PRACTICE EXAM 6: FULL CFI SIMULATION (Q1–Q150)

FOI BLOCK — Q1–Q50

1. A student arrives at the briefing room visibly exhausted, having driven five hours after a night shift. The student insists they are "fine to fly." The instructor's most defensible response is to:

A. Brief the student carefully, perform the flight as planned, and re-evaluate on landing

B. Reschedule the lesson, citing the failed "F" in IM SAFE

C. Begin with a quick refresher and let the student decide mid-flight

D. Continue with a ground lesson only, then fly the same day after lunch

2. A student has been working on crosswind landings for several lessons and the latest debrief shows continued inconsistency. The instructor's lesson plan should next emphasize:

A. Diagnosis of whether the error is a slip or a mistake before further practice

B. Repeated drill of the maneuver until the inconsistency disappears

C. A complete pause in landing practice for at least 60 days

D. A switch to a different runway orientation until the wind changes

3. A student loudly announces that the previous instructor "didn't know what they were talking about" while criticizing the new instructor's brief. The defense mechanism most likely at work is:

A. Repression of unpleasant material from earlier instruction

B. Compensation through emphasis on a strength elsewhere

C. Projection of personal shortcomings onto another instructor

D. Reaction formation showing the opposite of true feelings

4. A first-lesson student is uncertain whether they "have what it takes" to learn to fly. The most appropriate response from the instructor is to:

A. Acknowledge the doubt, restate the lesson's clear objective, and start with an achievable success

B. Confirm that flight training is not for everyone and suggest reconsidering

C. Promise an unconditional refund if the student does not solo in 30 days

D. Demonstrate every maneuver perfectly so the student can decide

5. A student demonstrates the ability to recite cruise-flight checklist items but freezes when the instructor introduces a slight scenario variation. The student's knowledge level is:

A. Concept formation, in which general principles transfer

B. Memorization, the shallowest level of knowledge

C. Insight, in which connections among items are made

D. Understanding, in which the meaning of each item is grasped

6. A student grasps cruise pitch-power-airspeed quickly and uses the relationship immediately on approach. The instructor recognizes this as:

A. Negative transfer that should be deliberately interrupted

B. Positive transfer from prior cruise mastery

C. The law of recency operating in isolation from other laws

D. A defense mechanism protecting the student's confidence

7. A student who botches a steep turn responds, "I know, the airplane is just not trimmed correctly today." The instructor's correct response is to:

A. Treat the comment as rationalization, then gently redirect to the student's input

B. Re-trim the airplane and confirm the equipment was at fault

C. Document the comment and refer the matter to maintenance

D. End the lesson and reassign the student to another instructor

8. A student who has just experienced a frightening unusual-attitude recovery later cannot recall how the recovery was performed, despite practicing it correctly multiple times that day. The most likely cause is:

A. A defect in the student's working memory unrelated to the event

B. A loss of motivation following the recovery

C. Repression of the unpleasant material associated with the event

D. A medical condition requiring a referral

9. A student is anxious about an upcoming first solo. The instructor's most useful action is to:

A. Restore an early success and confirm readiness from a state of confidence

B. Insist on the original solo date to avoid feeding the anxiety

C. Substitute additional written homework in place of flight time

D. Cancel solo training and continue dual flights indefinitely

10. A student in the development phase of a lesson reports that they "kind of get it" but cannot articulate the principle. The instructor should:

A. Move forward to the next item to keep the lesson on schedule

B. Use guided discussion to draw the principle from the student's experience

C. Repeat the same explanation verbatim until the student confirms understanding

D. Skip the question and reschedule the topic for the next lesson

11. A student is observed performing every maneuver more aggressively after a friend earned their certificate the previous week. The hazardous attitude most likely at work is:

A. Macho, marked by a desire to demonstrate capability

B. Anti-authority, marked by resistance to rules

C. Resignation, marked by helplessness

D. Invulnerability, marked by discounting personal risk

12. A student reads about a fatal accident in the same aircraft type and concludes "It won't happen to me — I'm a careful pilot." The instructor should:

A. Identify the hazardous attitude as invulnerability and teach its antidote

B. Praise the student's confidence as a positive safety trait

C. Recommend the student stop reading accident reports

D. Avoid the topic to prevent erosion of confidence

13. A student in a debrief insists, contrary to the GPS track, that the pattern they flew was a perfect rectangle. The defense mechanism most clearly at work is:

A. Compensation through emphasis on a strength

B. Projection of pattern errors onto the GPS receiver

C. Denial, in which the student refuses an uncomfortable reality

D. Repression of an unpleasant aspect of the flight

14. A student responds to a sharp critique with visible withdrawal and degraded subsequent maneuvers. The instructor's appropriate next step is to:

A. Continue the critique to demonstrate that flying requires resilience

B. End the lesson immediately and reassign the student

C. Document the withdrawal in the training record without further action

D. Soften tone, restore a low-threat climate, and rebuild engagement

15. A student whose last three lessons have ended in frustration is scheduled again. The instructor's most defensible lesson design opens and closes with:

A. An achievable maneuver the student already performs well

B. The most difficult new maneuver to confront the frustration directly

C. A formal written quiz rather than any flying

D. A lecture on motivation rather than any maneuvers

16. A primary student insists the instructor's preferred sight picture for the round-out is "wrong" because a YouTube video showed a different one. The instructor's best response is to:

A. Acknowledge the variation, explain why the sight picture used here matches this airplane, and demonstrate

B. Forbid further consumption of online flying content during training

C. Concede the point to maintain the student's engagement

D. Document the disagreement and refer to the chief instructor

17. A student in the application phase performs the maneuver well, debriefs honestly, and identifies the one element to improve next time. This pattern is best described as:

A. A defense mechanism masking deeper insecurity

B. A sign the student is not learning because they identified an error

C. Effective student self-assessment, the goal of the assessment cycle

D. Excessive self-criticism that the instructor should redirect

18. A student who is uncomfortable with a checkride examiner asks the instructor to call the examiner ahead of time to "go easy." The instructor's correct response is to:

A. Make the call but downplay the request to the examiner

B. Refuse and remind the student that endorsement guarantees readiness

C. Decline because such calls are illegal, then ignore the underlying concern

D. Decline and address the underlying performance and confidence concern

19. A student tells the instructor mid-lesson, "I want to skip stalls today — I just don't like them." The most appropriate instructional response is to:

A. Skip the stalls to maintain the student's engagement and reschedule later

B. Document the refusal and end the lesson

C. Address the avoidance, manage the threat, and complete the syllabus item

D. Force the stalls without addressing the underlying anxiety

20. A student attempts to short-circuit ground school by claiming "I'll just learn it from the test prep book." The instructor's most defensible response is to:

A. Agree, since the FIA written test rewards memorization

B. Explain that the written prep does not develop the integrated understanding the oral and flight test require

C. Substitute the test prep book in place of all ground school

D. Refer the student to a different instructor for ground school only

21. During an early-pattern lesson, the student consistently glances down at the panel instead of looking outside. The instructor should diagnose this as:

A. Channelized attention on the airspeed indicator

B. A pitot system malfunction making outside reference impossible

C. An over-trained instrument scan inappropriate for VFR

D. Underdeveloped division of attention requiring graduated practice

22. During steep turns, a student "lands a wing low" each rollout. The most likely underlying issue is:

A. Late cross-check of bank reference during rollout

B. Pitot blockage producing a false airspeed indication

C. Magneto failure on the inside engine

D. A medical condition requiring referral

23. Asked why the airplane stalls in a steep turn at a higher airspeed than wings-level, the student answers, "Because we're closer to Vne." The instructor's correct response is to:

A. Accept the answer to maintain student confidence

B. Repeat the same question more loudly

C. Document the misconception for the chief instructor

D. Replace the misconception by teaching that load factor raises stall speed

24. A student who has just experienced a near miss with traffic during pattern work returns to the instructor visibly shaken. The most appropriate next step is to:

A. Continue the lesson and require the student to "push through it"

B. Pause the lesson, acknowledge the event, and rebuild a low-threat climate

C. Document the event without further discussion with the student

D. End the lesson permanently and reassign the student

25. A student in the application phase of teaching a slow flight maneuver consistently lets the airspeed decay below the target. The instructor's first diagnostic question should be:

A. Does the student understand that pitch governs airspeed at slow flight?

B. Does the airplane need a pitot calibration before next flight?

C. Are the engine magnetos providing equal RPM drop?

D. Is the chief instructor available for a stage check today?

26. Asked why an aft CG produces lower stall speed, a student answers "because the airplane is lighter." The instructor's correct response is to:

A. Replace the misconception with the tail-downforce explanation

B. Accept the answer to maintain the student's flow

C. Direct the student to look it up in the AFM appendix

D. Refer the question to the chief instructor for explanation

27. A student doing power-off stalls says, "When the warning horn sounds, I just want to pull harder to keep flying." The instructor's correct response is to:

A. Replace the instinct with deliberate practice of "release back pressure"

B. Agree that pulling harder will recover the stall

C. Substitute power-on stalls for the rest of the lesson

D. Document the instinct as normal and proceed to the next maneuver

28. A student insists on flying through a clearly developing thunderstorm "because the GPS shows clear sky on the other side." The instructor's correct response is to:

A. Allow the attempt to expose the student to the consequences of poor judgment

B. Accept the GPS as the authoritative source on convective weather

C. Continue the flight and observe the student's decision quality

D. Refuse and use the moment as an ADM teaching opportunity on the ground

29. A student misses 30% of the FIA written items and the instructor is asked to endorse the practical test. The most defensible action is to:

A. Use the ACS codes to drive remedial study and confirm understanding before endorsing

B. Endorse to keep the schedule, since 70% is the passing score

C. Decline indefinitely until the student retakes the written

D. Endorse with a verbal warning to the examiner about the score

30. A student requests an endorsement for solo before the instructor's standard pre-solo proficiency criteria are met. The correct action is to:

A. Endorse to support the student's confidence and schedule

B. Endorse only for that day's wind condition

C. Decline until the criteria are met, regardless of social pressure

D. Endorse with a written caveat in the logbook

31. A student says, "I'd rather not divert — let's just push on to the destination, the weather will probably hold." The most accurate identification of the hazardous attitude is:

A. Anti-authority, marked by resistance to rules

B. Macho, marked by a desire to demonstrate capability

C. Get-there-itis, an external pressure operating under the PAVE framework

D. Resignation, marked by helplessness

32. A student in a guided discussion is silent and avoids eye contact. The instructor's most useful next step is to:

A. Lecture for the remainder of the lesson to fill the silence

B. Pose an easy, specific question the student can answer to re-engage

C. Document the disengagement and end the lesson

D. Switch to a written quiz to bypass the discussion entirely

33. A student demonstrates a forward slip with aileron away from the wind and rudder into the wind. The correct instructional response is to:

A. Praise the demonstration as a textbook example

B. Document the deviation and refer to the chief instructor

C. Replace the misunderstanding with the correct aileron-into-wind, opposite-rudder relationship

D. Substitute crab-and-kick for the rest of the lesson

34. A student says after a botched landing, "I just wasn't feeling it today." The instructor's most useful response is to:

A. Acknowledge the feeling, then debrief the specific technical errors observed

B. Accept the explanation and reschedule for a "better day"

C. Document the comment as evidence of underlying anxiety

D. Press the student to admit the real cause of the error

35. A student in a stall demonstration whispers "I really hate this maneuver" before entry. The instructor should:

A. Pause, acknowledge the feeling, restore the low-threat climate, then proceed if and only if the student is engaged

B. Continue the maneuver as planned to demonstrate that the airplane is safe

C. Skip stalls for the remainder of training

D. End the lesson immediately and reassign the student

36. A student during pre-flight discovers a small but legitimate maintenance discrepancy and asks, "Can we just fly it once? I'm sure it's fine." The instructor's correct response is to:

A. Fly it once as a teaching opportunity about minor discrepancies

B. Discontinue the flight and use the moment to teach airworthiness discipline

C. Defer to the student's judgment because they discovered the discrepancy

D. Document the discrepancy and fly the next day without repair

37. A student doing pattern work consistently turns base too soon, overshoots final, and tightens the turn with rudder. The instructor's most urgent teaching point is:

A. The pattern dimensions on the airport diagram

B. The cost of the additional fuel burned in extra pattern legs

C. The stall-spin risk created by cross-controlled, skidding base-to-final turns

D. The radio phraseology for entering the pattern

38. A student in the early stages of training shows up consistently 20 minutes late and inadequately prepared. The instructor's most defensible action is to:

A. Document each occurrence and continue without addressing the pattern

B. Address the pattern directly as a developing professionalism issue

C. End the training relationship immediately

D. Subtract the late time from the next lesson's billing

39. A student asks the instructor, "Is it OK to skip the run-up if we're already late?" The correct instructional response is to:

A. Skip the run-up to make the slot but explain it later

B. Use the question as an ADM moment, decline, and explain why

C. Substitute a partial run-up to compromise between schedule and safety

D. Document the request and refer to the chief instructor

40. A student insists that, since the instructor has full controls, the student can be casual about hazards because the instructor will "catch anything." The instructor's correct response is to:

A. Confirm that the dual control philosophy supports the student's view

B. Document the comment for the chief instructor without comment

C. Replace the misconception by teaching PIC responsibility and the student's role in safety

D. Demonstrate by deliberately allowing a near-miss to occur

41. A student doing first solos returns from a flight reporting "I felt totally alone up there." The instructor's most appropriate response is to:

A. Treat the experience as a maintenance issue with the radio

B. Refer the student to an aviation medical examiner

C. Acknowledge the feeling as normal and integrate it into the next lesson

D. Discontinue solos and resume dual flights indefinitely

42. A student in a debrief takes notes only on praise and ignores the corrections. The instructor should:

A. Move past the pattern to keep the debrief positive

B. Ask the student to summarize the corrections in their own words to confirm absorption

C. Stop offering corrections to match the student's preference

D. Document the pattern and reassign the student

43. A student during ground school says, "I never need to know the regulations — the examiner will just ask me to look it up." The instructor's correct response is to:

A. Agree and shorten the regulation portion of ground school

B. Document the comment without correction

C. Refer the student to a different ground school

D. Replace the misconception with the integrated knowledge model of the ACS

44. A student says, "I don't care about the affective domain — just teach me to fly." The instructor's correct response is to:

A. Skip the affective elements to honor the student's preference

B. Confirm that affective material is unrelated to flying

C. Explain that attitudes and habits are themselves part of "flying" and continue to model them

D. Document the comment and refer the student to a chief instructor

45. A student demonstrates the entire FIA-required maneuver sequence flawlessly but in a debrief refuses to consider any alternative technique. The instructor should diagnose this as:

A. Solid mastery requiring no further intervention

B. A rigidity in concept formation that limits transfer to new situations

C. A defense mechanism unrelated to the technique itself

D. A medical condition requiring referral

46. A student asks the instructor, "How did you know what was going wrong before I even said anything?" The most useful instructor response is:

A. Attribute the diagnostic ability to magic and move on

B. Refuse to discuss instructor technique with the student

C. Explain that observation, inference, and slip-vs-mistake diagnosis are learned skills

D. Suggest the student avoid that level of curiosity until commercial training

47. A student in ground school challenges a regulation citation the instructor provided. The instructor's most defensible response is to:

A. Insist on the original citation regardless of the challenge

B. Concede the point to avoid friction

C. Welcome the challenge, look up the regulation together, and confirm the correct answer

D. Document the challenge and refer to the chief instructor

48. A student insists on referring to all maneuvers by their CFI's nickname terminology. The instructor's correct response is to:

A. Substitute the nickname terminology in all written records

B. Use both nicknames and standard terms interchangeably to confuse the student

C. Document each occurrence as evidence of underlying anxiety

D. Replace the nicknames with the FAA-standard terminology used by the examiner

49. A student about to take the practical test asks, "What if I forget something during the oral?" The instructor's most useful response is to:

A. Tell the student to fake confidence and move on

B. Promise that the examiner will provide the answer if asked

C. Promise to call the examiner ahead of time

D. Teach the student to look it up in the appropriate FAA publication during the oral

50. A student who has earned a certificate asks the instructor, "Now that I'm done, do I really need to keep learning?" The most accurate instructor response is to:

A. The certificate is a license to learn — professional development is a lifelong obligation

B. The certificate eliminates the need for further professional development

C. Continuing education is optional after initial certification

D. Recurrent training is required only for instructors

FIA BLOCK — Q51–Q150

51. A pilot in a coordinated 30° banked turn experiences what approximate load factor?

A. 1.00 G

B. 2.00 G

C. 1.41 G

D. 1.15 G

52. A student flying at a published 1-G stall speed of 50 KIAS enters a 60° banked level turn. The expected stall speed is approximately:

A. 50 KIAS

B. 71 KIAS

C. 100 KIAS

D. 35 KIAS

53. Asked to define angle of attack, a student says, "It's the angle between the chord line and the longitudinal axis." The instructor's correct response is to:

A. Accept the definition since it is approximately correct

B. Replace it with the angle between the chord line and the relative wind

C. Document the answer and refer to the chief instructor

D. Substitute pitch attitude as the equivalent term going forward

54. A student says, "If the airplane is light enough, the wing can't stall." The instructor's correct response is to:

A. Agree, because lighter wings produce more lift

B. Explain that lighter aircraft enter ground effect more easily

C. Substitute the term "departure" for "stall" in this context

D. Explain that the wing stalls at the critical AOA regardless of weight; only the airspeed at which that AOA is reached changes

55. A student during cruise without leaning the mixture reports the engine "seems sluggish." The most likely cause is:

A. Progressively richer mixture from decreased air density at altitude

B. Carburetor ice formed despite warm conditions

C. Magneto degradation requiring run-up retest

D. Pitot blockage producing low indicated airspeed

56. A pilot on a long climb without mixture adjustment notices a roughening engine. The most likely cause and corrective action are:

A. Carburetor ice; apply carburetor heat

B. Magneto failure; switch tanks

C. Over-rich mixture from decreased density; lean the mixture

D. Pitot blockage; switch to alternate static source

57. A student during run-up observes the engine roughen when one magneto is selected. The most likely cause is:

A. A faulty ignition component such as a fouled plug or bad lead

B. A normal indication requiring no further action

C. An over-rich mixture from low density altitude

D. A blocked pitot tube affecting the airspeed indicator

58. A student says, "Carburetor ice can only form when the OAT is below freezing." The instructor's correct response is to:

A. Agree, since freezing is the threshold for ice formation

B. Document the misconception and refer to the chief instructor

C. Substitute "icing" for "carburetor ice" in this context going forward

D. Explain that carburetor ice can form across a wide range of temperatures with sufficient moisture

59. A pilot encounters known icing in an aircraft not approved for flight into known icing. The correct response is to:

A. Continue at the planned altitude and increase cruise power

B. Slow to the bottom of the white arc to reduce accretion rate

C. Disable pitot heat to verify icing severity by airspeed

D. Exit the icing conditions immediately by altitude or course change

60. A blocked pitot tube with an open static port will cause the airspeed indicator to:

A. Read consistently lower than true airspeed at every altitude

B. Behave like an altimeter, reading high in a climb and low in a descent

C. Remain stuck at the airspeed at the moment of blockage

D. Read true airspeed only in straight and level flight

61. A blocked static port (pitot clear) will cause the altimeter and vertical speed indicator to:

A. Continue functioning normally with no observable effect

B. Reverse readings during climb and descent

C. Display an inverted scale until ground reset is performed

D. Freeze, with the airspeed reading also becoming unreliable

62. Asked about wingtip vortex strength, a student says, "The lighter and faster the airplane, the stronger the wake." The instructor's correct response is to:

A. Accept the answer because it correctly identifies airplane mass as the variable

B. Document the answer and refer to the chief instructor

C. Explain that the wake is strongest from heavy, clean, and slow aircraft — the opposite of the student's framing

D. Substitute the term "downwash" for "wake" going forward

63. A pilot computing wake avoidance behind a heavy aircraft on takeoff is taught to:

A. Take off as quickly as possible to overtake below the heavy

B. Take off heading 90 degrees from the heavy's departure heading

C. Rotate prior to the heavy aircraft's rotation point and climb above its flight path

D. Climb directly through the heavy aircraft's wake at high AOA

64. A student descending into ground effect on landing reports the airplane "floats." The instructor's correct teaching is that:

A. Ground effect increases induced drag, requiring more power

B. Ground effect reduces induced drag and can cause float on landing

C. Ground effect raises the stall speed during the flare

D. Ground effect appears only above 1,000 feet AGL

65. A pilot at high density altitude in a normally aspirated airplane will most directly experience:

A. Improved climb performance due to thinner intake air

B. Increased maneuvering speed and improved acceleration

C. Reduced engine power and longer takeoff distance

D. Reduced fuel consumption due to leaner mixture at altitude

66. A wing accumulating frost or ice will experience:

A. A reduction in stall speed proportional to thickness

B. No measurable effect, since lift depends only on airspeed

C. Increased stall speed and degraded takeoff and climb performance

D. An automatic increase in maneuvering speed limits

67. Asked about the relationship between Va and weight, a student says, "Va is fixed by the manufacturer and never changes." The instructor's correct response is to:

A. Agree, since Va is published as a single value

B. Substitute Vne as the relevant term

C. Document the misconception and refer to the chief instructor

D. Explain that Va decreases at operating weights below maximum gross because a lighter airplane reaches limit G at a lower airspeed

68. Maneuvering speed (Va) is best defined as the maximum airspeed at which:

A. The airplane may be flown in any conditions including severe icing

B. The autopilot may remain engaged during turbulence

C. Maximum landing flap extension is permitted on final approach

D. Full deflection of a single control will not exceed the structural limit

69. A pilot encountering significant turbulence at cruise should:

A. Increase to maneuvering speed plus a margin

B. Slow to Va to protect against structural overload from full control deflection

C. Disable the autopilot and accept whatever airspeed develops

D. Climb to a higher altitude regardless of clouds present

70. Asked why a steep coordinated turn raises the stall speed, a student says, "Because we're closer to Vne." The instructor's correct response is to:

A. Accept the answer to maintain confidence

B. Document the misconception and refer to the chief instructor

C. Replace the misconception by teaching that load factor — not Vne — raises stall speed

D. Substitute the term "g-stall" for "accelerated stall" in this context

71. A four-stroke reciprocating engine cycle proceeds in the order:

A. Intake, compression, power, exhaust

B. Compression, intake, power, exhaust

C. Power, exhaust, intake, compression

D. Exhaust, power, compression, intake

72. A fuel-injected engine is generally immune to carburetor ice but is susceptible to:

A. Magneto failure during cruise operations

B. Pitot system blockage during cold soaks

C. Vapor lock and a more sensitive hot-start procedure

D. Sudden electrical failure during normal starts

73. A constant-speed propeller allows the pilot to:

A. Eliminate manifold pressure management at altitude

B. Bypass the magnetos during cold engine starting

C. Operate without an RPM gauge installed in the cockpit

D. Set RPM independently of throttle position to optimize performance

74. Carburetor heat is applied during run-up and a slight RPM drop is observed. The drop indicates:

A. A defective magneto requiring grounded-out troubleshooting

B. A blocked fuel injection nozzle restricting fuel flow

C. A failure of the carburetor heat system to deliver warm air

D. Heated air reaching the carburetor, which is the desired result

75. A pilot at maneuvering speed (Va) in heavy turbulence is most directly protected from:

A. Loss of fuel pressure during severe maneuvering events

B. Inadvertent autopilot disengagement on aileron input

C. Structural damage from full deflection of a single flight control

D. Loss of radio communication with the air traffic controller

76. ARROW is the recognized mnemonic for required-aboard documents. The "O" stands for:

A. Owner's manual approved by the manufacturer

B. Operating limitations including the flight manual

C. Operator's medical certification status

D. Open-airworthiness directive list

77. An annual inspection is required for all civil aircraft every:

A. 6 calendar months regardless of utilization

B. 50 flight hours regardless of calendar time

C. 12 calendar months from the previous annual

D. 24 calendar months at IFR certification cycles

78. A 100-hour inspection is required in addition to the annual when an aircraft is:

A. Operated only under VFR in good weather

B. Owned by an individual rather than a flight school

C. Stored in a hangar between flights

D. Used for hire or for flight instruction in an instructor-provided aircraft

79. Class B airspace requires an explicit ATC clearance to enter. Two-way radio communication alone is sufficient to enter which class?

A. Class A, in which IFR clearance is required regardless

B. Class C, around moderately busy towered airports

C. Class B, surrounding the busiest airports

D. Class G, in remote uncontrolled areas

80. Under Part 91, to carry passengers a pilot must have completed three takeoffs and landings within the preceding:

A. 30 days in the same category of aircraft

B. 90 days in the same category, class, and (if a type rating is required) type

C. 12 calendar months in any aircraft for which rated

D. 24 calendar months in any aircraft regardless of category

81. A flight review under §61.56 must be completed within the preceding:

A. 24 calendar months and must include at least 1 hour of ground and 1 hour of flight

B. 12 calendar months and must include a written knowledge test by the FAA

C. 36 calendar months and must include 3 hours of ground training

D. 6 calendar months and must include 30 minutes of ground training only

82. A flight instructor's recency-of-experience requirements under §61.197 are evaluated over the preceding:

A. 24 calendar months with several alternative satisfaction options

B. 12 calendar months and require an additional checkride annually

C. 6 calendar months with monthly recurrent ground training

D. 36 calendar months with a Part 142 training course

83. §91.3 establishes the pilot in command as:

A. Required to share command decisions equally with passengers

B. Directly responsible for, and the final authority over, the operation of the aircraft

C. Bound to follow ATC instructions even in declared emergencies

D. Permitted to delegate command authority to any qualified passenger

84. Hypoxic hypoxia is caused by:

A. Reduced blood oxygen-carrying capacity from carbon monoxide

B. Inadequate blood circulation due to G-forces or cold

C. Cellular inability to use oxygen, as caused by alcohol

D. Insufficient oxygen partial pressure reaching the blood at altitude

85. A pilot on a night approach over featureless or unlit terrain is most likely to be deceived by:

A. The black-hole illusion, removing the cues needed to judge height

B. The Coriolis illusion produced by head movement in a stabilized turn

C. The runway-width illusion making a wide runway appear closer

D. The atmospheric haze illusion making distant objects appear nearer

86. Spatial disorientation is most accurately described as:

A. A condition fully prevented by adequate cockpit ventilation

B. The inability to determine one's position, attitude, and motion relative to the earth

C. A normal sensation that should be ignored without further action

D. A regulatory restriction limited to night VFR flight

87. The IM SAFE personal self-assessment checklist evaluates:

A. Inspection, maintenance, sealing, airworthiness, fuel, equipment

B. Illness, medication, stress, alcohol, fatigue, emotion

C. Inertia, magnetism, signal, audio, fuel, engine

D. Instruments, mixture, switches, altimeter, flaps, electrical

88. Atmospheric stability is most directly determined by:

A. The geographic latitude of the air mass

B. The surface elevation beneath the air mass

C. The total water vapor present in the air

D. The lapse rate at which temperature decreases with altitude

89. A cold front typically produces:

A. A narrow band of intense, brief weather with a sharp wind shift at passage

B. A wide band of stratus and prolonged steady precipitation

C. Persistent fog with no significant wind shift at passage

D. Smooth conditions with unlimited visibility for many hours

90. A warm front typically produces:

A. A narrow band of intense thunderstorms over a short duration

B. A wide band of stratus, prolonged steady precipitation, and low ceilings

C. Cool dry air with scattered fair-weather cumulus only

D. Severe clear-air turbulence above 20,000 feet only

91. Which stage of a thunderstorm's life cycle is the most violent, with coexisting updrafts and downdrafts, lightning, hail, and the strongest gust front?

A. The cumulus stage, marked by building updrafts only

B. The mature stage, beginning when precipitation reaches the surface

C. The pre-cumulus stage, marked by clear air and rising temperatures

D. The dissipating stage, dominated by weakening downdrafts

92. Structural icing requires which two conditions simultaneously?

A. Light precipitation and a stable atmospheric layer

B. High humidity and outside temperatures well above freezing

C. Smooth airflow and clear skies above the aircraft

D. Visible moisture and aircraft surface temperature at or below freezing

93. Thunderstorm development requires three simultaneous ingredients:

A. Stable air, dry conditions, and gentle vertical motion

B. Smooth steady winds, an inversion layer, and clear skies

C. Cool surface temperatures, low humidity, and high pressure

D. Sufficient moisture, an unstable lapse rate, and a lifting mechanism

94. An AIRMET Zulu advises pilots specifically of:

A. Severe convective activity producing thunderstorms

B. Mountain obscuration affecting VFR operations only

C. Icing conditions and freezing levels along the route

D. Strong surface winds and low-level turbulence

95. A Convective SIGMET specifically advises pilots of:

A. Routine moderate turbulence at all altitudes along airways

B. Severe convective weather including thunderstorms producing tornadoes

C. Low-level wind shear advisories at non-towered airports

D. Forecast visibilities below 1 mile without precipitation

96. A METAR is most accurately described as:

A. A 24-hour forecast of expected conditions at an airport

B. A warning of severe convective activity along major airways

C. A routine observation of current weather at an airport

D. A long-range outlook covering an entire flight corridor

97. A PIREP is uniquely valuable because it:

A. Replaces the need for METARs and TAFs along the planned route

B. Is generated automatically by satellites scanning each system

C. Describes conditions actually encountered in flight by other pilots

D. Provides a binding legal forecast that ATC must enforce

98. During flight planning, the most comprehensive briefing type for a pilot who has received no prior information about the flight is the:

A. Outlook briefing valid for the next 12 hours only

B. Abbreviated briefing covering only NOTAMs and ATC delays

C. NOTAM-only briefing requested directly from the tower

D. Standard briefing covering adverse conditions through NOTAMs

99. A microburst encounter on approach typically produces, in sequence:

A. A persistent crosswind from the right with no vertical component

B. A steady tailwind only with no downdraft component

C. Smooth conditions with a gradual airspeed decrease throughout

D. An increasing headwind, then a powerful downdraft, then a tailwind

100. Mechanical turbulence is most likely produced by:

A. Strong winds flowing across irregular terrain or obstacles

B. A clear stable air mass over level terrain with light winds

C. A smooth jet stream at high altitude over the open ocean

D. A high-altitude inversion layer in still atmospheric conditions

101. Lateral stability — resistance to rolling around the longitudinal axis — is provided primarily by:

A. The dihedral angle built into the wings

B. The vertical stabilizer acting as a weathervane against yaw

C. The elevator trim setting selected in cruise flight

D. The location of the center of gravity along the longitudinal axis

102. Directional stability — resistance to yawing around the vertical axis — is provided primarily by:

A. The dihedral angle built into the wings

B. The vertical stabilizer acting as a weathervane against the relative wind

C. The elevator trim setting selected in cruise flight

D. The horizontal stabilizer and CG location combined

103. During a level coordinated turn, the force that actually turns the airplane is:

A. The horizontal component of the lift vector when banked

B. The increased thrust pointed into the turn

C. The drag from deflected ailerons on the outside wing

D. The rudder pressure applied in the direction of the turn

104. Compared to a forward CG, an aft CG within the certified envelope produces:

A. Higher stall speed and easier stall and spin recovery

B. No measurable change in handling characteristics

C. Lower stall speed and more difficult stall and spin recovery

D. A lower never-exceed speed and reduced wing area

105. An engine failure in flight calls for priority of actions captured in which mnemonic?

A. Communicate, navigate, aviate

B. Navigate, communicate, aviate

C. Aviate, navigate, communicate

D. Communicate, aviate, navigate

106. The first action after an engine failure is to:

A. Establish best-glide airspeed to maximize available time and distance

B. Tune the radio to 121.5 and declare an emergency

C. Open the cabin door immediately for emergency egress

D. Pull the mixture to idle cutoff to prevent damage

107. A go-around from an unstabilized approach is best described as:

A. A normal pilot decision initiated early when needed

B. An emergency reserved only for the final seconds before touchdown

C. A maneuver requiring explicit ATC clearance at all airports

D. A failure of approach planning that should be avoided at all costs

108. A crosswind landing using the sideslip (wing-low) method requires the pilot to use:

A. Aileron away from the wind and rudder in the same direction

B. Rudder only, with the wings held perfectly level

C. Aileron into the wind and rudder opposite to align with the centerline

D. Full back elevator with no rudder input on the rollout

109. In a standard left-traffic pattern, the leg parallel to the runway but flown in the opposite direction of landing is the:

A. Crosswind leg, perpendicular to the departure end of the runway

B. Downwind leg, parallel to the runway opposite the takeoff direction

C. Base leg, perpendicular to the approach end of the runway

D. Upwind leg, climbing away from the departure runway

110. When teaching ground reference maneuvers, the central principle the student must understand is that:

A. Wind has no effect on the airplane once airborne

B. Bank angle should remain constant regardless of wind

C. Bank angle must vary with the wind to keep a planned ground track

D. The path through the air matters more than the path over the ground

111. When teaching a primary student about angle of attack and stall, the most useful conceptual framing is that:

A. The airplane always stalls at the same airspeed regardless of conditions

B. The airplane stalls only when the throttle is reduced to idle

C. The airplane stalls only at low altitude near the surface

D. The airplane always stalls at the same angle of attack, but the airspeed varies with conditions

112. A pilot relying on airspeed rather than angle of attack to manage stall margins is most likely to be surprised by an accelerated stall in:

A. Straight and level cruise well above maneuvering speed

B. A descent at idle power below the green arc lower limit

C. A normal takeoff roll prior to rotation airspeed

D. A steep coordinated turn at low airspeed

113. A student tightens a base-to-final turn at low airspeed with cross-controlled aileron and bottom rudder. The instructor should recognize the maneuver as creating the conditions for:

A. A controlled short-field landing at a steep angle

B. A stall-spin accident in the traffic pattern

C. A normal high-energy go-around with no significant risk

D. A maneuver fully prevented by modern stall warning horns

114. During power-on stall practice, a student pulls the yoke aft when the warning sounds. The instructor should diagnose:

A. A pitot system malfunction producing false stall warnings

B. A jammed elevator preventing forward yoke movement

C. A stress-driven pull-back rather than the trained AOA reduction

D. A normal recovery as the manufacturer specifies

115. A spin requires which two conditions to be present simultaneously?

A. Wings-level flight at maneuvering speed and idle thrust

B. A coordinated turn at maneuvering speed and full power

C. Reduced visibility outside and partial loss of vacuum instruments

D. A stalled wing and the presence of yaw producing autorotation

116. The PARE spin recovery sequence calls for:

A. Power smoothly to full takeoff setting before any other change

B. Power idle, ailerons neutral, rudder opposite the rotation, elevator briskly forward

C. Power full, ailerons with the rotation, rudder neutral, elevator full back

D. Reduce throttle slightly, ailerons with the rotation, rudder neutral, elevator full back

117. Spin training in a typical general-aviation airplane is permissible only when the aircraft is:

A. Loaded to its aft center-of-gravity limit

B. Operated below 1,000 feet AGL to limit altitude loss

C. Filled to its maximum gross weight for added stability

D. Specifically certificated for intentional spins

118. The first action in the standardized stall recovery sequence is to:

A. Apply maximum allowable power before any other change

B. Roll the airplane into a steep banked turn for energy recovery

C. Retract all flaps to clean up the wing immediately

D. Reduce angle of attack by lowering the pitch attitude

119. A pilot exhibiting hypoxia symptoms most often experiences:

A. A clear recognition of the impairment before judgment is affected

B. Judgment unaffected until oxygen has been donned by the crew

C. Degraded judgment before the impairment is recognized

D. No symptoms below 25,000 feet regardless of individual

120. Alcohol consumption affects flight safety even after the legal minimum waiting period because:

A. The regulatory waiting period was designed to allow full elimination

B. Caffeine and alcohol cancel each other out completely

C. Alcohol's effects pass entirely with adequate sleep

D. Lingering effects and hangover symptoms can persist beyond the legal floor

121. A pilot considering an over-the-counter cold medication for flight should recognize that:

A. Over-the-counter status does not mean "safe for flight"

B. The medication is safe for flight because no prescription is required

C. A double dose will clear symptoms quickly before departure

D. Such medications are prohibited during the entire calendar year

122. A student who recently mastered cruise pitch-power-airspeed grasps approach setup quickly. The instructor recognizes this as:

A. Negative transfer requiring corrective intervention

B. The law of recency operating alone

C. Positive transfer from prior cruise mastery

D. A defense mechanism protecting confidence

123. Negative transfer of learning occurs when:

A. Earlier learning interferes with the acquisition of a new skill

B. The student abandons earlier learning when starting a new skill

C. The student receives a reward for completing a difficult lesson

D. The student transitions smoothly between two different airplane types

124. The five hazardous attitudes recognized by the FAA are anti-authority, impulsivity, invulnerability, macho, and:

A. Curiosity, marked by interest in unfamiliar situations

B. Resignation, marked by helplessness in difficult situations

C. Optimism, marked by a generally positive outlook

D. Frustration, marked by emotional response to failure

125. The hazardous attitude expressed by "It won't happen to me" is best identified as:

A. Invulnerability, marked by discounting personal risk

B. Anti-authority, marked by resistance to rules

C. Macho, marked by a desire to demonstrate capability

D. Resignation, marked by a sense of helplessness

126. The antidote to the hazardous attitude of impulsivity ("do something quickly") is:

A. "Not so fast. Think first."

B. "Follow the rules. They are usually right."

C. "Taking chances is foolish."

D. "I'm not helpless. I can make a difference."

127. Single-pilot resource management (SRM) is best described as:

A. A regulation requiring two pilots on commercial flights

B. The art of managing all resources available to a pilot operating alone

C. A maneuver evaluated only during the multi-engine practical test

D. An optional course offered only to airline transport pilots

128. Aeronautical decision-making (ADM) is best described as:

A. A systematic approach to consistently determining the best course of action

B. A regulation requiring written documentation before every flight

C. A maneuver evaluated only during the practical test

D. An intuitive skill that cannot be taught systematically

129. The PAVE framework identifies risk across four categories. The four are:

A. Performance, altitude, velocity, energy state

B. Procedures, airspace, visibility, equipment

C. Pilot, aircraft, enVironment, External pressures

D. Passengers, avionics, ventilation, engineering

130. A pilot's airman knowledge test report shows a 75% score on the FIA. From the examiner's perspective during the upcoming practical test, this score:

A. Increases the number of ACS codes the examiner must revisit during the oral

B. Eliminates the oral portion of the practical test entirely

C. Results in a reduced fee for the practical test

D. Has no effect at all on the upcoming practical test conduct

131. A flight instructor's endorsement on a logbook for solo flight in a specific make and model certifies that:

A. The student has received the required training and is proficient to solo that make and model

B. The student is the legal minimum age for a commercial certificate

C. The student has paid all fees through the end of the rating

D. The student holds a current first-class medical certificate

132. A flight instructor providing instruction in an instructor-provided aircraft must ensure the aircraft has both a current annual inspection and a current:

A. Pitot-static inspection regardless of operation type

B. 100-hour inspection cycle

C. Transponder inspection regardless of operation type

D. Flight review for the instructor's currency

133. The flight instructor recency rule under §61.197 lives in:

A. 14 CFR Part 61 Subpart H, governing flight instructors

B. 14 CFR Part 43, governing maintenance and preventive maintenance

C. 14 CFR Part 67, governing medical certification standards

D. 14 CFR Part 71, governing the structure of designated airspace

134. Required documents that must be aboard a civil aircraft for legal flight are remembered by the mnemonic:

A. CARES: Certificate, Aircraft data, Registration, Equipment list, Standards

B. FREES: Fuel records, Repair records, Equipment, Endorsements, Standards

C. ARROW: Airworthiness, Registration, Radio (when required), Operating limitations, Weight and balance

D. POWER: Pilot certificate, Operating manual, Weight, Equipment, Registration

135. An effective lesson plan is best characterized as:

A. A flexible guide supporting the lesson's objective and adapting to the student

B. A rigid script that must be followed lesson-by-lesson with no deviation

C. A regulatory document submitted to the FAA annually

D. A list of regulations the student must memorize before any flight training

136. A pilot encountering a Convective SIGMET on the planned route should:

A. Continue at the planned altitude and increase cruise power

B. Slow to the bottom of the white arc to reduce the airspeed

C. Disable the autopilot to verify the icing severity by airspeed

D. Avoid the area indicated, since the advisory warns of severe convection

137. Wing flaps deployed to a landing position generally:

A. Disable the stall warning system during the landing phase

B. Reduce induced drag while increasing parasite drag dramatically

C. Eliminate the need for rudder coordination during the approach

D. Lower the stall speed and improve low-speed handling for landing

138. An airplane operating in icing conditions in an aircraft not certified for flight into known icing should:

A. Increase cruise power to maintain speed and prevent stalling

B. Exit the icing conditions immediately by altitude or course change

C. Slow to the bottom of the white arc to reduce accretion rate

D. Disable the pitot heat to verify icing severity by airspeed

139. A flight review under §61.56 must include at least:

A. 30 minutes of ground training and 30 minutes of flight training

B. 6 hours of ground training with no flight time required

C. 1 hour of ground training and 1 hour of flight training

D. 3 hours of ground training and 3 hours of flight training

140. A constant-speed propeller most directly benefits the pilot by:

A. Eliminating manifold pressure management entirely at altitude

B. Bypassing the magnetos during cold engine starts

C. Allowing RPM to be set independently of throttle position

D. Permitting operation without an RPM gauge in the cockpit

141. A pilot conducting VFR night operations must ensure the aircraft has functioning:

A. Pitot heat and oxygen system regardless of altitude

B. A second altimeter cross-referenced to the primary altimeter

C. A constant-speed propeller regardless of engine type

D. Position lights, anti-collision lights, and an electrical source

142. AIRMET Sierra advises pilots specifically of:

A. Severe convective activity producing thunderstorms

B. IFR conditions and mountain obscuration

C. Strong surface winds and low-level turbulence at all altitudes

D. Icing conditions and freezing levels along the route

143. AIRMET Tango advises pilots specifically of:

A. Icing conditions and freezing levels along the route

B. Severe convective activity producing thunderstorms

C. IFR conditions and mountain obscuration

D. Turbulence and strong surface winds at low levels

144. A pilot using the standard NTSB or FAA AIM definition of "ceiling" is referring to:

A. The maximum altitude attainable by the aircraft

B. The maximum altitude permitted by the operator

C. The maximum altitude permitted by the regulation in effect

D. The height above ground of the lowest layer reported as broken, overcast, or vertical visibility

145. A pilot at maneuvering speed (Va) at a lighter operating weight (well below maximum gross) finds that:

A. Va is significantly higher than the published value

B. Va is lower than the published value

C. Va is identical to the published value

D. Va is no longer relevant because the structure has unlimited margin

146. Asked why an airplane is more difficult to recover from a stall with an aft CG, a student answers "Because it's heavier in the back." The instructor's correct response is to:

A. Accept the answer to maintain flow

B. Document the misconception and refer to the chief instructor

C. Substitute the term "tail-heavy" for "aft CG" going forward

D. Explain that an aft CG produces less natural nose-down pitching moment, making AOA reduction harder

147. A student incorrectly claims an over-rich mixture is the result of climbing without leaning, because "the engine should be running cleaner up high." The instructor's correct response is to:

A. Replace the misconception by explaining that air density decreases relative to fuel flow, producing a progressively richer mixture

B. Accept the answer to maintain confidence

C. Substitute the term "lean of peak" for "over-rich" going forward

D. Document the misconception and refer to the chief instructor

148. Asked why pulling the yoke aft when the stall warning sounds is wrong, a student answers, "Because it increases stall speed." The instructor's correct response is to:

A. Agree with the answer to maintain confidence

B. Document the misconception and refer to the chief instructor

C. Replace the misconception by teaching that pulling aft increases AOA past the critical angle, deepening the stall

D. Substitute "deep stall" for "stall" in this context going forward

149. During a steep coordinated turn, the stall speed rises with the:

A. Cube root of the load factor present in the turn

B. Linear value of the load factor present in the turn

C. Reciprocal of the load factor present in the turn

D. Square root of the load factor present in the turn

150. A student about to take the practical test asks the instructor what to do if they forget a regulation during the oral. The instructor's most defensible coaching is:

A. Tell the student to fake confidence and move on

B. Promise the examiner will provide the answer if asked

C. Promise to call the examiner ahead of time

D. Teach the student to consult the appropriate FAA publication during the oral

PRACTICE EXAM 6 – ANSWER KEY AND EXPLANATIONS

1. B — Fatigue is the "F" in IM SAFE, and a student who has just driven five hours after a night shift has failed that item regardless of self-report. The instructor as PIC must apply the no-go decision, since the student's own judgment is already compromised by the fatigue being assessed. Teaching the student that the rule applies when it is inconvenient is itself the lesson.

2. A — Repeated practice deepens a mistake (wrong concept) and refines only a slip (right intent, wrong execution). The instructor must first diagnose which error is present before prescribing remediation. Drilling without diagnosis is the single most common reason students plateau.

3. C — Projection is the defense mechanism in which a person attributes their own shortcomings to others, such as blaming a prior instructor for the student's own knowledge gaps. It protects self-esteem from an unwelcome truth. The instructor's response is to reduce threat and rebuild a low-stress climate, not engage the previous-instructor narrative.

4. A — A first-lesson student's doubt is best addressed by acknowledging it (security need), stating a clear achievable objective (engaging cognition), and producing a small early success (engaging the law of effect). Dismissing the student, promising refunds, or front-loading perfect demonstrations all skip the affective work. Building confidence from a tangible win is the proven instructional move.

5. B — Memorization is the shallowest level of knowledge: the student can recite verbatim but cannot adapt to changed conditions because no underlying concept has formed. Understanding, insight, and concept formation would produce the flexibility the student lacks. The instructor must push past rote recall toward comprehension.

6. B — Positive transfer occurs when earlier learning aids the acquisition of new learning, such as cruise pitch-power mastery supporting approach setup. The opposite is negative transfer. Naming the connection accelerates the transfer effect and builds the student's confidence in their growing skill set.

7. A — Rationalization is the defense mechanism in which a person substitutes a plausible-sounding but false reason for the real cause of a poor performance. The instructor neither argues the trim claim nor

accepts it — both extremes feed the defense. Gentle redirection to "let's look at what you input on the controls" addresses the real issue without threatening self-esteem.

8. C — Repression is the unconscious suppression of unpleasant or threatening material, and a frightening unusual-attitude recovery is exactly the kind of event the mind buries. The pattern does not fit working-memory defects, motivation loss, or medical conditions. The response is to rebuild a low-threat environment before re-introducing the content.

9. A — A solo must be approached from a state of confidence and recent success, not anxiety. Insisting on the original date deepens the stress; substituting written work avoids the issue; canceling indefinitely undermines progression. Restoring an early success first lets the student arrive at the solo from genuine readiness.

10. B — Guided discussion draws the principle from the student's own experience, which builds durable understanding the student constructs rather than receives. Moving forward leaves the gap; repeating the same words verbatim does not address the failed transfer; skipping the topic guarantees its return on the FIA. The method demands more preparation than a lecture, not less.

11. A — Macho is the hazardous attitude marked by "I can do it" and the desire to demonstrate capability. The trigger here — a peer earning a certificate — is the classic precipitant. The antidote is the deliberate substitution of "Taking chances is foolish," taught by name.

12. A — Invulnerability is the hazardous attitude characterized by "It won't happen to me," in which the pilot discounts personal risk despite recognizing the hazard. The student's reading of the accident report combined with the dismissive conclusion is the textbook signature. The antidote is "It could happen to me," taught explicitly.

13. C — Denial is the defense mechanism in which a person refuses to accept an uncomfortable reality, such as insisting the pattern was perfect when the GPS track shows otherwise. It directly rejects the fact rather than reinterpreting it. The instructor's response is to reduce stress and rebuild safety so the truth can be accepted.

14. D — A withdrawn, degrading student has perceived threat in the learning environment, and a perceived threat narrows perception and blocks learning. Continuing the critique deepens the problem; ending the lesson is excessive; documenting without action ignores the cause. Softening tone and restoring a low-threat climate is the proven remedy.

15. A — Three frustrating lessons signal a damaged law-of-effect chain that must be repaired by ending and starting on success. Opening and closing with an achievable maneuver applies the laws of primacy and recency to repair the affective damage. Front-loading the most difficult material would deepen the frustration, not address it.

16. A — A student bringing in outside content is engaging actively, even if the conclusion is wrong. The instructor acknowledges the variation, explains why this airplane uses this sight picture, and demonstrates — replacing the misconception while honoring the student's initiative. Forbidding outside content or conceding the point both forfeit the teaching moment.

17. C — Effective student self-assessment — honest debrief plus identification of the next priority — is the goal of the assessment cycle and the foundation of safe post-rating flying. It should be reinforced, not redirected. A pilot who can self-assess accurately will keep improving long after the instructor is gone.

18. D — An instructor's endorsement guarantees the applicant meets the standard; calling the examiner to ask for leniency would breach that integrity and the trust of the certificate. The correct move is to refuse and address the underlying performance and confidence concern through additional preparation. Both the integrity and the issue must be handled.

19. C — Skipping stalls feeds avoidance behavior and leaves a safety-critical maneuver unmastered; documenting refusal misses the affective issue; forcing the maneuver without addressing the anxiety triggers a threat response. The correct move addresses the threat first, restores the climate, then completes the syllabus item.

20. B — The ACS integrates knowledge, risk management, and skill in each task; written-test memorization does not develop the integrated understanding the oral and flight test require. The student's plan would produce a low FIA score and a long, probing oral. Explaining the integration model is itself part of teaching how the practical test works.

21. D — Division of attention is a learned skill, and a student who has not yet developed it will fixate on whatever feels most demanding at the moment (often the panel). The remedy is graduated practice that builds the habit of scanning between reference, altitude, and traffic. It is not a malfunction, an over-trained scan, or channelized attention in the strict sense.

22. A — A late cross-check of bank reference during rollout is the classic primary-training error producing wing-low rollouts. Pitot blockage, magneto failure, and medical referrals do not fit the pattern. The remedy is deliberate practice of the rollout cross-check, not equipment troubleshooting.

23. A — A steep turn raises stall speed because load factor — not proximity to Vne — increases the lift required, forcing the wing to reach its critical AOA at a higher airspeed. The student's misconception confuses two unrelated limits. Replacing it with load-factor reasoning is the central FOI/FIA correction on this topic.

24. B — A near miss produces a threat response that narrows perception and blocks further learning. Continuing the lesson without addressing the event guarantees no further learning occurs that day. Pausing, acknowledging the event, and rebuilding the low-threat climate is the affective-domain move that restores the student's capacity to engage.

25. A — At slow flight, pitch governs airspeed and power governs altitude — the inverse of the cruise relationship most beginners default to. A student letting airspeed decay is likely applying the cruise model in a region where it fails. The diagnostic question targets the underlying concept; equipment and stage-check options are red herrings.

26. A — An aft CG produces lower stall speed because the horizontal stabilizer's required downforce decreases, lightening the effective load on the wing. The student's "lighter" answer is a misconception that

fails when the student encounters real-weight cases. The correct mental model is the tail-downforce relationship.

27. B — Power-on stall training must replace the instinctive "pull harder" with the deliberate "release back pressure" habit. The instinct itself is normal and predictable; the corrective habit is not, and must be drilled until it becomes the default. Substituting other stalls or accepting the instinct both leave the safety-critical reflex unbuilt.

28. D — Penetrating a developing thunderstorm because the GPS shows blue sky beyond is a textbook ADM failure. Permitting the attempt to "teach a lesson" risks lives; accepting GPS as a convective-weather source is wrong on the merits; continuing observation cedes PIC authority. Refusing and using the moment for an ADM discussion on the ground is the correct CFI move.

29. A — The ACS codes from a missed-item knowledge test report identify exactly the topics the examiner must revisit during the oral. The instructor uses the codes to drive remediation and confirms understanding before endorsing — the 70% passing score is a regulatory floor, not a substitute for verified competence. Endorsement is a formal certification of readiness, not a schedule decision.

30. C — A pre-solo endorsement is a personal determination that the student meets the standard, full stop. Social pressure, weather of the day, or written caveats do not justify endorsing short of the criteria. Holding the line is the instructor's protective discipline for the student and the certificate.

31. C — "Get-there-itis" is the textbook example of an external pressure in the PAVE framework — schedule and expectation pressure overriding judgment. Anti-authority, macho, and resignation are hazardous attitudes, not external pressures. Identifying the pressure as external rather than internal points the student to the correct mitigation.

32. B — A silent, disengaged student in a guided discussion needs an easy, specific entry point — a question with a definable answer that re-engages without exposing them. Lecturing fills time without learning; documenting and ending escalates inappropriately; switching to a quiz abandons the method. Skilled facilitation lowers the bar back to where the student can step over it.

