

PRACTICE EXAM 31 SIMULATION

1. A pilot reasons that because the destination forecast shows a 2,000-foot ceiling but only 2 miles visibility, no alternate is needed since the ceiling meets the threshold. What is the correct understanding?

- A. No alternate is needed, since the ceiling alone satisfies the rule
- B. No alternate is needed, since 2 miles is acceptable for IFR
- C. The forecast is only advisory, so no alternate applies
- D. An alternate is required, because the 1-2-3 rule needs both 2,000 feet and 3 miles

2. A pilot believes that filing IFR is illegal in clear weather because there are no clouds to fly through. What is correct?

- A. IFR may be flown in VMC; IFR describes the rules, not the weather
- B. IFR requires at least a broken cloud layer to be legal
- C. VFR is mandatory whenever the sky is clear
- D. Clear weather suspends both VFR and IFR rules

3. A pilot assumes that after a vacuum failure, all the flight instruments will be lost together. What is the correct understanding?

- A. All six instruments fail simultaneously
- B. The attitude and heading indicators fail, but the turn coordinator and pitot-static instruments remain
- C. Only the magnetic compass is affected
- D. Only the pitot-static instruments fail

4. A pilot believes DME should read zero when the aircraft is directly over the station. What actually happens?

- A. It reads the altitude above the station, because DME measures slant range
- B. It reads exactly zero nautical miles
- C. It reads the horizontal ground distance
- D. It reads the magnetic bearing to the station

5. A pilot thinks the localizer needs larger corrections as the runway is approached because the aircraft is closer. What is correct?

- A. Larger corrections are correct because the runway is near
- B. The localizer becomes less sensitive near the runway
- C. Corrections must become smaller because the localizer grows more sensitive near the runway
- D. Lateral control should be abandoned inside the final approach fix

6. A pilot reasons that a high-pressure system brings poor weather because air converges into it. What is the correct understanding?

- A. Highs feature rising, converging air that condenses into clouds
- B. Highs rotate counterclockwise, drawing in moisture
- C. Highs feature descending, diverging air that warms and dries, bringing fair weather
- D. Highs always form over warm, moist oceans

7. A pilot believes the cumulus stage of a thunderstorm is the most dangerous because the cloud is building rapidly. What is correct?

- A. The mature stage is most dangerous, with both updrafts and downdrafts and severe hazards
- B. The cumulus stage is most dangerous due to building updrafts
- C. The dissipating stage is most dangerous due to downdrafts
- D. All stages are equally hazardous to flight

8. A pilot believes datalink NEXRAD radar shows storms in real time and can be used to dodge between cells. What is the correct understanding?

- A. The image lags the storms' actual positions, so it is for strategic use only
- B. The image is real-time and suitable for close-in avoidance
- C. The radar detects only turbulence, not precipitation
- D. The radar is available only above 18,000 feet

9. A pilot reasons that the 45-minute IFR reserve can be skipped when the destination weather is excellent. What is correct?

- A. The reserve drops to 30 minutes in good weather
- B. The reserve applies only when an alternate is required
- C. The 45-minute reserve is always required under IFR
- D. No reserve is required for IFR flight in VMC

10. A pilot believes the magnetic compass is the most reliable instrument to read during a turn because it needs no power. What is correct?

- A. The compass is most accurate during turns through north
- B. The compass requires vacuum power during turns
- C. The compass is immune to acceleration and turning errors
- D. The compass is subject to turning and acceleration errors during maneuvers

11. A pilot assumes the outbound leg of a hold is the one timed to a standard length. What is correct?

- A. The outbound leg is always exactly one minute
- B. Neither leg is timed; only DME is used
- C. The inbound leg is timed to a standard length, and the outbound leg is adjusted

D. Both legs are timed identically regardless of wind

12. A pilot believes selecting the alternate static source will make the altimeter read lower than actual. What actually happens in an unpressurized cabin?

