

PRACTICE EXAM 34 SIMULATION

1. A pilot's destination forecast shows a 1,500-foot ceiling and 2 statute miles visibility through the required window. What does this require?

- A. Nothing further, since the ceiling exceeds 1,000 feet
- B. Cancellation of the flight before departure
- C. A switch to a VFR flight plan
- D. Selection and filing of a qualifying alternate airport

2. Why does the airspeed indicator behave like an altimeter when the pitot tube and its drain hole are both blocked?

- A. Trapped pressure then responds only to changes in static pressure
- B. The static port has also failed
- C. The instrument switches to vacuum power
- D. Ram air pressure increases as the aircraft slows

3. Which instrument is connected to both the pitot and static pressure sources?

- A. The altimeter
- B. The vertical speed indicator
- C. The turn coordinator
- D. The airspeed indicator

4. A pilot at 16,000 feet MSL is cleared to hold. Which pairing of maximum holding airspeed and standard inbound leg time is correct?

- A. 230 knots and 1 minute
- B. 200 knots and 1.5 minutes
- C. 265 knots and 1 minute
- D. 265 knots and 1.5 minutes

5. A standard-rate turn changes heading at what rate and completes 360 degrees in how long?

- A. 6 degrees per second, 1 minute
- B. 1.5 degrees per second, 4 minutes
- C. 3 degrees per second, 2 minutes
- D. 3 degrees per second, 1 minute

6. Which transponder code indicates a two-way radio communication failure?

- A. 7600
- B. 7700
- C. 7500
- D. 1200

7. A pilot computes a leg of 84 nautical miles at a forecast groundspeed of 112 knots. What is the time en route?

- A. 50 minutes
- B. 60 minutes
- C. 45 minutes
- D. 40 minutes

8. Which AIRMET type advises of IFR conditions and mountain obscuration?

- A. AIRMET Zulu
- B. AIRMET Tango
- C. AIRMET Sierra
- D. AIRMET Romeo

9. A pilot loses communication in IMC. On each segment, which altitude should be flown?

- A. The highest of the minimum, expected, and assigned altitudes
- B. The last assigned altitude only
- C. The lowest minimum altitude available
- D. Whatever altitude gives the best winds

10. Why are the attitude indicator and turn coordinator typically on different power sources?

- A. To reduce the electrical load on the alternator
- B. Because the turn coordinator cannot run on vacuum
- C. So a single power-source failure cannot remove all attitude information
- D. To allow the attitude indicator to be switched off in cruise

11. Which is NOT one of the standard approach segments?

- A. The feeder route to an initial approach fix
- B. The intermediate approach segment
- C. The missed approach segment
- D. The cruise climb segment after takeoff

12. For an alternate airport served only by a non-precision approach, what standard minimums apply absent published non-standard values?

- A. 600 feet and 2 statute miles
- B. 400 feet and 1 statute mile
- C. 800 feet and 2 statute miles
- D. Basic VFR only

13. A pilot is being radar vectored to the final approach course of an ILS with a charted procedure turn. Should the procedure turn be flown?

- A. Yes, it is mandatory whenever charted
- B. No, a procedure turn is not flown when radar-vectored to final
- C. Only above the charted procedure-turn altitude
- D. Only with specific controller authorization

14. A glide slope needle on the ILS indicator is deflected above center. What does this indicate?

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

15. Within how many days must a VOR accuracy check be completed for IFR use?

- A. 90 days
- B. 60 days
- C. 30 days
- D. 6 calendar months

16. A pilot copying a clearance hears "squawk 4271." Which CRAFT element is this?

- A. The clearance limit
- B. The transponder code
- C. The frequency
- D. The route

17. Why must datalink NEXRAD radar not be used for close-in thunderstorm avoidance?

- A. It cannot detect convective precipitation
- B. It is available only above 18,000 feet
- C. It refreshes too rapidly to interpret
- D. Latency makes the image lag the storm's real position

18. A pilot reaches the missed approach point on a non-precision approach without the runway in sight. What must the pilot do?

- A. Descend below the MDA to search
- B. Circle at the MDA until weather improves
- C. Continue on a computed glide path to the threshold
- D. Execute the published missed approach immediately

19. Which statement about structural icing is true?

- A. It requires only a freezing temperature regardless of moisture
- B. It requires both visible moisture and a temperature at or below freezing
- C. It forms only above 18,000 feet
- D. It improves wing performance by smoothing airflow

20. A pilot arrives at a holding fix from the sector opposite the holding side, behind the inbound course. Which entry applies?

