Infrastructures del Transport Aeri

Name:

Mid Term exam - Fall semester 2016

Short questions: answer them with one word or one sentence in the space provided.

For the following questions an incorrect answer is -1 point (blank answer: 0 points).

[1 point] Give **one (1)** example of **capacity indicator**

[1 point] What is the difference between VIS and RVR?

Give **one (1)** example of squawk code.

Give one (1) synonym of **precision.**

Write the acronym of the system that CPDLC uses to transmit the messages between pilot and ATC controller.

Which system provides more navigation **accuracy**: SBAS or GBAS?

How is it called the North American SBAS?

For the following questions an incorrect or blank answer adds 0 points.

[1 point] Give the name of **at least** three legs of the visual aerodrome traffic pattern?

[1 point] What is the **name AND acronym** of the standard IFR procedure for the arrival phase of the flight?

[1 point] There are three types of fixes, enumerate **all of them**

[2 points] Enumerate three different objectives or main tasks of Airspace Management (ASM)

[2 points] Give **the main reason** of why en-route sectors are typically bigger than TMA sectors

INFRAESTRUCTURES DEL TRANSPORT AERI (ITA)
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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

Permutacio A

1. Who is the responsible to publish a contingency instrumental departure for a given runway?
   (a) The national safety agency.
   (b) the aircraft manufacturer.
   (c) the ANSP.
   (d) the aircraft operator.

2. A circling to approach...
   (a) is the same than a non precision approach.
   (b) is the same than an APV approach.
   (c) is only for approaches where the final approach segment has a miss-alignment of 15 degrees or more.
   (d) is an approach that cannot be considered as a straight-in approach.

3. Which of the following statements is *not correct*?
   (a) for the same airport, the MDA for a circling to approach procedure would be typically higher than the MDA for an straight-in approach procedure.
   (b) when reaching the DA, if the aircraft crew cannot see the landing runway they must immediately initiate the missed approach procedure.
   (c) when reaching the MAPt, if the aircraft crew cannot see the landing runway they must immediately initiate the missed approach procedure.
   (d) when reaching the MDA, if the aircraft crew cannot see the landing runway they must immediately initiate the missed approach procedure.

4. What is the most important characteristic of controlled airspace?
   (a) aircraft need a clearance to enter.
   (b) all answers are equally important and all them characterize controlled airspaces.
   (c) separation services are always provided.
   (d) aircraft must be equipped with a transponder to enter.

5. Which of the following statements is correct?
   (a) The availability of a navigation system is the percentage of time that the services of the system are usable by the navigator.
   (b) All answers are correct.
   (c) The accuracy of an estimated or measured position of an aircraft at a given time is the degree of conformance of that position with the true position, velocity and/or time of the aircraft.
   (d) The continuity of a system is the ability of the total system (comprising all elements necessary to maintain aircraft position within the defined area) to perform its function without interruption during the intended operation.

6. Regarding the S/A and A/S GPS funtionalities...
   (a) None of the answers is correct.
   (b) S/A avoids spoofing by encripting GPS signals (*)
   (c) A/S implements an intentional degradation of public GPS signals (*)
   (d) Both answers labelled with a (*) are correct.

7. Which of these operations can improve significantly the landing capacity of an airport with close parallel runways?
   (a) Parallel instrumental approaches only with aircraft equipped with TCAS.
   (b) Parallel ILS CAT-III approaches with radar control.
   (c) Parallel ILS CAT-III approaches with procedural control.
   (d) Parallel self-separation visual approaches.

8. A VFR flight is crossing the Limoges airspace at 2500ft QNH following a straight **north to south** linw, which overflyes 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 1.
   (b) Before entering the TMA Limoges 2.
   (c) Before entering the CTR Limoges 2.
   (d) Before entering the TMA Limoges 1.

9. Imagine that a significant amount of aircraft in a given airspace is operating with CPDL. Then, the ATC workload related with the communications may presumably:
   (a) Increase.
   (b) Remain approximately the same.
   (c) Decrease.
   (d) None of the other options is correct.

10. For a given runway threshold, which of the following approaches will lead (in general) to the highest MDA or DA?
    (a) a NDB straight-in approach procedure.
    (b) a NDB circling to approach procedure.
    (c) a VOR straight-in approach procedure.
    (d) a VOR circling to approach procedure.

