Infrastructures del Transport Aeri

Name:

Final exam - Fall semester 2015

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

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

Give one (1) example of capacity indicator
Give **the name** or just the acronym of **three (3)** different **aircraft operators**
Regarding the **CPDLC**, what is the name of the **sequence of messages** between the controller and the pilot relating to a particular transaction (e.g. request and receive clearance)?
Which system provides more geographical **coverage**: SBAS or GBAS?
ACAS II/TCAS Resolution Advisories (RA) are always specified in terms of heading changes. True or false?
Enumerate the **four** unknowns in the following GPS observation equation from the receiver point of view: $p_i = \sqrt{(x_i - x)^2 + (y_i - y)^2 + (z_i - z)^2} + T \cdot c_0$
How the letter "**L**" is pronounced according to the international radiotelephony alphabet used in aviation?
Why some flights are typically exempted from ATFM measures?

Questions related to Kahului VOR RWY20 chart (consider OGG VORTAC as a VOR/DME)

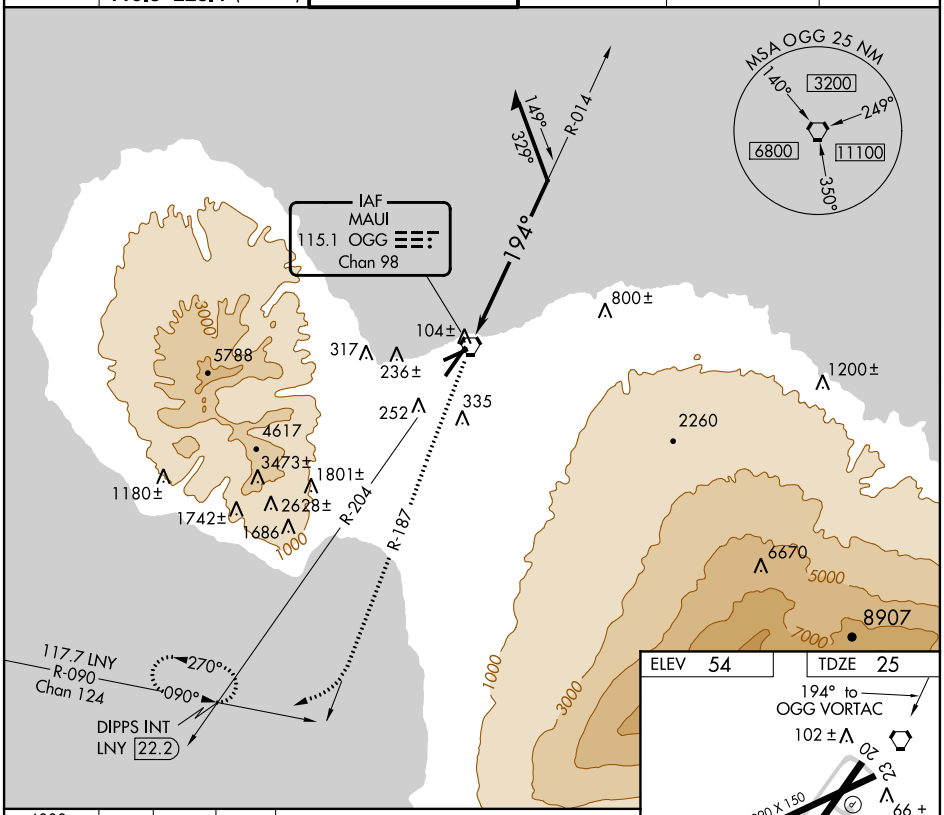
An aircraft if flying to DIPPS with heading 260º and it is instructed to hold. What will be the holding entry type?
Where does the initial approach segment end?
What type of initial approach segment can we observe?
What is the minimum descent altitude for a Category C aircraft performing an approach to runway 05? (**yes!** runway 05)
.How is defined the fix delimiting the end of the first leg of the missed approach segment?
What is the leg type of the first leg of the missed approach segment?
What is the leg type of the second leg of the missed approach segment?
What is the leg type of the intermediate segment