- A. A direct entry
- B. A parallel entry
- C. A teardrop entry
- D. No entry is needed

21. Which mnemonic lists the additional equipment required for IFR flight?

- A. GRABCARD
- B. ARROW
- C. AVIATES
- D. CIGARTIP

22. A pilot must compute fuel: 2.0 hours to the destination, no alternate required, at 12 gallons per hour, plus the IFR reserve. What is the minimum fuel?

- A. About 24 gallons
- B. About 27 gallons
- C. About 33 gallons
- D. About 39 gallons

23. Why does a high-pressure system generally bring fair weather?

- A. Rising, converging air condenses into clouds
- B. Descending, diverging air warms and dries
- C. It rotates counterclockwise, dispersing moisture
- D. It forms only over cold, dry land

24. A pilot at a non-towered airport completes an IFR flight and lands. What must the pilot do regarding the flight plan?

- A. Wait for the tower to close it automatically
- B. File a cancellation flight plan
- C. Allow the transponder to close it
- D. Close the IFR flight plan with ATC or flight service

25. Which AIRMET type advises of icing and freezing levels?

- A. AIRMET Sierra
- B. AIRMET Tango
- C. AIRMET Romeo
- D. AIRMET Zulu

26. Why does the localizer require progressively smaller corrections near the runway?

- A. The course narrows and becomes more sensitive approaching the runway
- B. The signal weakens and must be flown loosely
- C. The glide slope overrides lateral guidance inside the FAF
- D. The VOR sensitivity increases at the same rate

27. A pilot on partial panel after a vacuum failure controls pitch using which combination?

- A. The turn coordinator and magnetic compass
- B. The attitude indicator alone
- C. The tachometer and manifold pressure gauge
- D. The altimeter, airspeed indicator, and VSI together

28. What is the maximum holding airspeed at 9,000 feet MSL?

- A. 200 knots
- B. 230 knots
- C. 265 knots
- D. 175 knots

29. A pilot notices the attitude indicator shows a bank while the altimeter, VSI, turn coordinator, and heading indicator all show level flight. What is the reasonable conclusion?

- A. The attitude indicator is the suspect instrument
- B. The aircraft is in a coordinated turn
- C. The static system has failed
- D. All instruments failed together

30. Why does spatial disorientation affect even skilled pilots?

- A. Only fatigued pilots experience it
- B. It can be eliminated by stronger concentration
- C. The illusions are products of normal physiology
- D. Skilled pilots ignore their instruments

31. A pilot must select and qualify an alternate after the destination fails the 1-2-3 rule. The alternate has a precision approach. What standard minimums apply?

- A. 600 feet and 2 statute miles
- B. 800 feet and 2 statute miles
- C. 400 feet and 1 statute mile
- D. 1,000 feet and 3 statute miles

32. Which charted altitude assures both obstacle clearance and navigation signal coverage for the entire segment?

- A. The minimum en route altitude (MEA)
- B. The minimum obstruction clearance altitude (MOCA)
- C. The minimum reception altitude (MRA)
- D. The maximum authorized altitude (MAA)

33. A pilot recovering from a nose-low unusual attitude with increasing airspeed should do what?

- A. Raise the nose first, then reduce power
- B. Reduce power, level the wings, then raise the nose
- C. Add power and pull back while maintaining the bank
- D. Hold the attitude until airspeed stabilizes

34. What does RAIM describe in a GPS system?

- A. A ground-based correction broadcast applied by the receiver
- B. The receiver's ability to monitor the integrity of its own position solution
- C. The maximum range at which satellites can be received
- D. A backup inertial reference used when satellites are lost

35. A pilot in a constant-airspeed climb must identify the primary instrument for pitch. Which is it?

- A. The altimeter
- B. The vertical speed indicator
- C. The airspeed indicator
- D. The attitude indicator

36. Why does the EFC time matter in a lost-communication hold?

- A. It tells the pilot when to leave the holding fix and proceed
- B. It sets the maximum holding airspeed
- C. It defines the inbound leg length
- D. It assigns the transponder code

37. Which statement about a Convective SIGMET is true?

- A. It implies severe turbulence, severe icing, and low-level wind shear
- B. It applies only to light aircraft
- C. It concerns only mountain obscuration
- D. It reports only routine surface wind shifts

38. A pilot decodes a winds-aloft group "7345." After the high-speed convention, what is the wind?

- A. From 073 degrees at 45 knots
- B. From 230 degrees at 145 knots
- C. From 073 degrees at 145 knots
- D. From 230 degrees at 45 knots

