Date effective: October 15, 2018

The following sample questions for Instrument Rating Airplane (IRA) are suitable study material for all the Instrument Rating tests. Although these questions are airplane based they represent the same type of questions that can be found on all Instrument Rating tests. The applicant must realize that these questions are to be used as a study guide, and are not necessarily actual test questions. The full IRA test contains 60 questions. The Application Identification, Information Verification and Authorization Requirements Matrix lists all FAA exams. It is available at http://www.faa.gov/training_testing/testing/media/testing_matrix.pdf.

The FAA testing system is supported by a series of supplement publications. These publications include the graphics, legends, and maps that are needed to successfully respond to certain test questions. FAA-CT-8080-3F, Airman Knowledge Testing Supplement for Instrument Rating is available at

http://www.faa.gov/training_testing/testing/supplements/media/instrument_rating_akts.pdf.

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. Matching the learning statement codes with the codes listed on your Airman Knowledge Test Report assists in the evaluation of knowledge areas missed on your exam. It is available at http://www.faa.gov/training_testing/testing/media/LearningStatementReferenceGuide.pdf.

Instrument Rating Airplane Sample Questions with ACS Codes

1. PLT172 IR.III.A.K1

ATC can issue a STAR

- A) to all pilots wherever STARs are available.
- B) only if the pilot requests a STAR in the `Remarks` section of the flight plan.
- C) when ATC deems it appropriate, unless the pilot requests `No STAR.`

2. PLT128 IR.I.C.S5

On initial climb-out after takeoff and with the autopilot engaged, you encounter icing conditions. In this situation you can expect

- A) ice to accumulate on the underside of the wings due to the higher AOA.
- B) the autopilot to hold the vertical speed, if the anti-icing boots are working.
- C) the increased airflow under the wings to prevent the accumulation of ice.

3 . PLT509 IR.VI.E.S2

(Refer to FAA-CT-8080-3F, Figure 158.) With winds reported as from 330° at 4 knots, you are given instructions to taxi to runway 4 for departure and to expect takeoff after an airliner departs from runway 29. What effect would you expect from that airliner's vortices?

- A) The winds will push the vortices southeast of your takeoff path.
- B) The upwind vortex would tend to remain over the runway.
- C) The downwind vortex will rapidly dissipate.

4. PLT171 IR.III.A.K1

While on an IFR flight plan, you should notify ATC of a variation in speed when

- A) ground speed changes more than 5 knots.
- B) average TAS changes 10 knots or 5 percent.
- C) ground speed changes by 10 MPH or more.

5. PLT224 IR.I.C.K5

You may cancel an IFR flight plan

- A) at any time as long as you advise ATC.
- B) only in an emergency.
- C) if in VMC outside class A airspace.

6. PLT163 IR.III.A.K1

While performing a VFR practice instrument approach, Radar Approach Control assigns an altitude or heading that will cause you to enter the clouds. What action should you take?

- A) Continue as directed.
- B) Advise "unable" and remain clear of clouds.
- C) Deviate as needed; then rejoin the approach.

7. PLT382 IR.VI.B.K1

If the RVR equipment is inoperative for an IAP that requires a visibility of 2,400 RVR, how should the pilot expect the visibility requirement to be reported in lieu of the published RVR?

- A) As a slant range visibility of 2,400 feet.
- B) As an RVR of 2,400 feet.
- C) As a ground visibility of 1/2 SM.

8. PLT292 IR.I.C.S4

If the plan view on an approach chart does not include a procedure turn barb, which means

A) a procedure turn is not authorized.

- B) you should fly a teardrop entry.
- C) a racetrack-type turn is required.

9. PLT382 IR.VI.A.K1

The instrument approach criteria for a Category A airplane is based on a maximum airspeed of

- A) 100 knots.
- B) 90 knots.
- C) 80 knots.

10 . PLT083 IR.I.C.S4

(Refer to FAA-CT-8080-3F, Figure 227.) Refer to the APA (Centennial) ILS RWY 35R procedure. The PFAF (Precision Final Approach Fix) intercept altitude is

- A) 7,080 feet MSL.
- B) 7,977 feet MSL.
- C) 8,000 feet MSL.

