JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 00 00	INTERNATIONAL AGREEMENTS AND ORGANISATIONS	
010 01 01 00	The Convention of Chicago	
	<ul> <li>Historical background</li> <li>Explain the worldwide political situation and climate at the end of WW II and its influence on the establishment of the Convention on International Civil Aviation</li> </ul>	ICAO Doc 7300 / 6, Chicago, December 7.1944
010 01 01 01	Part I Air Navigation	
	<ul> <li>General principles</li> </ul>	
	<ul> <li>Describe the application of the following terms in Civil Aviation</li> </ul>	
	<ul> <li>Territory, Sovereignty, Suzerainty</li> <li>Territorial Waters, High Seas, according to the UN Convention of the High Seas</li> <li>Flight over territory of contracting states</li> <li>Define the following terms and explain how they apply to the Law of Nations (International Law)</li> </ul>	UN Convention of the High Seas, Oct. 7. 1982
	<ul> <li>Right for non scheduled flights; scheduled air services, cabotage, landing at customs airports, applicability of air regulations, rules of the air, search and rescue of ACFT</li> </ul>	
	<ul> <li>Describe the duties of ICAO Member States in relation to</li> </ul>	
	<ul> <li>Measures to facilitate air navigation; customs duty; conditions to be fulfilled with respect to ACFT; certificates of airworthiness, licenses of personnel, recognition of certificates and licenses, cargo restrictions, photographic apparatus; documents to be carried in ACFT</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	International standards and recommended practices	
	<ul> <li>Explain the obligations of each ICAO Member State towards:</li> </ul>	
	<ul> <li>Adoption of international standards and procedures; endorsements of certificates and licenses, validity of endorsed certificates and licenses; departure from international standards and procedures (notification of differences)</li> </ul>	
010 01 01 02	Part II The International Civil Aviation Organisation / ICAO	
	<ul> <li>Describe and explain the Structure and Objectives of the International Civil Aviation Organisation / ICAO. State whether parts of the organisation are assembled permanently or periodically</li> <li>Assembly</li> <li>Council, Secretary</li> <li>Commissions</li> <li>Explain the Duties of the</li> <li>ICAO Headquarters</li> <li>Regional structure and Offices</li> </ul>	ICAO Doc 7300 / 6, Chicago, December 7.1944
010 01 01 03	Regional structure and offices	
	Explain the need for regional structures	
	<ul> <li>Give an overview of the worldwide ICAO regions and the location of regional offices</li> </ul>	
	<ul> <li>Describe their specific duties compared with those of the ICAO Headquarters</li> </ul>	
	Give reasons for the establishment of Regional Supplementary Procedures	ICAO Doc. 7030

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 01 04	<u>Duties in relation to (ICAO Publications)</u>	40 A manage to the 10 A O
	<ul> <li>Give reasons for the establishment of the (18) ANNEXES to the Convention. Name their content.</li> </ul>	18 Annexes to the ICAO Convention
	<ul> <li>Give a brief summary of the content and the area of application of the following documents</li> </ul>	
	<ul> <li>Standards and Recommended Practices</li> </ul>	
	<ul><li>Docs, SARPS, PANSOPS</li></ul>	
	<ul> <li>Procedures for Air Navigation Services</li> </ul>	
	<ul> <li>Regional supplementary Procedures</li> </ul>	
	<ul> <li>Regional Air Navigation</li> </ul>	
	<ul> <li>Manuals and Circulars</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 02 00	Other international agreements (Multilateral and bilateral agreements)	
010 01 02 01	The International Air Transit- and Air Transport Agreement	
	- The Freedoms of the Air	
	<ul> <li>Explain the presentation of the Air Transit and the Air Transport Agreement at the Conference of Chicago 1944, and their role for the formulation of the "Five Freedoms of the Air" in Bilateral Agreements for regular Air Transport:</li> </ul>	
	<ul> <li>The Air Transit Agreement         Explain the two technical "Freedoms of the Air" on the basis of the International Air Services     </li> </ul>	Air Transit Agreement ICAO
	<ul> <li>The Air Transport Agreement</li> <li>Explain the three commercial "Freedoms of the Air" on the basis of the International</li> <li>Transport Agreement, Five Freedoms Agreement</li> </ul>	not printed anymore
	<ul> <li>The 6th, 7th, 8th and 9th Freedoms</li> <li>Describe the political and legal situation of Air Transport in Europe after the establishment of the EU and the subsequent need for the formulation of further "Freedoms of the Air"</li> </ul>	
	<ul> <li>Bilateral Agreements         Explain the reason for the existence of the Chicago Standard Form for Bilateral Agreements for regular Air Transport based on the definitions of the "Freedoms of the Air" defined in the Air Transit and the Air Transport Agreement     </li> </ul>	Digest of Bilateral Air Transport Agreements, ICAO Doc 9511

