PRACTICE EXAM 32 (60 QUESTIONS)

1. When two-way radio communication fails in IMC, the route a pilot must fly is governed by the order: assigned, then vectored, then expected, then filed. This is commonly remembered by the acronym:

A. AVEF, for assigned, vectored, expected, filed

B. MEAR, for minimum en route altitude required

C. ATIS, for the automatic terminal information service

D. CRAFT, for the clearance readback elements

2. Under lost communications in IMC, the altitude flown is the highest of the last assigned altitude, the minimum en route altitude, or the:

A. Filed cruising altitude on the original flight plan

B. Maximum authorized altitude for the airway segment

C. Altitude ATC has advised to expect in a further clearance

D. Transition altitude for the destination terminal area

3. A pilot experiencing an in-flight emergency may, under the emergency authority regulation, deviate from any rule to the extent required to:

A. Avoid a minor delay in reaching the destination airport

B. Reduce the workload during a routine instrument approach

C. Meet the emergency and ensure the safety of the flight

D. Improve fuel economy on a long cross-country flight

4. The emergency transponder code a pilot squawks to indicate a general emergency is:

A. 7500 for the loss of radio communications only

B. 7600 for an unlawful interference situation

C. 1200 for visual flight rules operations in flight

D. 7700 to alert ATC of an aircraft emergency

5. A pilot who deviates from an ATC clearance in response to an emergency must, if requested by ATC:

A. Submit a written report of that deviation

B. Surrender the pilot certificate upon landing

C. Pay a fine assessed by the controlling facility

D. Repeat the deviation to demonstrate the cause

6. The transponder code for a lost communications (radio failure) situation is:

A. 7700 indicating a general aircraft emergency

B. 7500 indicating an unlawful interference event

C. 7600 indicating two-way radio communication failure

D. 1200 indicating standard VFR cruising flight

7. A pilot in IMC with a lost-communications situation and a clearance limit that is not the destination airport should, upon reaching the limit:

A. Land immediately at the nearest available airport

B. Cancel IFR and continue under visual flight rules

C. Begin descent and approach to arrive near the filed ETA

D. Hold indefinitely until fuel exhaustion forces a landing

8. Class A airspace, where all operations must be conducted under IFR, extends from:

A. 18,000 feet MSL up to and including FL600

B. The surface up to 10,000 feet MSL nationwide

C. 14,500 feet MSL up to the base of Class E

D. FL180 up to an unlimited upper altitude

9. A pilot must receive an ATC clearance before operating IFR in controlled airspace because the clearance:

A. Certifies the aircraft is airworthy for the flight

B. Replaces the need to file a flight plan in advance

C. Provides authorization and separation from other IFR traffic

D. Guarantees the pilot a specific arrival time slot

10. The readback of a clearance is important because it:

A. Satisfies a recording requirement for the flight data

B. Allows the controller to verify the pilot understood correctly

C. Substitutes for filing the IFR flight plan on the ground

D. Transfers separation responsibility entirely to the pilot

11. A pilot flying an approach reads "circling MDA 1,160 (640-1)." The "640" represents the:

A. Visibility required in hundreds of feet for the circle

B. Distance in feet the aircraft may circle from the runway

C. Height above the airport elevation for the circling MDA

D. Decision altitude for the precision portion of the approach

12. The "minimum descent altitude" (MDA) differs from a decision altitude in that at the MDA the pilot:

A. May level off and continue to the missed approach point

B. Must immediately initiate a missed approach upon reaching it

C. Is required to descend below it to locate the runway

D. Disengages the autopilot for the automatic landing

13. On an approach chart, the symbol depicting a "lightning bolt" associated with the minimums box typically indicates:

A. Thunderstorm activity reported near the airport

B. Pilot-controlled lighting or a remote communications note

C. The approach is restricted to turbojet aircraft only

D. A required radar handoff before the final approach fix

14. A pilot interpreting "RVR 24" in an approach minimums line reads this as:

A. A required ceiling of 2,400 feet above the runway

B. Visibility of 24 statute miles along the approach path

C. A circling radius of 2,400 feet from the runway

D. Runway visual range of 2,400 feet at the touchdown zone

15. Class E airspace is controlled airspace that, unless otherwise designated, begins at:

A. The surface at all airports with instrument approaches

B. 18,000 feet MSL throughout the continental United States

C. 1,200 feet AGL or 700 feet AGL in transition areas

D. 14,500 feet MSL only over designated mountainous terrain

16. A pilot reviewing the "profile view" of an approach chart finds it depicts the:

A. Vertical descent profile, fixes, and altitudes for the approach

B. Overhead plan view of the approach course and navaids

C. Airport diagram with runway lengths and taxiways

D. Communications frequencies and minimums in a table

17. When a pilot accepts "cleared for the approach," obstacle clearance is assured provided the pilot:

A. Descends immediately to the lowest published minimums

B. Maintains the last assigned heading throughout the approach

C. Flies at maximum forward speed to expedite the procedure

D. Flies the published procedure including all altitudes and segments

18. A pilot must hold a clearance limit and begin the approach at the expect-further-clearance time under lost comms; if no EFC was issued, the approach begins as close as possible to the:

A. Time the aircraft first entered controlled airspace

B. Time the radio communication failure occurred

C. Earliest possible moment regardless of the flight plan

D. Estimated time of arrival computed from the flight plan

19. The "plan view" of an approach chart depicts:

A. The vertical descent profile with crossing altitudes

B. The overhead course, navaids, fixes, and holding patterns

C. The minimums table for straight-in and circling approaches

D. The airport runway layout and lighting systems

20. A pilot operating under IFR in Class E airspace receives separation from ATC relative to:

A. Other IFR aircraft, but not necessarily VFR traffic

B. All aircraft in the vicinity, both IFR and VFR

C. Only aircraft operating above 18,000 feet MSL

D. No other aircraft, as Class E is uncontrolled

21. A pilot reads "S-ILS 9 314/24 200 (200-1/2)" on an approach chart. The "200" in parentheses represents the:

A. Height above touchdown for the decision altitude

B. The required runway visual range in hundreds of feet

C. The distance in feet from the threshold to the marker

D. The circling radius for the Category A minimums

22. Class G airspace differs from controlled airspace in that within Class G:

A. ATC provides positive separation to all IFR traffic

B. ATC does not provide separation services to aircraft

C. An instrument clearance is required for all operations

D. Only IFR operations are permitted at any altitude

23. A pilot must comply with a "hold for release" instruction by:

A. Entering a holding pattern over the departure runway

B. Departing within 30 minutes of receiving the clearance

C. Contacting the destination tower before departing

D. Remaining on the ground until a release is received

24. The "missed approach" section of an approach chart specifies:

A. The climb and routing to follow if the landing is not completed

B. The descent profile from the final approach fix to the runway

C. The feeder routes connecting the en route fixes to the IAF

D. The circling minimums for each approach category

25. A pilot encountering a genuine emergency and deviating from a clearance has the authority to do so under the regulation that grants the pilot in command:

A. Permission only after first obtaining ATC approval

B. Authority limited to declared fuel emergencies alone

C. No authority to deviate from any published procedure

D. Final authority and responsibility for the operation of the aircraft

26. The "circling approach area" radius for a given approach category is based on the aircraft's:

A. Maximum certificated takeoff gross weight value

B. Number of engines installed on the airframe

C. Total instrument flight experience of the pilot

D. Approach speed (1.3 times the stalling speed in landing configuration)

27. A pilot in IMC who loses communications and is being radar vectored when the failure occurs should:

A. Continue on the last assigned vector heading indefinitely

B. Climb to the maximum authorized altitude and hold

C. Proceed by the most direct route to rejoin the filed/expected route

D. Descend below the clouds to navigate visually to the airport

28. Class B airspace generally requires, for IFR operations, that the pilot:

A. Hold only a private pilot certificate with no rating

B. Receive an ATC clearance to operate within the airspace

C. Maintain visual contact with the primary airport at all times

D. Squawk the VFR transponder code of 1200 throughout

29. A pilot interpreting an approach chart's "MSA 25 NM 3,500" understands the 3,500 to be:

A. The decision altitude for the straight-in approach

B. The minimum en route altitude for the airway segment

C. A minimum safe altitude providing obstacle clearance in that sector

D. The circling minimum descent altitude for the airport

30. The transponder code 7500 is reserved to indicate:

A. A general in-flight aircraft emergency situation

B. A two-way radio communication failure event

C. Standard VFR cruising flight at lower altitudes

D. Unlawful interference (hijacking) aboard the aircraft

31. A pilot flying a non-precision approach uses the "MDA" as the lowest altitude to descend to until:

A. The aircraft crosses the final approach fix inbound

B. The required visual references for landing are in sight

C. The autopilot disconnects on the final segment

D. The glideslope needle centers on the display

32. Class D airspace surrounding a towered airport typically requires a pilot under IFR to:

A. Cancel the IFR flight plan before entering the airspace

B. Maintain 1,000 feet above the cloud layer at all times

C. Be on an ATC clearance and in contact with the tower

D. Squawk standby until established on the final approach

33. A pilot reading the approach chart notes a "T" in an inverted triangle and an "A" in an inverted triangle. These direct the pilot to the:

A. Tower and approach control frequencies respectively

B. Two different missed approach holding patterns

C. Terminal arrival area and the alternate airport routes

D. Non-standard takeoff minimums and alternate minimums

34. A pilot reaching the clearance limit under lost communications, where the limit IS the destination fix, should:

A. Hold at the fix until reaching fuel exhaustion

B. Begin the approach to land near the filed ETA

C. Climb to the maximum altitude and proceed elsewhere

D. Cancel IFR and remain clear of all clouds

35. The "feeder route" portion of an approach chart provides a charted route and altitude from the en route structure to the:

A. Final approach fix on the precision segment

B. Missed approach holding pattern after the runway

C. Visual descent point on the final approach course

D. Initial approach fix where the procedure begins

36. Under the emergency authority regulation, a pilot who deviates may be required to file a report; this report is submitted:

A. Automatically to the news media after any deviation

B. Only if the aircraft sustains substantial damage

C. To the aircraft manufacturer for design review

D. Upon request of the administrator or controlling ATC facility

37. Class C airspace requires a pilot operating IFR to:

A. Establish and maintain communications and an ATC clearance

B. Remain below 4,000 feet above the airport elevation

C. Cancel IFR and proceed under visual flight rules within it

D. Squawk only the standby mode while inside the area

38. A pilot reading "LOC (GS out) RWY 27" on an approach chart understands this to be:

A. A precision approach with a fully functioning glideslope

B. A circling-only approach with no straight-in capability

C. A visual approach requiring the runway in sight throughout

D. A localizer-only non-precision approach with the glideslope unavailable

39. The lowest altitude depicted on an approach chart's profile that ensures obstacle clearance during the intermediate segment is the:

A. Decision altitude for the precision approach segment

B. Minimum altitude published for that intermediate segment

C. Circling minimum descent altitude for the airport

D. Maximum authorized altitude for the en route airway

40. A pilot under IFR who experiences both an electrical failure and lost communications should:

A. Immediately abandon the IFR flight plan and land anywhere

B. Squawk 7600 if able and follow lost-communications procedures

C. Continue the flight ignoring the communication requirements

D. Climb above all airspace to avoid conflicting with other traffic

41. The approach chart "minimums" section lists different values for "S" (straight-in) and "circling" because:

A. Circling involves maneuvering and generally has higher minimums

B. Straight-in approaches are always flown at night only

C. Circling approaches use the precision glideslope guidance

D. The two share identical obstacle clearance requirements

42. A pilot who declares an emergency receives priority handling from ATC and may be asked to:

A. Pay a service fee for the emergency assistance provided

B. Land only at airports with operating control towers

C. Demonstrate the emergency by repeating the maneuver

D. Provide information such as souls on board and fuel remaining

43. Class E airspace extends upward from its designated floor to, but not including, the floor of the overlying:

A. Class G uncontrolled airspace below it

B. Class A airspace at 18,000 feet MSL

C. Special use airspace in the vicinity

D. Military operations area when active

44. A pilot reading the approach chart's "frequencies" section finds them generally arranged in the:

A. Order of use from arrival (ATIS, approach) through to ground

B. Reverse order starting with the clearance delivery frequency

C. Alphabetical order of the facility names involved

D. Order of transmitting power of each station listed

45. The "DA" or "DH" listed on a precision approach minimums line is the altitude/height at which the pilot must:

A. Begin a missed approach if the required visual references are not seen

B. Level off and continue toward the missed approach point

C. Disconnect the autopilot for a fully manual landing

D. Reduce to the minimum approach speed for the category

46. Class A airspace requires that all aircraft operate under instrument flight rules and be equipped with:

A. A radar altimeter and a terrain awareness system

B. Dual VOR receivers and an autopilot system

C. A transponder with altitude reporting and appropriate navigation equipment

D. Weather radar and a second independent attitude indicator

47. A pilot operating under lost communications in VMC (or who encounters VMC) should:

A. Continue to the clearance limit and hold until the EFC time

B. Continue under VFR and land as soon as practical

C. Climb to the maximum altitude and squawk the emergency code

D. Maintain the last assigned altitude until reaching the destination

48. The approach chart's "airport diagram" or sketch provides the pilot with:

A. The runway layout, taxiways, and airport features

B. The vertical descent profile for the final approach

C. The minimums for straight-in and circling approaches

D. The en route airways connecting to the approach

49. A pilot determines the alternate airport's minimums from the chart; an airport marked with an "A" in an inverted triangle and "NA" indicates:

A. The airport has standard alternate minimums available

B. The airport may not be used as an alternate (alternate not authorized)

C. The alternate minimums are reduced below standard there

D. The airport requires only a 600-foot ceiling as an alternate

50. A pilot under IFR must, when receiving a clearance, write down and read back the elements often remembered by the acronym CRAFT, which stands for:

A. Ceiling, runway, altitude, frequency, time of departure

B. Course, rate, altimeter, fix, and transponder code

C. Clearance limit, route, altitude, frequency, transponder

D. Climb, reporting, approach, fuel, and taxi instructions

51. A pilot reading "Category A 1.3 NM, Category B 1.5 NM" in the circling area notes these figures represent the:

A. Required visibility for each approach category to circle

B. Decision altitude offsets for each aircraft category

C. Radius of the protected circling area for each category

D. Minimum descent rate for the circling maneuver per category

52. The phrase "radar required" in an approach chart's notes means the procedure:

A. Can only be flown when ATC provides radar service for it

B. May be flown by any aircraft with a working transponder

C. Requires the aircraft to carry onboard weather radar

D. Is reserved for use only during daytime visual conditions

53. A pilot squawking 7700 should expect ATC to:

A. Cancel the aircraft's IFR flight plan automatically

B. Require the pilot to land at the nearest tower-controlled field

C. Provide priority handling and offer assistance as needed

D. Discontinue all communication until the code is changed

54. A pilot reading an approach chart's "missed approach" instructions finds them depicted both textually and as:

A. A list of alternate airports suitable for diversion

B. A table of minimums for each approach category

C. A profile of the final approach descent gradient

D. Icons or a sketch showing the missed approach track

55. Controlled airspace in which IFR aircraft are separated from both IFR and VFR traffic, and clearances are required to enter, describes:

A. Class G airspace below 1,200 feet AGL

B. Class B airspace surrounding the busiest airports

C. Class E airspace above 14,500 feet MSL only

D. Uncontrolled airspace in remote regions

56. A pilot interpreting the "minimums" on a chart finds "DA 1,440" for an LPV approach; this altitude is referenced to:

A. Mean sea level as read on the barometric altimeter

B. Height above the touchdown zone elevation only

C. The radio altimeter reading at the runway threshold

D. The airport's published field elevation directly

57. A pilot who must deviate from an assigned altitude to avoid an emergency should, as soon as practical:

A. File a written report regardless of the circumstances

B. Notify ATC of the deviation and the reason for it

C. Return to the assigned altitude without informing ATC

D. Cancel the IFR flight plan and proceed under VFR

58. The "FAF to MAP" table sometimes printed on an approach chart provides:

A. The fuel required from the final approach fix to landing

B. The frequencies to use during the final approach segment

C. The altitudes to maintain during the missed approach climb

D. The time from the final approach fix to the missed approach point by groundspeed

59. A pilot operating IFR must maintain the cleared altitude; a deviation from it without clearance is permitted only:

A. When the pilot prefers a smoother altitude for comfort

B. To take advantage of more favorable winds aloft

C. In response to an emergency or a TCAS resolution advisory

D. When passing through a layer of light turbulence

60. A pilot reads "Procedure NA at night" in the approach chart notes. This means the approach:

A. Requires special night-vision goggles to be flown legally

B. May not be flown as published during night operations

C. Has lower minimums available exclusively at night

D. Is authorized at night only with prior ATC approval

+ Answer Key

1. A — The lost-communications route priority — assigned, vectored, expected, filed — is remembered by the acronym AVEF. It tells the pilot which route to fly when out of contact in IMC. Following this order keeps the aircraft predictable to ATC.

2. C — The lost-comm altitude is the highest of the last assigned altitude, the MEA, or the altitude ATC advised to expect in a further clearance. Choosing the highest ensures terrain and traffic protection. This is the MEA-expected-assigned rule under §91.185.

3. C — The emergency authority regulation lets the pilot in command deviate from any rule to the extent required to meet the emergency and ensure the safety of the flight. Safety is the governing purpose. The deviation must be limited to what the emergency requires.

4. D — The transponder code 7700 signals a general aircraft emergency to ATC. It alerts controllers to provide priority handling. Squawking it is appropriate whenever the flight's safety is threatened.

5. A — A pilot who deviates from a clearance in an emergency must, if requested by ATC, submit a written report of that deviation. The report documents the circumstances. It is required only upon request, not automatically.

6. C — The transponder code 7600 indicates two-way radio communication failure. It tells ATC the aircraft has lost communications. Squawking it triggers the appropriate lost-comm handling.

7. C — At a clearance limit that is not the destination, a lost-comm pilot begins descent and the approach to arrive near the filed ETA (or EFC time). The aircraft proceeds to the destination on schedule. This keeps the flight predictable for ATC planning.

8. A — Class A airspace extends from 18,000 feet MSL up to and including FL600, and all operations there are conducted under IFR. It encompasses the high-altitude structure. An IFR clearance and proper equipment are mandatory within it.

9. C — An IFR clearance in controlled airspace provides authorization to operate and separation from other IFR traffic. It is the basis of the IFR system's traffic management. The clearance does not certify airworthiness or guarantee a time slot.

10. B — Reading back a clearance allows the controller to verify the pilot understood it correctly. The readback catches errors before they cause a conflict. It is a safety cross-check, not a substitute for filing or a transfer of separation duty.

11. C — In "circling MDA 1,160 (640-1)," the 640 is the height above the airport elevation for the circling MDA, and the 1 is the visibility in statute miles. The parenthetical pairs height-above-airport with required visibility. This helps the pilot relate the MDA to the field.

12. A — At the MDA the pilot may level off and continue to the missed approach point, descending no lower until the runway is in sight. Unlike a DA, the MDA is a level-off altitude. The pilot holds the MDA and executes a miss at the MAP if the runway is not seen.

13. B — A lightning-bolt symbol near the minimums box typically denotes pilot-controlled lighting or a related communications note. It directs the pilot to activate or note the lighting. It is a charting convention, not a weather report.

14. D — "RVR 24" means a runway visual range of 2,400 feet measured at the touchdown zone. RVR is expressed in hundreds of feet. The pilot uses it to determine landing legality on the approach.

15. C — Class E airspace, unless otherwise designated, typically begins at 1,200 feet AGL, or at 700 feet AGL in transition areas around airports with instrument approaches. These floors establish where controlled airspace begins. The designation depends on the location.

16. A — The profile view of an approach chart depicts the vertical descent profile, fixes, and altitudes. It shows the side view of the approach descent. The plan view, by contrast, gives the overhead layout.

17. D — "Cleared for the approach" assures obstacle clearance provided the pilot flies the published procedure, including all altitudes and segments. The protection is built into the charted procedure. Descending early or skipping segments forfeits that clearance.