33. C — A forward slip uses aileron into the wind and rudder opposite to align the longitudinal axis with the track — the student has described the opposite relationship. Replacing the misunderstanding directly with the correct relationship is the instructor's job. Praising or referring it would let the misconception stand.

34. A — "I just wasn't feeling it" is an affective statement that deserves acknowledgment, but the technical errors observed are the actionable content of the debrief. Accepting the explanation forfeits the learning; documenting alone misses the lesson; pressing for the "real cause" feels accusatory. Acknowledge first, then debrief specifically.

35. A — A student's verbalized fear before a stall demonstration is a security-need signal that must be addressed before the maneuver proceeds. Pausing and acknowledging restores the climate; continuing without acknowledgment guarantees a threat response that prevents learning. Skipping stalls entirely abandons a safety-critical syllabus item; ending the lesson is excessive.

36. B — Discovering an airworthiness discrepancy and flying "just once" violates the basic airworthiness discipline the certificate represents. Treating it as a teaching moment about the discipline itself — not a one-time exception — embeds the right habit. Deferring to student judgment or flying later without repair both teach the wrong lesson.

37. C — A skidding, tightened base-to-final turn with rudder is the classic precursor to a stall-spin accident — one of the deadliest fatal-accident profiles in general aviation. Pattern dimensions, fuel cost, and radio phraseology are secondary. The lethal mechanism — load factor pushing the wing past critical AOA in cross-controlled flight — is the urgent teaching point.

38. B — Chronic lateness and inadequate preparation are professionalism issues with safety implications downstream. Documenting without addressing the pattern teaches that the standard is negotiable; ending the relationship is premature without an honest conversation; billing adjustments miss the underlying issue. Addressing the pattern directly is the right CFI move.

39. B — A student suggesting skipping the run-up to make a schedule is offering a real-time ADM teaching opportunity. The correct CFI response is to decline and use the moment to teach why the run-up matters, particularly under schedule pressure (external pressure under PAVE). Partial run-ups and chief-instructor referrals miss the lesson at hand.

40. C — The instructor's safety net does not excuse the student from responsibility — the student is being trained to be PIC, and casualness around hazards is itself a hazardous attitude. Replacing the misconception by teaching the student's PIC role is the right move. Confirming the misconception or allowing a near-miss to occur are obviously wrong.

41. A — "I felt totally alone up there" is the normal affective experience of first solo and is a sign the student is ready for the next lesson, not evidence of a radio or medical issue. Acknowledging the feeling and integrating it into ongoing instruction respects the student's growth. Treating it as malfunction or medical issue misses the moment.

42. B — A student selectively absorbing praise and ignoring corrections is exhibiting a defense pattern that will limit growth. Asking the student to summarize corrections in their own words forces absorption without confrontation. Matching the student's preference would forfeit the corrective half of every debrief.

43. D — The ACS integrates knowledge, risk management, and skill — a candidate who plans to "look it up" during the oral has missed how the test actually works and how regulations are applied in flight. Replacing this misconception with the integrated knowledge model is essential preparation. Shortening or outsourcing ground school avoids the issue.

44. C — A student dismissing the affective domain has not yet understood that attitudes, habits, and standards are themselves part of safe flying. The instructor explains the integration and continues to model — never skipping the affective work just because the student doesn't see it as "flying." Skipping or referring miss the central teaching opportunity.

45. B — Flawless execution paired with refusal to consider alternatives signals rigidity in concept formation — the student has memorized the recipe but cannot transfer the underlying principle to new

situations. This is a knowledge-level limitation, not solid mastery. The instructor's job is to push toward genuine concept formation where transfer is possible.

46. C — The diagnostic ability the student noticed is learned through observation, inference, and the slip-vs-mistake framework — it is teachable. Sharing this builds the student's own diagnostic skill for self-assessment and future leadership. Magic, refusal to discuss, or deferral all forfeit a valuable affective-domain teaching moment.

47. C — A challenged regulation citation is a learning opportunity for both parties. Looking it up together models the right approach to regulatory questions: confirm with the source, not from memory. Insisting on the original citation or conceding for friction both teach the wrong lesson about how regulations are handled.

48. D — FAA-standard terminology is what the examiner will use and what the student will encounter in every cockpit. Substituting nicknames in records or alternating terminology creates confusion. Replacing nicknames with standard terms is part of preparing the student for the actual test and operational environment.

49. D — The correct response to forgetting a regulation during the oral is to consult the appropriate FAA publication, demonstrating the right professional habit. Faking confidence, hoping the examiner provides the answer, or calling ahead all damage the candidate's integrity and the instructor's. Teaching the look-it-up habit is itself ACS-aligned preparation.

50. A — The certificate is a license to learn — professional development is a lifelong obligation in aviation, given the constant evolution of knowledge, regulations, and best practices. A pilot who stops learning quickly becomes a danger and a poor model. This is foundational FOI content the new certificate-holder must internalize.

51. D — Load factor in a level coordinated turn is $n = 1/\cos(\text{bank})$. At 30°, $n = 1/\cos(30°) = 1/0.866 \approx 1.15$ G. The relationship is shallow at 30° but steepens sharply: at 60° it doubles. The math is straightforward and FIA-tested.

52. B — Stall speed at increased load factor follows $Vs(n) = Vs1 \times \sqrt{n}$. At 60° bank in a level turn, $n = 2.0$ G, so the stall speed is $50 \times \sqrt{2} \approx 70.71$ KIAS, rounded to 71 KIAS. This accelerated-stall relationship is the reason a steep turn at low airspeed is dangerous.

53. B — Angle of attack is the angle between the wing's chord line and the relative wind — not the longitudinal axis, not pitch attitude. The student's definition confuses pitch with AOA, a foundational error that fails in turns and unusual attitudes. Replacing the misconception with the chord-line-vs-relative-wind definition is essential.

54. D — The wing stalls at its critical AOA regardless of weight; only the airspeed at which that AOA is reached changes with conditions. The student's statement reflects the airspeed-only misconception. Replacing it with AOA-centered thinking is the most important conceptual move in primary training.

55. A — As the airplane climbs without leaning, air density decreases while fuel flow stays roughly the same, producing a progressively richer fuel-air mixture and degraded performance. Carburetor ice, magneto issues, and pitot blockage do not produce sluggishness with full continuous power. Leaning restores the correct ratio.

56. C — Climbing without mixture adjustment produces a progressively richer fuel-air mixture as air density decreases relative to fuel flow, producing roughness. Leaning restores the correct ratio. Carburetor ice and magneto failure produce different signatures.

57. A — An RPM drop on a single magneto exceeding the manufacturer's allowable maximum, or roughening when one magneto is selected, indicates a faulty ignition component — fouled spark plug, defective magneto, or bad lead. It is not normal and requires correction before flight. The dual-magneto design provides flight redundancy, but each must be healthy at run-up.

58. D — Carburetor ice can form across a wide range of temperatures — including warm days — wherever sufficient moisture and the venturi effect cool the air below freezing inside the carburetor. The freezing-OAT threshold is a common misconception that has caused fatal accidents. The pilot's defense is carburetor heat applied per the manufacturer's procedure.

59. D — When known icing is encountered in an aircraft not approved for flight into known icing, the only correct response is to exit the icing conditions immediately by altitude or course change. Continuing or slowing increases ice accumulation; disabling pitot heat is dangerous. Avoidance is the defense; exit is the response when avoidance has failed.

60. B — A blocked pitot tube with an open static port causes the airspeed indicator to behave like an altimeter — reading high in a climb (as ambient static decreases while ram pressure is trapped) and low in a descent. This is the classic blocked-pitot signature the FIA tests reliably. Recognizing it allows the pilot to fall back on pitch-and-power references.

61. D — A blocked static port causes the altimeter and vertical speed indicator to freeze and renders the airspeed reading unreliable, because all three pitot-static instruments depend on accurate static pressure. The pilot must use the alternate static source if available. This is the classic blocked-static signature.

62. C — Wingtip vortices are strongest from heavy, clean (no flaps), and slow aircraft — the opposite of the student's "light and fast" framing. The student has the relationship inverted. Replacing the misconception with the heavy-clean-slow signature is essential for correct wake-avoidance behavior.

63. C — Wake-turbulence avoidance behind a heavy aircraft on takeoff calls for the following aircraft to rotate prior to the heavy aircraft's rotation point and climb above its flight path, staying above the descending wake. Taking off underneath, departing perpendicular, or penetrating at high AOA are unsafe. The principle is to stay above and upwind of where the wake will be.

64. B — Ground effect reduces induced drag near the surface (within roughly one wingspan of the ground), which can cause the airplane to float on landing as the wing's apparent efficiency improves. The phenomenon is real and exam-tested. Managing the float is a primary landing-phase teaching point.

65. C — A pilot at high density altitude in a normally aspirated airplane experiences reduced engine power (thinner intake air) and longer takeoff distance. Maneuvering speed, climb performance, and fuel consumption do not improve at altitude. The combined power-and-lift reduction is what makes hot-high-humid takeoffs hazardous.

66. C — Wing contamination — frost or ice — disrupts airflow, reduces the maximum coefficient of lift, raises the stall speed, and degrades takeoff and climb performance. The effect can be dramatic even from a thin layer. All contamination must be removed before flight, regardless of how minor it appears.

67. D — Va decreases at operating weights below maximum gross weight, counterintuitively, because a lighter airplane is accelerated more easily by a given aerodynamic force and reaches limit G at a lower airspeed. The "fixed by manufacturer" misconception is common and fails in practice. The relationship is exam-tested reliably.

68. D — Maneuvering speed (Va) is the maximum airspeed at which full deflection of a single control will not exceed the airplane's structural limit, because at or below Va the wing will stall before structural damage occurs. It is not an icing, autopilot, or flap-extension limit. Above Va, a sudden full-deflection input can produce structural damage.

69. B — Slowing to Va in significant turbulence protects against structural overload from full control deflection, because at or below Va the wing stalls before exceeding the structural limit. Increasing airspeed or disabling autopilot are unsafe responses. Climbing without considering clouds invites IFR-encounter risk.

70. C — A steep turn raises stall speed because load factor — not proximity to Vne — increases the lift required, forcing the wing to reach its critical AOA at a higher airspeed. The Vne misconception confuses two unrelated limits. Load-factor reasoning is the correct mental model.

71. A — A four-stroke reciprocating engine cycle proceeds intake, compression, power, exhaust — repeating continuously across the cylinders. Intake draws the mixture in, compression squeezes it, combustion produces the power stroke, and exhaust expels the burned gases. Memorizing the sequence supports diagnosing roughness and misfires.

