PRACTICE EXAM 11 (60 QS)

1. The minimum fuel reserve required for a day VFR flight is enough to reach the first point of intended landing plus:

A. 30 minutes at normal cruise power

B. 45 minutes at normal cruise power

C. 60 minutes at maximum endurance

2. The minimum fuel reserve required for a night VFR flight is enough to reach the destination plus:

A. 45 minutes at normal cruise power

B. 30 minutes at normal cruise power

C. 20 minutes at best-glide power

3. The primary purpose of filing a VFR flight plan is to:

A. Obtain ATC separation from other traffic

B. Authorize entry into Class B airspace

C. Provide search-and-rescue protection

4. A VFR flight plan must be activated and closed by:

A. Air traffic control automatically

B. The destination airport manager

C. The pilot

5. If a pilot fails to close a VFR flight plan after arrival, the likely result is:

A. Search-and-rescue procedures begin after the overdue time

B. Automatic conversion to an IFR clearance

C. Immediate certificate suspension

6. A complete cross-country plan should include all of the following EXCEPT:

A. A weather briefing and go/no-go decision

B. A weight-and-balance computation

C. A request for an instrument approach clearance

7. Aircraft position lights consist of:

A. Red on the left wing, green on the right wing, white on the tail

B. Green on the left wing, red on the right wing, white on the nose

C. White on both wingtips and red on the tail

8. Required position (navigation) lights must be displayed from:

A. The end of evening civil twilight to the beginning of morning civil twilight

B. Sunset to sunrise

C. One hour after sunset to one hour before sunrise

9. For the purpose of logging night flight time, "night" is the period from:

A. The end of evening civil twilight to the beginning of morning civil twilight

B. Sunset to sunrise

C. One hour after sunset to one hour before sunrise

10. To carry passengers at night, the required recent experience must be obtained during the period from:

A. One hour after sunset to one hour before sunrise

B. Sunset to sunrise

C. The end of evening civil twilight to the beginning of morning civil twilight

11. At night, you see another aircraft showing a red light on your left and a green light on your right. The other aircraft is:

A. Flying away from you

B. Flying toward you, roughly head-on

C. Crossing from right to left

12. Required night equipment for an aircraft operated for hire includes a:

A. Second radio

B. Landing light

C. Backup attitude indicator

13. To preserve night vision, a pilot should:

A. Use bright white cockpit lighting continuously

B. Stare directly at distant lights

C. Use red or dim cockpit lighting and avoid bright lights

14. Full dark adaptation of the eyes takes approximately:

A. 5 minutes

B. 30 minutes

C. 2 hours

15. An ELT activates automatically on impact and aids search and rescue by transmitting on:

A. 121.5 MHz and 406 MHz

B. 122.8 MHz and 123.0 MHz

C. 118.0 MHz and 136.0 MHz

16. ELT batteries must be replaced or recharged after the transmitter has been used for a cumulative total of more than:

A. 30 minutes

B. 1 hour

C. 5 hours

17. The modern 406 MHz ELT signal is superior to 121.5 MHz because it:

A. Transmits voice messages to rescuers

B. Is satellite-monitored and provides precise location data

C. Operates without any battery

18. After a forced landing in remote terrain, a pilot should generally:

A. Stay with the aircraft, which is more visible to searchers

B. Walk toward the nearest road immediately

C. Disable the ELT to conserve its battery

19. In any emergency, the correct priority sequence is:

A. Navigate, communicate, aviate

B. Aviate, navigate, communicate

C. Communicate, aviate, navigate

20. Upon engine failure, the pilot's first action is to:

A. Establish best glide speed

B. Transmit a MAYDAY immediately

C. Engage the starter and add full power

21. Best glide speed (V_G) is the speed that provides the:

A. Maximum gliding distance for altitude lost

B. Steepest possible descent

C. Slowest controllable airspeed

22. Before an unavoidable forced landing, the pilot should:

A. Leave the doors latched for structural integrity

B. Increase airspeed well above best glide

C. Tighten harnesses, unlatch doors, and shut off fuel and ignition

23. Under NTSB Part 830, an aircraft accident involving substantial damage requires:

A. A written report within 30 days only

B. Immediate notification to the NTSB

C. No notification unless requested

24. Following an aircraft accident, a written report must be submitted to the NTSB within:

A. 5 days

B. 30 days

C. 10 days

25. A pilot who experiences an alternator failure at night should:

A. Shut down the engine to prevent fire

B. Shed nonessential electrical loads to conserve the battery

C. Turn off the magnetos to reduce demand

26. A pilot planning a night cross-country should carry, among other items, a:

A. Spare propeller

B. Second altimeter

C. Reliable flashlight with spare batteries

27. A standard weather briefing should be requested when a pilot:

A. Has not received any prior weather information for the flight

B. Needs only to update a previous briefing

C. Is planning a flight 6 or more hours away

28. Fuel reserves are legal minimums, meaning a prudent pilot should:

A. Carry substantially more fuel than the minimum

B. Plan to land exactly at the reserve fuel level

C. Reduce reserves on familiar routes

29. A pilot becomes temporarily lost during a cross-country. A sound first step is to:

A. Descend low to read town names

B. Continue on the same heading indefinitely

C. Climb for better navigation and radio reception and seek assistance

30. During a forced landing approach with excess altitude, a useful technique to lose altitude is a:

A. Forward slip

B. Steep power-on dive

C. Climb to bleed off energy

31. A pilot planning a cross-country must check NOTAMs primarily to identify:

A. The cost of fuel at the destination

B. The aircraft's weight-and-balance limits

C. Temporary Flight Restrictions and field conditions

32. When determining the runway in use at a non-towered airport, a pilot consults the:

A. Aircraft's POH performance section

B. Nearest VOR frequency

C. Wind sock and segmented circle

33. A pilot encountering deteriorating VFR weather should:

A. Climb into the clouds and proceed on instruments

B. Divert, turn back, or land while still in visual conditions

C. Descend lower to remain beneath the clouds

34. Position lights help a pilot at night determine another aircraft's:

A. Altitude precisely

B. Direction of travel

C. Airspeed

35. During night flight, depth perception and distance judgment are:

A. Degraded, requiring greater reliance on instruments and the VASI/PAPI

B. Improved compared to daytime

C. Unaffected by darkness

36. A pilot must enrich the mixture before descending to a lower altitude because:

A. Thinner air at low altitude requires less fuel

B. Denser air at lower altitude requires more fuel for the proper ratio

C. The engine produces no power during descent

37. A VFR flight plan provides no:

A. ATC separation from other traffic

B. Search-and-rescue benefit

C. Record of the intended route

38. During a precautionary off-airport landing, the safest field choice considers wind, surface, slope, and:

A. Proximity to the destination only

B. The presence of onlookers

C. Obstructions and the longest, smoothest surface into the wind

39. A pilot recognizing "get-there-itis" in themselves should:

A. Be willing to divert, delay, or cancel the flight

B. Increase speed to reach the destination sooner

C. Continue despite the warning signs

40. When carrying passengers at night, the three takeoffs and landings within 90 days must be:

A. Touch-and-go landings

B. To a full stop

C. At a towered airport only

41. A pilot planning a long cross-country over remote terrain should, for survival preparedness:

A. Avoid filing any flight plan to maintain flexibility

B. Carry no survival equipment to save weight

C. Carry a survival kit appropriate to the terrain and climate