A. The altimeter reads slightly higher than actual

B. The altimeter reads slightly lower than actual

C. The altimeter reads exactly the same

D. The altimeter freezes at the current value

13. A pilot believes a procedure turn must always be flown when it is charted, even under radar vectors to final. What is correct?

A. The procedure turn is mandatory whenever charted

B. The procedure turn is flown only above its charted altitude

C. The procedure turn requires controller authorization to skip

D. A procedure turn is not flown when being radar vectored to final

14. A pilot reasons that WAAS works by providing its own inertial reference independent of satellites. What is correct?

A. WAAS provides an inertial reference replacing satellites

B. WAAS links directly to ground-based ILS glide slopes

C. WAAS reduces the required satellites to two

D. WAAS broadcasts ground-measured corrections that sharpen GPS accuracy and integrity

15. A pilot believes structural icing can form in dry air as long as the temperature is below freezing. What is correct?

A. Below-freezing dry air alone produces icing

- B. Icing requires only altitude above 18,000 feet
- C. Icing requires both visible moisture and a temperature at or below freezing
- D. Warm visible moisture freezes on contact regardless of temperature

16. A pilot treats the EFC time as purely informational with no operational use. What is correct?

- A. The EFC sets the maximum holding airspeed
- B. The EFC tells the pilot when to leave the hold if communication is lost
- C. The EFC defines the inbound leg length in miles
- D. The EFC assigns the holding pattern's turn direction

17. A pilot believes communicating with ATC should come before flying the aircraft after an instrument failure. What is the correct priority?

- A. Communicate, then navigate, then aviate
- B. Aviate, then navigate, then communicate
- C. Navigate, then communicate, then aviate
- D. Communicate, then aviate, then navigate

18. A pilot believes the 1-2-3 rule sets the weather minimums the alternate airport must meet. What does the rule actually determine?

- A. The visibility required to land at the alternate
- B. The fuel reserve for the alternate leg
- C. Whether an alternate must be filed at all, based on the destination forecast
- D. The maximum holding airspeed at the destination

19. A pilot assumes the turn coordinator is lost along with the attitude indicator after a vacuum failure. What is correct?

- A. The turn coordinator fails because it shares the vacuum source
- B. The turn coordinator runs on ram air and fails with the pitot
- C. The turn coordinator is typically electrically driven and remains available
- D. The turn coordinator requires no power and is unaffected by any failure

20. A pilot believes a warm front produces a narrow band of violent thunderstorms. What is correct?

- A. A warm front forces air up steeply, concentrating weather
- B. A warm front produces widespread layered clouds and steady precipitation well ahead
- C. A warm front moves faster than a cold front and clears rapidly
- D. A warm front produces no clouds or precipitation

21. A pilot reasons that spatial disorientation only affects poorly trained pilots. What is correct?

- A. Only fatigued pilots experience disorientation
- B. Disorientation can be eliminated by stronger willpower
- C. The illusions are products of normal physiology and affect everyone
- D. Skilled pilots are immune to the illusions

22. A pilot believes the MOCA is always higher than the MEA on the same segment. What is correct?

- A. The MOCA guarantees more navigation coverage than the MEA
- B. The MOCA ignores obstacles entirely
- C. The MEA guarantees only obstacle clearance
- D. The MOCA is always equal to or lower than the MEA

23. A pilot assumes that filing a creative direct route between two busy airports guarantees that exact clearance. What is the likely outcome when a preferred route exists?

- A. The flight will be prohibited from departing
- B. The flight plan will be rejected outright
- C. The aircraft will be cleared exactly as filed
- D. The pilot will likely receive an amendment onto the preferred route

24. A pilot believes the tower will close the IFR flight plan after landing at a non-towered airport. What is correct?

- A. The transponder closes it automatically on landing
- B. The pilot must close it with ATC or flight service
- C. The tower closes it even at non-towered airports
- D. The flight plan never needs to be closed

25. A pilot reasons that the standard inbound holding leg is two minutes at all altitudes. What is correct?

- A. It is two minutes at all altitudes
- B. It is 45 seconds below 14,000 feet
- C. It is one minute at or below 14,000 feet and 1.5 minutes above
- D. It is always 1.5 minutes regardless of altitude

