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The following sample exam for Instrument Rating Airplane (IRA) is suitable study material for all the Instrument Rating tests including helicopters. 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-8080-3, Computer Testing Supplement for Instrument Rating is available at http://www.faa.gov/training_testing/testing/test_questions/media/FAA-CT-8080-3E.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.

1 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.`

PLT172 / IR.III.A.K8 The procedures involved for departure, en route, and arrival phases of flight.

2 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.

PLT128 / IR.V.B.R1 Icing conditions.

3 (Refer to FAA-CT-8080-3E, Addendum A, 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.

PLT509 / IR.VI.E.S2 Adhere to all ATC (or evaluator) advisories, such as NOTAMs, wind shear, wake turbulence, runway surface, braking conditions, and other operational

4 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.

PLT170 / IR.III.A.K8 The procedures involved for departure, en route, and arrival phases of flight.

5 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.

PLT224 / IR.I.C.K7 Procedures for activating and closing an IFR flight plan in controlled and uncontrolled airspace.

6 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.

PLT141 / IR.III.A.K1 The responsibilities associated with accepting an ATC clearance.

7 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.

PLT382 / IR.VI.B.K4 How inoperative components can affect approach minimums.

8 If the ILS outer marker is inoperative, you may substitute

A. a compass locator or precision radar.
B. VOR radials that identify the location.
C. Distant Measuring Equipment (DME).

PLT321 / IR.VI.B.K4 How inoperative components can affect approach minimums.

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

A. a procedure turn is not authorized.
B. you should fly a teardrop entry.
C. a racetrack-type turn is required.

PLT292 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

10 (Refer to FAA-CT-8080-3E, Addendum A. Figure 227.) Refer to the DEN ILS RWY 35R procedure. The FAF intercept altitude is

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

PLT083 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

11 (Refer to FAA-CT-8080-3E, Legend 21 and Addendum A, Figure 242.) You have been cleared for the RNAV (GPS) RWY 36 approach to LIT. At a ground speed of 105 knots, what are 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.

PLT083 / IR.VI.A.K1 Procedures and limitations associated with a nonprecision approach.

12 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.

PLT370 / IR.VI.B.K1 The procedures and limitations associated with a precision approach.

13 (Refer to FAA-CT-8080-3E, Figures 21, 22, and 24.) If the average fuel consumption is 17.5 GPH, how much fuel would you use on the flight between Grand Junction, CO and Durango, CO?

A. 17 gallons.
B. 22 gallons.
C. 28 gallons.

PLT012 / IR.I.C.S5 Calculate time en route and fuel considering factors such as power settings, operating altitude, wind, fuel reserve requirements, and weight and balance

14 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.

PLT292 / IR.III.A.K8 The procedures involved for departure, en route, and arrival phases of flight.

15 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.

PLT222 / IR.III.A.K8 The procedures involved for departure, en route, and arrival phases of flight.

16 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.

PLT406 / IR.VI.B.K4 How inoperative components can affect approach minimums.

17 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.

PLT202 / IR.II.B.K2c The general characteristics of navigation instruments: DME.

18 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.

PLT322 / IR.I.C.K9 Altitude and course requirements.

19 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.

PLT354 / IR.VI.A.K3 Navigation system annunciations expected during a GPS based approach.

20 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.

PLT322 / IR.II.B.K2b The general characteristics of navigation instruments: VOR.

21 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.

PLT300 / IR.II.B.K2b The general characteristics of navigation instruments: VOR.

22 (Refer to FAA-CT-8080-3E, Figures 60A and 61.) Determine your position relative to the PLATS intersection, glide slope, and localizer course.

A. Past PLATS, below the glide slope, and right of the localizer course.
B. Approaching PLATS, above the glide slope, and left of the localizer course.
C. Past PLATS, above the glide slope, and right of the localizer course.

PLT049 / IR.V.A.S6 Determine the aircraft position relative to the navigational facility or waypoint.

23 (Refer to FAA-CT-8080-3E, Figure 87.) What is indicated by the localizer course symbol at Jefferson County Airport?

A. A published LDA localizer course with voice capability.
B. A published SDF localizer course with back course capabilities.
C. A published ILS localizer course which has an additional navigation function.

PLT058 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

24 (Refer to FAA-CT-8080-3E, 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.

PLT058 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

25 (Refer to FAA-CT-8080-3E, 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. Baldwin Municipal Airport.

PLT083 / IR.V.B.K9 Instrument approach procedures (IAPs).

26 (Refer to FAA-CT-8080-3E, 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. 133.425 MHz.
B. 122.1 MHz and receive on 108.4 MHz.
C. 122.35 MHz.

PLT058 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

27 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.

PLT100 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

28 (Refer to FAA-CT-8080-3E, 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.

PLT058 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

29 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 aircraft:

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, and 6 hours of instrument time in any aircraft.

PLT442 / IR.I.A.K2 Recent instrument flight experience requirements.

30 Determine 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.

PLT379 / IR.I.C.K12 Alternate airport selection.

31 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 of aircraft.

PLT448 / IR.I.A.K1 When an instrument rating is required.

32 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

C. The ILS approach can be credited regardless of actual weather if you are issued an IFR clearance.

PLT442 / IR.I.A.K2 Recent instrument flight experience requirements.

33 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.

PLT370 / IR.I.C.K11 Airspace, cloud clearance, and visibility requirements.