42. Postflight responsibilities include securing the aircraft, logging the flight, reporting discrepancies, and:

A. Refueling to maximum capacity regardless of the next flight

B. Closing the VFR flight plan

C. Performing the next annual inspection

43. A headwind on a cross-country leg affects fuel planning by:

A. Reducing the fuel required for the leg

B. Increasing the time and fuel required for the leg

C. Having no effect on fuel burn

44. A pilot computing time en route for a leg should use:

A. True airspeed regardless of wind

B. Indicated airspeed only

C. Groundspeed, which accounts for wind

45. During an emergency, under 14 CFR 91.3, the pilot-in-command may:

A. Deviate from any rule to the extent required to meet the emergency

B. Never deviate from an ATC clearance

C. Deviate only with prior written approval

46. A pilot determining "night" for the requirement to display position lights uses the period from:

A. The end of evening civil twilight to the beginning of morning civil twilight

B. Sunset to sunrise

C. One hour after sunset to one hour before sunrise

47. During a night approach over dark, featureless terrain, the black-hole illusion makes a pilot feel:

A. Too low, prompting a climb

B. Correctly on glidepath

C. Too high, prompting a dangerously low approach

48. A pilot should obtain an outlook briefing when the planned departure is:

A. Within the next 30 minutes

B. Already underway

C. Six or more hours in the future

49. The most timely report of actual in-flight conditions along a route is a:

A. PIREP (pilot report)

B. Surface analysis chart

C. Terminal aerodrome forecast

50. An emergency descent for a cabin fire prioritizes, after maintaining control:

A. Completing the navigation log

B. Photographing the panel

C. Getting the aircraft on the ground as soon as possible

51. To declare an urgency condition (a serious but not yet grave situation), a pilot transmits:

A. "PAN-PAN, PAN-PAN, PAN-PAN"

B. "MAYDAY, MAYDAY, MAYDAY"

C. "Traffic advisory request"

52. To declare a distress condition (grave and imminent danger), a pilot transmits:

A. "PAN-PAN, PAN-PAN, PAN-PAN"

B. "MAYDAY, MAYDAY, MAYDAY"

C. "Securité, securité"

53. A VFR flight plan that is not closed within 30 minutes after the ETA causes Flight Service to:

A. Cancel the flight plan automatically with no action

B. Begin procedures to locate the aircraft

C. Issue an IFR clearance for the return flight

54. A pilot planning fuel for a cross-country with a strong forecast tailwind should remember that:

A. Tailwinds always require carrying extra reserve fuel

B. Tailwinds eliminate the need for any reserve

C. A tailwind increases groundspeed but reserves are still required

55. Required night equipment, summarized in part by 14 CFR 91.205, includes position lights, an anti-collision light system, an adequate electrical source, and:

A. A backup GPS unit

B. A second transponder

C. A spare set of fuses (or one spare of each kind)

56. A pilot who experiences a complete electrical failure at night retains the use of the engine because:

A. The battery powers the ignition continuously

B. The magnetos are self-powered and independent of the electrical system

C. The alternator switches to a backup mode

57. When planning a cross-country, a pilot confirms the airplane can meet the demands of the flight by checking:

A. Takeoff, climb, cruise, and landing performance for the conditions and weight

B. Only the cruise speed in the POH

C. The aircraft's resale value

58. A pilot who realizes mid-flight that fuel is lower than planned and the destination is now marginal should:

A. Continue and hope for favorable winds

B. Increase power to arrive sooner

C. Divert to a nearer airport to refuel with reserves intact

59. The "5 P's" in-flight risk check stands for Plan, Plane, Pilot, Passengers, and:

A. Power

B. Programming (avionics/automation)

C. Procedures

60. Survival after a forced landing is improved by filing a flight plan, carrying signaling equipment, and:

A. Walking away from the aircraft to find help

B. Disabling the ELT to save its battery

C. Staying with the aircraft for visibility

Answer Key

1. A — Day VFR fuel rules require enough fuel to reach the first point of intended landing plus 30 minutes at normal cruise power. Night VFR requires a larger 45-minute reserve.

2. A — Night VFR fuel rules require enough fuel to reach the destination plus 45 minutes at normal cruise power. The extra reserve over the day requirement reflects the reduced landing options in darkness.

3. C — The primary purpose of filing a VFR flight plan is to provide search-and-rescue protection. It provides no ATC separation and does not authorize airspace entry.

4. C — A VFR flight plan must be activated after departure and closed upon arrival by the pilot. ATC does not track or close it automatically.

5. A — If a pilot fails to close a VFR flight plan, search-and-rescue procedures begin once the overdue time passes. The flight plan is not automatically converted or closed by ATC.

6. C — A cross-country plan includes a weather briefing, weight-and-balance, performance, navigation log, and airspace review, but not an instrument approach clearance for a VFR flight. VFR flights do not require an instrument clearance.

7. A — Aircraft position lights are red on the left wingtip, green on the right wingtip, and white on the tail. This arrangement lets a pilot determine another aircraft's direction of travel at night.

8. B — Required position lights must be displayed from sunset to sunrise. This differs from the definitions used for logging night time and night passenger currency.

9. A — For logging night flight time, "night" is the period from the end of evening civil twilight to the beginning of morning civil twilight. This is distinct from the sunset-to-sunrise window for position lights.

