

INFRASTRUCTURES DEL TRANSPORT AERI (ITA)

Mid Term Exam - Fall semester 2020

November 9th 2020

Correct answer: +1 point – Incorrect answer: -1/3 points – Blank answer: 0 points
For each question **only one answer** is correct

CODE 1 - GROUP 00

1. In an hypothetical scenario with airborne separation assurance systems (ASAS) operations...
 - (a) there is no need for collision avoidance systems.
 - (b) the capacity of the ATS sectors will significantly increase.
 - (c) free route airspace will be mandatory.
 - (d) procedural control will be mandatory.
2. Which of the following statements is correct?
 - (a) In controlled airspace, an ATS clearance **may be** required to enter/exit the airspace, while in non-controlled airspace no ATS clearance is required to enter/exit the airspace.
 - (b) In controlled airspace, an ATS clearance **is always** required to enter/exit the airspace, while in non-controlled airspace no ATS clearance is required to enter/exit the airspace.
 - (c) In both controlled and non-controlled airspaces, an ATS clearance **may be** required to enter/exit the airspace.
 - (d) In both controlled and non-controlled airspaces, an ATS clearance **is always** required to enter/exit the airspace.
3. What is a flight information region (FIR)?
 - (a) A specified airspace assigned to one air traffic controller (or two if working in pairs) providing flight information services.
 - (b) A specified airspace assigned to one air traffic controller (or two if working in pairs) providing alert services.
 - (c) A specified airspace in which flight information and alert services are provided. It is the largest regular division of airspace in use in the world today.
 - (d) A specified airspace above an airfield where flight information is provided to aircraft in the airfield traffic pattern.
4. What is an upper information region (UIR)?
 - (a) A FIR in the upper airspace.
 - (b) A specified airspace above an airfield where flight information is provided to aircraft executing SIDs and STARs.
 - (c) A specified airspace above an airfield where flight information is provided to aircraft executing approaches.
 - (d) A specified airspace above an airfield where flight information is provided to aircraft in the airfield traffic pattern.
5. North Atlantic tracks (NAT) are...
 - (a) the static airway network in the North Atlantic airspace.
 - (b) an organised en-route track network that is updated every day as a function of the wind field forecast.
 - (c) the set of actual trajectory tracks that have been flown by all aircraft crossing the North Atlantic in a given period of time and considering realised weather.
 - (d) the name given to the oceanic clearances required to enter the North Atlantic airspace.
6. An IFR aircraft is flying in RVSM airspace with heading 280°. According to the ICAO flight level allocation scheme (*odd-even* rule), a possible flight level for this flight could be:
 - (a) FL320
 - (b) FL325
 - (c) FL330
 - (d) FL335
7. An IFR aircraft is flying in RVSM airspace with heading 310°. According to the ICAO flight level allocation scheme (*odd-even* rule), a possible flight level for this flight could be:
 - (a) FL320
 - (b) FL325
 - (c) FL330
 - (d) FL335
8. In a descent, at which moment the pilot sets the altimeter to the QNH setting?
 - (a) At FL100.
 - (b) At the crossover altitude.
 - (c) At the transition altitude.
 - (d) At the transition level.
9. In a climb, at which moment the pilot sets the altimeter to the standard setting?
 - (a) At FL100.
 - (b) At the crossover altitude.
 - (c) At the transition altitude.
 - (d) At the transition level.
10. Which of the following airspace volumes is, in general, the smallest one?
 - (a) TMA.
 - (b) CTR.
 - (c) ATC.
 - (d) ATZ.
11. Which of the following volume is, in general, the biggest one?
 - (a) TMA.
 - (b) CTR.
 - (c) ATC.
 - (d) ATZ.
12. Who and when is in charge to design the shape and size of an ATS sector?
 - (a) the ATC supervisor, the day before of operations, as a function of the expected traffic demand for next day in his/her control center.
 - (b) the ATC officer, few minutes before starting his/her service, as a function of the actual traffic demand in his/her sector.