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

A. Performance increasing with a tailwind and updraft.

B. Performance decreasing with a tailwind and downdraft.

C. Performance decreasing with a headwind and downdraft.

PLT317 / IR.I.B.R4 Hazardous weather conditions that may affect the planned flight.

35 Area forecasts generally include a forecast period of 18 hours and cover a geographical

A. terminal area.
B. area less than 3,000 square miles.
C. area the size of several states.

PLT291 / IR.I.B.K1 Current and forecast weather for departure, en route, and arrival.

36 Which weather product is a concise statement of the expected weather for an airport's runway complex?

A. Area Forecast (FA.)
B. Weather Depiction Charts.
C. Terminal Aerodrome Forecast (TAF.)

PLT288 / IR.I.B.K1 Current and forecast weather for departure, en route, and arrival.

37 Decode the excerpt from the Winds and Temperature Aloft Forecast (FB) for OKC at 39,000 feet.
FT 3000 9000 12000 24000 39000
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.

PLT284 / IR.I.B.S1 Use available aviation weather resources to obtain an adequate weather briefing.

38 Use the TAF to determine the wind shear forecast.
TAF
KCVG 231051Z 231212 12012KT 4SM -RA BR OVC008
WS005/27050KT TEMPO 1719 1/2SM -RA FG
FM1930 09012KT 1SM -DZ BR VV003 BECMG 2021 5SM HZ=

A. Wind shear at 500 feet MSL from 270° at 50 KT.
B. Wind shear at 500 feet AGL from 270° at 50 KT.
C. Wind shear from the surface to 500 feet AGL from 270° at 50 KT.

PLT288 / IR.I.B.S1 Use available aviation weather resources to obtain an adequate weather briefing.

39 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 RAE42SNB42

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

PLT059 / IR.I.B.S1 Use available aviation weather resources to obtain an adequate weather briefing.

40 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.

PLT294 / IR.I.B.K1 Current and forecast weather for departure, en route, and arrival.

41 (Refer to FAA-CT-8080-3E, Figure 7.) Interpret the weather conditions depicted within the area indicated by

A. 2/8 to 6/8 coverage, occasional embedded thunderstorms, tops at FL 540.
B. 1/8 to 4/8 coverage, occasional embedded thunderstorms, maximum tops at 51,000 feet MSL.
C. Occasional embedded cumulonimbus, bases below 25,000 feet with tops to 48,000 feet.

PLT068 / IR.I.B.S1 Use available aviation weather resources to obtain an adequate weather briefing.

42 In what localities is advection fog most likely to occur?

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

PLT226 / IR.I.B.K2e Meteorology to include: Fog.

43 `WND` in the categorical outlook in the Aviation Area Forecast means that the surface wind speed during that period is forecast to be

A. sustained at 25 knots or greater.
B. gusting at 20 knots or greater.
C. sustained at 20 knots or greater.

PLT291 / IR.I.B.K1 Current and forecast weather for departure, en route, and arrival.

44 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.

PLT161 / IR.I.C.K11 Airspace, cloud clearance, and visibility requirements.

45 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.

PLT161 / IR.I.C.R1 IFR altitude selection.

46 (Refer to FAA-CT-8080-3E, Addendum A, Figure 162.) You have accepted a visual approach to RWY 16L 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.

PLT281 / IR.III.A.K1 The responsibilities associated with accepting an ATC clearance.

47 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.

PLT337 / IR.IV.A.K3 Normal and abnormal instrument indications.

48 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.

PLT088 / IR.IV.A.K3 Normal and abnormal instrument indications.

49 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

PLT140 / IR.VI.E.K5 Land and hold short operations (LAHSO) or option to refuse a LAHSO clearance.

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

A. RAIL.
B. HIRL.
C. REIL.

PLT145 / IR.VI.E.K4 Approach lighting systems.

51 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.

PLT292 / IR.VI.B.K1 The procedures and limitations associated with a precision approach.

52 (Refer to FAA-CT-8080-3E, Figure 136.) An 'on glidepath' indication is

A. 8.
B. 10.
C. 11.

PLT147 / IR.VI.E.K4 Approach lighting systems.

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

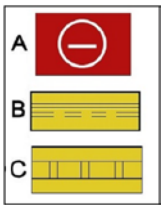
A. 500 feet per minute.
B. 400 feet per nautical mile.
C. 200 feet per nautical mile.

PLT133 / IR.III.A.K5 Terrain clearance requirements associated with departure procedures.

54 (Refer to the figure provided.) Which of the signs in the figure is a mandatory instruction sign?

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

PLT141 / IR.V.B.K5 Airport lighting, signs, and markings.



55 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.

PLT104 / IR.II.B.R1 Failure to manage the automation management.

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

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

PLT330 / IR.I.A.K5 Physiological factors that might affect the pilot's ability to fly under instrument conditions.

57 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.

PLT105 / IR.I.B.R2 The limitations of inflight aviation weather resources.

58 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.

PLT102 / IR.I.C.K4 Symbology found on IFR en route and approach charts and diagrams.

59 (Refer to FAA-CT-8080-3E, Addendum A, 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.

PLT083 / IR.VI.A.K1 Procedures and limitations associated with a nonprecision approach.

60 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.

PLT128 / IR.II.A.R3 Considerations of pilot and systems for flight into known or unforecast icing conditions.