11. What is the en-route phase?
    (a) All answers are correct.
    (b) The phase of the flight that follows the departure procedure.
    (c) The phase of the flight where the aircraft is at a constant cruise altitude.
    (d) The phase of the flight that precedes the descent.

12. A racetrack procedure...
    (a) could be, for instance, a 45/180 procedure turn.
    (b) is a type of initial approach segment.
    (c) is a type of holding pattern.

(d) is when an aircraft uses an active runway to taxi in the opposite direction from which it will take off or land.

13. A VFR flight is crossing the Limoges airspace at 2500ft QNH following a straight line from **south to north** that overflyes 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 1.

    (b) Before entering the TMA Limoges 2 (aproximatelly over St. Yrieix-la-Perche).

    (c) Before entering the CTR Limoges 2.

    (d) Before entering the TMA Limoges 1 (aproximatelly over Nexoh).

14. An approach procedure only using a Localiser as principal guidance system in the final approach segment is...

    (a) an APV approach.

    (b) a Localiser cannot be used as principal guidance system in the final approach segment.

    (c) a non-precision approach.

    (d) a precision approach.

15. 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 D.

    (b) Class C.

    (c) Class G.

    (d) Class E.

16. Which of the following statements is true regarding TCAS?

    (a) None of other answers is correct.

    (b) TCAS is a cooperative collision avoidance system.

    (c) TCAS is a non-cooperative collision avoidance systems.

    (d) TCAS provides separation provision between aircraft.

17. Which physical transmission layer is mainly used for ATC communications when aircraft are flying over populated continental regions?

    (a) Satellite communication.

    (b) A Very high frequency (VHF) subnetwork.

    (c) A High Frequency (HF) subnetwork.

    (d) All answers are correct.

18. The augmentation navigational information of the SBAS is based on:

    (a) a navigation satellite, situated in a low earth orbit (LEO).

    (b) a dedicated VHF channel.

    (c) a communication satellite, situated in a geostationary earth orbit (GEO).

    (d) a communication satellite, situated in a low earth orbit (LEO).

19. In the model used in your WP1 project, how do you simulate the flaps/slats configuration?

    (a) changing the CD0 and CD2 parameters of the drag coefficient.

    (b) the flaps/slats configuration is not simulated in the WP1.

    (c) changing the wing surface.

    (d) changing the CT1, CT2 and CT3 parameters of the Thrust expression.

20. A small aircraft **with no VHF radio equipment** flying in VFR wants to fly the black dotted line over the Limonges area at a constant altitude. What is the maximum altitude that the aircraft can operate without requesting a clearance to enter into controlled airspace?

    (a) 1000ft ASFC.

    (b) 4000ft QNH.

    (c) This flight cannot be done without a VHF radio.

    (d) 1000ft QNH.

21. What is the main consequence of not having atomic clocks in GPS receivers?

    (a) We need at least a fourth satellite to calculate the position of the receiver.

    (b) None of the other answers is correct.

    (c) All GPS receivers, in fact, are equipped with atomic clocks.

    (d) We need at least a fifth satellite to calculate the position of the receiver.

22. Imagine an twin engine aircraft departing in IMC from a controlled airport. Few seconds after take-off, it hits birds, which cause a fire in one of the engines and loosing all of its power. In this situation, the **aviate** function of the aircraft crew would be:

    (a) to revert to manual control and visual flight to safely land as soon as possible.

    (b) to send a distress message to the air traffic control.

    (c) to check if there is a contingency departure published for that airport and execute it.

    (d) to safely control the aircraft trajectory with the loss of power and to manage to extinguish the fire and shut down the engine.

23. A pilot is reporting "our altitude is six thousand feet". This means:

    (a) The barometric altimeter of the aircraft indicates 6 000 ft and it is calibrated with respect to the standard pressure at sea level (1013.25 hPa).

    (b) The barometric altimeter of the aircraft indicates 6 000 ft and it is calibrated with respect to the local QNH.

    (c) The radio altimeter of the aircraft indicates 6 000 ft and it is calibrated with respect to the local QNH.

    (d) The radio altimeter of the aircraft indicates 6 000 ft and it is calibrated with respect to the standard pressure at sea level (1013.25 hPa).

24. A pilot is reporting "we are at flight level two zero zero". This means:

    (a) The barometric altimeter of the aircraft indicates 20 000 ft and it is calibrated with respect to the standard pressure at sea level (1013.25 hPa).

