

INFRAESTRUCTURES DEL TRANSPORT AERI (ITA)

Mid Term Exam - Fall semester 2015

Correct answer: +1 point – Incorrect answer: -1/3 points – Blank answer: 0 points

For each question **only one answer** is correct

Assignatura 00213 – Centre 300 – Parcial 01 – Permutacio A:0 B:1 C:2 D:3

Use the **left** side numbering to mark your answers into the optical mark recognition sheet

Make a cross over an option to nullify an incorrect marking

Permutacio A

1. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, imagine an aircraft is instructed to hold at PPN after executing the missed approach procedure. The aircraft will enter the hold with...
 - (a) a parallel entry procedure.
 - (b) an offset entry procedure.
 - (c) a racetrack entry procedure.
 - (d) a direct entry procedure.
2. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the aircraft operator will publish for their crew...
 - (a) a NDB altitude.
 - (b) a decision altitude.
 - (c) an obstacle clearance altitude.
 - (d) a minimum descent altitude.
3. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, which of the following statements is correct?
 - (a) the chart is valid only for aircraft of category B.
 - (b) the chart is valid only for ILS CAT-III-B systems.
 - (c) the chart is valid only for ILS CAT-III-A, CAT-III-B and CAT-III-C systems.
 - (d) the chart is valid only for aircraft of categories A, B and C.
4. Which of the following are key technologies of the global positioning system (GPS) development?
 - (a) Stable platforms and communications
 - (b) Stable/precise clocks and communications.
 - (c) Stable platforms and stable/precise clocks.
 - (d) None of the other answers are correct.
5. Which of the following summarises the three high-level tasks that are always performed by an air traffic controller?
 - (a) Coordinate clearances with other ATC units, coordinate civil-military operations, coordinate emergencies.
 - (b) Prevent collisions between aircraft (air and ground), expedite and maintain an orderly flow of air traffic, provide advice and information useful for the safe and efficient conduct of flights.
 - (c) Gather and process data from flights and/or ground vehicles, separate aircraft, give flight information instructions.
 - (d) Gather and process data from flights and/or ground vehicles, issue clearances, coordinate clearances with other ATC units.
6. Who is *responsible* to check that the positioning geometry is good enough to fly an RNAV GNSS procedure?
 - (a) the GNSS receiver.
 - (b) the air traffic controller.
 - (c) the pilot in command.
 - (d) the procedure designer.
7. Visual approaches with prescribed tracks...
 - (a) do not longer exist nowadays.
 - (b) are typically used in the US (even at major airports) and for some circling-to-approach procedures.
 - (c) are only used as contingency procedures and must be designed by the operator of the aircraft.
 - (d) are only published for VFR flights.
8. The direction, with respect to the North, to which the nose of the aircraft is pointing is called...
 - (a) course.
 - (b) heading.
 - (c) track.
 - (d) bearing.
9. Which is the principal inconvenience of radar vectoring?
 - (a) It can only be used with procedural control.
 - (b) The pilot loses the situational awareness of the aircraft trajectory in the near future (for example, the remaining distance to the runway threshold).
 - (c) It can only be used for area control (en-route).
 - (d) It increases significantly the workload of the pilot.
10. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam:
 - (a) It is a circling and a precision approach.
 - (b) It is a straight-in and a precision approach.
 - (c) It is a circling and a non precision approach.
 - (d) It is a straight-in and a non precision approach.
11. In which case you will find a non-precision approach procedure with no FAF?
 - (a) in case the approach can only be executed as a circling to approach.
 - (b) in case the initial segment consists in a reversal procedure given by a timed outbound leg and there is no intermediate segment.
 - (c) in case the glide slope is not available.
 - (d) in case there is no final segment.