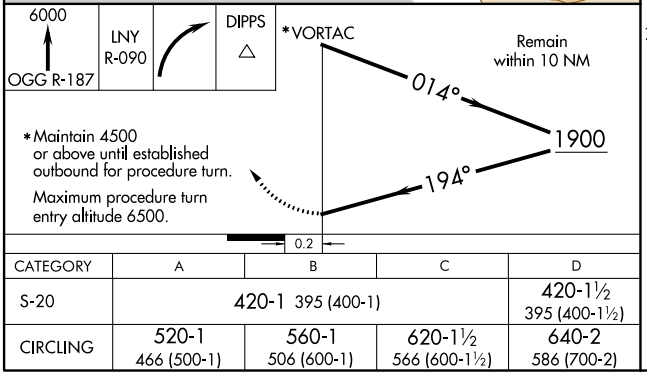
VORTAC OGG	APP CRS	Rwy Idg	6995
115.1	194°	TDZE	25
Chan 98		Apt Elev	54

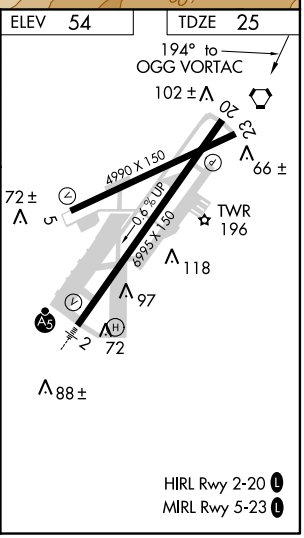
VOR RWY 20
KAHULUI (OGG)(PHOG)

MISSED APPROACH: Climb to 6000 via OGG R-187 to intercept LNY R-090, then climbing right turn direct DIPPS Int and hold.

ATIS	HCF APPROACH	MAUI TOWER★	GND CON	CLNC DEL	UNICOM
128.6	120.2 322.4 (NORTH) 119.5 225.4 (SOUTH)	118.7 (CTAF) L 279.6	121.9 279.6	120.6 290.5	122.95







CATEGORY	A	B	C	D
S-20	420-1 395 (400-1)			420-1½ 395 (400-1½)
CIRCLING	520-1 466 (500-1)	560-1 506 (600-1)	620-1½ 566 (600-1½)	640-2 586 (700-2)

PAC, 06 FEB 2014 to 03 APR 2014

INFRAESTRUCTURES DEL TRANSPORT AERI (ITA)
Final 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. An ILS approach is generally a:
   (a) Straight-in approach and a non precision approach.
   (b) Circling to approach and a non precision approach.
   (c) Circling to approach and a precision approach.
   (d) Straight-in approach and a precision approach.

2. A VFR flight is flying inside an airspace of class B. The air traffic controller is responsible to separate it from:
   (a) other IFR flights.
   (b) other VFR flights.
   (c) the controller has no separation responsibility with VFR flights in airspace class B.
   (d) other VFR and IFR flights.

3. Air Traffic Management (ATM) is composed by:
   (a) AS, FIS and ATC.
   (b) CNS, ASM, ATFM, ATS, S&R, AIS and MET
   (c) ASM, ATFM and ATS.
   (d) ASM, ATFM, AIP, NOTAM and CIRC.

4. Who is *responsible* to check that the positioning geometry is good enough to fly an RNAV DME/DME procedure?
   (a) the DME receiver.
   (b) the procedure designer.
   (c) the air traffic controller.
   (d) the pilot in command.

5. What features are taken into account when designing the size and shape of ATC sectors?
   (a) Actual weather conditions and short term (i.e. next hour aproximatelly) traffic complexity.
   (b) Number of incidents and aircraft types of the forecast traffic.
   (c) All answers are correct.
   (d) Long term traffic demand and its complexity.

6. In which case you will find an non-precision approach procedure with no FAF?
   (a) in case there is no final segment.
   (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 approach can only be executed as a circling to approach.
   (d) in case the glide slope is not available.