- (c) a team of engineers and ATC officers of the ANSP, many months in advance, after performing a thorough study checking the safety, capacity and efficiency of the operations.
- (d) a team of engineers and ATC officers of the ANSP, the day before of operations, as a function of the expected traffic demand for next day in the concerned control center.
13. The *free route* concept allows...
- (a) the operator to freely plan a route joining two points without the need for overflying specific ground facilities and submit the route in the flight plan.
- (b) the procedure designer to design guided segments joining two points without the need for overflying specific ground facilities.
- (c) 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.
- (d) all the answers are correct.
14. In the context of flexible use of airspace, what is the main difference between a TRA (temporary reserved area) and a TSA (temporary segregated area)?
- (a) None of the other answers is correct.
- (b) The TSAs are published in the ATS letters of agreement, while the TRAs are not.
- (c) The TSAs are published in the AIP, while the TRAs are not.
- (d) A civil aircraft might transit through a TRA if cleared by ATC, while in a TSA this transit is never possible if the TSA is active.
15. The main objective of air traffic flow management (ATFM) is:
- (a) provide flight information services to civil aircraft according to the class of airspace.
- (b) keep the forecast demand below estimated capacity in airports and airspace sectors.
- (c) develop a network of ATS routes and airspace structures to try to accommodate the forecast air traffic volumes.
- (d) all the answers are correct.
16. Which of the following ATFM initiatives is the most widely used in Europe and in the U.S.?
- (a) Ground holding.
- (b) Ground stop.
- (c) Pre-tactical re-routing.
- (d) Miles in trail.
17. Which of the following ATFM initiatives is the most efficient in terms of fuel consumption?
- (a) Ground holding.
- (b) Air holding.
- (c) Level capping.
- (d) All initiatives are similar in terms of fuel consumption.
18. Schedule (or IATA) slots...
- (a) are slots aiming to regulate demand when the airport is under IMC (instrument meteorological conditions).
- (b) are seasonal slots aiming to prevent airlines to plan operations above a fixed value of airport capacity.
- (c) are the slots computed by the Network Manager, an independent and transparent service run by IATA.
- (d) all answers are correct.
19. In Europe, when a CTOT (Calculated take-off time) is given, the aircraft should take-off within the period:
- (a) [CTOT, CTOT +10 min]
- (b) [CTOT - 5min, CTOT +5 min]
- (c) [CTOT - 5min, CTOT +10 min]
- (d) [CTOT - 10min, CTOT +10 min]
20. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. Table below depicts the Estimated Time Over (ETO) the concerned sector for a given set of aircraft. What is the ATFM delay that would be assigned to EZY078 according to the computed assisted slot allocation (CASA) algorithm?
- | Flight | ETO | Flight | ETO |
|--------|-------|--------|-------|
| BAW123 | 10:01 | DAL077 | 10:24 |
| IBE222 | 10:06 | BAW444 | 10:40 |
| RYR069 | 10:07 | AFR022 | 11:02 |
| EZY078 | 10:11 | AZA333 | 11:05 |
- (a) No delay.
- (b) 1 minute.
- (c) 4 minutes.
- (d) 19 minutes.
21. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. The table above depicts the Estimated Time Over (ETO) the concerned sector for a given set of aircraft. What is the ATFM delay that would be assigned to AZA333 according to the computed assisted slot allocation (CASA) algorithm?
- (a) No delay.
- (b) 1 minute.
- (c) 5 minutes.
- (d) 10 minutes.
22. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. The table above depicts the Estimated Time Over (ETO) the concerned sector for a given set of aircraft. What is the ATFM delay that would be assigned to BAW444 according to the computed assisted slot allocation (CASA) algorithm?
- (a) No delay.
- (b) 1 minute.
- (c) 5 minutes.
- (d) 10 minutes.
23. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. The table above depicts the Estimated Time Over (ETO) the concerned sector for a given set of aircraft. If the first slot (slot #1) is given at 10h00, which aircraft will take slot #7?
- (a) This slot will not be used by any aircraft.
- (b) AFR022
- (c) EZY078
- (d) DAL077
24. Strategic ATFM should:
- (a) Balance flights next day with available ATC Capacity.
- (b) Match long-term demand and needed ATC capacity.
- (c) Manage current flights with existing ATC capacity.
- (d) Define the national airspace policy and predetermined airspace structures.
25. Pre-tactical ATFM should:
- (a) Balance flights next day with available ATC Capacity.
- (b) Match long-term demand and needed ATC capacity.
- (c) Manage current flights with existing ATC capacity.
- (d) Define the national airspace policy and predetermined airspace structures.
26. Tactical ATFM should:

- (a) Balance flights next day with available ATC Capacity.
 - (b) Match long-term demand and needed ATC capacity.
 - (c) Manage current flights with existing ATC capacity.
 - (d) Define the national airspace policy and predetermined airspace structures.
27. What is the primary information sent by ATC dependencies to the Network Manager?
- (a) sector and airport capacities.
 - (b) flight plans.
 - (c) accurate weather data.
 - (d) slots and rerouterings.
28. What is the primary information sent by aircraft operators to the Network Manager?
- (a) sector and airport capacities.
 - (b) flight plans.
 - (c) accurate weather data.
 - (d) slots and rerouterings.
29. Which of the following NM systems implements the Computer Assisted Slot Allocation (CASA) algorithm?
- (a) The RPL
 - (b) The IFPS
 - (c) The ETFMS
 - (d) The PREDICT
30. In the context of ATS, what is a flight information sector?
- (a) In the context of ATS, sectors are only used to provide ATC services.
 - (b) A volume of airspace under the responsibility of one person (or a pair) who provide ATC, flight information and alert services within it.
 - (c) A volume of airspace under the responsibility of one person (or a pair) who provide flight information and alert services within it.
 - (d) In the context of ATS, sectors are only used to provide ATC and alert services.
31. If an aircraft declares an emergency, communicating that the fuel on board is insufficient for a safe landing, which of the following phases shall be activated?
- (a) Uncertainty phase.
 - (b) Alert phase.
 - (c) Distress phase.
 - (d) Awareness phase.
32. Which of the following transponder codes indicates a lost of radio communications?
- (a) 1215
 - (b) 7500
 - (c) 7600
 - (d) 7700
33. In airspace class C, separation services are provided...
- (a) only between two conflicting VFR flights.
 - (b) only between two conflicting IFR flights.
 - (c) between two conflicting IFR flights, between an IFR conflicting with a VFR or SVFR, and between two SVFR flights.
 - (d) to all IFR and VFR flights in the airspace.
34. A VFR flight is flying inside an airspace of class D. The air traffic controller is responsible to separate it from:
- (a) all other IFR flights.
 - (b) all other VFR flights.
 - (c) all other VFR and IFR flights.
 - (d) the controller has no separation responsibility with VFR flights in airspace class D.
35. A VFR flight is flying inside an airspace of class E and has contacted the ATC. Which of the following answers is correct?
- (a) the ATC will ignore this flight.
 - (b) a VFR flight cannot fly in airspace class E.
 - (c) the ATC will provide separation services to this aircraft whenever possible.
 - (d) the ATC will provide traffic information services to this aircraft whenever possible.
36. Which of the following summarises the three high-level tasks that are always performed by an air traffic controller?
- (a) Gather and process data from flights and/or ground vehicles, issue clearances, coordinate clearances with other ATC units.
 - (b) Gather and process data from flights and/or ground vehicles, separate aircraft, give flight information instructions.
 - (c) 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.
 - (d) Coordinate clearances with other ATC units, coordinate civil-military operations, coordinate emergencies.
37. In which situation, the visual contact with aircraft is the main data gathering source for an air traffic controller?
- (a) for the tower dependency.
 - (b) for the approach control dependency in non busy airports.
 - (c) for the IFR clearance delivery dependency.
 - (d) Nowadays, visual contact with aircraft is not used as source of information by ATC anymore.
38. Who is the responsible to issue air traffic control clearances?
- (a) The strategic controller
 - (b) The tactical controller.
 - (c) The planner controller.
 - (d) The ATC supervisor.
39. In the context of ATS, what is the exit flight level (XFL)?
- (a) The maximum flight level of an ATS sector.
 - (b) The flight level an aircraft should have when being transferred from one ATS sector to the next one.
 - (c) The flight level the altimeter setting is changed from QNH to STD.
 - (d) The flight level the altimeter setting is changed from STD to QNH.
40. Who is the responsible to receive and sort incoming ATC flight progress strips?
- (a) The strategic controller
 - (b) The tactical controller.
 - (c) The controller in charge of the IFR clearance delivery dependency.
 - (d) The ATC supervisor.
41. What ATC dependency is typically in charge to issue taxi clearances?
- (a) The en-route control.
 - (b) The ground control.
 - (c) The IFR clearance delivery.
 - (d) The tower control.