26. A pilot believes the instrument rating must be renewed every 24 months. What is correct?

- A. The rating expires every 12 months
- B. The rating must be re-tested every 24 months
- C. The rating does not expire; only currency must be maintained
- D. The rating converts to a private certificate after two years

27. A pilot believes RNP and RNAV are the same because both navigate to waypoints. What distinguishes RNP?

- A. RNP uses only ground-based navaids
- B. RNP cannot use GPS
- C. RNP navigates to a lower accuracy than RNAV
- D. RNP adds on-board performance monitoring and alerting

28. A pilot believes a glide slope needle deflected above center means to descend more steeply. What does it actually indicate?

- A. The aircraft is above the glide path; increase descent
- B. The aircraft is below the glide path; reduce descent
- C. The localizer has failed; disregard it
- D. The aircraft has passed the missed approach point

29. A pilot believes that reaching the MDA on a non-precision approach permits a landing regardless of visibility. What is correct?

- A. Flight visibility must meet the minimum and a required visual reference must be in sight
- B. Reaching the MDA alone permits the landing
- C. Bright runway lights alone permit the landing
- D. A centered localizer alone permits the landing

30. A pilot assumes that exceeding the maximum holding airspeed has no consequence. What is the actual risk?

- A. The transponder resets to the VFR code
- B. The aircraft may exit the protected airspace, especially in the turns
- C. The inbound leg timing doubles automatically
- D. The hold becomes nonstandard, requiring left turns

31. A pilot believes "radar contact" removes all reporting duties. What is correct?

- A. No reports of any kind are required in radar contact
- B. Position reports over open-triangle points become mandatory
- C. The pilot must report every frequency change
- D. Certain reports, such as equipment malfunctions, are still required

32. A pilot believes an inoperative required instrument is acceptable for IFR if it is simply noted in the logbook. What is correct?

- A. Any logged inoperative instrument is acceptable for IFR
- B. The item must be addressed under the MEL or deactivate-and-placard process
- C. VMC weather always permits the flight
- D. GPS altitude may substitute for the instrument

33. A pilot believes a SID's primary purpose is to guarantee obstacle clearance. What is correct?

- A. A SID is designed primarily to simplify clearance delivery and organize traffic flow
- B. A SID is flown only at the pilot's discretion
- C. A SID is always a textual procedure
- D. A SID never includes a climb gradient

34. A pilot believes verifying the localizer's Morse identifier is unnecessary if the needle is centered. What is correct?

- A. The identifier confirms the correct, operating facility, preventing false guidance
- B. The identifier sets the decision altitude automatically
- C. The identifier indicates the runway length
- D. The identifier reveals the glide slope angle

35. A pilot believes a converging temperature–dew point spread on a calm evening means clearing skies. What does it actually indicate?

- A. Strong winds aloft developing
- B. An unstable lapse rate building thunderstorms
- C. The air approaching saturation, favoring fog
- D. Rapidly improving visibility overnight

36. A pilot believes the attitude indicator is the primary instrument for pitch in level flight because it is the most important instrument. What is correct?

- A. The vertical speed indicator is primary for pitch in level flight
- B. The attitude indicator is primary for pitch in all phases
- C. The airspeed indicator is primary for pitch in level flight
- D. The altimeter is primary for pitch because holding altitude is the objective

37. A pilot believes "ducking under" the MDA briefly to find the runway is acceptable. What is the correct understanding?