12. When talking about traffic (or trajectory) synchronisation in terminal manoeuvring areas, which of the following list contains the best strategy from most efficient to less efficient?
 - (a) Air holding, tromboning, radar vectoring.
 - (b) Tromboning, radar vectoring, air holding.
 - (c) Tromboning, air holding, radar vectoring.
 - (d) Radar vectoring, tromboning, air holding.
13. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the initial approach segment is:
 - (a) composed by two VOR radials.
 - (b) composed by a VOR radial and a dead-reckoning leg.
 - (c) composed by a NDB course.
 - (d) composed by a dead-reckoning leg.
14. Regarding Figure 1, what does the point *E*cho (E) in the chart indicate?
 - (a) an NDB.
 - (b) a visual reference point for the arrival procedure.
 - (c) a VOR.
 - (d) a visual reference point for the departure procedure.
15. Which transponder mode transmits only the transponder code and the barometric altitude of the aircraft?
 - (a) Mode C.
 - (b) Mode B.
 - (c) Mode A.
 - (d) Mode S.
16. What procedures are usually flown inside a TMA?
 - (a) SIDs.
 - (b) en-route procedures (i.e. airways).
 - (c) SIDs and STARs.
 - (d) SIDs, STARs and approaches.
17. A VFR flight is flying inside an airspace of class C. The air traffic controller is responsible to separate it from:
 - (a) all other VFR flights.
 - (b) all other IFR flights.
 - (c) all other VFR and IFR flights.
 - (d) the controller has no separation responsibility with VFR flights in airspace class C.
18. A search and rescue helicopter is at the St. Cyprien beach, at the south-east of Perpignan and must transport urgently a wounded person to the Hospital, which is located in Perpignan city (slightly north-west of the PL NDB). This transfer flight is planned at 500 ft above the terrain and in VFR. In these conditions, which of the following statements is correct (check the VFR chart provided in annex to this exam)?
 - (a) The pilot must receive a clearance to enter the CTR of Perpignan.
 - (b) VFR flights cannot enter the CTR of Perpignan. However, being a search and rescue aircraft this helicopter can proceed with the planned flight.
 - (c) Is not necessary for the pilot to contact the ATC (albeit it is recommended).
 - (d) The pilot must always be in radio-contact with the ATC during the whole flight.
19. The main difference between a VOR and a NDB is that...
 - (a) the VOR emits with much more signal power than the NDB.
 - (b) with an NDB the pilot only knows a relative bearing to the NDB station, while with the VOR the pilot knows the position of the aircraft.
 - (c) the NDB emits with much more signal power than the VOR.
 - (d) with an NDB the pilot only knows a relative bearing to the NDB station, while with the VOR the pilot has directional information (relative to the magnetic North) with respect to the VOR station.
20. Regarding the airspace opening scheme:
 - (a) It defines how sectors are collapsed. The sector configuration actually may change during the day.
 - (b) None of the other answers are correct.
 - (c) It defines at what time the airspace will be available for civil traffic.
 - (d) It defines how sectors are collapsed. During the entire day, the sector configuration does not change.
21. Which of the following institutions is NOT an aircraft operator?
 - (a) Boeing.
 - (b) Emirates.
 - (c) Vueling.
 - (d) Institut Cartogràfic de Catalunya.
22. If we talk about a FIR, which of the following statements is **wrong**?
 - (a) As far as practicable, Alert Services are provided in the whole FIR airspace.
 - (b) As far as practicable, Flight Information Services are provided in the whole FIR airspace.
 - (c) As far as practicable, Air Traffic Control services are provided in the whole FIR airspace.
 - (d) Flight Information Services are provided in the FIR by means of different flight information sectors.
23. In what situation the effect of the wind will have a bigger impact on the actual trajectory flown by an aircraft?
 - (a) when the aircraft is following a given VOR radial.
 - (b) when the aircraft is following a given track.
 - (c) when the aircraft is following a given NDB course.
 - (d) when the aircraft is following a given heading.
24. According to Figure 1...
 - (a) Turns in the airfield traffic pattern are to the left for runway 31 and to the right for runway 13.
 - (b) Turns in the airfield traffic pattern are always to the left.
 - (c) Turns in the airfield traffic pattern are always to the right.
 - (d) Turns in the airfield traffic pattern are to the right for runway 31 and to the left for runway 13.
25. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the final approach segment is:
 - (a) a VOR radial.
 - (b) a NDB course.
 - (c) there is no final segment in this procedure.
 - (d) a dead-reckoning leg.

26. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the radionavigation aid labeled as *ISV* is a:
- VOR/DME.
 - Locator.
 - DME.
 - Localizer.
27. Airspace Management (ASM) is responsible for:
- the airspace design and modelling.
 - the civil/military coordination.
 - all the answers are correct.
 - the analysis and allocation of ATS capacities.
28. In a precision approach, the final segment ends:
- at the FAF or FAP.
 - when reaching the DA while following the final approach track.
 - at the end of turn.
 - at the MAPt.
29. In a Locator approach, the approach minima are given by:
- A minimum descent altitude.
 - A minimum descent altitude and a minimum obstacle clearance altitude.
 - A decision altitude and a minimum visibility.
 - A minimum descent altitude and a minimum visibility.
30. A VFR flight is flying inside an airspace of class E. The air traffic controller is responsible to separate it from:
- other VFR and IFR flights.
 - the controller has no separation responsibility with VFR flights in airspace class E.
 - other VFR flights.
 - other IFR flights.
31. Which of the following statements is correct?
- APV and PA provide vertical and lateral guidance, while NPA provide only lateral guidance.
 - APV provide vertical and lateral guidance, PA provide only lateral guidance and NPA are non-guided (visual) approaches.
 - PA provide vertical and lateral guidance, NPA provide only lateral guidance and APV are non-guided (visual) approaches.
 - NPA and PA provide vertical and lateral guidance, while APV provide only lateral guidance.
32. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the initial approach segment is...
- a racetrack procedure.
 - a dead-reckoning segment that depends on the aircraft speed.
 - a tear-drop procedure.
 - a 45/180 procedure turn.
33. Who is the responsible to publish a contingency instrumental departure for a given runway?
- the aircraft operator.
 - the aircraft manufacturer.
 - The national safety agency.
 - the ANSP.
34. Using GPS, own-ship position can be determined...
- by means of the Doppler effect.
 - by measuring the distance to the satellites, whose positions are known.
 - by measuring the relative velocity to the satellites, whose velocity vectors are known.
 - None of the other answers are correct.
35. A VFR flight is crossing the Limoges airspace at 2500ft QNH following a straight line from **south to north** that overflies Limoges airport. According to the VFR chart provided in annex to this exam, at which point this aircraft will need a clearance before entering controlled airspace?
- Before entering the CTR Limoges 1.
 - Before entering the CTR Limoges 2.
 - Before entering the TMA Limoges 2 (approximately over St. Yrieix-la-Perche).
 - Before entering the TMA Limoges 1 (approximately over Nexoh).
36. Consider the VFR chart of the area of Perpignan, provided in annex to this exam. The elevation of the town *Millas* (at the West of Perpignan city) is 800ft above the mean sea level. The airspace class over this town at 1500ft QNH is
- Class E.
 - Class G.
 - Class D.
 - Class A.
37. Which of the following is a clear objective of the air traffic control (ATC) service?
- To Notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required.
 - To provide advice and information useful for the safe and efficient conduct of flights.
 - All answers are correct.
 - To expedite and maintain an orderly flow of air traffic.
38. Which of the following emergency ATS phases is the first one to be activated?
- Incerfa
 - Alerfa
 - Detresfa
 - Palerfa
39. An aircraft has just landed at a major airport and has vacated the runway. In order to reach its gate at the terminal, an active runway needs to be crossed. Which control is responsible to deliver the needed clearance to cross the runway?
- The delivery control.
 - The ground control.
 - The approach control.
 - The tower control.
40. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the approach starts at:

- (a) The intersection of radial 210° with the arc of 10.0NM of PAP VOR/DME.
- (b) The intersection of radial 207° of PPN VOR/DME with the arc of 14.0NM of PAP VOR/DME.
- (c) The intersection of radial 207° with the arc of 14.0NM of PPN VOR/DME.
- (d) The intersection of radial 207° with the arc of 20.5NM of PPN VOR/DME.
41. Which of the following statements is correct?
- (a) The aircraft operator must compute and publish the MDA in the charts used by their pilots.
- (b) The appropriate national administration must compute a lower bound for the MDA and publish it in the AIP charts.
- (c) The aircraft operator must compute and publish the OCA in the charts used by their pilots.
- (d) The appropriate national administration must compute and publish the MDA in the AIP charts.
42. What is the main reason why airspace is separated into FIR and UIR nowadays?
- (a) for historical reasons. In fact, not all states distinguish between FIR and UIR nowadays.
- (b) to separate turboprop aircraft from jets. Turboprops use FIR while jets use UIR.
- (c) none of the other answers are correct.
- (d) to separate turboprop aircraft from jets. Turboprops use UIR while jets use FIR.
43. Flight information services shall be provided to...
- (a) only VFR flights.
- (b) all aircraft provided with ATC service (*).
- (c) the two answers labeled with (*) are correct.
- (d) any aircraft known by the ATS (*).
44. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the radionavigation aid labelled as *PAM* is a:
- (a) DME.
- (b) VOR/DME.
- (c) NDB.
- (d) Locator.
45. Which of the following statements is true?
- (a) CPDL may make worse the current shortage of available frequencies.
- (b) CPDL is based in long text messages with attached images.
- (c) CPDL may allow reducing the use of voice communication between ATC and pilots.
- (d) None of the other options is correct.
46. In what situation an approach procedure cannot be a straight-in approach?
- (a) when the final descent gradient exceeds a given value*
- (b) when the angular difference between the final track alignment and the runway track exceeds a given value*
- (c) both answers marked with a (*) are correct.
- (d) in case the procedure is a non-precision approach.
47. Which of the following methods is not valid to define a radionavigation FIX:
- (a) The intersection of a VOR radial and a NDB course.
- (b) Some timing after overflying a facility.
- (c) Overflying a facility.
- (d) An important visual landmark.
48. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the missed approach segment is...
- (a) mainly composed by a dead-reckoning leg and an arc DME.
- (b) mainly composed by a NDB course and an arc DME.
- (c) mainly composed by two NDB courses.
- (d) mainly composed by a VOR radial and an arc DME.
49. Consider the VFR chart of the area around Limoges, provided in annex to this exam. The airspace class over the NDB LSU (south-west of Limoges airport) at 4500 ft QNH is:
- (a) Class E.
- (b) Class C.
- (c) Class G.
- (d) Class D.
50. The MDA...
- (a) is the minimum altitude for circling approaches, while the DA is the minimum altitude for straight-in approaches.
- (b) is the minimum altitude to overfly the runway threshold, just before landing.
- (c) None of the other answers are correct.
- (d) is the altitude that once reached the pilot must decide whether to continue or abort a non-precision approach.
51. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam...
- (a) it is an APV approach.
- (b) it is a circling to approach.
- (c) it is a CAT-I approach.
- (d) it is a precision approach.
52. In a conventional IFR holding, which leg is typically a guided leg?
- (a) The inbound leg.
- (b) The outbound leg.
- (c) In a IFR holding there are no guided legs.
- (d) Both inbound and the outbound legs are always guided.
53. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, imagine an aircraft is instructed to hold at NIKAL after executing the missed approach procedure. The aircraft will enter the hold with...
- (a) a parallel entry procedure.
- (b) a direct entry procedure.
- (c) an offset entry procedure.
- (d) a racetrack entry procedure.
54. An air traffic controller issues the following radiotelephony message: *Echo Charlie Uniform Papa Charlie, traffic at your 10 o'clock position, Cessna 172 westbound at 4 miles, 300 ft below*. Which of the following answers is correct?
- (a) The message is a separation instruction to prevent a mid-air collision.