42. What ATC dependency is typically in charge to issue the approach clearance?
- The en-route control.
 - The approach control.
 - The tower control
 - The IFR clearance delivery.
43. What ATC dependency is typically in charge to confirm that the cruise altitude filed in the flight plan has been accepted?
- The en-route control.
 - The ground control.
 - The IFR clearance delivery.
 - The tower control.
44. The navigation process by which a navigator calculates its current position by using a previously determined position and known or estimated speeds over an elapsed time and course is known as:
- Instrumental Flight Rules (IFR) navigation.
 - Special Visual Flight Rules (SVFR) navigation.
 - dead reckoning.
 - conventional navigation.
45. The Visual Flight Rules (VFR) airfield traffic pattern leg by which an aircraft flies perpendicular to the runway and starts descending is called:
- upwind.
 - crosswind.
 - downwind.
 - base.
46. The direction, with respect to the North, that join two waypoints (or fixes), is called...
- track.
 - heading.
 - course.
 - bearing.
47. Which of the following sentences is correct?
- In IMC, an aircraft can fly under IFR or VFR.
 - In VMC, an aircraft must always fly under IFR.
 - In VMC, an aircraft must always fly under VFR.
 - None of the other answers is correct.
48. Imagine you are in charge of designing the new visual arrival procedure for VFR traffic to Sabadell aerodrome. You want to specify in the chart a reporting fix (waypoint). Which of the following statements is correct?
- You will use the intersection of the corresponding radial and distance from Sabadell VOR/DME at the fix coordinates.
 - You will use a visible landmark, such as a castle, a town or a visible antenna, nearby the fix coordinates.
 - You will use the intersection of the corresponding radials from Sabadell VOR and Barcelona VOR at the fix coordinates.
 - None of the other answers is correct.
49. In what situation the effect of the wind will have a bigger impact on the actual trajectory flown by an aircraft?
- when the aircraft is following a given heading.
 - when the aircraft is following a given track.
 - when the aircraft is following a given VOR radial.
 - when the aircraft is following a given NDB course.
50. Which of the following statements is correct in the context of IFR navigation?
- The aircraft shall be at the cruise altitude when entering the first airway of the en-route phase (*).
 - The aircraft shall be at the cruise altitude when before leaving the last airway of the en-route phase (*).
 - Both answers marked with a (*) are correct.
 - None of the other answers is correct.
51. When does a STAR begin?
- At a given radionavigation fix.
 - At the top of descent.
 - At a given visual landmark.
 - Depending on the airport and TMA characteristics, any of the previous answers could be possible.
52. Regarding standard instrumental procedures, which of the following statements is correct?
- The ANSP is responsible to publish them in the AIP, assuming nominal operations.
 - The ANSP is responsible to publish them in the AIP, assuming nominal operations, but also publishing, if needed, contingency procedures.
 - The aircraft manufacturer is responsible to publish them in the AIP assuming nominal operations, but also publishing, if needed, contingency procedures.
 - The aircraft operator is responsible to publish them in the AIP assuming nominal operations, but also publishing, if needed, contingency procedures.
53. Regarding the climb gradient of the standard instrumental procedures published in the AIP, which of the following statements is correct?
- it is always fixed at 3.3%.
 - if not otherwise stated in the chart, it is assumed to be 3.3% in nominal conditions.
 - if not otherwise stated in the chart, it is assumed to be 3.3% in contingency conditions.
 - none of the other answers is correct.
54. Regarding the descent gradient of the standard terminal arrival routes published in the AIP, which of the following statements is correct?
- it is always fixed at 3.3%.
 - if not otherwise stated in the chart, it is assumed to be 3.3% in nominal conditions.
 - if not otherwise stated in the chart, it is assumed to be 3.3% in contingency conditions.
 - none of the other answers is correct.
55. According to Figure 1 at the end of this exam, the airfield traffic pattern leg marked with a star (*) is:
- The downwind leg for traffics to runway 07.
 - The downwind leg for traffics to runway 25.
 - The base leg for traffics to runway 07.
 - The base leg for traffics to runway 25.
56. According to Figure 1 at the end of this exam, the airfield traffic pattern leg marked with a star (*) is:
- The final leg for traffics to runway 07.
 - The final leg for traffics to runway 25.
 - The crosswind leg for traffics to runway 07.
 - The crosswind leg for traffics to runway 25.
57. What is the point marked with a "W" inside a circle in Figure 1?
- It is a VFR reporting point for helicopter arrivals.
 - It is a IFR reporting point for helicopter arrivals.
 - It is the intersection of radial 101 and DME distance 2.5NM of the SDE VOR/DME