18. D — With no EFC issued, the lost-comm approach begins as close as possible to the estimated time of arrival computed from the flight plan. The filed ETA serves as the timing reference. This keeps the arrival predictable to ATC.

19. B — The plan view depicts the overhead course, navaids, fixes, and holding patterns. It is the top-down map of the approach. The profile view shows the vertical descent, and the minimums table lists the landing criteria.

20. A — Under IFR in Class E, ATC separates the aircraft from other IFR traffic but not necessarily from VFR traffic, since VFR aircraft are not required to be in contact. The pilot still maintains vigilance for VFR traffic. This is a key limitation of IFR separation in Class E.

21. A — In "S-ILS 9 314/24 200 (200-1/2)," the 200 in parentheses is the height above touchdown for the decision altitude, and the 1/2 is the visibility in statute miles. The parenthetical gives HAT and visibility. This relates the DA to the runway.

22. B — In Class G (uncontrolled) airspace, ATC does not provide separation services to aircraft. Pilots are responsible for their own separation. IFR operations are possible but without ATC separation in Class G.

23. D — "Hold for release" requires remaining on the ground until a release is received from ATC. It is used to manage IFR departures into the system. Departing without release would be a violation.

24. A — The missed approach section specifies the climb and routing to follow if the landing is not completed. It guides the pilot through the go-around safely. Following it ensures obstacle clearance during the missed approach.

25. D — The emergency authority rests on the pilot in command's final authority and responsibility for the operation of the aircraft. This authority allows deviation when an emergency requires it. It does not depend on prior ATC approval.

26. D — The circling approach area radius is based on the aircraft's approach speed (1.3 times the stalling speed in landing configuration), which defines the approach category. Faster aircraft need larger circling areas. Using the correct category ensures adequate obstacle clearance.

27. C — A lost-comm pilot being radar vectored when the failure occurs proceeds by the most direct route to rejoin the filed or expected route. The vector was temporary, so the pilot returns to the cleared routing. This satisfies the AVEF route priority.

28. B — IFR operations in Class B require the pilot to receive an ATC clearance to operate within the airspace. The clearance grants entry and separation. Class B has the most restrictive entry requirements.

29. C — "MSA 25 NM 3,500" means a minimum safe altitude of 3,500 feet providing obstacle clearance within 25 NM in that sector. It is an emergency reference, not a navigation or approach minimum. Pilots use it for terrain awareness.

30. D — The transponder code 7500 indicates unlawful interference (hijacking) aboard the aircraft. It silently alerts ATC to the situation. It is distinct from the 7600 and 7700 emergency codes.

31. B — On a non-precision approach, the MDA is the lowest altitude to descend to until the required visual references for landing are in sight. The pilot holds the MDA until then. Descending below it without those references is prohibited.

32. C — IFR operations in Class D require the pilot to be on an ATC clearance and in contact with the tower. The tower controls the airspace around the airport. The IFR clearance and communication are both required.

33. D — A "T" in an inverted triangle and an "A" in an inverted triangle direct the pilot to the non-standard takeoff minimums and the alternate minimums sections respectively. These symbols flag where default minimums do not apply. The pilot consults the referenced notes.

34. B — When the clearance limit IS the destination fix, a lost-comm pilot begins the approach to land near the filed ETA. The aircraft proceeds to land on schedule. Holding to fuel exhaustion or canceling IFR would not follow the lost-comm rules.

35. D — A feeder route provides a charted route and altitude from the en route structure to the initial approach fix, where the procedure begins. It bridges the airway and the approach. Using it ensures alignment and obstacle clearance into the IAF.

36. D — A pilot who deviates under emergency authority files a report upon request of the administrator or controlling ATC facility. The report is not automatic or routine. It documents the deviation when requested.

37. A — IFR operations in Class C require the pilot to establish and maintain communications and hold an ATC clearance. Class C mandates two-way contact and participation. The clearance and communication are both prerequisites.

38. D — "LOC (GS out) RWY 27" denotes a localizer-only non-precision approach with the glideslope unavailable. The localizer provides lateral guidance to the LOC MDA. Without the glideslope, the approach is non-precision.