39. Which is the correct emergency priority hierarchy?

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

40. Why must the heading indicator be periodically reset to the magnetic compass?

- A. The compass drifts and the heading indicator corrects it
- B. The heading indicator reads bearing to a VOR
- C. The heading indicator drifts and the compass is reliable in steady flight
- D. The compass requires vacuum power the heading indicator supplies

41. A pilot believes an inoperative required instrument is acceptable for IFR if merely logged. What is correct?

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

42. A 3-degree glide path descends approximately how many feet per nautical mile?

- A. 150 feet
- B. 200 feet
- C. 250 feet
- D. 300 feet

43. Which statement correctly distinguishes a DA from an MDA?

- A. The DA applies to non-precision approaches and the MDA to precision approaches
- B. The DA is used on approaches with vertical guidance; the MDA on non-precision approaches
- C. Both are identical altitudes used on every approach
- D. The MDA permits a glide-path descent to the threshold

44. Why does WAAS enable vertically guided approaches that basic GPS cannot?

- A. It provides an independent inertial reference
- B. It links directly to ground-based ILS glide slopes
- C. Ground stations measure GPS errors and broadcast corrections that sharpen accuracy
- D. It reduces the required satellites to two

45. What is the maximum permissible bearing error for a VOR check at a designated airborne checkpoint?

- A. Plus or minus 2 degrees
- B. Plus or minus 4 degrees
- C. Plus or minus 8 degrees
- D. Plus or minus 6 degrees

46. A pilot at the decision altitude on an ILS has no required visual references in sight. What must the pilot do?

- A. Descend 100 feet below DA to search
- B. Execute the missed approach immediately
- C. Level off and circle at DA
- D. Continue the descent to the threshold

47. Which best describes the purpose of a STAR?

- A. It guarantees obstacle clearance on departure
- B. It bridges the en route structure to the approach environment
- C. It serves as a course reversal at the destination
- D. It replaces the need for an instrument approach

48. Why is fixation the most dangerous scan error?

- A. While perfecting one parameter, the aircraft diverges in others unnoticed
- B. It improves precision on the fixated instrument
- C. It affects only the magnetic compass
- D. It eliminates the need for trim

49. A pilot must verify a tuned ILS localizer is the correct, operating facility. How?

- A. By checking the runway length on the chart
- B. By confirming the Morse code identifier
- C. By reading the published glide slope angle
- D. By noting the touchdown zone elevation

50. Within how many calendar months must the altimeter and static system inspection have been completed for IFR flight?

- A. 12 calendar months
- B. 18 calendar months
- C. 24 calendar months
- D. 36 calendar months

51. A pilot must determine the maximum holding airspeed at 5,000 feet MSL. What is it?

- A. 200 knots
- B. 230 knots
- C. 265 knots
- D. 175 knots

52. Why does the 1-2-3 rule apply to the destination rather than the alternate?

- A. The alternate's weather is never considered
- B. The rule sets the visibility needed to land at the alternate
- C. The rule determines the alternate-leg fuel reserve
- D. The rule decides whether an alternate is needed at all, based on the destination

53. A pilot decodes a METAR group "BKN004 OVC010." What is the ceiling?

- A. 1,000 feet, the overcast layer
- B. No ceiling, since both are below 1,000 feet
- C. 400 feet, the lowest broken or overcast layer
- D. 700 feet, the average of the two

54. Which statement about the relationship between currency and proficiency is true?

- A. A pilot can be legally current yet not proficient
- B. A current pilot is always proficient
- C. Currency and proficiency are identical
- D. Proficiency expires every 24 months like a written test

55. A pilot is assigned a STAR with a "descend via" clearance. What is the pilot responsible for managing?

- A. Only the lateral routing, since ATC assigns each altitude
- B. Nothing, since crossing restrictions are advisory
- C. The descent to meet every published crossing restriction
- D. Only the final crossing restriction

56. What minimum percentage must be answered correctly to pass the IRA knowledge test, and how many questions is that out of 60?

- A. 65 percent, 39 questions
- B. 75 percent, 45 questions
- C. 80 percent, 48 questions
- D. 70 percent, 42 questions

57. Why must a pilot trust the instruments rather than bodily sensations in IMC?

- A. Instruments are required equipment under the regulations
- B. The vestibular and somatosensory systems produce false sensations without a horizon
- C. Bodily sensations are accurate but slower to respond
- D. The instruments are immune to all failures

58. A pilot at a non-towered airport in low visibility over rising terrain wants to guarantee obstacle clearance on departure. What should the pilot review and fly?