- A. It is acceptable if done within 100 feet
- B. It triggers an automatic transponder change
- C. It exceeds the maximum holding airspeed
- D. It descends the aircraft below the altitude that guarantees obstacle protection

38. A pilot believes the lost-communication route rule lets them fly whatever route is most direct. What is correct?

- A. The pilot may choose any efficient route
- B. The pilot flies the assigned route first under the AVE-F priority
- C. The pilot must go to the nearest airport regardless of filing

D. The clearance is voided and free navigation applies

39. A pilot believes a non-WAAS GPS can fly LPV approaches. What is correct?

A. Any GPS can fly LPV regardless of WAAS

B. LPV requires no vertical guidance at all

C. Non-WAAS GPS provides better vertical guidance than WAAS

D. A non-WAAS GPS is generally limited to lateral (LNAV) minimums

40. A pilot believes that being legally current guarantees being proficient. What is correct?

A. Currency and proficiency are identical concepts

B. A current pilot is always proficient

C. Currency is a regulatory minimum; proficiency is actual ability, and they can differ

D. Proficiency expires every 24 months like a written test

41. A pilot believes the airspeed indicator uses the static source only, like the altimeter. What is correct?

A. The airspeed indicator uses both pitot and static sources

B. The airspeed indicator uses the static source only

C. The airspeed indicator uses the pitot source only

D. The airspeed indicator uses neither source

42. A pilot believes that in a nose-low unusual attitude, pulling back immediately is the priority. What is correct?

A. Reduce power, level the wings, then raise the nose

B. Pull back immediately regardless of bank

C. Add power and pull while maintaining the bank

D. Hold the attitude until airspeed stabilizes

43. A pilot believes the VOR indication changes when the aircraft heading changes. What is correct?

A. The CDI reverses with every heading change

B. The indication depends on aircraft position relative to the station, not heading

C. The VOR cannot be used unless heading matches the radial

D. The TO/FROM flag is driven by heading

44. A pilot believes losing communication in VFR conditions during an IFR flight means climbing into cloud to proceed IFR. What is correct?

A. Climb into the nearest cloud and proceed under IFR

B. Squawk 7700 and hold over the present position

C. Continue to the destination at the assigned altitude regardless

D. Remain in VFR conditions and land as soon as practical

45. A pilot believes a Convective SIGMET applies only to light aircraft. What is correct?

A. It applies only to inexperienced pilots

B. It concerns thunderstorm hazards significant to all aircraft

C. It applies only to aircraft above 18,000 feet

D. It implies only light rime icing

46. A pilot believes the heading indicator never needs adjustment in flight. What is correct?

A. The heading indicator drifts and must be reset to the compass in steady flight

B. The heading indicator is immune to drift

C. The heading indicator is powered by the pitot-static system

D. The heading indicator shows bearing to a VOR

47. A pilot believes any charted airport automatically qualifies as an alternate at the standard 600-2 or 800-2 minimums. What is correct?

A. The standard 600-2 always applies to every airport

B. All airports require only basic VFR as an alternate

C. Charted airports never require any minimums as alternates

D. An airport may have non-standard alternate minimums or "alternate NA" published

48. A pilot believes that on partial panel after a vacuum failure, the heading indicator is used to control bank. What is correct?

A. The attitude indicator remains the bank reference

B. The turn coordinator is used to control bank

C. The compass alone controls bank

D. The altimeter controls bank

49. A pilot believes the IRA knowledge test result is valid indefinitely once passed. What is correct?

A. The result is valid for 24 calendar months

B. The result is valid indefinitely with no limit

C. The result is valid for 12 calendar months

D. The result is valid for 36 calendar months

50. A pilot believes datalink NEXRAD can be used to thread between embedded thunderstorm cells. What is correct?

A. It detects only turbulence, not precipitation

- B. It is available only above 18,000 feet
- C. Its latency makes it unsuitable for close-in avoidance; use it strategically
- D. It refreshes too quickly to interpret

51. A pilot believes the standard-rate turn completes a 360-degree turn in one minute. What is correct?

- A. It completes 360 degrees in 30 seconds
- B. It changes heading at 3 degrees per second, completing 360 degrees in two minutes
- C. It changes heading at 6 degrees per second
- D. It is independent of airspeed for a given bank

52. A pilot believes emergency authority can be used for any inconvenience to save time. What is correct?

- A. It allows deviation from any rule only to the extent required to meet a genuine emergency
- B. It permits routine shortcuts on every flight
- C. It transfers command authority to the controller
- D. It applies to scheduling delays as well as emergencies

53. A pilot believes an ODP at a non-towered airport is merely advisory and any departure heading is fine. What is correct?