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 02 02	The Conventions of Tokyo, La Haye, Montreal Conventions and Supplements for the Suppression of Unlawful Acts against the Safety of Civil Aviation	
	<ul> <li>Analyse the facts that led to the Conventions and Supplements against the Safety of Civil Aviation and summarize briefly the content of the following documents:</li> </ul>	
	- Unlawful Acts Committed on Board Aircraft:	
	<ul> <li>Convention on Offences and Certain Other Acts Committed on Board Aircraft,</li> <li>Tokyo 14.9.1963</li> </ul>	ICAO Doc. 8364
	Suppression of Unlawful Seizure of Aircraft	
	<ul> <li>Convention for the Suppression of Unlawful Seizure of Aircraft,</li> <li>The Hague 16.12.1970</li> </ul>	ICAO Doc. 8920
	<ul> <li>Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation,</li> <li>Montreal 23.9.1971</li> </ul>	ICAO Doc. 8966
	<ul> <li>Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation</li> </ul>	
	<ul> <li>Supplementary to the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, Done at Montreal 23.9.1971, signed at Montreal 24.2.1988</li> </ul>	
	<ul> <li>Describe measures and actions taken by ICAO and ECAC in order to suppress Unlawful Acts against the Safety of Civil Aviation</li> </ul>	
	<ul> <li>Describe measures and actions to be taken by the PIC of an ACFT in order to suppress Unlawful Acts against the Safety of the ACFT</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 02 03	European organisations: Names, composition, objectives and relevant documents	
	<ul> <li>European Council, European Union / EU</li> <li>Explain the implications of the former EEC and the present EU with European Aviation on the basis of relevant documents such as:         <ul> <li>General, Structure 91 / 3922</li> <li>EWG, 16.12.91</li> <li>92 / 2407 EWG, 23.7.92</li> </ul> </li> <li>Market, European Regional Air Traffic         <ul> <li>Licensing</li> <li>91 / 670</li> <li>EWG, 16.12.91</li> <li>Safety</li> <li>94 / 56</li> <li>EG, 21.11.94</li> <li>(Accident Investigation)</li> </ul> </li> <li>European Civil Aviation Conference / ECAC         <ul> <li>Give a brief summary of the history of ECAC</li> <li>Explain the relevant content of basic ECAC documents, such as:</li></ul></li></ul>	ECAC Doc 20, ICAO Doc 7676 ICAO / ECAC Doc 7695 ICAO / ECAC Doc 8056,

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>JAA / Joint Aviation Authorities</li> <li>Explain the reasons for the foundation of the JAA at the Convention of Cyprus on Sept. 11.1990</li> <li>Give a brief description of the Organisation</li> <li>Describe</li> <li>the position of the National Aviation Authorities / NAAs within the JAA</li> <li>the relationship and harmonisation with other International Organisations such as ICAO, regional and national Organisations</li> <li>Explain the reasons for the establishment of the JAR Documents</li> <li>Give an overview of the JAR Publications</li> </ul>	Convention of Cyprus September 11. 1990
	<ul> <li>Eurocontrol</li> <li>Give the reason for the Convention relating to Co-operation for the Safety of Air Navigation (Eurocontrol)</li> </ul>	Eurocontrol Convention Brussels, Dec 13. 1969

