

OPCION B: decrease the amount of fuel in the mixture to compensate for increased air density.

OPCION C: increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air.

PREG20080233 A fixed-pitch propeller is designed for best efficiency only at a given combination of B

OPCION A: altitude and RPM.

OPCION B: airspeed and RPM.

OPCION C: airspeed and altitude.

PREG20080241 Unless adjusted, the fuel/air mixture becomes richer with an increase in altitude because the amount of fuel C

OPCION A: decreases while the volume of air decreases.

OPCION B: remains constant while the volume of air decreases.

OPCION C: remains constant while the density of air decreases.

PREG20080231 Detonation occurs in a reciprocating aircraft engine when C

OPCION A: there is an explosive increase of fuel caused by too rich a fuel/air mixture.

OPCION B: the spark plugs receive an electrical jolt caused by a short in the wiring.

OPCION C: the unburned fuel/air charge in the cylinders is subjected to instantaneous combustion.

PREG20080232 Propeller efficiency is the A

OPCION A: ratio of thrust horsepower to brake horsepower.

OPCION B: actual distance a propeller advances in one revolution.

OPCION C: ratio of geometric pitch to effective pitch.

PREG20080216 Before shutdown, while at idle, the ignition key is momentarily turned OFF. The engine continues to run with no interruption; this B

OPCION A: is normal because the engine is usually stopped by moving the mixture to idle cut-off.

OPCION B: should not normally happen. Indicates a magneto not grounding in Off position

OPCION C: is an undesirable practice, but indicates that nothing is wrong.

PREG20080217 Leaving the carburetor heat on while taking off C

OPCION A: leans the mixture for more power on takeoff.

OPCION B: will decrease the takeoff distance.

OPCION C: will increase the ground roll.

PREG20080218 A way to detect a broken magneto primary grounding lead is to A

OPCION A: idle the engine and momentarily turn the ignition off.

OPCION B:	add full power, while holding the brakes, and momentarily turn off the ignition.	
OPCION C:	run on one magneto, lean the mixture, and look for a rise in manifold pressure.	

PREG20080219	Fouling of spark plugs is more apt to occur if the aircraft	A
OPCION A:	gains altitude with no mixture adjustment.	
OPCION B:	descends from altitude with no mixture adjustment.	
OPCION C:	throttle is advanced very abruptly.	

PREG20080221	If the ground wire between the magneto and the ignition switch becomes disconnected, the engine	C
OPCION A:	will not operate on one magneto.	
OPCION B:	cannot be started with the switch in the BOTH position.	
OPCION C:	could accidentally start if the propeller is moved with fuel in the cylinder.	

PREG20080222	For internal cooling, reciprocating aircraft engines are especially dependent on	B
OPCION A:	a properly functioning cowl flap augments.	
OPCION B:	the circulation of lubricating oil.	
OPCION C:	the proper freon/compressor output ratio.	

PREG20080223	The pilot controls the air/fuel ratio with the	C
OPCION A:	throttle.	
OPCION B:	manifold pressure.	
OPCION C:	mixture control.	

PREG20080220	The most probable reason an engine continues to run after the ignition switch has been turned off is	C
OPCION A:	carbon deposits glowing on the spark plugs.	
OPCION B:	a magneto ground wire is in contact with the engine casing.	
OPCION C:	a broken magneto ground wire.	

PREG20080224	Which statement best describes the operating principle of a constant-speed propeller?	C
OPCION A:	As throttle setting is changed by the pilot, the prop governor causes pitch angle of the propeller blades to remain unchanged.	
OPCION B:	A high blade angle, or increased pitch, reduces the propeller drag and allows more engine power for takeoffs.	
OPCION C:	The propeller control regulates the engine RPM and in turn the propeller RPM.	