- (d) All answers are correct.
58. When executing an airfield traffic pattern, how is the aircraft guided?
- there is no guidance, the traffic pattern is always executed visually.
 - with an ILS.
 - with one or more conventional radionavigation systems.
 - with an RNAV system.
59. Consider the VFR chart of the area around Bordeaux, provided in annex to this exam. The airspace class over the NDB BD (north-east of Bordeaux airport) at 4500 ft QNH is:
- Class C.
 - Class D.
 - Class E.
 - Class G.
60. What is the airspace class at 1500 ft over the SAUVET-ERRE (SAU) VOR (south-east of Bordeaux airport)?
- Class A
 - Class D
 - Class E
 - Class G
61. An aircraft **with no VHF radio equipment** flying under VFR wants to take-off from *LIBOURNE (LFDI)*, located at the east of Bordeaux, and take heading towards the West to reach the Atlantic coast. Check the VFR chart provided in annex to this exam. Which of the following answers is correct?
- This flight cannot be done without a VHF radio.
 - This flight can be done if the aircraft remains always below 2000 ft QNH, regardless if it crosses or not the CTR of Bordeaux Merignac.
 - This flight can be done if the aircraft remains always outside the CTR of Bordeaux Merignac and below 2000ft QNH.
 - This flight can be done if the aircraft remains always outside the CTR of Bordeaux Merignac and always between 1000 ft above ground level and 3000ft above the mean sea level.
62. An helicopter is over the mountain peak of 493 ft that appears in the south-east corner of the Bordeaux chart provided in this exam. The helicopter will be inside Restricted Area R 46 A if:
- its altitude is 850 ft above the mountain.
 - its altitude is 850 ft QNH.
 - its altitude is 2200 ft QNH.
 - All the answers are correct.
63. An helicopter is over the mountain peak of 493 ft that appears in the south-east corner of the Bordeaux chart provided in this exam. The helicopter will be inside Restricted Area R 46 A if:
- its altitude is 850 ft above the mountain (*)
 - its altitude is 2000 ft above the mountain (*)
 - Both answers labeled with a (*) are correct.
 - None of the answers are correct.
64. In the San Francisco airport (SFO), two parallel approaches are executed if visibility meteorological conditions (VMC) are met. Otherwise, only one instrumental approach is executed in one of the runways. Which of the following statements is correct?
- In VMC, runway capacity in SFO is increased at the expense of reducing safety.
 - In VMC, flight efficiency of SFO arrivals is increased at the expense of reducing safety.
 - In VMC, flight efficiency of SFO arrivals is increased at the expense of reducing capacity.
 - None of the other answers is correct.
65. Minimum aircraft separation standards in oceanic areas are much larger than separation in continental areas with radar coverage. This is a illustrative example of a trade-off, or interdependency, between:
- flight efficiency and environmental impact.
 - flight efficiency and safety.
 - capacity and safety.
 - capacity and flight efficiency.
66. Noise optimal departures (i.e. minimising noise exposure over the population) typically require more fuel since the aircraft might be required to climb at not optimal speeds and/or fly longer distances to avoid certain populated areas. This is a illustrative example of a trade-off, or interdependency, between:
- flight efficiency and environmental impact.
 - flight efficiency and safety.
 - capacity and safety.
 - capacity and flight efficiency.
67. Why in Lleida Alguaire airport (a secondary airport with few traffic) continuous descent operations (CDOs) are (almost) always possible, while in Barcelona airport (a busy airport) they are hardly ever possible?
- Because in Lleida Alguaire RNAV approach procedures based on satellite navigation are implemented, increasing dramatically the airport capacity.
 - Because the capacity in Lleida Alguaire when executing CDOs is still significantly above the incoming traffic demand.
 - Because the orography surrounding Barcelona makes very difficult to safely execute CDOs due to minimum obstacle clearance altitudes.
 - Because Barcelona mainly operates with two simultaneous runways (one for departures and the other for arrivals), which makes impracticable the execution of CDOs.
68. It has been reported in many studies that the United States of America (USA) ATM system, if compared with the European system, handles almost the double of traffic but with much less technical staff and air traffic controllers involved. Which of the following potential reasons is correct?
- The European airspace is much more complex to manage in terms of aircraft density and network topology.
 - The European airspace is managed by many air navigation service providers, using different systems and procedures; and it is very constrained with several military zones.
 - The USA communication and navigation systems are much more advanced if compared with the European technology, leading to significant capacity increases.
 - The USA surveillance systems are more precise, allowing for lower separation margins between aircraft.
69. Which of the following actions has a more strategic nature in the context of air traffic management?
- The majority of the tasks done by the strategic air traffic controller.
 - The design and implementation of ATS sectorisations.
 - Air traffic flow management.
 - The majority of the tasks done by the ATC supervisor.
70. Which of the following indicators could be representative to measure flight efficiency in the en-route phase?