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 02 04	Warsaw convention and associated documents (Multilateral Conventions, Protocols and Agreement / Private Law)	
	<ul> <li>Analyse and describe, on the basis of the following documents, the Warsaw System of Conventions,</li> <li>Protocols and Agreements, designed to cover liability towards persons and goods</li> </ul>	
	<ul> <li>Convention for the Unification of Certain Rules Relating to International Carriage by Air, Warsaw,</li> <li>October 2. 1929</li> </ul>	Original in French
	<ul> <li>Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air, The Hague, September 28. 1955, cited as the Hague Protocol.</li> </ul>	Original in French ICAO Doc 7632
	<ul> <li>Convention Supplementary to the Warsaw Conventionfor the Unification of Certain Rules Relating to International Carriage by Air Performed by a Person other than the Contracting Carrier, Guadalajara September 18. 1961</li> </ul>	Original in French ICAO Doc 8181
	<ul> <li>Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air, signed at Warsaw on October 12,1929 as Amended by the Protocol, Done at The Hague on September 28. 1955, signed at Guatemala City on March 8. 1971</li> </ul>	ICAO Doc 8932
	<ul> <li>Additional Protocols No.1 - 4 to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air, signed at Warsaw on October 12. 1929</li> </ul>	ICAO Doc 9145, 9146, 9147, 9148
	<ul> <li>Explain the legal significance of the issue of a passenger ticket and / or baggage / cargo documents</li> </ul>	
	<ul> <li>Describe the consequences for an airline / the PIC when a passenger ticket is not issued</li> </ul>	
	<ul> <li>Describe present developments and situation subsequent to the implementation of the IATA Intercarrier Agreement of Kuala Lumpur, October 31.1995</li> </ul>	Agreement of Kuala Lumpur, Oct 31.1995

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 01 03 00	The PIC's authority and responsibility regarding safety and security	
	<ul> <li>Explain the authority and responsibility of the PIC regarding safety and security on the basis of relevant documents</li> </ul>	
010 01 04 00	Operators and pilots liabilities towards persons and goods on the ground, in case of damage and injury caused by the operation of the aircraft	
	<ul> <li>Explain the different systems regarding the coverage for liability in European Countries</li> </ul>	
	<ul> <li>The Convention of Rome</li> </ul>	Convention of Rome
	<ul> <li>Analyse the different systems to cover liability towards persons and goods on the ground on the basis of the document known as the Convention of Rome and alternative provisions laid down in the legal system of Nations</li> </ul>	May 29. 1933
	<ul> <li>International Convention for the Unification of Certain Rules Relating to Damage Caused by ACFT to Third Parties on the Surface.</li> <li>Signed at Rome on 29 th May 1933</li> </ul>	
	<ul> <li>Protocol supplementing The Convention for the Unification of Certain Rules Relating to Damage Caused by ACFT to Third Parties on the Surface. Rome 1933, concluded at Brussels in 1938</li> </ul>	
	<ul> <li>Convention on Damage by Foreign Aircraft to Third Parties on the Surface, signed October 7.1952</li> </ul>	ICAO Doc 7364
	<ul> <li>Protocol to Amend the Convention on Damage Caused by Foreign Aircraft to third Parties on the Surface, Signed at Rome on October 7. 1952, Montreal September 23.1978</li> </ul>	ICAO Doc 9257