7. Standard airfield traffic patterns are...
   (a) with turns to the left and at 2000 ft above the aerodrome elevation.
   (b) with turns to the right and at 2000 ft above the aerodrome elevation.
   (c) with turns to the right and at 1000 ft above the aerodrome elevation.
   (d) with turns to the left and at 1000 ft above the aerodrome elevation.

8. Who is the responsible to receive and sort incoming strips (flights)?
   (a) The strategic controller
   (b) The controller in charge of the IFR clearance delivery dependency.
   (c) The ATC supervisor.
   (d) The tactical controller.

9. Regarding the figure 1(d), what does the tip of the black line appearing next to each aircraft symbol indicate?
   (a) The black line gives a visual information to the controller regarding the vertical speed of the aircraft.
   (b) The minimum separation distance between two aircraft.
   (c) The estimated position of the aircraft, after a given period of time, based on the filed flight plan.
   (d) The estimated position of the aircraft, after a given period of time, based on the current aircraft heading and speed.

10. What is a VOLMET?
    (a) A radio station broadcasting volcanic activity information in a certain area.
    (b) A radio station broadcasting meteorogical information of a specific airport, indicating as well, the runway in service, the preferred IFR approach, the transition level and any other relevant information regarding airport operations.
    (c) A radio station broadcasting meteorogical information of a certain area, including some relevant airports.
    (d) A special message issued by the International Volcanic Meteorology Office, regarding volcanic activity.

11. Consider figure 1(b), where the aircraft label is displayed in **blue** colour and all the airspace shown in the picture belongs to our sector. If we assume we are controlling an **en-route sector of Barcelona UIR**, then we can say that...
    (a) AEA979D is not yet in our sector but will enter in few minutes from below.
    (b) AEA979D is in our sector and climbing to FL260.
    (c) AEA979D is in our sector and climbing to FL320.
    (d) AEA979D is not yet in our sector but will enter in few minutes from above.

12. Which of the following is a clear objective of the flgith information service?

    (a) To expedite and maintain an orderly flow if air traffic.
    (b) To provide advice and information useful for the safe and efficient conduct of flights.
    (c) All answers are correct.
    (d) To Notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required.

13. Which of the following controlled airspace zones is sized to accommodate, approximately, all the aircraft flying standard instrumental departures?

    (a) The CTR.
    (b) The TMA.
    (c) The ATC.
    (d) The ATZ.

14. The direction, with respect to the North, to which the actual path of the aircraft is pointing to, is called...

    (a) track.
    (b) heading.
    (c) bearing.
    (d) course.

15. The *free flight* concept allows...

    (a) the procedure designer to design guided segments joining two points without the need for overflying specific ground facilities.
    (b) 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.
    (c) all the answers are correct.
    (d) 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.

16. 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 F or G.
    (c) we can only fly in airspace G.
    (d) we can only fly in airspace E, F or G.

17. Figure 1(d) shows a radar screenshot taken at the North border of Barcelona FIR. EZY1713 is scheduled to land in Valencia, while EZY9JA is just transiting in the FIR. Which of the following statements is correct?

    (a) There is no potential conflict between the two aircraft if the ATC clears EZY9JA immediately to FL330.
    (b) There is a potential conflict between the two aircraft that can be solved by changing appropriately the exit flight level of EZY1713.
    (c) There is no potential conflict between the two aircraft if the ATC clears EZY1713 immediately to FL220.
    (d) There is a potential conflict between the two aircraft that can be solved by laterally deviating one of the two aircraft and instructing the EZY1713 to descend when ready.

18. Regarding the airspace opening scheme:

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

19. Regarding the figure 1(d), the heading of the two aricraft is:

    (a) approximately 190
    (b) approximately 100
    (c) approximately 010
    (d) approximately 000

20. Which of the following initiatives is **NOT** an ATFM initiative?

    (a) Call for release.
    (b) Level capping.
    (c) All of them are ATFM initiatives.
    (d) Miles in trail.