10. A — Night passenger-carrying currency must be obtained during the period from one hour after sunset to one hour before sunrise. This is the specific window the regulation defines for night passenger experience.

11. B — Seeing the other aircraft's red (left) light on your left and green (right) light on your right means you are viewing its front, so it is flying roughly head-on toward you. The position-light arrangement reveals direction of travel.

12. B — An aircraft operated for hire at night must carry a landing light, among other night equipment. For non-commercial operations a landing light is recommended but not required.

13. C — To preserve night vision, the pilot uses red or dim cockpit lighting and avoids bright lights that destroy dark adaptation. Bright white light can erase 30 minutes of adaptation in an instant.

14. B — Full dark adaptation of the eyes takes approximately 30 minutes, during which the rods reach maximum sensitivity. Exposure to bright light can destroy this adaptation instantly.

15. A — An ELT transmits on 121.5 MHz (older units) and 406 MHz (modern, satellite-monitored) to aid search and rescue. The 406 MHz signal provides far better detection and positioning.

16. B — ELT batteries must be replaced or recharged after the transmitter has been used for a cumulative total of more than 1 hour, or when 50% of their useful life has expired. This ensures the beacon remains reliable.

17. B — The 406 MHz ELT signal is superior because it is satellite-monitored and provides precise location data. This dramatically speeds the location of a downed aircraft compared to 121.5 MHz.

18. A — After a forced landing in remote terrain, a pilot should stay with the aircraft, which is a far larger and more visible target for searchers than a person on foot. A filed flight plan and survival kit further aid rescue.

19. B — The correct emergency priority sequence is aviate, navigate, communicate. Maintaining aircraft control comes first, before navigating or working the radio.

20. A — Upon engine failure, the pilot's first action is to establish best glide speed, maximizing the distance and time available to reach a landing site. Only then does the pilot select a site and attempt a restart.

21. A — Best glide speed (V_G) provides the maximum gliding distance for the altitude lost, corresponding to the best lift-to-drag ratio. Flying faster or slower shortens the glide range.

22. C — Before an unavoidable forced landing, the pilot tightens harnesses, unlatches doors so they cannot jam, and shuts off fuel and ignition to reduce fire risk. These steps maximize survivability and egress.

23. B — Under NTSB Part 830, an aircraft accident involving substantial damage requires immediate notification to the NTSB. A written report follows within 10 days.

24. C — A written report must be submitted to the NTSB within 10 days following an aircraft accident. The initial notification itself must be made immediately.

25. B — A pilot experiencing an alternator failure at night should shed nonessential electrical loads to conserve the battery, since the engine keeps running on the self-powered magnetos. This preserves power for essential systems.

26. C — A pilot planning a night cross-country should carry a reliable flashlight with spare batteries, among other items. A flashlight is essential for reading charts and instruments if cockpit lighting fails.

27. A — A standard weather briefing should be requested when the pilot has not received any prior weather information for the flight. It provides the complete picture for a go/no-go decision.

28. A — Fuel reserves are legal minimums, so a prudent pilot carries substantially more than the minimum to account for wind, weather, and the unexpected. Planning to land exactly at reserve is unwise.

29. C — When temporarily lost, a sound first step is to climb for better navigation and radio reception and to seek assistance. Higher altitude extends the visible horizon and navaid range.

30. A — A forward slip increases the descent rate while controlling airspeed, allowing the pilot to lose excess altitude on a forced-landing approach. Diving or climbing would be counterproductive.

31. C — A pilot checks NOTAMs primarily to identify Temporary Flight Restrictions and field conditions before the flight. TFRs are temporary and would not appear on a static sectional chart.

32. C — At a non-towered airport, the pilot determines the runway in use by consulting the wind sock and the segmented circle. Aircraft take off and land into the wind.

33. B — A pilot encountering deteriorating VFR weather should divert, turn back, or land while still in visual conditions. Continuing into reduced visibility risks disorientation and loss of control.

34. B — Position lights help a pilot determine another aircraft's direction of travel at night. The red-left, green-right, white-tail arrangement reveals which way the other aircraft is flying.

35. A — At night, depth perception and distance judgment are degraded, requiring greater reliance on instruments and the VASI/PAPI. The lack of visual cues makes these references essential.