11 . PLT083 IR.VI.A.K1

(Refer to FAA-CT-8080-3F, Figure 242 and Legend 27.) You have been cleared for the RNAV (GPS) RWY 36 approach to LIT. At a groundspeed of 105 knots, what is the vertical descent angle and rate of descent on final approach?

- A) 2.82 degrees and 524 feet per minute.
- B) 3.00 degrees and 557 feet per minute.
- C) 4.00 degrees and 550 feet per nautical mile.

12 . PLT370 IR.VI.B.K1

You have not yet been cleared for the approach, but you are being vectored to the ILS approach course. It is clear that you will pass through the localizer course unless you take action. You should

- A) turn outbound and complete the procedure turn.
- B) continue as assigned and query ATC.
- C) turn inbound and join the final approach course.

13 . PLT292 IR.III.A.K1

Flying clear of clouds on an instrument flight plan, what are the requirements for a contact approach to an airport that has an approved IAP?

- A) The controller must determine that the pilot can see the airport at the altitude flown and can remain clear of clouds.
- B) The controller must have determined that the visibility was at least 1 mile and be reasonably sure the pilot can remain clear of clouds.
- C) The pilot must request the approach, have at least 1 mile visibility, and be reasonably sure of remaining clear of clouds.

14 . PLT033 IR.I.C.K2

MEA is an altitude which assures

- A) obstacle clearance, accurate navigational signals from more than one VORTAC, and accurate SME mileage.
- B) a 1,000-foot obstacle clearance within 2 miles of an airway and assures accurate DME mileage.
- C) acceptable navigational signal coverage and meets obstruction clearance requirements.

15 . PLT222 IR.III.A.K1

During a takeoff into IMC with low ceilings, you should contact departure

- A) before entering the clouds.
- B) when the tower instructs the change.
- C) upon reaching traffic pattern altitude.

16 . PLT406 IR.VI.B.K1

A pilot is making an ILS approach and is past the OM to a runway which has a VASI. What action is appropriate if an electronic glide slope malfunction occurs and the pilot has the VASI in sight?

- A) The pilot should inform ATC of the malfunction and then descend immediately to the localizer DH and make a localizer approach.
- B) The pilot may continue the approach and use the VASI glide slope in place of the electronic glide slope.
- C) The pilot must request an LOC approach, and may descend below the VASI at the pilot's discretion.

17 . PLT202 IR.II.B.K2a

The greatest DME indication error between actual ground distance and displayed ground distance occurs at

A) high altitudes far from the VORTAC.

- B) high altitudes close to the VORTAC.
- C) low altitudes far from the VORTAC.

18 . PLT322 IR.I.C.K2

You are planning an IFR flight off established airways below 18,000 feet MSL. If you use VOR navigation to define the route, the maximum distance between NAVAIDS should be

- A) 40 NM.
- B) 70 NM.
- C) 80 NM.

19. PLT354 IR.VI.A.K1

If Receiver Autonomous Integrity Monitoring (RAIM) is not available prior to beginning a GPS approach, the pilot should

- A) continue the approach, expecting to recapture the satellites before reaching the FAF.
- B) use a navigation or approach system other than GPS for an approach.
- C) continue to the MAP and hold until the satellites are recaptured.

20 . PLT322 IR.II.B.K2a

When using VOR for navigation, which of the following should be considered as station passage?

- A) The first movement of the CDI as the airplane enters the zone of confusion.
- B) The moment the TO FROM indicator becomes blank.
- C) The first positive, complete reversal of the TO FROM indicator.

21 . PLT300 IR.II.B.K2a

When flying directly over a published airborne VOR checkpoint, what is the maximum error allowed for IFR flight?

- A) Plus or minus 6° of the designated radial.
- B) Plus or minus 4° of the designated radial.
- C) Plus 6° or minus 4° of the designated radial.