- (b) It is a distress signal message.
 - (c) It is a urgency signal message.
 - (d) It is a collision hazard flight information message.
55. In an ILS approach, the approach minima are given by:
- (a) A minimum descent altitude and a minimum obstacle clearance altitude.
 - (b) A minimum descent altitude and a minimum visibility.
 - (c) A decision altitude and a minimum visibility.
 - (d) A decision altitude and a minimum obstacle clearance altitude.
56. An IFR flight is crossing the Limoges airspace at 3500ft QNH following a straight line from **south to north** that overflies Limoges airport. According to the VFR chart provided in annex to this exam, at which point this aircraft will need a clearance before entering controlled airspace?
- (a) Before entering the CTR Limoges 2.
 - (b) Before entering the TMA Limoges 2 (approximately over St. Yrieix-la-Perche).
 - (c) Before entering the CTR Limoges 1.
 - (d) Before entering the TMA Limoges 1 (approximately over Nexoh).
57. Which of the following statements is NOT a new concept/system regarding the **communications** in the future CNS systems for ATM?
- (a) Aircraft Communications Addressing and Reporting System (ACARS).
 - (b) Global Navigation Satellite System (GNSS).
 - (c) Reduced VHF frequency spacing (8.33 kHz).
 - (d) Controller-Pilot DataLink Communications (CPDLC).
58. The minimum decision height for an ILS CAT-II approach is:
- (a) 0ft.
 - (b) 100ft.
 - (c) 300ft.
 - (d) 200ft.
59. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the intermediate approach segment starts at...
- (a) at the end of a turn.
 - (b) there is no intermediate segment in this procedure.
 - (c) when overflying a radionavigation facility.
 - (d) at an intersection.
60. In which of the following airspace classes VFR flights are not allowed?
- (a) in airspace class G.
 - (b) in airspace class A.
 - (c) VFR flights are allowed in all airspace classes, providing that they are conveniently equipped with VHF radio equipment and secondary radar transponder if so required.
 - (d) in airspace class E.
61. In which of the following procedures the final approach segment will start at a FIX and not a POINT?
- (a) The answers labelled with (*) are correct.
 - (b) In a VOR approach (*).
 - (c) In an ILS approach.
 - (d) In a Localizer approach (*).
62. ALERFA is:
- (a) All are correct.
 - (b) A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.
 - (c) A situation wherein apprehension exists as to the safety of an aircraft and its occupants.
 - (d) A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.
63. In which situation, the visual contact with aircraft is the main data gathering source for an air traffic controller?
- (a) for the approach control dependency
 - (b) for the ground movement control dependency.
 - (c) for the IFR clearance delivery dependency.
 - (d) Nowadays, visual contact with aircraft is not used anymore as source of information by ATC.
64. Which of the following legs is not properly an RNAV leg?
- (a) a DME arc.
 - (b) none of them are RNAV.
 - (c) a VOR radial.
 - (d) a dead-reckoning segment.
65. What is required to fly according to IFR?
- (a) Certified radionavigation equipment on-board the aircraft.
 - (b) All answers are correct.
 - (c) To file an ATS flight plan.
 - (d) A special training (and rating) for the pilot.
66. RNAV allows:
- (a) all the answers are correct.
 - (b) the pilot to freely chose a route joining two points without the need for overflying specific ground facilities at tactical level assuring self-separation with other aircraft.
 - (c) the pilot to freely plan a route joining two points without the need for overflying specific ground facilities and submit the route in the flight plan.
 - (d) the procedure designer to design guided segments joining two points without the need for overflying specific ground facilities.
67. What is an aeronautical information circular (CIRC)?
- (a) It is information for aircraft operators that typically contain administrative, explicative or advice that in the long term can affect their operations.
 - (b) It is the chapter of the national AIP where the rules of the air that apply to that specific country are described.
 - (c) It is a notice or advisory that contains useful information for pilots or potential hazards along a flight route or at a location, such an airport, in the short term.
 - (d) It is a document where two air traffic control centres agree in how traffic is transferred (specifying, for instance exit flight levels).
68. In a Localiser approach, the approach minima are given by:
- (a) A minimum descent altitude.
 - (b) A minimum descent altitude and a minimum obstacle clearance altitude.