21. The angle, with respect to the North, of the line formed by the actual position of the aicraft and a given destination waypoint or radionavigation facility is called...

    (a) track.
    (b) course.
    (c) heading.
    (d) bearing.

22. What is a TSA (temporary segregated area)?

    (a) a volume of airspace temporary reserved and allocated for specific use where civil traffic might transit under an ATC clearance.
    (b) a volume of airspace temporary reserved for IFR terminal manoeuvers where VFR traffic might transit under an ATC clearance
    (c) a volume of airspace temporary reserved for IFR terminal manoeuvers where VFR traffic cannot transit under any circumstance
    (d) a volume of airspace temporary reserved and allocated for specific use where civil traffic cannot transit under any circumstance.

23. An IFR aircraft is flying in RVSM airspace with heading 189^o, following the *odd-even* rule to assign a flight level, a possible flight level for the flight could be:

    (a) FL330
    (b) FL320
    (c) FL335
    (d) FL325

24. In a non-precision approach, the final segment starts at:

    (a) the MAPt.
    (b) the FAP or the end of turn of the previous segment.
    (c) the FAF or the end of turn of the previous segment.
    (d) the FAF or FAP.

25. North Atlantic oceanic control typically require the aircraft crew to:

    (a) Switch-off the transponder.
    (b) Report their position only when requested by the ATC.
    (c) Report periodically their position every 2h.
    (d) Report periodically their position every 10^o of longitude.

26. In the model used in your WP1 project, the Thrust of the aricraft varied as a funtion of:

    (a) the speed of the aircraft.

    (b) the thrust does not change, it is constant.

    (c) the altitude.

    (d) the drag coefficient.

27. Who is responsible to publish the OCA/H in an instrumental approach chart (IAC)?

    (a) Eurocontrol.

    (b) The aircraft operator.

    (c) The appropriate ANS national administration.

    (d) The aircraft manufacturer.

28. Regarding the flexible use of airspace (FUA) concept, the third level (tactical 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.

29. ICAO regulations classify the aircraft according to their speed at the threshold as:

    (a) A, B, C, D, E and H.

    (b) CAT-I, CAT-II, CAT-IIIa, CAT-IIIb and CAT IIIc.

    (c) Heavy, Medium and Light.

    (d) APV-I and APV-II.

30. What is a NOTAM?

    (a) It is a collision hazard information typically given by a flight information service to a pilot.

    (b) It is the name that receives the aeronautical radiotelephony alphabet.

    (c) It is a type of airspace without air traffic control.

    (d) 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.

31. A secondary objective of air traffic flow management (ATFM) is...

    (a) to monitor the aeronautical inforamation publications (AIP).

    (b) all the answers are correct.

    (c) to monitor the network operations.

    (d) to monitor the CNS infrastructure.

32. 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) It is a collision hazard flight information message.

    (b) It is a distress signal message.

    (c) It is a urgency signal message.

    (d) The message is a separation instruction to prevent a mid-air collision.

33. 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 NDB course.

    (b) when the aircraft is following a given heading.

    (c) when the aircraft is following a given track.

    (d) when the aircraft is following a given VOR radial.

34. Mark the **correct** statement:

    (a) All the answers are correct.

    (b) Air Traffic Control is provided when Alert Services are provided.

    (c) Flight information Services are provided when Air Traffic Control is provided.

    (d) Flight Information Services are provided when Alert Services are provided.

35. In a Localiser approach, the approach minima are given by:

    (a) A decision altitude and a minimum visibility.

    (b) A minimum descent altitude and a minimum visibility.

    (c) A minimum descent altitude and a minimum obstacle clearance altitude.

    (d) A minimum descent altitude.

36. Which of the following statements is *not correct*?

    (a) when reaching the MAPt, if the aircraft crew cannot see the landing runway they must immediately initiate the missed 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 MDA, if the aircraft crew cannot see the landing runway they must immediately initiate the missed approach procedure.

    (d) 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.