22 . PLT049 IR.V.A.S2

(Refer to FAA-CT-8080-3F, Figures 61.) Determine your position relative to the glide slope and localizer course.

- A) Below the glide slope and right of the localizer course.
- B) Above the glide slope and left of the localizer course.
- C) Above the glide slope and right of the localizer course.

23 . PLT058 IR.I.C.S4

(Refer to FAA-CT-8080-3F, Figure 91.) When flying a northbound IFR flight on V257, what is the minimum crossing altitude at DBS VORTAC?

- A) 7,500 feet.
- B) 8,600 feet.
- C) 11,100 feet.

24 . PLT102 IR.V.B.K1

(Refer to FAA-CT-8080-3F, Figures 174 and 175.) When DFW is landing to the north, at CURLE, expect

- A) to be instructed to maintain 200 knots.
- B) to fly a course of 010°.
- C) radar vectors.

25 . PLT083 IR.V.B.K1

(Refer to FAA-CT-8080-3F, Figure 230.) The minimum safe altitude (MSA) for the VOR/DME or GPS-A at 7D3 is geographically centered on what position?

- A) **DEANI** intersection.
- B) WHITE CLOUD VOR/DME.
- C) MAJUB intersection.

26 . PLT058 IR.VII.A.K1

(Refer to FAA-CT-8080-3F, Figure 24.) While passing near the CORTEZ VOR, southbound on V187, contact is lost with Denver Center. You should attempt to reestablish contact with Denver Center on

- A) 118.575 MHz.
- B) 108.4 MHz.
- C) 122.3 MHz.

27 . PLT100 IR.I.C.S4

Military training routes (MTR) above 1,500 feet are depicted on

A) IFR Planning Charts.

- B) IFR Low Altitude En Route Charts.
- C) IFR High Altitude En Route Charts.

28 . PLT058 IR.I.C.S4

(Refer to FAA-CT-8080-3F, Figure 53.) What is indicated by the inverse `H` symbol in the radio aids to navigation box for SAN MARCUS VORTAC?

- A) VOR with TACAN compatible DME.
- B) The availability of HIWAS.
- C) The VOR has a high altitude SSV Class Designator.

29 . PLT442 IR.I.A.K2

To meet the minimum required instrument flight experience to act as pilot in command of an aircraft under IFR, you must have logged within the 6 calendar months preceding the month of the flight, in the same category of

- A) holding procedures, intercepting and tracking courses through the use of navigation systems, and six instrument approaches.
- B) 6 hours of instrument time in any aircraft, and six instrument approaches.
- C) six instrument approaches, three of which must be in the same category and class of aircraft to be flown, and6 hours of instrument time in any aircraft.

30 . PLT379 IR.I.C.K1

What are the alternate minimums for an airport with a precision approach procedure?

- A) 400 foot ceiling and 2 miles visibility.
- B) 600 foot ceiling and 2 miles visibility.
- C) 800 foot ceiling and 2 miles visibility.

31 . PLT443 IR.I.A.K1

A certificated commercial pilot who carries passengers for hire at night or in excess of 50 NM is required to have at least

- A) a type rating.
- B) a first class medical certificate.
- C) an instrument rating in the same category and class of aircraft.

32 . PLT442 IR.I.A.K2

What are the requirements to log an ILS approach in VMC conditions for instrument currency?

- A) The flight must remain on an IFR flight plan throughout the approach and landing.
- B) The ILS approach can be credited only if you use a view-limiting device and log the name of the safety pilot.
- C) The ILS approach can be credited regardless of actual weather if you are issued an IFR clearance.

33 . PLT370 IR.I.C.R3

When is an IFR clearance required during VFR weather conditions?

- A) When operating in the Class E airspace.
- B) When operating in a Class A airspace.
- C) When operating in airspace above 14,500 feet.

34 . PLT317 IR.I.B.R1b

(Refer to FAA-CT-8080-3F, Figure 13.) How will the aircraft in position 4 be affected by a microburst encounter?