- (c) A decision altitude and a minimum visibility.
(d) A minimum descent altitude and a minimum visibility.
69. Which of the following statements does NOT apply to the FUA concept?
- (a) All the other options apply to the FUA concept.
(b) Airspace should be considered as one continuum and used flexibly on a day-to-day basis.
(c) Airspace segregations are not longer permanent and they are based on real use during conveniently chosen time periods.
(d) Airspace should no longer be designated either military or civil.
70. Which of the following communication systems / airbands can be used in oceanic areas?
- (a) None of the answers are correct.
(b) UHF.
(c) HF.
(d) VHF.
71. A small aircraft **with no VHF radio equipment** flying in VFR wants to fly from *St Junien (LFBJ)*, located at the west of Limoges, to the north-east following a route of constant heading of approximately 030°. Check the VFR chart provided in annex to this exam. Which of the following answers is correct?
- (a) This flight can only be done providing the aircraft will not enter the CTR of Limoges, and remain always above 1000 ft above ground level and below 4000 ft above the mean sea level.
(b) This flight can only be done providing the aircraft will not enter the CTR of Limoges, and remain always below 1000 ft above ground level.
(c) This flight cannot be done without a VHF radio.
(d) This flight can only be done providing the aircraft will not enter the CTR of Limoges.
72. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the aircraft operator will publish for their crew a...
- (a) obstacle clearance altitude.
(b) ILS minimum altitude.
(c) decision altitude.
(d) minimum descent altitude.
73. Which is the correct order of priorities (from the highest to the lowest) when flying an aircraft?
- (a) Aviate, Communicate and Navigate.
(b) Communicate, Aviate and Navigate.
(c) Aviate, Navigate and Communicate.
(d) Communicate, Navigate and Aviate.
74. Which of the following aircraft instruments are mainly used to perform the *aviate* function in IMC conditions?
- (a) the *aviate* function is always executed visually and no instruments are required.
(b) the VOR, the ADF (NDB receiver) and the DME.
(c) the artificial horizon, the airspeed indicator and the altimeter.
(d) all engine related instruments.
75. What features are taken into account when designing the size and shape of ATC sectors?
- (a) Long term traffic demand and its complexity.
(b) Actual weather conditions and short term (i.e. next hour approximately) traffic complexity.
(c) All answers are correct.
(d) Number of incidents and aircraft types of the forecast traffic.
76. Which of the following sentences is correct?
- (a) In IMC an aircraft can fly according to IFR or VFR.
(b) In VMC an aircraft must always fly according to IFR.
(c) In IMC an aircraft must always fly according to VFR.
(d) In VMC an aircraft can fly according to IFR or VFR.
77. Consider the VFR chart of the area around Perpignan, provided in annex to this exam. The lower limit of the Dangerous area D142, located over the mediterranean sea is:
- (a) 3000 ft above the sea level.
(b) 3000 ft above the 1013.25 hPa isobar.
(c) 3000 ft above the elevation of Perpignan airport.
(d) the sea level.
78. Regarding the Instrumental Approach Chart (IAC) **Pamplona VOR B**, annexed to this exam, the missed approach segment is:
- (a) mainly composed by a NDB course and a VOR radial.
(b) mainly composed by a VOR radial and a dead-reckoning leg.
(c) mainly composed by two VOR radials.
(d) mainly composed by a NDB course and dead-reckoning leg.
79. Imagine an ILS straight-in approach to an airport. The guidance of the intermediate segment...
- (a) must always be from a localiser and an ILS glide path.
(b) must always be from a localiser.
(c) must always be from an ILS glide path.
(d) comes from another radionavigation aid (such as a VOR) and at some point within the segment the crew switches to the localiser guidance.
80. What is a TRA (temporary reserved area)?
- (a) a volume of airspace temporary reserved and allocated for specific use where civil traffic cannot transit under any circumstance.
(b) a volume of airspace temporary reserved and allocated for specific use where civil traffic might transit under an ATC clearance.
(c) a volume of airspace temporary reserved for IFR terminal maneuvers where VFR traffic cannot transit under any circumstance
(d) a volume of airspace temporary reserved for IFR terminal maneuvers where VFR traffic might transit under an ATC clearance
81. Which of the following airspace volumes is, in general, the smallest one?
- (a) ATC.
(b) TMA.
(c) ATZ.
(d) CTR.

