.

TURBOCHARGED ENGINES ONLY (15) Describe the turbocharger system: _____

_____

_____

_____

_____

(16) What are the indications of an overboost? _____

What is the critical density altitude? _____ ft.

RETRACTABLE LANDING GEAR ONLY (17) Describe the system and how it operates: _____

_____

_____

_____

_____

(18) Describe the gear unsafe indications: _____

_____

_____

_____

(19) Where are the squat switches located and what is their function? _____

_____

(20) Describe the emergency gear extension procedure: _____

_____

_____

_____

ELECTRICAL SYSTEM (21) Describe the system: _____

_____

_____

_____

_____

(22) Describe the indication of a malfunctioning alternator and the reactivation procedure: _____

_____

_____

_____

_____

(23) Battery location: _____

CARBURETOR ICING (24) Describe all indications: _____

_____

STATIC AIR SYSTEM (25) Location of normal static ports: _____

_____

(26) Location of alternate static source: _____

(27) Altimeter error when using the alternate static source: _____

HYDRAULIC SYSTEM (28) Describe the system: _____

_____

_____

_____

_____

(29) Reservoir location: _____

EMERGENCY LOCATOR TRANSMITTER (ELT) (30) Control panel is located: _____

COMPUTATIONS

TAKEOFF PERFORMANCE Airplane is at maximum gross weight; airport elevation is 1,000 feet msl. There is no wind and the temperature is 10 degrees above the standard Celsius temperature.

(31) Compute the following takeoff information: Ground roll is _____ feet, total distance to clear a 50

foot obstacle is _____ feet, and the rate of climb is _____ feet per minute.

If multiengine, the accelerate-stop distance for this takeoff is _____ feet.

CLIMB AND EN ROUTE PERFORMANCE You are departing from the airport used in the last problem, and you plan to cruise at 7,500 feet msl using 75% power. The temperature at 7,500 feet is 10 degrees above standard.

(32) Compute the following climb information: Time _____ minutes, fuel _____ gallons, and _____

miles to reach cruise altitude.

(33) Compute the following cruise information: The power setting will be _____, and this

will yield a speed of _____ KTAS and a fuel burn of _____ GPH.

LANDING PERFORMANCE You are 200 pounds below the maximum allowable landing gross weight; airport elevation is 3,000 feet msl. You plan a full flap landing with a 10 knot headwind component, and the temperature is10 degrees above standard.

(34) Compute the following landing information: Ground roll is _____ feet, and total distance to clear

a 50-foot obstacle is _____ feet.

WEIGHT AND BALANCE COMPUTATION All seats are full. The pilot weighs 200 pounds, copilot 150 pounds, and each remaining passenger 120 pounds. There is 100 pounds of baggage.

(35) Compute the following information:

How much fuel you can carry and still remain within the allowable gross weight? _____ gallons.

Is the airplane within its C.G. limits with this fuel load? _____.

What is the actual C.G. location? _____ inches.

INSTRUCTORS Make a copy of this exam, give the original to the pilot, and attach the copy to the aircraft checkout sheet.

Exam reviewed by _____

(initial and print last name)