39000

- A) Performance increasing with a tailwind and updraft.
- B) Performance decreasing with a tailwind and downdraft.
- C) Performance decreasing with a headwind and downdraft.

35 . PLT284 IR.I.B.S1

Decode the excerpt from the Winds and Temperature Aloft Forecast (FB) for OKC at 39,000 feet.

FT 3000 9000 12000 24000

OKC 9900 2018+00 2130-06 2361-30 830558

A) Wind 130° at 50 knots, temperature -58 °C.

- B) Wind 330° at 105 knots, temperature -58 °C.
- C) Wind 330° at 205 knots, temperature -58 °C.

36 . PLT316 IR.I.B.K1

When are severe weather watch bulletins issued?

- A) At 0000 (UTC).
- B) At 0000 (local).
- C) unscheduled and issued as required.

37. PLT059 IR.I.B.S1

Interpret the remarks section of METAR surface report for KBNA? METAR KBNA 211250Z 33018KT 290V260 1/2SM R31/2700FT +SN BLSNFG VV008 00/M03 A2991 RMK RAESNB42

- A) The wind is variable from 290° to 360°.
- B) Heavy blowing snow and fog on runway 31.
- C) Rain ended 42 minutes past the hour, snow began 42 minutes past the hour.

38 . PLT290 IR.I.B.K1

Consider this AIRMET which includes your route of flight:

DFWS WA 211445 AIRMET IFR . . . OK TX FROM END TO TXK TO HOU TO LBB TO END CIG BELOW 010. CONDS ENDG 15-18Z This indicates

- A) there will be icing in clouds below 10,000 feet MSL.
- B) visibility will be less than 3 SM until 15Z.
- C) the area will have low ceilings before 15Z

39 . PLT294 IR.I.B.K1

If you encounter in-flight icing and ATC asks you to report your conditions, what are the official reportable icing values that you are expected to use?

- A) Light, moderate, severe, extreme.
- B) Trace, light, moderate, severe.
- C) Few, light, moderate, severe.

40 . PLT068 IR.I.B.S1

(Refer to FAA-CT-8080-3F, Figure 7.) What type of weather can be expected in the red scalloped area near area 9?

- A) 2/8 to 6/8 coverage, occasional embedded thunderstorms, tops at FL 330.
- B) 1/8 to 4/8 coverage, occasional embedded thunderstorms, maximum tops at 51,000 feet MSL.
- C) Isolated embedded cumulonimbus with tops to FL330.

41 . PLT226 IR.I.B.K3j

In what localities is advection fog most likely to occur?

- A) Coastal areas.
- B) Mountain slopes.
- C) Level inland areas.

42 . PLT288 IR.I.B.K1

When the visibility is greater than 6 SM on a TAF, it is.

- A) expressed as 6PSM.
- B) expressed as P6SM.
- C) omitted from the report.

43 . PLT161 IR.II.C.K3

Your transponder is inoperative. What are the requirements for flying in Class D airspace?

- A) The entry into Class D is prohibited.
- B) Continue the flight as planned.
- C) Pilot must immediately request priority handling to proceed to destination.

44 . PLT161 IR.I.C.K2

ATC has approved your request for VFR-on-top while on an IFR clearance. Therefore, you

- A) should set your transponder to code 1200.
- B) must fly appropriate IFR altitudes.
- C) must fly appropriate VFR altitudes.

45 . PLT281 IR.III.A.K1

(Refer to FAA-CT-8080-3F, Figure 162.) You have accepted a visual approach to RWY 16L at EUG at night. As you approach the runway, you notice runway centerline lights. This indicates

- A) you are on the centerline for your assigned runway.
- B) you are too low on the approach.
- C) you have lined up with the wrong runway.

46 . PLT337 IR.IV.A.K3

If while in level flight, it becomes necessary to use an alternate source of static pressure vented inside the airplane, which of the following variations in instrument indications should the pilot expect?