PREG20080225	In aircraft equipped with constant-speed propellers and normally-aspirated engines, which procedure should be used to avoid placing undue stress on the engine components? When power is being	B
OPCION A:	decreased, reduce the RPM before reducing the manifold pressure.	
OPCION B:	increased, increase the RPM before increasing the manifold pressure.	
OPCION C:	increased or decreased, the RPM should be adjusted before the manifold pressure.	

PREG20080226	5185-1 Detonation may occur at high-power settings when	A
OPCION A:	the fuel mixture instantaneously ignites instead of burning progressively and evenly.	
OPCION B:	an excessively rich fuel mixture causes an explosive gain in power.	
OPCION C:	the fuel mixture is ignited too early by hot carbon deposits in the cylinder.	

PREG20080227	The uncontrolled firing of the fuel/air charge in advance of normal spark ignition is known as	C
OPCION A:	instantaneous combustion.	
OPCION B:	detonation.	
OPCION C:	pre-ignition.	

PREG20080228	Fuel/air ratio is the ratio between the	B
OPCION A:	volume of fuel and volume of air entering the cylinder.	
OPCION B:	weight of fuel and weight of air entering the cylinder.	
OPCION C:	weight of fuel and weight of air entering the carburetor.	

PREG20080229	The mixture control can be adjusted, which	A
OPCION A:	prevents the fuel/air combination from becoming too rich at higher altitudes.	
OPCION B:	regulates the amount of air flow through the carburetor's venturi.	
OPCION C:	prevents the fuel/air combination from becoming lean as the airplane climbs.	

PREG20080230	Which statement is true concerning the effect of the application of carburetor heat?	A
OPCION A:	It enriches the fuel/air mixture.	
OPCION B:	It leans the fuel/air mixture.	
OPCION C:	It has no effect on the fuel/air mixture.	

PREG20080238	Applying carburetor heat will	C
OPCION A:	not affect the mixture.	
OPCION B:	lean the fuel/air mixture.	
OPCION C:	enrich the fuel/air mixture.	

PREG20080237	Detonation can be caused by	C
OPCION A:	A rich mixture	
OPCION B:	low engine temperatures.	
OPCION C:	using a lower grade fuel than recommended.	

PREG20080234	The reason for variations in geometric pitch (twisting) along a propeller blade is that it	C
OPCION A:	permits a relatively constant angle of incidence along its length when in cruising flight.	
OPCION B:	prevents the portion of the blade near the hub from stalling during cruising flight.	
OPCION C:	permits a relatively constant angle of attack along its length when in cruising flight.	

PREG20080235	A detuning of engine crankshaft counterweights is a source of overstress that may be caused by	A
OPCION A:	rapid opening and closing of the throttle.	
OPCION B:	carburetor ice forming on the throttle valve.	
OPCION C:	operating with an excessively rich fuel/air mixture.	

PREG20080239	An abnormally high engine oil temperature indication may be caused by	B
OPCION A:	a defective bearing.	
OPCION B:	the oil level being too low.	
OPCION C:	operating with an excessively rich mixture.	

PREG20080236	The best power mixture is that fuel/air ratio at which	B
OPCION A:	cylinder head temperatures are the coolest.	
OPCION B:	the most power can be obtained for any given throttle setting.	
OPCION C:	a given power can be obtained with the highest manifold pressure or throttle setting.	

PREG20080240	What will occur if no leaning is made with the mixture control as flight altitude increases?	C
OPCION A:	The volume of air entering the carburetor decreases and the amount of fuel decreases.	
OPCION B:	The density of air entering the carburetor decreases and the amount of fuel increases.	
OPCION C:	The density of air entering the carburetor decreases and the amount of fuel remains constant.	

PREG20080245	To establish a climb after takeoff in an aircraft equipped with a constant-speed propeller, the output of the engine is reduced to climb power by decreasing manifold pressure and	C
OPCION A:	increasing RPM by decreasing propeller blade angle.	

OPCION B: decreasing RPM by decreasing propeller blade angle.

OPCION C: decreasing RPM by increasing propeller blade angle.