- (a) The difference, in terms of additional flight distance, between the actual trajectory and the optimal trajectory.
 - (b) The average separation between aircraft for a given period of time.
 - (c) The number separation violations between aircraft reported in a given period of time.
 - (d) The average number of aircraft inside an air traffic control sector for a given period of time.
71. What is the most important element to operate in RVSM (reduced vertical separation minima) space?
 - (a) An accurate 3D radar.
 - (b) A certified altimeter.
 - (c) Certified instrumental en-route charts.
 - (d) A certified radio-navigation system.
72. Which of the following statements is correct?
 - (a) Tromboning procedures in terminal airspace are mainly designed to improve the efficiency of the flights, if compared with continuous descent operations.
 - (b) Tromboning procedures in terminal airspace are mainly designed to improve airspace and airport capacity, if compared with holding patterns.
 - (c) Tromboning procedures in terminal airspace are one of the collision avoidance layers.
 - (d) All other answers are correct.
73. Which is the main purpose of radar vectoring?
 - (a) To give fast and simple separation instructions to aircraft crew.
 - (b) To increase airport capacity when sequencing traffic into final approach.
 - (c) To increase airspace capacity when merging arrival traffic flows.
 - (d) All answers are correct.
74. Which is the principal inconvenience of radar vectoring?
 - (a) It reduces significantly terminal airspace capacity if compared with using holding patterns to sequence and merge aircraft.
 - (b) It increases significantly the workload of the aircraft crew (*).
 - (c) The pilot loses the situational awareness of the aircraft trajectory in the near future (for example, the remaining distance to the runway threshold) (*).
 - (d) Both answers labeled with a (*) are correct.
75. Regarding the airborne separation assurance systems (ASAS) and airborne collision avoidance systems (ACAS), which of the following statements is correct?
 - (a) Traffic collision avoidance system (TCAS) is a commercially available ACAS system.
 - (b) ASAS serves as a last-resort safety net irrespective of any separation standards.
 - (c) ACAS could be an enabler of the Free Flight concept.
 - (d) All the answers are correct.
76. Which of the following statements is true regarding TCAS?
 - (a) TCAS provides separation provision between aircraft.
 - (b) TCAS is a non-cooperative collision avoidance systems.
 - (c) TCAS is a cooperative collision avoidance system.
 - (d) None of other answers is correct.
77. Which of the following statements, regarding the Traffic-alert and Collision Avoiding System (TCAS), is correct?
 - (a) A TCAS resolution advisory (RA) has a higher priority than any ATC instruction given to avoid a mid-air collision.
 - (b) A TCAS traffic advisory (TA) has a higher priority than any ATC instruction given to avoid a mid-air collision.
 - (c) A TCAS traffic advisory (TA) has a higher priority than any pilot action, after visual acquisition of the intruder aircraft, to avoid a mid-air collision.
 - (d) All answers are correct.