36. B — A pilot enriches the mixture before descending because the denser air at lower altitude requires more fuel for the proper fuel-air ratio. Failing to enrich can cause roughness or power loss when power is applied at low altitude.

37. A — A VFR flight plan provides no ATC separation from other traffic; it is tracked only for search and rescue. It is not a clearance and does not guarantee separation.

38. C — During a precautionary off-airport landing, the safest field choice considers obstructions and the longest, smoothest surface, landing into the wind. Wind, surface, and slope together determine the best option.

39. A — A pilot recognizing get-there-itis should be willing to divert, delay, or cancel the flight for safety. The decision not to press on is always available and never wrong when made for safety.

40. B — Night passenger-carrying landings must be made to a full stop, unlike day landings which may be touch-and-go. Full-stop landings ensure proficiency in the more demanding night environment.

41. C — For survival preparedness on a remote cross-country, a pilot carries a survival kit appropriate to the terrain and climate. A filed flight plan and signaling equipment further improve the chance of rescue.

42. B — Postflight responsibilities include securing the aircraft, logging the flight, reporting discrepancies, and closing the VFR flight plan. Closing the flight plan is the step most easily forgotten and the one whose omission causes the most trouble.

43. B — A headwind reduces groundspeed, increasing the time and fuel required for the leg. This is why fuel planning must use groundspeed rather than airspeed.

44. C — A pilot computes time en route using groundspeed, which accounts for wind, rather than airspeed. Groundspeed is the correct value for distance covered over the ground.

45. A — Under 14 CFR 91.3, the pilot-in-command may deviate from any rule to the extent required to meet an in-flight emergency. The PIC's first duty is to handle the emergency safely.

46. B — For the requirement to display position lights, "night" is defined as the period from sunset to sunrise. This differs from the civil-twilight definition used for logging night time.

47. C — The black-hole illusion over dark, featureless terrain makes a pilot feel too high, prompting a dangerously low approach. Cross-checking the VASI/PAPI and instruments counters the illusion.

48. C — An outlook briefing is appropriate when the planned departure is six or more hours in the future. It provides a general forecast for planning purposes.

49. A — A PIREP provides the most timely report of actual in-flight conditions along a route, coming directly from an aircraft. It confirms or corrects forecasts with real observations.

50. C — During an emergency descent for a cabin fire, the priority after maintaining control is to get the aircraft on the ground as soon as possible. A cabin fire is immediately life-threatening.

51. A — An urgency condition (serious but not yet grave) is declared by transmitting "PAN-PAN" three times. This unlocks ATC priority assistance short of a full distress emergency.

52. B — A distress condition (grave and imminent danger) is declared by transmitting "MAYDAY" three times. This signals the most serious emergency and unlocks full priority handling.

53. B — A VFR flight plan not closed within 30 minutes after the ETA causes Flight Service to begin procedures to locate the aircraft. This search is unnecessary if the pilot has simply forgotten to close it.

54. C — A tailwind increases groundspeed and shortens time en route, but required fuel reserves still apply. Reserves are a legal minimum regardless of favorable winds.

55. C — Required night equipment under 14 CFR 91.205 includes position lights, an anti-collision light system, an adequate electrical source, and a spare set of fuses (or one spare of each kind). These ensure safe operation and the ability to restore tripped circuits.

56. B — A pilot retains use of the engine during a complete electrical failure because the magnetos are self-powered and independent of the electrical system. The engine runs regardless of battery or alternator status.

57. A — A pilot confirms the airplane can meet the flight's demands by checking takeoff, climb, cruise, and landing performance for the conditions and weight. This ensures the planned flight is physically achievable.

58. C — With fuel lower than planned and a marginal destination, the pilot should divert to a nearer airport to refuel while reserves remain. Fuel exhaustion is a leading cause of avoidable accidents.

59. B — The "5 P's" in-flight risk check stands for Plan, Plane, Pilot, Passengers, and Programming (avionics/automation). It is a periodic check of the major risk factors during a flight.

60. C — Survival after a forced landing is improved by staying with the aircraft for visibility, along with filing a flight plan and carrying signaling equipment. The aircraft is a far larger, more visible target for searchers than a person on foot.