    (b) The barometric altimeter of the aircraft indicates 2 000 ft and it is calibrated with respect to the local QNH.

    (c) The barometric altimeter of the aircraft indicates 20 000 ft and it is calibrated with respect to the local QNH.

    (d) The barometric altimeter of the aircraft indicates 2 000 ft and it is calibrated with respect to the standard pressure at sea level (1013.25 hPa).

25. Which of the following statements is correct?

    (a) The aircraft operator must compute and publish the OCA in the AIP charts.

    (b) The appropriate national administration must approve the MDA computed by the aircraft operators.

(c) The appropriate national administration must compute and publish the MDA in the AIP charts.

(d) The aircraft operator must compute and publish the OCA in the charts used by their pilots.

26. Which of the following statements is true?

(a) Both answers labelled with a (*) are correct.

(b) CPDLC permits, amongst other things, the communication between pilots and flight operation centres (FOC) (*).

(c) None of the answers is correct.

(d) ACARS uses CPDLC to transmit controller-pilot communication messages (*).

27. Which of the following statements is correct?

(a) The appropriate national administration must compute a lower bound for the MDA and publish it in the AIP charts.

(b) The aircraft operator must compute and publish the MDA in the charts used by their pilots.

(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.

28. According to the small Figure at the end of this test, depicting an airfield traffic pattern,...

(a) It is a default traffic pattern only for runway 09.

(b) It is not a default traffic pattern for any runway.

(c) It is a default traffic pattern for both runways.

(d) It is a default traffic pattern only for runway 27.

29. The transponder mode that only transmits the squawk code and aircraft altitude is the transponder...

(a) Mode A.

(b) Mode C.

(c) Mode S.

(d) Mode B.

30. Imagine an twin engine aircraft departing in IMC from a controlled airport. Few seconds after take-off, it hits birds, which cause a fire in one of the engines and loosing all of its power. In this situation, the **navigate** function of the aircraft crew would be:

(a) to send a distress message to the air traffic control.

(b) to revert to manual control and visual flight to safely land as soon as possible.

(c) to safely control the aircraft trajectory with the loss of power and to manage to extinguish the fire and shut down the engine.

(d) to check if there is a contingency departure published for that airport and execute it.

(e) to check if there is a contingency departure published for that airport and execute it.

31. The direction, with respect to the North, that join two waypoints (or fixes), is called...

(a) course.

(b) heading.

(c) track.

(d) bearing.

32. In which case radionavigation is optional for the whole flight?

(a) In VMC and flying according to VFR (*).

(b) In IMC and flying according to IFR.

(c) The answers labelled with (*) are correct.

(d) In VMC and flying according to IFR (*).

33. The OCA...

(a) is also known as the minima-minima.

(b) is the minimum altitude in the final approach segment regarding obstacle clearance.

(c) is a synonym of minimum descent altitude.

(d) is the minimum visibility required for an instrumental approach procedure.

34. An IFR flight is crossing the Limoges airspace at 3500ft QNH following a straight line from **south to north** that overflyes 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 TMA Limoges 1 (aproximatelly over Nexoh).

(b) Before entering the CTR Limoges 1.

(c) Before entering the CTR Limoges 2.

(d) Before entering the TMA Limoges 2 (aproximatelly over St. Yrieix-la-Perche).

35. In what situation an approach procedure cannot be a straight-in approach?

(a) when the angular diference between the final track alignement and the runway track exceeds a given value*

(b) when the final descent gradient exceeds a given value*

(c) in case the procedure is a non-precision approach.

(d) both answers marked with a (*) are correct.

36. Regarding the flexible use of airspace (FUA) concept, the first level (strategic level) deals with:

(a) The day-to-day allocation of airspace, according to users requirements.

(b) The definition of national airspace policy and predetermined airspace structures.

(c) The definition of the sectorisation and capacity of the military airways.

(d) The real-time use and management of available airspace.

37. One of the advantages of performing continuous climb operations is that:

(a) the capacity of departures at the airport is increased.

(b) the environmental impact of the operations is reduced.

(c) the conflicts with other traffic are reduced.

(d) all the answers are correct.