72. C — A fuel-injected engine is immune to carburetor ice because no carburetor is present, but it has its own characteristic concerns including vapor lock and more sensitive hot-start procedures. Each system has unique teaching points the instructor must cover. The trade-off between systems is a recurring FIA topic.

73. D — A constant-speed propeller allows the pilot to set RPM independently of throttle position, with propeller pitch adjusting automatically to maintain the selected RPM. The pilot manages manifold pressure with the throttle and RPM with the propeller control. This enables optimization of climb, cruise, and descent that a fixed-pitch propeller cannot match.

74. D — Carburetor heat routes warm air to the carburetor, and a slight RPM drop during the run-up confirms that the heated air is reaching it — the heated air is less dense, producing the expected drop. No

drop would suggest the heat system is not functioning. The check verifies the system before it is needed in flight.

75. C — Maneuvering speed (Va) is the maximum airspeed at which full deflection of a single control will not exceed the airplane's structural limit, because at or below Va the wing will stall before structural damage occurs. Above Va, severe turbulence or sudden control input can produce structural overload. Slowing to Va in significant turbulence protects the airplane structurally.

76. B — In ARROW, the O stands for Operating limitations — typically the AFM/POH and any placards. The other letters are Airworthiness certificate, Registration, Radio station license (when required), and Weight-and-balance data. The pilot verifies ARROW during preflight; absence makes the flight unlawful.

77. C — The annual inspection is required for all civil aircraft every 12 calendar months from the previous annual, performed by an authorized inspector. An airplane without a current annual is not airworthy regardless of other inspections. The 12-calendar-month interval is exam-tested precisely.

78. D — A 100-hour inspection is required in addition to the annual when an aircraft is used for hire or for flight instruction in an instructor-provided aircraft. The annual covers the same scope and can substitute for a 100-hour, but a 100-hour cannot substitute for an annual. CFI candidates teaching in their own airplane must keep both cycles current.

79. B — Class C airspace requires two-way radio communication established with ATC before entry, but not the explicit clearance that Class B demands. Class D also requires only two-way communication. Class A is IFR-only with explicit clearance; Class G is uncontrolled.

80. B — To carry passengers under Part 91, a pilot must have completed three takeoffs and landings within the preceding 90 days in the same category, class, and (if a type rating is required) type of aircraft. Tailwheel and night passenger carriage add parallel requirements. The 90-day window is exam-tested precisely.

81. A — A flight review under §61.56 must be completed within the preceding 24 calendar months and include at least 1 hour of ground training and 1 hour of flight training with an authorized instructor. The review covers Part 91 rules and maneuvers appropriate to the pilot. The 24-month interval is the headline FIA fact.

82. A — A flight instructor's recency-of-experience requirements under §61.197 are evaluated over the preceding 24 calendar months, with several alternative options for satisfaction including renewal courses and additional rating checkrides. An instructor who fails to satisfy any option may not exercise instructor privileges until reinstated. The 24-month window matches the flight review interval.

83. B — §91.3 establishes the pilot in command as directly responsible for, and the final authority over, the operation of the aircraft. In an in-flight emergency, the PIC may deviate from any rule to the extent required to meet the emergency, reporting afterward as required. This authority is paired with full accountability.

84. D — Hypoxic hypoxia is caused by insufficient oxygen partial pressure reaching the blood, most commonly from reduced partial pressure at altitude. Hypemic hypoxia involves reduced blood-carrying capacity (carbon monoxide), stagnant involves circulation problems, and histotoxic involves cellular inability to use oxygen (alcohol). Hypoxic hypoxia is the form pilots most directly manage through altitude discipline and supplemental oxygen.

85. A — The black-hole illusion occurs over featureless or unlit terrain at night, where the visual cues normally used to judge height on approach are missing. Pilots are tempted to descend low, producing landing-short accidents. The defense is reliance on instruments and a stabilized profile rather than the visual sight picture alone.

86. B — Spatial disorientation is the inability to determine one's position, attitude, and motion relative to the earth, arising from conflict among the body's orientation senses when visual reference is lost. It is not a sensation to ignore, a regulation, or a ventilation problem. The defense is trusting the flight instruments rather than the body's senses.

87. B — The IM SAFE personal self-assessment evaluates Illness, Medication, Stress, Alcohol, Fatigue, and Emotion. It is performed before every flight as an honest self-evaluation. A failed item should produce a no-go decision; teaching the affective habit of acting on the result is the instructor's responsibility.

88. D — Atmospheric stability is determined by the lapse rate — the rate at which temperature decreases with altitude. A steep lapse rate favors instability; a shallow or inverted lapse rate favors stability. Latitude, moisture amount, and surface elevation are separate factors that combine with stability to produce specific weather.

89. A — A cold front produces a narrow band of intense, brief weather with a sharp wind shift and temperature drop at frontal passage — cumulus, possible thunderstorms, gusty winds. Warm fronts produce wide bands of prolonged precipitation; smooth conditions and persistent fog do not match the cold-front signature. The narrow-and-intense pattern is uniquely the cold front.

90. B — A warm front produces a wide band of stratus, prolonged steady precipitation, and low ceilings extending hundreds of miles ahead of the surface front. Narrow thunderstorm bands are cold-front signatures; cool dry conditions are post-frontal high-pressure signatures. Warm-front weather is less violent but lasts much longer than a cold-front pass.

91. B — The mature stage of a thunderstorm begins when precipitation reaches the surface and is the most violent stage because updrafts and downdrafts coexist with heavy rain, lightning, hail, and the strongest gust front. The cumulus stage features updrafts only; the dissipating stage is dominated by weakening downdrafts. Mature-stage cells are unsurvivable for light aircraft attempting penetration.

92. D — Structural icing requires two conditions simultaneously: visible moisture (cloud or precipitation) and aircraft surface temperatures at or below freezing. Either alone does not produce icing. Recognizing icing through both requirements lets the pilot identify icing risk across the full range of conditions.

93. D — Thunderstorm development requires three simultaneous ingredients: sufficient moisture, an unstable lapse rate, and a lifting mechanism. All three must be present together; removing any one prevents development. Recognizing this lets the pilot anticipate convective activity from forecast products.

94. C — AIRMET Zulu advises pilots of icing conditions and freezing levels. AIRMET Sierra covers IFR and mountain obscuration; AIRMET Tango covers turbulence and strong surface winds. Each AIRMET type has a defined subject area instructors and pilots must know by name.

95. B — A Convective SIGMET advises of severe convective weather — thunderstorms producing severe turbulence, hail, surface winds of 50 knots or more, and tornadoes. It is the strongest convective-weather warning short of a tornado watch. Routine turbulence, wind-shear advisories, and visibility warnings operate at lower thresholds.

96. C — A METAR is a routine observation of current weather at an airport, issued hourly with special reports as conditions change significantly. A TAF is the forecast counterpart; warning products and route forecasts differ in purpose. METARs answer the question "what is the weather right now at this airport?"

97. C — Pilot reports describe conditions actually encountered in flight by other pilots, uniquely valuable because they confirm or contradict the forecast picture from real airborne experience. They are not satellite-generated, do not replace METARs and TAFs, and are not binding forecasts. Pilots are professionally obligated to make PIREPs as well as read them.

98. D — A standard briefing is the comprehensive briefing requested when the pilot has not received prior information about a planned flight. It covers adverse conditions, synopsis, current conditions, forecast en-route and destination weather, alternates, winds aloft, NOTAMs, and ATC delays. Abbreviated briefings update existing information; outlook briefings cover flights six or more hours away.

99. D — A microburst encounter on approach produces, in sequence, an increasing headwind (apparent performance gain), then a powerful downdraft, then a tailwind (performance loss). The pilot's natural reactions — reducing power for the gain, then over-correcting for the sink — are exactly wrong. Avoidance is the only defense for light aircraft.

100. A — Mechanical turbulence is produced by strong winds flowing across irregular terrain or obstacles, particularly on the leeward side of mountains and buildings. Stable air over level terrain, smooth jet streams, and inversion layers do not generate mechanical turbulence by their nature. Recognizing it lets the pilot anticipate rough air downwind of terrain features.

101. A — Lateral stability — resistance to rolling around the longitudinal axis — is provided primarily by dihedral, the upward angle of the wings from horizontal. Dihedral causes a sideslipping airplane to roll back toward wings-level. Vertical stabilizer provides directional stability; trim and CG affect longitudinal stability.

102. B — The vertical stabilizer acts as a weathervane against the relative wind, providing directional stability around the vertical axis. Dihedral provides lateral stability; trim and horizontal stabilizer affect longitudinal stability. Each axis has its own primary stabilizing surface.

103. A — In a coordinated turn, the horizontal component of the lift vector — produced when the wings are banked — provides the centripetal force that turns the airplane. The vertical component still supports weight, requiring increased total lift. Neither thrust nor rudder turns the airplane; bank does, with rudder coordinating the turn.

104. C — An aft CG within the certified envelope produces lower stall speed (the tail downforce required is reduced, lightening the effective wing load) and more difficult stall and spin recovery. The trade is accepted for a slight cruise gain. Beyond the aft limit, spin recovery may be impossible — the aft limit is the safety-critical boundary.

105. C — Aviate, navigate, communicate is the priority order during an engine failure: fly the airplane first, navigate to a chosen field second, communicate with ATC third. Reversing this priority has killed pilots who talked on the radio while losing control. The mnemonic is taught as a reflex until it operates without conscious thought.

106. A — The first action after an engine failure is to establish best-glide airspeed, maximizing the time and distance available to evaluate options and act. Restart attempts, radio calls, and cockpit preparation follow only after the airplane is flying the optimal glide. Restart actions before establishing the glide consume the pilot's only fixed resource — time aloft.

107. A — A go-around is a normal pilot decision that should be initiated early when an approach is not stabilized or predictable. It is not a last-resort emergency, a clearance-requiring maneuver, or a sign of failure. Teaching the go-around as a default response prevents many landing-phase accidents.

108. C — The sideslip (wing-low) method uses aileron into the wind to control drift and rudder opposite to keep the longitudinal axis aligned with the runway centerline. The result is a controlled slip that tracks the centerline through touchdown. Aileron away from the wind would drift the airplane away from the centerline.

109. B — The downwind leg is parallel to the landing runway but flown in the opposite direction, typically at pattern altitude. Upwind is the leg paralleling the runway after departure; crosswind is perpendicular at the departure end; base is perpendicular at the approach end. Knowing the legs by name is required for traffic-pattern operations.

110. C — Ground reference maneuvers teach the student that bank angle must vary with the wind component to keep a planned ground track, because the airplane drifts with the wind while the desired path is fixed over the ground. The bank is steepest where groundspeed is highest. This wind-correction discipline is the maneuver's central teaching purpose.