37. An APV is a:

    (a) a circling to approach.

    (b) an approach with vertical guidance but with navigation performance worse than precision approaches.

    (c) a visual approach.

    (d) a RNAV non precision approach.

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

    (a) a non-precision approach.

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

    (c) an APV approach.

    (d) a precision approach.

39. A circling to approach with prescribed tracks...

    (a) consists of a sequence of visual tracks that guide the pilot when flying the circling procedure.

    (b) consists of a sequence of instrumental tracks to be avoided by the pilot when flying the circling procedure.

    (c) consists of a sequence of visual tracks to be avoided by the pilot when flying the circling procedure.

    (d) consists of a sequence of instrumental tracks that guide the pilot when flying the circling procedure.

40. Which of the following statements is correct with respect to the exit flight level (XFL) of an aircraft inside an ATC sector?

(a) The strategic controller of the following sector defines the XFL and the strategic controller of the current sector ensures it by clearing the aircraft to it.

(b) The ATC supervisor defines the XFL and the strategic controller ensures it by clearing the aircraft to it.

(c) The strategic controller defines the XFL and the tactical controller ensures it by clearing the aircraft to it.

(d) The strategic controller defines and ensures the XFL by clearing the aircraft to it.

41. In a NDB approach procedure, the decision to land or to execute a missed approach must be taken, at the latest...

(a) when reaching the DA.

(b) when reaching the MAPt.

(c) when reaching the OCA.

(d) when reaching the MDA.

42. Regarding the figure 1(a), the heading of the Delta aircraft is:

(a) approximately 45

(b) approximately 90

(c) approximately 130

(d) approximately 0

43. In which of the following procedures the final approach segment will start at a POINT and not a FIX?

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

(b) In a VOR approach (*).

(c) In an ILS approach.

(d) In a Localizer approach (*).

44. Which of the following legs could not be an RNAV leg?

(a) a fixed straight track between two fixes.

(b) all of them could be RNAV legs.

(c) a fixed radius track between two fixes.

(d) a VOR radial.

45. During a climb, when the pilot reaches the transition altitude, he/she shall...

(a) change the altimeter setting from QNH to STD.

(b) do nothing in particular regarding the altimeter setting.

(c) change the altimeter setting from STD to QFE.

(d) change the altimeter setting from STD to QNH.

46. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. Table 1 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) 1 minute.

(b) 10 minutes.

(c) 5 minutes.

(d) No delay.

47. 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.

48. What was the sector PON in the ITA ATC laboratory simulations?

(a) a sector of Barcelona CTR, for the West plan configuration.

(b) an en-route sector of Barcelona FIR/UIR.

(c) a departures sector of Barcelona TMA.

(d) an approach sector of Barcelona TMA.

49. Who is the responsible to publish a contingency instrumental departure for a given runway?

(a) The national safety agency.

(b) the aircraft operator.

(c) the aircraft manufacturer.

(d) the ANSP.

50. Figure 1(c) shows:

(a) A TCAS RA alert.

(b) A STCA alert.

(c) A TCAS TA alert.

(d) A MTCD alert.

51. The OCA...

(a) is a synonym of minimum descent altitude.

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

(c) is the safety margin between the aircraft and the highest obstacle in the final approach segement.

(d) None of the other answers are correct.

52. Two aircraft of the same aircraft model have their cruise at the same altitude, their only difference is the weight. Aircraft A is heavier than aircraft B. Regarding your WP1 project you can affirm that:

(a) the CCO of A will be longer than the CCO of B.

(b) both CCOs will be equally long.

(c) the CCO of B will be longer than the CCO of A.

(d) the longer CCO will depend on the actual aircraft model.