38. An IFR aircraft is cruising with heading 130^o. According to the ICAO flight level allocation scheme (*odd-even* rule), a possible flight level for this flight could be:

(a) FL135

(b) FL140

(c) FL130

(d) IFR flights do not fly using flight levels, but using Altitudes.

39. The direction, with respect to the North, to which the nose of the aircraft is pointing to, is called...

(a) bearing.

(b) heading.

(c) track.

(d) course.

40. According to the small Figure at the end of this test, depicting an airfield traffic pattern...

    (a) Turns in the pattern are always to the right.

    (b) Turns in the pattern are to the right for runway 09 and to the left for runway 27.

    (c) Turns in the pattern are always to the left.

    (d) Turns in the pattern are to the left for runway 09 and to the right for runway 27.

41. A functional airspace block (FAB) is:

    (a) a portion of flexible used airspace (FUA)

    (b) a synonym of airspace sector

    (c) a restricted or prohibited volume of airspace

    (d) an initiative of the single European sky that establishes airspace blocks regardless of the different state boundaries

42. Why standard instrumental departures contain typically **maximum altitude** restrictions for certain segments?

    (a) To allow visual self-separation procedures.

    (b) To strategically de-conflict them with arrivals crossing from below.

    (c) To allow continuous climb operations (CCO).

    (d) To strategically de-conflict them with arrivals crossing from above.

43. In civil aviation, which of the following transponder modes transmits more information?

    (a) Mode C.

    (b) Mode A.

    (c) Mode B.

    (d) Mode S.

44. Visual approaches with prescribed tracks...

    (a) are only used as contingency procedures and must be designed by the operator of the aircraft.

    (b) are typically used in the US (even at major airports) and for some circling-to-approach procedures.

    (c) do not longer exist nowadays.

    (d) are only published for VFR flights.

45. 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 approximatelly 030^o. Check the VFR chart provided in annex to this exam. Which of the following answers is correct?

    (a) This flight cannot be done without a VHF radio.

    (b) 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.

    (c) 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.

    (d) This flight can only be done providing the aircraft will not enter the CTR of Limoges.

46. An approach procedure using a DME as principal guidance system in the final approach segment is...

    (a) a DME cannot be used as principal guidance system in the final approach segment.

    (b) a precision approach.

    (c) a non-precision approach.

    (d) an APV approach.

47. A VFR aircraft is cruising with heading 130^o. According to the ICAO flight level allocation scheme (*odd-even* rule), a possible flight level for this flight could be:

    (a) FL135

    (b) FL130

    (c) VFR flights do not fly using flight levels, but using Altitudes.

    (d) FL140

48. The number of VHF channels dedicated to pilot-controller voice communications can be increased by...

    (a) Increasing the channel bandwith.

    (b) Increasing the assigned frequency band (*).

    (c) Both answers labelled with a (*) are correct.

    (d) Decreasing the channel bandwith (*)

49. Which of the following radionavigation aids **cannot** be used as the main aid providing guidance in the final approach segment of a non-precision approach procedure?

    (a) A DME.

    (b) All three radionavigation aids are valid.

    (c) A Locator.

    (d) An ILS localizer.

50. Which of the following answers is correct?

    (a) the ATC supervisor decides the best sectorisation to apply as a function of the traffic demand in his/her control center.

    (b) the ATC supervisor decides the best regulation to apply in case the traffic demand exceeds the capacity in one or more sectors of his/her control center.

    (c) the ATC supervisor designs the size and shape of the different ATC sectors as a function of the traffic demand in his/her control center.

    (d) all answers are correct.

51. Which of the following methods shall be used to define a VFR reporting point?

    (a) An significant landmark.

    (b) The intersection of a VOR radial and a NDB course.

    (c) Some timing after overflying a radionavigation facility.

    (d) Overflying a radionavigation facility.

52. Which of the following items **do not** affect the capacity value of an en-route sector:

    (a) the expected traffic demand on that sector.

    (b) all other items can affect the capacity of the sector.

    (c) the forecast weather conditions for that sector.

    (d) the route structure of the sector.

53. If you want to avoid a surrounding obstacle of the airport, it is better to climb:

    (a) using the velocity what maximizes the rate of climb.

    (b) both velocities (max. angle of ascent and max. rate of climb) have the same altitude vs distance profile.

    (c) using the maximum continuum velocity.

    (d) using the velocity what maximizes the angle of ascent.