- A. The standard terminal arrival route
- B. The minimum safe altitude circle
- C. A preferred IFR route
- D. The published obstacle departure procedure (ODP)

59. A pilot integrates a marginal forecast, fatigue, passenger pressure, and forecast icing in a non-known-ice aircraft. What does sound ADM most likely indicate?

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

D. Climbing above the icing once airborne removes the risk

60. Consistent with accident statistics, the safe outcome of an instrument flight owes most to which factor?

A. Sound recognition, judgment, and decision-making

B. Superior stick-and-rudder skill alone

C. Advanced avionics alone

D. Favorable luck with the weather

Answer Key

1. D — A 1,500-foot ceiling and 2 statute miles fail both parts of the 1-2-3 rule (2,000 feet and 3 statute miles), so a qualifying alternate must be selected and filed. The flight need not be canceled or refiled VFR. The alternate must then meet its own minimums.

2. A — When the pitot tube and its drain hole are both blocked, trapped pressure responds only to changes in static pressure, so the airspeed indicator behaves like an altimeter. The static system remaining clear allows this. It rises in a climb and falls in a descent.

3. D — The airspeed indicator is the only instrument connected to both pitot and static pressure, displaying the difference as airspeed. The altimeter and VSI use the static source only. This is why a pitot blockage uniquely corrupts the airspeed indication.

4. D — At 16,000 feet (above 14,000 feet), the maximum holding airspeed is 265 knots and the standard inbound leg is 1.5 minutes. Both tiers break at 14,000 feet. This altitude is in the highest tier for both.

5. C — A standard-rate turn changes heading at 3 degrees per second, completing a 360-degree turn in two minutes. It is not one minute or 6 degrees per second. These figures underlie holding timing.

6. A — Squawk 7600 indicates a two-way radio communication failure. 7700 is a general emergency, 7500 is unlawful interference, and 1200 is VFR. Setting 7600 alerts ATC to the failure.

7. C — Time equals distance divided by groundspeed: $84 \text{ NM} \div 112 \text{ knots} = 0.75 \text{ hour} = 45 \text{ minutes}$. Forecast groundspeed already accounts for wind. This supports ETE and fuel planning.

8. C — AIRMET Sierra advises of IFR conditions and mountain obscuration. Tango covers turbulence and strong surface winds, and Zulu covers icing and freezing levels. The phonetic initial is the memory aid.

9. A — On each lost-communication segment, the pilot flies the highest of the minimum, expected, and assigned altitudes. This ensures terrain clearance while remaining predictable to ATC. The "highest of" comparison is applied segment by segment.

10. C — The attitude indicator and turn coordinator are on different power sources so a single power-source failure cannot remove all attitude information. A vacuum failure leaves the electric turn coordinator; an electrical failure leaves the vacuum attitude indicator. This redundancy preserves partial-panel capability.

11. D — A "cruise climb segment after takeoff" is not a standard approach segment. The segments are feeder routes, initial, intermediate, final, and missed approach. The cruise climb segment is the odd one out.

12. C — An alternate served only by a non-precision approach must meet 800 feet and 2 statute miles, absent published non-standard minimums. The 600-2 figure applies to a precision approach. These standard values apply unless the chart publishes otherwise.

13. B — 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. C — A glide slope needle deflected above center means the glide path is above the aircraft, so the aircraft is below it 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.

15. C — A VOR accuracy check for IFR use must be completed within the preceding 30 days. This short cycle reflects how quickly navigation precision can drift. It contrasts with the 24-month altimeter/static and transponder checks.

16. B — "Squawk 4271" is the Transponder element of CRAFT (Clearance limit, Route, Altitude, Frequency, Transponder). It is the assigned squawk code. The other elements address the limit, route, altitude, and frequency.

17. D — Datalink NEXRAD must not be used for close-in avoidance because latency makes the image lag the storm's real position. It does detect precipitation, is not altitude-restricted, and the problem is staleness, not refresh speed. Latency is the core reason.

18. D — Reaching the missed approach point without the runway in sight requires executing the published missed approach immediately. Descending below MDA to search, circling, or continuing on a glide path are unsafe and not permitted. A go-around is the correct, expected action.

19. B — Structural icing requires both visible moisture and a temperature at or below freezing. Temperature alone is insufficient, it is not altitude-defined, and ice degrades rather than improves wing performance. Both conditions must coexist.