- A. ATC always provides vectors at non-towered airports
- B. A STAR provides the same obstacle protection
- C. The ODP should be reviewed and flown for guaranteed obstacle clearance
- D. The ODP organizes high-density traffic flow

54. A pilot believes the synopsis in a briefing provides the destination's exact landing minimums. What does it actually provide?

- A. The assigned transponder code
- B. The required fuel reserve
- C. The destination's landing minimums
- D. The big-picture causes — fronts, pressure systems, air masses

55. A pilot believes a procedure turn is omitted only on precision approaches. What is correct?

- A. It is omitted only on precision approaches
- B. It is omitted when charted NoPT, radar-vectored to final, or cleared straight-in
- C. It is always mandatory when charted
- D. It requires a holding entry to omit

56. A pilot believes structural icing improves wing performance by smoothing the airflow. What is correct?

- A. Ice smooths the airflow and increases lift
- B. Ice has no effect on wing performance
- C. Ice disrupts airflow, reducing lift and increasing drag and weight
- D. Ice only affects the pitot tube, not the wing

57. A pilot believes a destination forecast of exactly 2,000 feet and 3 statute miles for the window still requires an alternate because it only just meets the threshold. What is correct?

- A. No alternate is required because both thresholds are met
- B. An alternate is required because the values only just meet the rule
- C. An alternate meeting precision minimums is mandatory
- D. The flight must be delayed until conditions improve

58. A pilot believes the CDI sensitivity on a GPS approach stays constant from en route to the runway. What is correct?

- A. Sensitivity tightens automatically from en route to terminal to approach mode
- B. Sensitivity remains constant in all phases
- C. Sensitivity is widest in the approach phase
- D. The CDI shows VOR radials during a GPS approach

59. A pilot believes that declaring an emergency forces an immediate landing at the nearest airport. What is correct?

- A. Declaring cancels the IFR flight plan automatically
- B. Declaring brings ATC's full assistance and priority while the pilot manages the situation
- C. Declaring requires landing at the nearest airport regardless of suitability
- D. Declaring transfers command to the controller

60. A pilot believes that because the aircraft is legally equipped, departing into a marginal forecast with fatigue, passenger pressure, and forecast icing in a non-known-ice aircraft is justified. What does sound ADM indicate?

- A. Departing is justified by legal equipment alone
- B. The passenger's urgency should decide the matter
- C. Climbing above the icing once airborne removes the risk
- D. The combined PAVE risks may exceed prudent limits, favoring delay or cancellation

Answer Key

1. D — The 1-2-3 rule requires both a 2,000-foot ceiling AND 3 statute miles visibility; a 2-mile visibility fails the visibility part, so an alternate is required. Meeting only the ceiling is insufficient. Both conditions must be satisfied to omit the alternate.

2. A — IFR may be flown in VMC because IFR describes the operating rules, not the weather. No clouds are required, and clear weather does not mandate VFR or suspend the rules. A pilot may fly IFR in clear air for structure and separation.
3. B — A vacuum failure removes the attitude and heading indicators while the electrically driven turn coordinator and the pitot-static instruments remain. They do not all fail together. This split preserves partial-panel capability.
4. A — DME measures slant range, so directly over the station it reads the altitude above the station rather than zero. It does not read zero, horizontal distance, or bearing. The slant-range geometry explains the non-zero overhead reading.
5. C — Corrections must become smaller near the runway because the localizer course narrows and grows more sensitive. Larger corrections would overshoot, the localizer does not become less sensitive, and lateral control is not abandoned. Increasing sensitivity demands finer corrections.
6. C — A high-pressure system features descending, diverging air that warms and dries, bringing fair weather. It does not have rising, converging air, and its weather is not a function of where it forms. The descending air is the reason.
7. A — The mature stage is most dangerous, with both updrafts and downdrafts and severe hazards such as hail, lightning, and turbulence. The cumulus stage has building updrafts only, and the dissipating stage is weakening. The coexistence of opposing drafts defines the mature stage.
8. A — Datalink NEXRAD lags the storms' actual positions due to latency, so it is for strategic use only. It is not real-time, does not detect precipitation, and is not altitude-restricted. Latency makes close-in avoidance unsafe.
9. C — The 45-minute IFR reserve is always required, regardless of weather. It does not drop to 30 minutes, apply only with an alternate, or disappear in VMC. It is a fixed floor.
10. D — The magnetic compass is subject to turning and acceleration errors during maneuvers, making it unreliable in turns despite needing no power. It is not most accurate through north, needs no vacuum power, and is not immune to those errors. It is reliable only in steady, unaccelerated flight.