53. According to the following definitions: EOBT (Estimated Off-Block Time), ETOT (Estimated take-off time), ETO (Estimated Time Over), COBT (Calculated Off-Block Time), CTOT (Calculated Take-Off Time), CTO (Calculated Time Over); which of the following time relationships is correct for an aircraft that has been affected by a ground holding ATFM regulation:

(a) CTOT = EOBT + ground delay + Taxi Time

(b) CTOT = EOBT + COBT

(c) CTOT = EOBT + ground delay + Taxi Time + Trip Time

(d) CTOT = EOBT + ground delay

54. What is the primary inforamtion sent by aircraft operators to the CFMU?

(a) sector and airport capacities.

(b) aircraft flight plans.

(c) accurate weather data.

(d) slots and rerouterings.

55. If an aircraft loses its CFMU slot while on ground the controller should:

(a) Request the airline to fill a new flight plan in order to obtain an new slot.

(b) Clear the aircraft to take-off as soon as possible.

(c) Send a message to the CFMU informing about the delay and clear the aircraft to take-off as soon as possible.

(d) The controller does not consider the slots allocated to departing aircraft.

56. Consider figure 1(b), where the aircraft label is displayed in **blue** colour and all the airspace shown in the picture belongs to our sector. If we assume we are controlling an **en-route sector of Barcelona UIR**, then what does FL260 in the aircraft label means?

(a) The planned entry flight level to our sector.

(b) The last cleared flight level.

(c) The exit flight level of our sector.

(d) The desired cruise altitude of the aircraft.

57. What is the international radiotelephony **urgency** signal for aviation?

(a) The word *MayDay* repeated three times.

(b) The word *Pan-Pan*.

(c) The word *MayDay*.

(d) The word *Pan-Pan* repeated three times.

58. 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.

59. Which of the following controlled airspace zones is sized to accommodate, approximately, the intermediate and final segments of an instrumental approach procedure?

(a) The CTA.

(b) The ATZ.

(c) The TMA.

(d) The CTR.

60. Regarding the figure 1(a), the Delta aircraft is:

(a) at FL250 and descending, cleared to FL190 and with a planned exit level at FL160.

(b) at FL250 and descending, cleared to FL160 and with a planned exit level at FL190.

(c) at FL190 and descending, cleared to FL250 and with a planned exit level at FL160.

(d) at FL190 and descending, cleared to FL160 and with a planned exit level at FL250.

61. Pre-tactial ATFM should:

(a) Match long-term demand and needed ATC capacity.

(b) Define the national airspace policy and predetermined airspace structures.

(c) Manage current flights with existing ATC capacity.

(d) Balance flights next day with available ATC Capacity.

62. Which of the following ATFM initiatives is the most widely used in Europe and in the U.S.?

(a) Ground stop.

(b) Air holding.

(c) Call for release.

(d) Re-routering.

63. What is a Flow Management Position (FMP)?

(a) the European implementation of ATFM, managed by Eurocontrol.

(b) the CFMU system (or facility) that processes the flight plans sent by the aircraft operators.

(c) the results of running the CFMU PREDICT system the day before of operations (D-1) allowing Eurocontrol to define the ATFM measures that will be applied the D day.

(d) a special position within an ATC area control center devoted to ATFM issues and interfacing the center with the CFMU.

64. In which of the following processes, the class of an airspace (A, B, C, D, E, F or G) is determined?

(a) In AirSpace Management (ASM).

(b) In the provision of Air Traffic Services (ATS).

(c) In Air Traffic Flow Management (ATFM).

(d) In the provision of Air Information Services (AIS).

65. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. Table **??** 1 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 AFR022 according to the computed assisted slot allocation (CASA) algorithm?

(a) No delay.

(b) 4 minutes.

(c) 10 minutes.

(d) 19 minutes.

66. Schedule (or IATA) slots...

(a) are defined early in the morning in European airports, only if there is a demand/capacity imbalance.

(b) are defined early in the morning in European airports.

(c) are defined by the CFMU at any time when a demand/capacity imbalance exists.

(d) are defined in European airpots twice a year.

67. Which of the following CFMU systems deals with the flight plans sent by aircraft operators?

(a) The RCAT

(b) The ETFMS

(c) The IFPS

(d) The ENV

68. Which of the following CFMU systems is used to generate the network operations plan?

(a) The ETFMS

(b) The RPL

(c) The PREDICT

(d) The IFPS

69. Who decides if a IFR procedure is RNAV or conventional?

(a) The air traffic controller.

