

Emergency Operations

TEST PREP

1

If the pitot tube and outside static vents become clogged, which instruments would be affected?

- a. The altimeter, airspeed indicator, and turn-and-slip indicator.
- b. The altimeter, attitude indicator, and turn-and-slip indicator.
- c. The altimeter, airspeed indicator, and vertical speed indicator.

2

If a pilot suspects that the engine (with a fixed-pitch propeller) is detonating during climb-out after takeoff, the initial corrective action to take would be to

- a. apply carburetor heat.
- b. lean the mixture.
- c. lower the nose slightly to increase airspeed.

3

What would happen if your airplane experienced a complete electrical failure during flight?

- a. The airplane will lose all electrical equipment.
- b. The engine driven fuel pump will fail.
- c. The engine ignition system will fail.

4

Carburetor ice is most likely to occur when temperatures are:

- a. Below 20 degrees Fahrenheit.
- b. Above 105 degrees Fahrenheit (°F).
- c. Below 70 degrees Fahrenheit (°F) and the relative humidity is above 80 percent.

5

Excessively high engine temperatures, either in the air or on the ground, will

- a. cause loss of power, excessive oil consumption, and possible permanent internal engine damage.
- b. result in damage to heat-conducting hoses and warping of cylinder cooling fans.
- c. increase fuel consumption and may increase power due to the increased heat.

6

What effect will landing with a tailwind have during an engine-out approach and landing?

- a. Results in lower energy after the touchdown
- b. Decreased landing distance
- c. Increased landing distance

7

When executing an emergency approach to land in a single-engine airplane, it is important to maintain a constant glide speed because variations in glide speed will

- a. assure the proper descent angle is maintained until entering the flare.
- b. nullify all attempts at accuracy in judgment of gliding distance and landing spot.
- c. increase the chances of shock cooling the engine.

8

The possibility of carburetor icing exists even when the ambient air temperature is as

- a. high as 70 °F and the relative humidity is high.
- b. high as 95 °F and there is visible moisture.
- c. low as 0 °F and the relative humidity is high.

9

When activated, an emergency locator transmitter (ELT) transmits on

- a. 118.0 and 118.8 MHz.
- b. 123.0 and 119.0 MHz.
- c. 121.5 and 243.0 MHz.

10

Detonation occurs in a reciprocating aircraft engine when

- a. the unburned charge in the cylinders explodes instead of burning normally.
- b. hot spots in the combustion chamber ignite the fuel/air mixture in advance of normal ignition.
- c. the spark plugs are fouled or shorted out or the wiring is defective.

11

An electrical system failure (battery and alternator) occurs during flight. In this situation, you would

probably experience failure of the engine ignition system, fuel gauges, aircraft lighting system, and avionics equipment.

- a. experience avionics equipment failure.
- b. probably experience engine failure due to the loss of the engine-driven fuel pump and also
- c. experience failure of the radio equipment, lights, and all instruments that require alternating current.

12

Detonation may occur at high-power settings when

- a. the fuel mixture ignites instantaneously instead of burning progressively and evenly.
- b. the fuel mixture is ignited too early by hot carbon deposits in the cylinder.
- c. an excessively rich fuel mixture causes an explosive gain in power.

13

Which instrument(s) will become inoperative if the static vents become clogged?

- a. Airspeed, altimeter, and vertical speed.
- b. Altimeter only.
- c. Airspeed only.

14

How will the wind affect your engine-out gliding distance?

- a. A headwind increases your gliding distance
- b. A tailwind decreases the gliding distance
- c. A tailwind increases the gliding distance

15

What is the best course of action right after the engine quits in flight?

- a. Call ATC and declare an emergency
- b. Complete the emergency checklist immediately
- c. Use the emergency checklist if practical

16

Excessively high engine temperatures will

- a. not appreciably affect an aircraft engine.
- b. cause loss of power, excessive oil consumption, and possible permanent internal engine damage.
- c. cause damage to heat-conducting hoses and warping of the cylinder cooling fins.

17

When may an 121.5 MHz emergency locator transmitter (ELT) be tested?

- a. During the first 5 minutes after the hour.
- b. At 15 and 45 minutes past the hour.
- c. Anytime.

18

When are non-rechargeable batteries of an emergency locator transmitter (ELT) required to be replaced?

- a. Every 24 months.
- b. At the time of each 100-hour or annual inspection.
- c. When 50 percent of their useful life expires.

19

When an ATC clearance has been obtained, no pilot in command may deviate from that clearance, unless that pilot obtains an amended clearance. The one exception to this regulation is

- a. if the clearance contains a restriction.
- b. when the clearance states 'at pilot's discretion.'
- c. an emergency.

20

An abnormally high engine oil temperature indication may be caused by

- a. the oil level being too low.
- b. operating with an excessively rich mixture.
- c. operating with a too high viscosity oil.

21

If an emergency situation requires a downwind landing, pilots should expect a faster

- a. airspeed at touchdown, a longer ground roll, and better control throughout the landing roll.
- b. groundspeed at touchdown, a longer ground roll, and the likelihood of overshooting the desired touchdown point.
- c. groundspeed at touchdown, a shorter ground roll, and the likelihood of undershooting the desired touchdown point.

22

What is one procedure to aid in cooling an engine that is overheating?

- a. Enrichen the fuel mixture.
- b. Increase the RPM.
- c. Reduce the airspeed.

23

If an in-flight emergency requires immediate action, the pilot in command may

- a. not deviate from any rule of 14 CFR part 91 unless prior to the deviation approval is granted by the Administrator.
- b. deviate from any rule of 14 CFR part 91 to the extent required to meet that emergency.
- c. deviate from any rule of 14 CFR part 91 to the extent required to meet the emergency, but must submit a written report to the Administrator within 24 hours.

24

If you don't maintain a constant glide speed in attempting to land in an emergency:

- a. You will cause the engine to cool too rapidly.
- b. It is difficult to judge your gliding distance and landing spot.
- c. You will land beyond your desired landing spot.

25

What should you do to determine that your emergency locator transmitter (ELT) hasn't been activated?

- a. Ask the airport tower if they are receiving an ELT signal.
- b. Turn off the aircraft ELT after landing.
- c. Monitor 121.5 before engine shutdown.

26

The most important rule to remember in the event of a power failure after becoming airborne is to

- a. quickly check the fuel supply for possible fuel exhaustion.
- b. immediately establish the proper gliding attitude and airspeed.
- c. determine the wind direction to plan for the forced landing.

27

While on a VFR cross country and not in contact with ATC, what frequency would you use in the event of an emergency?

- a. 121.5 MHz.
- b. 122.5 MHz.
- c. 128.725 MHz.

28

If the engine oil temperature and cylinder head temperature gauges have exceeded their normal operating range, the pilot may have been operating with

- a. the mixture set too rich.
- b. higher-than-normal oil pressure.
- c. too much power and with the mixture set too lean.