11. C — The inbound leg is timed to a standard length and the outbound leg is adjusted to compensate. The outbound leg is not fixed, both legs are not timed identically, and DME is not the only method. Controlling the inbound leg keeps the pattern consistent.

12. A — In an unpressurized cabin, the alternate static source makes the altimeter read slightly higher than actual, because cabin static pressure is slightly lower than outside. It does not read low, the same, or freeze. The lower cabin pressure produces the high reading.

13. D — A procedure turn is not flown when being radar vectored to final, because the vectors position the aircraft to intercept directly. A charted procedure turn is not mandatory under vectors. It is also omitted on NoPT routes and when cleared straight-in.

14. D — WAAS broadcasts ground-measured corrections that sharpen GPS accuracy and integrity, enabling vertically guided approaches. It does not provide inertial reference, link to ground ILS, or reduce required satellites to two. The corrections are what unlock vertical guidance.

15. C — Structural icing requires both visible moisture and a temperature at or below freezing. Dry sub-freezing air lacks the water, icing is not altitude-defined, and moisture above freezing does not freeze on contact. Both conditions must coexist.

16. B — The EFC time tells the pilot when to leave the holding fix if two-way communication is lost. It does not set holding speed, leg length, or turn direction. Its lost-communication role makes it operational, not merely informational.

17. B — The correct priority is aviate, then navigate, then communicate. Flying the aircraft comes before navigating or using the radio. Reversing this order while the aircraft diverges is a classic fatal error.

18. C — The 1-2-3 rule determines whether an alternate must be filed at all, based on the destination forecast. It does not set the alternate's landing visibility, the alternate-leg fuel, or the holding speed. It is a destination test.

19. C — The turn coordinator is typically electrically driven and remains available after a vacuum failure. It does not share the vacuum source, run on ram air, or operate without power. Its separate electrical power is why it survives.

20. B — A warm front produces widespread layered clouds and steady precipitation well ahead of the front. The narrow, violent band describes a cold front, warm fronts move slower, and they do produce clouds and precipitation. The widespread, gentle signature is the warm front.

21. C — Spatial disorientation affects everyone because the illusions are products of normal physiology. It is not limited to fatigued or poorly trained pilots, cannot be eliminated by willpower, and skilled pilots are not immune. The physiological basis is universal.

22. D — The MOCA is always equal to or lower than the MEA on the same segment, because it relaxes the signal-coverage requirement (reception only within 22 NM of the VOR) while still guaranteeing obstacle clearance. It does not guarantee more coverage or ignore obstacles, and the MEA guarantees both. The MOCA is the lower altitude.

23. D — Filing a creative direct route between two busy airports with a preferred route most likely results in an amendment onto the preferred route. The flight is not prohibited or rejected, nor cleared exactly as the creative route was filed. Filing the preferred route from the start improves the chance of "as filed."

24. B — At a non-towered airport, the pilot must close the IFR flight plan with ATC or flight service, since no tower observes the landing. The transponder does not close it, and the tower is not present to do so. The flight plan does need closing.

25. C — The standard inbound holding leg is one minute at or below 14,000 feet and 1.5 minutes above. It is not two minutes at all altitudes, 45 seconds below 14,000 feet, or always 1.5 minutes. The 14,000-foot break governs the timing.