20. B — Arriving from the sector opposite the holding side, behind the inbound course, calls for a parallel entry: cross the fix, parallel the inbound course outbound on the non-holding side, then turn back to intercept. Direct and teardrop entries serve the other sectors. The entry must match the arrival geometry.

21. A — GRABCARD lists the additional equipment required for IFR beyond the VFR day/night requirements. ARROW refers to required aircraft documents, not equipment. GRABCARD is the IFR-equipment mnemonic.

22. C — With no alternate required, fuel is destination plus reserve: $2.0 + 0.75 = 2.75$ hours \times 12 gph = 33 gallons. The 45-minute (0.75-hour) reserve is always required under IFR. About 33 gallons covers destination and reserve.

23. B — 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.

24. D — 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 no cancellation flight plan is filed. The pilot is responsible for closing it.

25. D — AIRMET Zulu advises of icing and freezing levels. Sierra covers IFR conditions and mountain obscuration, and Tango covers turbulence and strong surface winds. The phonetic initial is the memory aid.

26. A — The localizer course narrows and becomes more sensitive approaching the runway, so the same displacement produces greater deflection and demands smaller corrections. The signal does not weaken, and the glide slope does not override lateral guidance. Increasing sensitivity is the reason.

27. D — On partial panel after a vacuum failure, pitch is controlled using the altimeter, airspeed indicator, and VSI together, since the attitude indicator is lost. The turn coordinator and compass handle bank, and the tachometer is not a pitch reference. The pitot-static instruments reconstruct pitch.

28. B — At 9,000 feet MSL the aircraft is in the 6,001–14,000 foot tier, where the maximum holding airspeed is 230 knots. The tiers are 200 up to 6,000, 230 to 14,000, and 265 above. This altitude is in the middle tier.

29. A — When the attitude indicator disagrees with the altimeter, VSI, turn coordinator, and heading indicator, all showing level flight, the attitude indicator is the suspect instrument. The cross-check identifies the disagreeing instrument by majority agreement. No single instrument is trusted in isolation.

30. C — Spatial disorientation affects even skilled pilots because the illusions are products of normal physiology. It is not limited to fatigued pilots, cannot be eliminated by concentration, and skilled pilots do not ignore instruments. The physiological basis is universal.

31. A — An alternate with a precision approach must meet 600 feet and 2 statute miles, the standard precision alternate minimums. The 800-2 figure applies to non-precision-only alternates. These apply unless non-standard minimums are published.

32. A — The minimum en route altitude (MEA) assures both obstacle clearance and navigation signal coverage for the entire segment. The MOCA guarantees obstacle clearance with limited coverage, and the MRA and MAA address reception and an upper limit. The MEA is the both-guarantees altitude.

33. B — In a nose-low recovery with increasing airspeed, the sequence is reduce power, level the wings, then raise the nose. Leveling the wings before pulling avoids tightening the spiral and overstressing the airframe. Roll first, then recover pitch.

34. B — RAIM is the GPS receiver's ability to monitor the integrity of its own position solution using redundant satellites and to alert the pilot if integrity cannot be assured. It is not a ground-correction broadcast (that is WAAS), a range limit, or an inertial backup. It is the receiver checking its own trustworthiness.

35. C — In a constant-airspeed climb, the airspeed indicator is primary for pitch because holding the target climb speed is the objective and it shows that most directly. The attitude indicator is supporting, and the altimeter and VSI are not primary for pitch here. The primary instrument shifts with the objective.

36. A — The EFC time tells the pilot when to leave the holding fix and proceed if communication is lost. It does not set holding speed, leg length, or the transponder code. Its lost-communication role is the operational purpose.

37. A — A Convective SIGMET implies severe turbulence, severe icing, and low-level wind shear, in addition to the thunderstorms it reports. It applies to all aircraft, not just light ones, and concerns more than mountain obscuration or wind shifts. Its implications are the most serious of the advisories.

38. B — Direction digits exceeding 36 trigger the high-speed convention: $73 - 50 = 23$ (230°) and $45 + 100 = 145$ knots, giving wind from 230° at 145 knots. The convention encodes winds of 100–199 knots. The decoded direction over 36 is the cue.

39. B — The emergency priority hierarchy is aviate, navigate, communicate, in that order. Flying the aircraft comes before navigating or using the radio. The other orderings reverse this life-saving sequence.