(b) The aircraft manufacturer.

(c) The procedure designer.

(d) The aircraft operator.

70. In which case you could find an approach procedure with no decision height?

    (a) In an ILS CAT-III approach.
    (b) In a circling to approach.
    (c) In an E category approach.
    (d) In a Heavy category approach.

71. The main objective of air traffic flow management (ATFM) is:

    (a) keep the forecast demand below estimated capacity in airports and airspace sectors by issuing different flow management initiatives
    (b) all the answers are correct.
    (c) develop a network of ATS routes and airspace structures to try to accommodate the forecast air traffic volumes
    (d) provide flight information services to civil aircraft according to the class of airspace

72. Airspace Management (ASM) is responsible for:

    (a) the analysis and allocation of ATS capacities.
    (b) the airspace design and modelling.
    (c) all the answers are correct.
    (d) the civil/military coordination.

73. What is a CBA (cross-border area)?

    (a) a FIR that spans over international boundaries
    (b) a CTR that spans over international boundaries
    (c) a TMA that spans over international boundaries
    (d) a type of flexible use of airspace that spans over international boundaries

74. What is the airspace flow program (AFP)?

    (a) the FAA ATFM program for airspace congestion.
    (b) the FAA pogram to modernise ATS.
    (c) the FAA program to modernise ATM.
    (d) the FAA ASM program for route congestion.

75. Which of the following statements is correct?

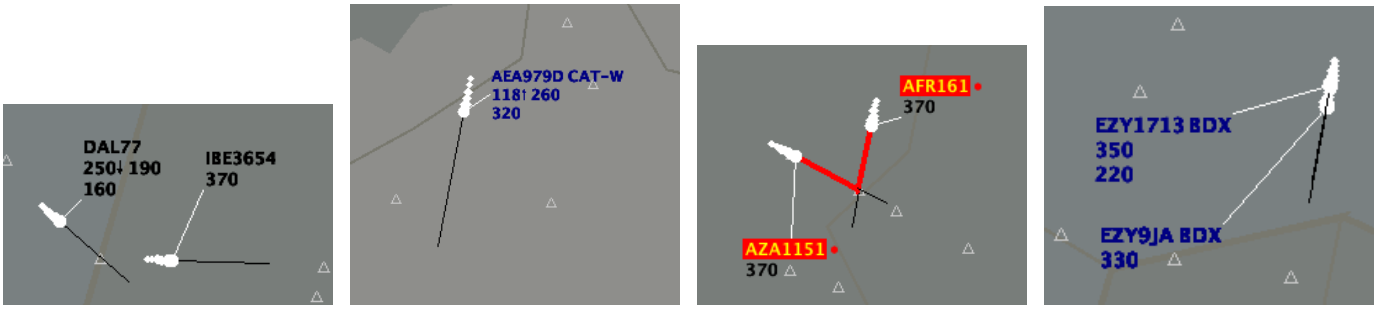
    (a) The answers marked with (*) are correct.
    (b) A VOR approach is always a NPA procedure (*).
    (c) None of the other answers are correct.
    (d) A NPA approach is always a VOR procedure (*).

76. An airspace sector has been regulated and its maximum capacity is set to 6 aircraft per hour. Table 1 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?

    (a) 1 minute.
    (b) 4 minutes.
    (c) 19 minutes.
    (d) No delay.

77. In the frame of ATS, who is responsible for executing transfers of aircraft between two ATC sectors?

    (a) The tactical controller.
    (b) The planner controller.
    (c) The supervisor controller.
    (d) None of the other answers is correct.



(a) (b) (c) (d)

Figure 1: ATC radar screenshots

Table 1

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

INFRAESTRUCTURES DEL TRANSPORT AERI (ITA)
Final Exam - Fall semester 2015

Correct answers

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

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