26. C — The instrument rating does not expire; only currency must be maintained. It requires no 12- or 24-month renewal or re-test, and it does not convert to a private certificate. What lapses is the legal right to use it without re-establishing currency.

27. D — RNP adds on-board performance monitoring and alerting that distinguishes it from basic RNAV. It can use GPS, navigates to a defined accuracy, and is not ground-NavAid-only. The monitoring-and-alerting capability is the difference.

28. B — A glide slope needle deflected above center means the aircraft is below the glide path and should reduce its descent to recapture it. It does not mean the aircraft is above the path, a localizer failure, or passing the MAP. Fly toward the needle: needle high means fly up.

29. A — To land from a non-precision approach, flight visibility must meet the minimum AND a required visual reference must be in sight. Reaching the MDA alone, bright lights alone, or a centered localizer alone do not permit a landing. Both conditions are required.

30. B — Exceeding the maximum holding airspeed can carry the aircraft outside the protected airspace, especially in the turns. It does not reset the transponder, double timing, or make the hold nonstandard. Loss of protected airspace is the risk.

31. D — Certain reports, such as equipment malfunctions, are still required in radar contact. Radar contact relieves only routine position reporting, not all reporting duties; open-triangle points do not become mandatory, and routine frequency changes are not always-required reports. Malfunctions remain reportable.

32. B — An inoperative required instrument must be addressed under the MEL or the deactivate-and-placard process. Merely logging it, forecast VMC, or GPS altitude do not legalize the flight. Required equipment must be operative or properly handled.

33. A — A SID is designed primarily to simplify clearance delivery and organize traffic flow. It is ATC-assigned (not pilot-discretion), graphic, and may include a climb gradient. Obstacle clearance is the ODP's primary purpose, not the SID's.

34. A — Verifying the localizer's Morse identifier confirms the correct, operating facility and prevents following false guidance, even with a centered needle. It does not set the DA, indicate runway length, or reveal the glide slope angle. Positive identification is required before use.

35. C — A converging temperature–dew point spread on a calm evening means the air is approaching saturation, favoring fog. It does not indicate strong winds aloft, an unstable lapse rate, or improving visibility. Near-saturation in calm, cooling conditions favors radiation fog.

36. D — The altimeter is primary for pitch in level flight because holding altitude is the objective and it shows that most directly. The attitude indicator is the supporting instrument, the VSI is not primary, and the airspeed indicator is not primary for pitch here. The primary instrument confirms the objective.

37. D — "Ducking under" the MDA descends the aircraft below the altitude that guarantees obstacle protection. It is not acceptable within 100 feet, and it does not change the transponder or exceed holding speed. Loss of obstacle clearance is the hazard.

38. B — The lost-communication route rule directs the pilot to fly the assigned route first under the AVE-F priority, not whatever is most direct. The pilot does not freely choose, divert to the nearest airport, or treat the clearance as void. Predictability for ATC governs.

39. D — A non-WAAS GPS is generally limited to lateral (LNAV) minimums because it lacks the WAAS corrections needed for vertical guidance to LPV. It cannot fly LPV, LPV does require vertical guidance, and non-WAAS does not exceed WAAS performance. The equipment limits the achievable minimums.

40. C — Currency is a regulatory recency minimum while proficiency is actual ability, and the two can differ. They are not identical, a current pilot is not automatically proficient, and proficiency does not expire on a fixed schedule. Legal recency does not guarantee skill.

41. A — The airspeed indicator uses both the pitot and static sources, displaying the difference as airspeed. It does not use the static source only (that is the altimeter and VSI), the pitot only, or neither. Using both sources is why a pitot blockage uniquely affects it.

42. A — In a nose-low unusual attitude, the recovery is to reduce power, level the wings, then raise the nose. Pulling back while banked tightens the spiral and overstresses the airframe, and adding power is wrong. Roll first, then recover pitch.

43. B — A VOR indication depends on the aircraft's position relative to the station, not its heading. The CDI does not reverse with heading, the VOR does not require the heading to match the radial, and the TO/FROM flag is not heading-driven. Position, not heading, determines the radial.