- A) The altimeter will read lower than normal, airspeed lower than normal, and the VSI will momentarily show a descent.
- B) The altimeter will read higher than normal, airspeed greater than normal, and the VSI will momentarily show a climb.
- C) The altimeter will read lower than normal, airspeed greater than normal, and the VSI will momentarily show a climb and then a descent.

47 . PLT088 IR.IV.A.K3

If both the ram air input and drain hole of the pitot system become blocked, the indicated airspeed will

- A) increase during a climb.
- B) decrease during a climb.
- C) remain constant regardless of altitude change.

48 . PLT140 IR.V.B.R1

What is the rule for a pilot receiving a "Land and Hold Short Operation (LAHSO) clearance?"

- A) The pilot is required to accept the controller's clearance in visual meteorological conditions.
- B) The pilot must accept the clearance if the pavement is dry and the stopping distance is adequate.
- C) The pilot has the option to accept or reject all LAHSO clearances regardless of the meteorological conditions.

49 . PLT145 IR.VI.E.K2

Which type of runway lighting consists of a pair of synchronized flashing lights, one on each side of the runway threshold?

- A) MALSR.
- B) HIRL.
- C) REIL.

50 . PLT292 IR.VI.B.K1

A Precision Runway Monitor (PRM) approach may require

- A) simultaneously monitoring two frequencies.
- B) special training to monitor two ILS receivers simultaneously.
- C) tracking performance parameters at the decision point.

51 . PLT147 IR.VI.E.K2

(Refer to FAA-CT-8080-3F, Figure 136.) An `on glidepath` indication is

- A) 8.
- B) 10.
- C) 11.

52 . PLT133 IR.V.B.K1

Unless otherwise stated, instrument procedures use the standard IFR climb gradient of

- A) 500 feet per minute.
- B) 400 feet per nautical mile.
- C) 200 feet per nautical mile.

53 . PLT141 IR.VI.E.K2

(Refer to FAA-CT-8080-3F, Figure 254.) Which of the signs in the figure is a mandatory instruction sign?

- A) Top red.
- B) Middle yellow.
- C) Bottom yellow.

54 . PLT104 IR.II.B.R1

An aircraft which is equipped with an Electronic Flight Display (EFD) can

- A) compensate for an airman's lack of skill or knowledge.
- B) offer new capabilities and simplify the basic flying task.
- C) improve flight awareness by allowing the pilot to simply watch for alerts.

55 . PLT104 IR.II.B.R1

The advancement of avionics in light general aviation airplanes has enhanced situational awareness for properly trained pilots. However, there is concern that this technology could lead to

- A) complacency.
- B) fatigue.
- C) resignation.

56 . PLT330 IR.IV.A.R1

If you experience tunnel vision and cyanosis you may have symptoms of

- A) hypoxia.
- B) hyperventilation.
- C) carbon monoxide poisoning.

57 . PLT105 IR.I.B.R2c

The use of airborne weather-avoidance radar

- A) provides no assurance of avoiding instrument weather conditions.
- B) assures the avoidance of hail.
- C) allows you to fly safely between echoes.

58 . PLT102 IR.I.C.S4

How can an initial approach fix be identified on a Standard Instrument Approach Procedure (SIAP) Chart?

- A) All fixes that are labeled "IAF" which are depicted on the plan view.
- B) Any fix depicted which is located on the final approach course.
- C) Any fix depicted which is located on the final approach course prior to the final approach fix.

59. PLT083 IR.VI.A.K1

(Refer to FAA-CT-8080-3F, Figure 187.) When conducting a missed approach from the RNAV (GPS) X RWY 28L approach at PDX, what is the Minimum Safe Altitude (MSA) while maneuvering?

- A) 2,100 feet MSL.
- B) 4,000 feet MSL.
- C) 5,800 feet MSL.

60 . PLT128 IR.II.B.K2b

A generally recommended practice for autopilot usage during cruise flight in icing conditions is

- A) keeping the autopilot engaged while monitoring the system.
- B) periodically disengaging the autopilot and hand flying the airplane.
- C) periodically disengaging and immediately reengaging the altitude hold function.