39. B — The lowest profile-view altitude ensuring obstacle clearance during the intermediate segment is the minimum altitude published for that segment. Each segment has its own protected minimum. Honoring it preserves obstacle clearance through the approach.

40. B — A pilot with both electrical failure and lost communications should squawk 7600 if able and follow lost-communications procedures. The transponder and lost-comm rules keep the aircraft predictable. Abandoning the plan or climbing above all airspace would be unsafe.

41. A — Circling minimums are generally higher than straight-in because circling involves maneuvering near the airport at low altitude. The extra maneuvering needs more obstacle clearance. This is why the "S" and circling lines differ.

42. D — A pilot declaring an emergency receives priority handling and may be asked to provide information such as souls on board and fuel remaining. This data helps ATC and rescue planning. The pilot is not fined or required to repeat the maneuver.

43. B — Class E airspace extends upward from its floor to, but not including, the floor of the overlying Class A airspace at 18,000 feet MSL. Above 18,000 feet, Class A begins. This defines the upper limit of Class E in most areas.

44. A — The frequencies section is generally arranged in the order of use, from arrival (ATIS, approach) through tower to ground. This sequence matches the phases of the approach and landing. The layout aids workflow during the procedure.

45. A — At the DA or DH on a precision approach, the pilot must begin a missed approach if the required visual references are not in sight. It is the go/no-go decision point. Continuing below without references is prohibited.

46. C — Class A operations require a transponder with altitude reporting and navigation equipment appropriate to the route, in addition to IFR operation. These ensure ATC can track and the aircraft can navigate. The high-altitude structure depends on this equipment.

47. B — A lost-comm pilot in VMC (or who encounters VMC) should continue under VFR and land as soon as practical. Visual conditions make a safe landing possible. This rule under §91.185 prioritizes getting down safely when able.

48. A — The airport diagram or sketch provides the runway layout, taxiways, and airport features. It aids ground orientation after landing. It is distinct from the profile, plan, and minimums sections.

49. B — An airport marked with an "A" in an inverted triangle and "NA" means alternate minimums are not authorized — the airport may not be used as an alternate. The notation flags the restriction. The pilot must choose a different alternate.

50. C — The CRAFT acronym stands for Clearance limit, Route, Altitude, Frequency, and Transponder code. It organizes the elements of an IFR clearance for readback. Using it ensures no element is missed.

51. C — "Category A 1.3 NM, Category B 1.5 NM" gives the radius of the protected circling area for each category. The radius grows with faster approach speeds. Staying within it ensures obstacle clearance while circling.

52. A — "Radar required" means the procedure can only be flown when ATC provides radar service for it. Some segments depend on radar identification or vectors. Without radar, the procedure is unavailable.

53. C — Squawking 7700 should prompt ATC to provide priority handling and offer assistance as needed. The code flags an emergency to controllers. They will coordinate help and clear the way for the aircraft.

54. D — The missed approach instructions appear textually and as icons or a sketch showing the missed approach track. The graphic depiction aids quick comprehension. Both forms convey the climb and routing of the miss.

55. B — Class B airspace separates IFR aircraft from both IFR and VFR traffic and requires a clearance to enter. It surrounds the busiest airports. This high level of service and control distinguishes Class B.

56. A — A DA of 1,440 on an LPV is referenced to mean sea level as read on the barometric altimeter. The DA is an altitude, unlike a DH which is a height above touchdown. The pilot reads it directly on the altimeter.

57. B — A pilot who deviates from an assigned altitude for an emergency should, as soon as practical, notify ATC of the deviation and the reason. Prompt notification helps ATC manage other traffic. The deviation is permitted, but communication restores coordination.

58. D — The "FAF to MAP" table gives the time from the final approach fix to the missed approach point by groundspeed. It supports timing the MAP where no fix defines it. The pilot reads the time corresponding to the current groundspeed.

59. C — A deviation from a cleared altitude without clearance is permitted only in response to an emergency or a TCAS resolution advisory. Comfort, winds, or light turbulence do not justify it. Safety-driven deviations are the exception, followed by prompt notification.

60. B — "Procedure NA at night" means the approach may not be flown as published during night operations. The restriction usually reflects unlit obstacles or unmonitored facilities. Pilots must select another procedure or divert at night.