54. If the visibility is **not good** enough for visual flight, then...

(a) we are in IMC and must fly according to IFR.

(b) we are in VMC and must fly according to IFR.

(c) we are in VMC and must fly according to VFR.

(d) we are in IMC and must fly according to VFR.

55. Airspace management (ASM) initiatives or strategies are usually:

(a) tested by several fast-time simulations and studies.

(b) proof mathematically and solved analytically.

(c) implemented in real time by the initiative of the supervisor of an ATC center.

(d) implemented in real time by the initiative of an air traffic controller.

56. If a potential collision conflict is detected by an ACAS II/TCAS system, what type of advisory is triggered first?

(a) A Resolution Advisory (RA) that includes the range of vertical speed at which the aircraft should be flown to avoid the thread aircraft.

(b) A Traffic Advisory (TA), which is intended to assist the pilot in the visual acquisition of the conflicting aircraft.

(c) A Traffic Advisory (TA) that includes the range of path angle at which the aircraft should be flown to avoid the thread aircraft.

(d) A Resolution Advisory (RA) that includes the range of indicated airspeed at which the aircraft should be flown to avoid the thread aircraft.

57. Which of the following statements is correct?

(a) The answers marked with (*) are correct.

(b) A NPA (non precision approach) is always a VOR procedure (*).

(c) A VOR approach is always a NPA (non precision approach) procedure (*).

(d) None of the other answers are correct.

58. Which of the following surveillance systems transmits at the highest power?

(a) The automatic dependent surveillance - broadcast (ADS-B).

(b) The primary surveillance radar (PSR).

(c) The aircraft communications addressing and reporting system (ACARS).

(d) The secondary surveillance radar (SSR).

59. Which is the correct order of these types of airspace/areas if we sort them **from fully segregated to non-segregated**? (TSA: temporary segregated area; RCA: reduced coordination airspace; TRA: temporary reserved area; PCA: prior coordination airspace)

(a) TRA, TSA, RCA, PCA.

(b) RCA, PCA, TRA, TSA.

(c) TSA, TRA, PCA, RCA.

(d) PCA, RCA, TSA, TRA.

60. ISA conditions are used in the model used in your WP1 project. In this case, the difference between the pressure altitude and the real altitude is:

(a) 71 m (233 ft) because this is the elevation of the origin airport.

(b) the difference between pressure altitude and real altitude increases with altitude.

(c) it depends on the altimeter performance.

(d) 0 m (0 ft).

61. The minimum decision height for an ILS CAT-II approach is:

(a) 300ft.

(b) 200ft.

(c) 0ft.

(d) 100ft.

62. What features are taken into account when designing the size and shape of ATC sectors?

(a) Number of incidents and aircraft types of the forecast traffic.

(b) All answers are correct.

(c) Actual weather conditions and short term (i.e. next hour aproximatelly) traffic complexity.

(d) Long term traffic demand and its complexity.

63. In which of the following airspace classes VFR flights are not allowed?

(a) in airspace class E.

(b) in airspace class G.

(c) in airspace class A.

(d) 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.

64. How are VFR arrivals typically defined?

(a) Using STAR charts designed by the ANSP and published in the AIP.

(b) Using visual reporting points and dead reckoning indications between these points.

(c) It is not possible to define arrivals in VFR, since radionavigation means are required to define arrivals.

(d) Using contingency charts, especially designed by the operator.

65. Which of the following controlled airspace zones is sized to accommodate all the aircraft flying in an aerodrome traffic pattern (downwind, base, final)?

(a) The ATZ.

(b) The CTA.

(c) The CTR.

(d) The TMA.

66. With our small aircraft, which is NOT equipped with any VHF radio..

(a) it is not legal to fly in civil airspace without a radio.

(b) we can only fly in airspace E, F or G.

(c) we can only fly in airspace F or G.

(d) we can only fly in airspace G.

67. What is a TRA (temporary reserved area)?

(a) a volume of airspace temporary reserved for IFR terminal maneuvers where VFR traffic cannot transit under any circumstance

(b) a volume of airspace temporary reserved and allocated for specific use where civil traffic cannot transit under any circumstance.

(c) a volume of airspace temporary reserved and allocated for specific use where civil traffic might transit under an ATC clearance.