40. C — The heading indicator drifts over time and must be reset to the magnetic compass, which is reliable in steady, unaccelerated flight. The compass does not drift in that sense, the heading indicator does not read VOR bearing, and the compass needs no vacuum power. Gyro drift plus compass reliability in steady flight is the reason.

41. D — 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.

42. D — A 3-degree glide path descends approximately 300 feet per nautical mile. This rule of thumb underlies stabilized-approach planning. The descent rate scales with groundspeed for that fixed path angle.

43. B — A DA is used on approaches with vertical guidance, where the pilot decides at that altitude, while an MDA is used on non-precision approaches, where the pilot levels off and may not descend below without the required visual references. They are not identical or interchangeable. The MDA does not involve a glide-path descent to the threshold.

44. C — WAAS enables vertically guided approaches because ground stations measure GPS errors and broadcast corrections that sharpen accuracy and integrity. It does not provide inertial reference, link to ground ILS, or reduce required satellites to two. The corrections unlock vertical guidance.

45. D — The maximum permissible bearing error at a designated airborne checkpoint is ± 6 degrees. VOT and ground checkpoints allow ± 4 degrees, and a dual-VOR check allows a 4-degree difference. The airborne checkpoint is the most lenient.

46. B — At the decision altitude without any required visual references, the pilot must execute the missed approach immediately. Descending below DA to search, circling, or continuing to the threshold are unsafe and not permitted. A prompt go-around is the correct, expected action.

47. B — A STAR bridges the en route structure to the approach environment, organizing arriving traffic as the counterpart to the SID. It does not guarantee departure obstacle clearance, serve as a course reversal, or replace an approach. Its role is the transition into the terminal area.

48. A — Fixation is the most dangerous scan error because, while perfecting one parameter, the aircraft diverges in others unnoticed. It does not genuinely improve precision, affects more than the compass, and does not eliminate trim. The unnoticed divergence is the hazard.

49. B — Confirming the Morse code identifier verifies that the correct localizer facility is tuned and operating, preventing false guidance. Runway length, glide slope angle, and touchdown elevation do not confirm the facility's identity. Positive identification is required before use.

50. C — The altimeter and static system inspection must be completed within the preceding 24 calendar months for IFR flight. The transponder check shares the same interval. These are far longer cycles than the 30-day VOR check.

51. A — At 5,000 feet MSL (up to 6,000 feet tier), the maximum holding airspeed is 200 knots. The tiers are 200 up to 6,000, 230 to 14,000, and 265 above. This altitude is in the lowest tier.

52. D — The 1-2-3 rule determines whether an alternate is needed at all, based on the destination forecast. It does not set the alternate's landing visibility, the alternate-leg fuel, or ignore the alternate's weather (which is a separate test). It is a destination test.

53. C — The ceiling is the lowest broken or overcast layer, which is the broken layer at 400 feet (BKN004). The overcast at 1,000 feet is higher and not the ceiling. Both broken and overcast qualify; the lowest one governs.

54. A — A pilot can be legally current yet not proficient, because currency is a regulatory recency minimum while proficiency is actual ability. They are not identical, a current pilot is not automatically proficient, and proficiency does not expire on a fixed schedule. The distinction is between legal recency and real skill.

55. C — On a "descend via" clearance, the pilot must manage the descent to meet every published crossing restriction on the STAR. ATC does not assign each altitude individually, and the restrictions are not advisory or limited to the final fix. The pilot satisfies all of them in sequence.

56. D — The minimum passing score is 70 percent, which on a 60-question test is 42 correct answers ($0.70 \times 60 = 42$). There is no curve or partial credit. Aiming higher than the minimum absorbs test-day variability.

57. B — A pilot must trust the instruments in IMC because the vestibular and somatosensory systems produce false sensations without a visual horizon. Bodily sensations are not merely slower — they are actively wrong, and instruments are not immune to all failures but are objective when working. Physiology is the reason.

58. D — At a non-towered airport in low visibility over rising terrain, the published obstacle departure procedure (ODP) guarantees obstacle clearance and may be flown at the pilot's discretion. A STAR, MSA circle, or preferred route does not serve this departure function. The ODP is the pilot's terrain safeguard.

59. A — 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.

60. A — Consistent with accident statistics, the safe outcome of an instrument flight owes most to sound recognition, judgment, and decision-making rather than stick-and-rudder skill, avionics, or luck alone. Most instrument accidents stem from judgment failures, not flying ability. Recognition and decision-making most often separate a safe outcome from an accident.