44. D — Losing communication in VFR conditions during an IFR flight means remaining in VFR conditions and landing as soon as practical. The pilot does not climb into cloud, hold indefinitely, or press to the destination at altitude. Staying VFR and landing removes the conflict.

45. B — A Convective SIGMET concerns thunderstorm hazards significant to all aircraft, not just light aircraft or inexperienced pilots. It is not altitude-restricted and implies severe, not light, hazards. The all-aircraft thunderstorm focus is correct.

46. A — The heading indicator drifts over time and must be reset to the magnetic compass in steady flight. It is not immune to drift, is gyroscopically (commonly vacuum) driven rather than pitot-static, and does not show VOR bearing. Periodic resetting to the compass is required.

47. D — An airport may have non-standard alternate minimums or "alternate NA" published, so it does not automatically qualify at the standard 600-2/800-2. The standard minimums do not always apply, the airport is not necessarily usable, and minimums are required. Always check the chart.

48. B — On partial panel after a vacuum failure, the turn coordinator is used to control bank, since the attitude and heading indicators are lost. The compass alone and the altimeter do not control bank. The turn coordinator is the bank reference.

49. A — A passing IRA knowledge test result is valid for 24 calendar months, within which the practical test must be completed. It is not valid indefinitely, 12 months, or 36 months. The 24-month validity is the rule.

50. C — Datalink NEXRAD's latency makes it unsuitable for close-in avoidance, so it must be used strategically; it cannot thread between embedded cells. It does detect precipitation, is not altitude-restricted, and the problem is staleness, not refresh speed. Use it for wide-margin routing only.

51. B — A standard-rate turn changes heading at 3 degrees per second, completing a 360-degree turn in two minutes, not one. It is not 30 seconds or 6 degrees per second, and the required bank increases with airspeed. The two-minute figure is correct.

52. A — Emergency authority allows deviation from any rule only to the extent required to meet a genuine emergency. It is not for inconvenience, routine shortcuts, or scheduling delays, and does not transfer command to the controller. A true emergency is required to invoke it.

53. C — An ODP at a non-towered airport should be reviewed and flown for guaranteed obstacle clearance, not treated as advisory. ATC does not always provide vectors there, a STAR does not serve departures, and the ODP is not for traffic flow. The ODP is the pilot's terrain safeguard.

54. D — The synopsis provides the big-picture causes — fronts, pressure systems, and air masses. It does not provide the transponder code, fuel reserve, or landing minimums. The synopsis sets the weather context.

55. B — A procedure turn is omitted when the chart shows NoPT, when radar-vectored to final, or when cleared straight-in — not only on precision approaches. It is not always mandatory when charted, and omitting it does not require a holding entry. These are the conditions for omission.

56. C — Structural ice disrupts the airflow over the wing, reducing lift and increasing drag and weight; it does not smooth airflow or improve performance. It affects far more than the pitot tube. Ice degrades, not enhances, wing performance.

57. A — A forecast of exactly 2,000 feet and 3 statute miles for the window meets both 1-2-3 thresholds, so no alternate is required. Meeting the thresholds exactly satisfies the rule, and no precision-minimum alternate or delay is mandated. Both conditions are met.

58. A — On a GPS approach, the CDI full-scale sensitivity tightens automatically from en route to terminal to approach mode. It does not stay constant, is not widest in the approach phase, and displays GPS guidance, not VOR radials. The pilot must confirm the mode before relying on the guidance.

59. B — Declaring an emergency brings ATC's full assistance and priority while the pilot manages the situation. It does not cancel the flight plan, force a landing at the nearest airport regardless of suitability, or transfer command. Declaring unlocks support and priority.

60. D — The combined PAVE risks — marginal forecast, fatigue, passenger pressure, and forecast icing in a non-known-ice aircraft — may exceed prudent limits, favoring delay or cancellation. Legal equipment alone, passenger urgency, and climbing through icing do not resolve the aggregated risk. Recognizing when combined risks exceed prudent limits is the essence of aeronautical decision-making.