(d) a volume of airspace temporary reserved for IFR terminal maneuvers where VFR traffic might transit under an ATC clearance

68. Which of the following surveillance systems transmits at the lowest power?

    (a) The primary surveillance radar (PSR).
    (b) The Global Positioning System (GPS).
    (c) The controller-pilot data-link communications (CPDLC).
    (d) The aircraft communications addressing and reporting system (ACARS).

69. In a VOR approach, the approach minima are given by:

    (a) A minimum descent altitude and a minimum visibility.
    (b) A minimum descent altitude and a minimum obstacle clearance altitude.
    (c) A minimum descent altitude.
    (d) A decision altitude and a minimum visibility.

70. The MAPt can be defined...

    (a) all answers are correct.
    (b) at the intersection of an NDB course and a DME arc.
    (c) at a given time after overflying the FAF.
    (d) above a VOR.

71. An approach procedure using a Locator as principal guidance system in the final approach segment is...

    (a) a Locator cannot be used as principal guidance system in the final approach segment.
    (b) a precision approach.
    (c) an APV approach.
    (d) a non-precision approach.

72. Regarding the airspace opening scheme:

    (a) It defines at what time the airspace will be available for civil traffic.
    (b) It defines how elementary sectors are collapsed. The sector configuration actually may change during the day.
    (c) It defines how elementary sectors are collapsed. During the entire day, the sector configuration does not change.
    (d) None of the other answers are correct.

73. Regarding the propagation properties of HF and VHF airbands which of the following statements is NOT correct?

    (a) HF airband is refracted back to the Earth, thus enabling long range radio communications.
    (b) VHF radio waves refract in the atmosphere and, therefore, the interference of the overall system is increased.
    (c) In order to avoid mutual interference, two close VHF transmitters must use different frequencies.
    (d) The VHF spectrum is a scarce resource but it is used in air navigation for several purposes.

74. Typically, the minimum vertical separation between two aircraft in RVSM airspace is:

    (a) 100ft
    (b) 10000ft
    (c) 10ft
    (d) 1000ft

75. ICAO regulations classify the aircraft according to their wake turbulence as:

    (a) Heavy, Medium and Light.
    (b) A, B, C, D, E and H.
    (c) CAT-I, CAT-II, CAT-IIIa, CAT-IIIb and CAT IIIc.
    (d) APV-I and APV-II.

76. Imagine an twin engine aircraft departing in IMC from a controlled airport. Few seconds after take-off, it hits birds, which cause a fire in one of the engines and loosing all of its power. In this situation, the **communicate** function of the aircraft crew would be:

    (a) to safely control the aircraft trajectory with the loss of power and to manage to extinguish the fire and shut down the engine.
    (b) to send a distress message to the air traffic control.
    (c) to check if there is a contingency departure published for that airport and execute it.
    (d) to revert to manual control and visual flight to safely land as soon as possible.

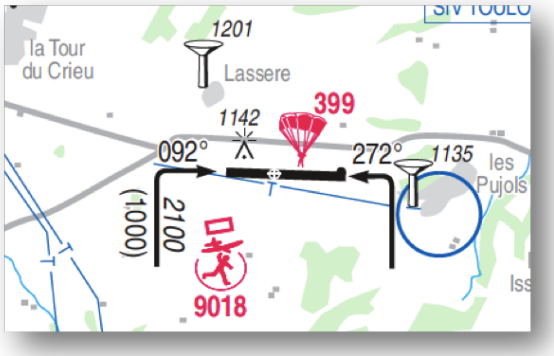

Figure 1: Airfield traffic pattern

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Correct answers

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

P 49	a	d	d	b
P 50	a	b	b	d
P 51	a	d	a	d
P 52	a	c	b	d
P 53	d	a	d	d
P 54	a	d	a	c
P 55	a	d	c	b
P 56	b	a	c	d
P 57	c	b	c	d
P 58	b	b	c	c
P 59	c	c	b	a
P 60	d	b	b	d
P 61	d	c	a	b
P 62	d	c	d	c
P 63	c	d	b	a
P 64	b	c	a	a
P 65	a	c	a	d
P 66	b	c	a	d
P 67	c	c	b	d
P 68	a	d	a	d
P 69	a	a	a	a
P 70	a	d	c	a
P 71	d	c	c	a
P 72	b	a	a	b
P 73	b	d	d	b
P 74	d	b	d	a
P 75	a	d	c	d
P 76	b	a	b	b