111. D — The most useful framing is that the airplane always stalls at the same angle of attack, but the airspeed at which the wing reaches that angle varies with weight, load factor, density altitude, configuration, and contamination. Teaching stalls as an airspeed event plants a misconception that fails in turns and contamination. AOA-centered thinking is the instructor's most important conceptual move.

112. D — A pilot relying on airspeed rather than AOA is most likely to be surprised by an accelerated stall in a steep coordinated turn at low airspeed, because load factor raises the stall speed above what the

airspeed indicator suggests. Cruise, idle descent, and takeoff before rotation are not the surprise scenarios. Teaching AOA-centered thinking prevents this specific surprise.

113. B — A skidding cross-controlled base-to-final turn at low airspeed creates the conditions for a stall-spin accident in the traffic pattern — among the deadliest fatal-accident profiles in general aviation. It is not a safe go-around, a controlled short-field approach, or a maneuver the stall horn prevents. The prevention discipline is to recognize the setup and go around.

114. C — A student pulling the yoke aft when the stall warning sounds is exhibiting a stress-driven pull-back rather than the trained AOA reduction. Pitot malfunction, jammed elevator, and "normal recovery" do not fit the pattern. The correction is repeated controlled demonstrations and the verbal cue of "release back pressure."

115. D — A spin requires two conditions simultaneously: a stalled wing and the presence of yaw producing autorotation. Without either ingredient the spin cannot develop. Recognizing the two-ingredient structure makes spin avoidance teachable — break either ingredient and the spin cannot occur.

116. B — The PARE recovery sequence is Power idle, Ailerons neutral, Rudder full opposite the rotation, Elevator briskly forward through neutral to break the stall. Each step is necessary and the order matters; the manufacturer's specific procedure for the airplane in use always governs. Aileron use during a spin can aggravate autorotation; the standard is neutral.

117. D — Spin training in a typical general-aviation airplane is permissible only when the aircraft is specifically certificated for intentional spins. Spinning a non-spin-certificated aircraft can produce an unrecoverable result. CG must also be within the certified envelope and sufficient altitude available for recovery.

118. D — The first action in the standardized stall recovery is to reduce angle of attack by lowering the pitch attitude, because nothing else recovers the wing once it is stalled. Adding power before reducing AOA can deepen the stall through the pitch-up tendency. Rolling wings level and adding power follow only after the wing is unstalled.

119. C — Hypoxia degrades judgment before the pilot recognizes the impairment, which is the central danger of the condition. By the time symptoms might prompt concern, the impaired judgment caused by hypoxia may prevent the pilot from acting. The defense is anticipation — oxygen and altitude discipline — not symptom recognition.

120. D — Lingering effects and hangover symptoms can persist beyond the legal minimum waiting period after alcohol consumption, impairing a pilot who believes themselves fit. The regulatory waiting period is a legal floor, not a safety guarantee. Alcohol also aggravates hypoxia through histotoxic effects at altitude.

121. A — Over-the-counter status does not mean a medication is safe for flight; many cold, allergy, and pain remedies carry warnings against operating machinery that apply fully to flying. The pilot should understand the effects of any substance and the condition it treats before flight. "Available without prescription" is not a clearance for cockpit use.

122. C — Positive transfer occurs when earlier learning aids the acquisition of new learning, such as cruise pitch-power mastery supporting approach setup. The opposite is negative transfer. Naming the connection accelerates the transfer effect.

123. A — Negative transfer occurs when earlier learning interferes with the acquisition of new learning, such as a habit appropriate to one aircraft causing errors in another. Smooth transfer between types is positive transfer; absent prior experience is no transfer at all; rewards are unrelated. Anticipating negative transfer helps the instructor anticipate where students will struggle.

124. B — The five hazardous attitudes are anti-authority, impulsivity, invulnerability, macho, and resignation ("What's the use?"). Each has a specific paired antidote the pilot consciously substitutes. Curiosity, optimism, and frustration are not on the FAA's recognized list.

125. A — Invulnerability is the hazardous attitude characterized by "It won't happen to me," in which the pilot discounts personal risk despite recognizing the hazard. The antidote is the deliberate substitution of "It could happen to me." Each attitude has a specific antidote tied to its specific thought.

126. A — The antidote to impulsivity ("do something quickly") is "Not so fast. Think first." Each hazardous attitude has its specific paired antidote that the pilot consciously substitutes. The FOI and FIA both test these pairings by name.

127. B — Single-pilot resource management is the art of managing all resources available to a pilot operating alone — inside and outside the cockpit. It encompasses ADM, task management, situational awareness, automation management, and the use of every resource. SRM is the practical discipline through which a lone pilot manages human-factors risk.

128. A — Aeronautical decision-making is the systematic approach pilots use to consistently determine the best course of action in response to a given set of circumstances. It is taught and learned through structured frameworks, not improvised by intuition. ADM is what turns knowledge and skill into safe outcomes.

129. C — PAVE identifies risk across Pilot, Aircraft, enVironment, and External pressures — the fourth category covering schedules, expectations, and get-there-itis. The other options are not recognized aviation risk-management frameworks. External pressures drive many accident chains.

130. A — A 75% score on the FIA leaves a relatively large number of ACS codes the examiner must revisit during the oral portion, producing a longer and more probing oral exam. The score does not eliminate the oral, change fees, or have no effect. Higher written scores hand examiners fewer codes.

131. A — A solo endorsement certifies that the student has received the required training and is proficient to solo the specific make and model of aircraft, based on the instructor's personal determination. Age, medical currency, and fee payment are separate matters not certified by this endorsement. The endorsement is the instructor's professional certification of solo readiness.

132. B — An aircraft used for hire or for flight instruction in an instructor-provided airplane must have both a current annual inspection (the baseline for all civil aircraft) and a current 100-hour inspection cycle.

The pitot-static and transponder inspections are required only for IFR or transponder operations, and the instructor's flight review is a separate matter from aircraft inspection.

133. A — The flight instructor recency rule under §61.197 lives in 14 CFR Part 61 Subpart H, which governs flight instructors. Part 43 covers maintenance, Part 67 covers medical, and Part 71 covers airspace structure. Knowing which part governs which subject is foundational regulatory navigation for the FIA.

134. C — ARROW captures the required-aboard documents: Airworthiness certificate, Registration, Radio station license (when required for international ops), Operating limitations (including the flight manual), and Weight-and-balance data. CARES, FREES, and POWER are not standard mnemonics. The pilot verifies ARROW during preflight; absence makes the flight unlawful.

135. A — A lesson plan is a flexible guide that supports the lesson's objective and adapts to the individual student, not a rigid script or regulatory document. It serves the preparation step of the teaching process by ensuring the lesson has a clear objective, organized content, and connections to past and future learning. Flexibility-with-objective is what makes it useful.

136. D — A Convective SIGMET indicates severe convective weather including thunderstorms, severe turbulence, hail, and possibly tornadoes — the area must be avoided. Continuing, slowing into the white arc, or disabling autopilot are not appropriate responses. Avoidance is the only safe defense for light aircraft.

137. D — Wing flaps deployed to a landing position lower the stall speed and improve low-speed handling, which is precisely why they are used for landing. They do not eliminate rudder coordination, disable the stall warning, or affect drag in the manner described in the wrong options. The stall-speed reduction is the safety benefit at approach airspeed.

138. B — When known icing is encountered in an aircraft not certified for flight into known icing, the only correct response is to exit the icing conditions immediately by altitude or course change. Continuing, slowing, or disabling pitot heat increases the danger. Avoidance is the defense; exit is the response when avoidance has failed.

139. C — A flight review under §61.56 must include at least 1 hour of ground training and 1 hour of flight training with an authorized instructor. The review must cover Part 91 rules and maneuvers appropriate to the pilot. Completion is logged with the instructor's endorsement.

140. C — A constant-speed propeller allows the pilot to set RPM independently of throttle position, with propeller pitch adjusting automatically to maintain the selected RPM. The pilot manages manifold pressure with the throttle and RPM with the propeller control. This enables optimization of climb, cruise, and descent that a fixed-pitch propeller cannot match.

141. D — VFR night operations require functioning position lights (red, green, white), an anti-collision light system, and an electrical source adequate to power them. Pitot heat is required only for IFR or flight into known icing; a second altimeter and a constant-speed propeller are not VFR night equipment requirements. Equipment list for night VFR is exam-tested directly.

142. B — AIRMET Sierra advises pilots of IFR conditions and mountain obscuration affecting flight operations. AIRMET Tango covers turbulence and strong surface winds; AIRMET Zulu covers icing and freezing levels; convective activity is the Convective SIGMET subject. Each AIRMET type has a defined subject area pilots must know by name.

143. D — AIRMET Tango advises pilots of turbulence and strong surface winds at low levels. AIRMET Sierra covers IFR and mountain obscuration; AIRMET Zulu covers icing and freezing levels. Each AIRMET type has a defined subject area pilots must know by name.

144. D — Ceiling is defined as the height above ground of the lowest layer of clouds reported as broken, overcast, or as vertical visibility into an obscured sky. It is a meteorological definition, not an aircraft-performance or operator-policy limit. The definition is foundational to weather minimums and TAF/METAR interpretation.

145. B — Va decreases at operating weights below maximum gross weight, counterintuitively, because a lighter airplane is accelerated more easily by a given aerodynamic force and reaches limit G at a lower airspeed. The heavier the airplane, the higher its Va. The FIA tests this weight relationship reliably.

146. D — An aft CG produces less natural nose-down pitching moment because the wing's lift line and the CG are closer together, reducing the restoring moment that drives AOA reduction in stall recovery. The student's "heavier in the back" framing is the common misconception. Replacing it with the pitching-moment explanation is the central FIA correction.

147. A — As the airplane climbs without leaning, air density decreases while fuel flow stays roughly the same, producing a progressively richer fuel-air mixture and degraded performance — not a cleaner-running engine. The student has the relationship inverted. Replacing the misconception with the density-vs-fuel-flow explanation is essential.

148. C — Pulling the yoke aft when the stall warning sounds is wrong because it increases AOA past the critical angle, deepening the stall rather than recovering it. The student's "increases stall speed" framing misses the underlying mechanism. Replacing it with the AOA-past-critical explanation is the foundational stall-recovery teaching point.

149. D — Stall speed at increased load factor scales as $Vs1 \times \sqrt{n}$. In a steep coordinated turn, the load factor depends on bank angle, and the resulting stall-speed increase is the square root of that load factor. This is the central accelerated-stall relationship and the reason a steep turn at low airspeed is dangerous.

150. D — The correct response to forgetting a regulation during the oral is to consult the appropriate FAA publication, demonstrating the professional habit of looking up the authoritative source. Faking confidence, hoping the examiner provides the answer, or calling ahead all damage the candidate's and instructor's integrity. Teaching the look-it-up habit is itself ACS-aligned preparation.