82. In civil aviation, which of the following transponder modes corresponds to the simplest system?
- Mode C.
 - Mode A.
 - Mode B.
 - Mode S.
83. Which of the following airspace volume is, in general, the biggest one?
- TMA.
 - ATC.
 - ATZ.
 - CTR.
84. In a non-precision approach, the final segment starts at:
- the FAF or the end of turn of the previous segment.
 - the FAF or FAP.
 - the FAP or the end of turn of the previous segment.
 - the MAPt.
85. What is the international radiotelephony distress signal for aviation?
- The word *MayDay*.
 - The word *Pan-Pan*.
 - The word *MayDay* repeated three times.
 - The word *Pan-Pan* repeated three times.
86. Given a specific runway, which of the following approaches will lead (in general) to the highest MDA or DA?
- a ILS CAT-II straight-in approach procedure.
 - a VOR straight-in approach procedure.
 - a VOR circling to approach procedure.
 - a ILS CAT-I straight-in approach procedure.
87. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the approach procedure starts...
- at a radionavigation FIX.
 - when overflying a LOC facility.
 - when overflying a NDB facility.
 - when overflying a VOR facility.
88. Which of the following statements is correct?
- The accuracy is defined as the probability that the precision requirement will be supported by the navigation system throughout a flight operation or flight hour.
 - While precision is the proximity of measurement results to the true value, accuracy is a measure of the repeatability or reproducibility of the measurement.
 - The precision is defined as the probability that the accuracy requirement will be supported by the navigation system throughout a flight operation or flight hour.
 - While accuracy is the proximity of measurement results to the true value, precision is a measure of the repeatability or reproducibility of the measurement.
89. Regarding the Instrumental Approach Chart (IAC) **Sevilla ILS Y RWY27**, annexed to this exam, the intermediate approach segment is...
- a VOR radial.
 - a NDB course.
 - a dead-reckoning heading.
 - there is no intermediate segment in this procedure.



Figure 1: Airfield traffic pattern

INFRAESTRUCTURES DEL TRANSPORT AERI (ITA)

Mid Term Exam - Fall semester 2015

Correct answers

Pregunta	PERM. A	PERM. B	PERM. C	PERM. D
P 01	d	a	a	c
P 02	d	a	d	c
P 03	d	d	d	b
P 04	c	a	b	b
P 05	d	c	b	d
P 06	a	c	c	a
P 07	b	b	d	a
P 08	b	c	d	d
P 09	b	b	d	c
P 10	b	c	c	a
P 11	b	a	b	d
P 12	b	a	d	b
P 13	d	c	b	c
P 14	b	a	c	a
P 15	a	c	c	a
P 16	c	b	b	d
P 17	b	a	c	a
P 18	a	b	c	b
P 19	d	d	d	c
P 20	a	a	b	d
P 21	a	c	b	c
P 22	c	c	b	b
P 23	d	a	c	b
P 24	d	b	c	c
P 25	a	d	b	c
P 26	d	c	d	d
P 27	c	a	d	c
P 28	b	a	b	b
P 29	d	b	d	a
P 30	b	c	d	b
P 31	a	d	d	a
P 32	a	c	d	a
P 33	a	a	b	b
P 34	b	b	c	d
P 35	b	b	a	c
P 36	b	d	a	c
P 37	d	d	c	d
P 38	a	b	b	c
P 39	d	b	b	d
P 40	c	c	a	c
P 41	a	a	c	b
P 42	a	d	b	b
P 43	c	a	a	d
P 44	c	c	c	c
P 45	c	d	d	a
P 46	c	a	b	b
P 47	d	b	a	b
P 48	b	c	d	a

P 49	a	a	a	a
P 50	c	c	c	c
P 51	b	a	b	c
P 52	a	b	a	d
P 53	a	a	a	a
P 54	d	c	a	b
P 55	c	b	b	d
P 56	b	a	d	b
P 57	b	c	b	a
P 58	b	d	b	a
P 59	a	d	d	a
P 60	b	a	b	b
P 61	a	a	c	a
P 62	c	a	d	d
P 63	b	c	b	d
P 64	b	b	b	d
P 65	b	d	b	c
P 66	d	c	a	d
P 67	a	b	b	a
P 68	d	c	d	c
P 69	a	b	d	a
P 70	c	d	a	a
P 71	d	c	d	a
P 72	c	c	b	d
P 73	c	b	b	d
P 74	c	c	a	b
P 75	a	c	d	b
P 76	d	c	c	c
P 77	d	b	d	c
P 78	c	b	c	a
P 79	d	a	d	c
P 80	b	b	d	b
P 81	c	a	a	b
P 82	b	b	d	c
P 83	a	d	d	c
P 84	a	b	d	b
P 85	c	d	b	a
P 86	c	c	b	c
P 87	c	c	b	b
P 88	d	b	c	c
P 89	b	b	b	b