Figure 1: Airfield traffic pattern

INFRASTRUCTURES DEL TRANSPORT AERI (ITA)

Mid Term Exam - Fall semester 2020

Correct answers

Question	CODE 0	CODE 1	CODE 2	CODE 3
P 01	c	b	d	b
P 02	d	b	a	c
P 03	a	c	b	a
P 04	c	a	b	d
P 05	c	b	a	d
P 06	b	a	a	c
P 07	d	a	a	a
P 08	c	d	c	b
P 09	a	c	a	b
P 10	d	d	a	a
P 11	a	a	c	c
P 12	d	c	b	a
P 13	b	a	c	d
P 14	c	d	b	b
P 15	b	b	b	c
P 16	b	a	d	a
P 17	d	a	d	c
P 18	b	b	b	c
P 19	c	c	a	d
P 20	d	d	a	a
P 21	c	c	a	c
P 22	d	d	d	a
P 23	d	b	b	d
P 24	d	b	c	d
P 25	a	a	a	a
P 26	b	c	d	c
P 27	c	a	d	d
P 28	d	b	a	c
P 29	a	c	a	c
P 30	c	c	c	b
P 31	a	c	b	b
P 32	d	c	c	a
P 33	b	c	c	a
P 34	c	d	c	a
P 35	c	d	a	c
P 36	b	a	a	b
P 37	d	a	d	a
P 38	b	b	a	b
P 39	d	b	d	d
P 40	a	a	d	d
P 41	b	b	c	c
P 42	d	b	b	a
P 43	d	c	c	d
P 44	a	c	b	b
P 45	c	d	b	c
P 46	a	c	d	a
P 47	c	d	d	c
P 48	c	b	b	c

P 49	a	a	a	d
P 50	a	d	a	a
P 51	b	a	a	c
P 52	b	a	d	a
P 53	c	b	b	d
P 54	b	d	c	d
P 55	c	c	a	a
P 56	c	d	d	c
P 57	c	a	d	d
P 58	d	a	a	c
P 59	a	a	a	c
P 60	a	d	c	b
P 61	b	b	c	c
P 62	d	a	b	a
P 63	b	a	c	d
P 64	d	d	b	b
P 65	d	c	b	c
P 66	d	a	d	a
P 67	a	b	d	c
P 68	a	b	b	c
P 69	d	b	a	d
P 70	c	a	a	a
P 71	b	b	a	c
P 72	c	b	d	a
P 73	d	d	b	d
P 74	c	c	c	d
P 75	c	a	a	a
P 76	d	c	d	c
P 77	a	a	d	d