LEARNING OBJECTIVES	REMARKS
Commercial practices and associated rules (leasing)	
- European Organisations	
<ul> <li>Explain the implications of the relevant European documents on commercial practices in European Regional Air Traffic</li> <li>Explain the implications of the ECAC Recommendation ECAC / 21-1 on Leasing of ACFT</li> </ul>	EC Council Regulation 2407 / 92
<ul> <li>WTO / GATS</li> <li>Explain the impact of the regulations of the worldwide trade Organisations WTO and their regulations GATS</li> </ul>	GATS
<ul> <li>Describe the consequences of the General Arrangement of Trade and Services for aviation on the basis of Art 2, 3, 5, 16, 17, of the treaty</li> </ul>	
Rights in Aircraft on Air Traffic	
<ul> <li>Explain the legal system for the Recognition of Rights in Aircraft on Air Traffic on the basis of the following Documents:</li> </ul>	ICAO Doc 7620
<ul> <li>Convention for the Unification of Certain Rules Relating to the Precautionary Arrest of Aircraft,</li> <li>Signed at Rome on 29th May 1933</li> </ul>	
<ul> <li>Convention on the International Recognition of Rights in Aircraft,</li> <li>Geneva June 19. 1948</li> </ul>	
	Commercial practices and associated rules (leasing)  - European Organisations - Explain the implications of the relevant European documents on commercial practices in European Regional Air Traffic - Explain the implications of the ECAC Recommendation ECAC / 21-1 on Leasing of ACFT  - WTO / GATS - Explain the impact of the regulations of the worldwide trade Organisations WTO and their regulations GATS - Describe the consequences of the General Arrangement of Trade and Services for aviation on the basis of Art 2, 3, 5, 16, 17, of the treaty  - Rights in Aircraft on Air Traffic - Explain the legal system for the Recognition of Rights in Aircraft on Air Traffic on the basis of the following Documents: - Convention for the Unification of Certain Rules Relating to the Precautionary Arrest of Aircraft, Signed at Rome on 29th May 1933 - Convention on the International Recognition of Rights in Aircraft,

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 02 00 00	ANNEX 8 – AIRWORTHINESS OF AIRCRAFT (except helicopters)	
	- Foreword	
	<ul> <li>Explain how the airworthiness Standards of Annex 8 are related to the aeroplane performance operating limitations of Annex 6 Part I</li> </ul>	
	Essential Definitions	
	<ul> <li>Recall the following definitions so as to be able to choose the correct one from a set of different definitions:</li> </ul>	
	Aeroplane, aircraft, configuration, critical power-unit(s), design landing mass, design take-off mass, design taxiing mass, final approach and take-off area / FATO (except helicopters), landing surface, power- unit, pressure altitude, standard atmosphere (general concept only), State of design, State of registry, take-off surface	
	<ul><li>Administration</li></ul>	
	- State who is supposed to issue a Certificate of Airworthiness / C of A	
	- State who shall determine the continuity of an aircraft's airworthiness	
	Describe how a Certificate of Airworthiness can be renewed or shall remain valid	
	<ul> <li>Explain who takes the decision whether a damaged ACFT is airworthy or not</li> </ul>	
	Note: The standards of Annex 8 / Part III represent the core of the airworthiness regulations covered in Annex 8	
	State to which aeroplanes these Standards shall apply	
	<ul> <li>State to which parts of an aeroplane the Standards of Annex 8 Part III apply</li> </ul>	
	<ul> <li>State whether there is any Statement about the minimum number of power-units required for aeroplanes, the Airworthiness Standards of which are covered by Annex 8 Part III</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 03 00 00	ANNEX 7 – AIRCRAFT NATIONALITY AND REGISTRATION MARKS	
	- Foreword	
	State that ANNEX 7 contains only Standards but not Recommendations	
	- Essential Definitions:	
	<ul> <li>Recall the following definitions so as to be able to choose the correct one from a set of different definitions:</li> </ul>	
	Aeroplane, aircraft, heavier-than-air aircraft, State of registry	
	Nationality, common and registration marks to be used	
	<ul> <li>Explain the combination of nationality and registration marks (sequence, use of hyphen)</li> </ul>	
	<ul> <li>State who is responsible for assigning registration marks and how registration marks may be composed</li> </ul>	
	Certificate of registration	
	<ul> <li>Describe where the certificate of registration shall be kept at all times</li> </ul>	
	ACFT Nationality and Registration Marks	
	State where a list of the ACFT nationality and common marks has been used	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 03 00 00	Differences between national regulations	
	Differences between the national regulations and practices of States and the corresponding international Standards contained in ANNEX 7	
	- Indicate in which form ANNEX 7 contains information concerning	
	<ul> <li>Contracting States which have notified ICAO of differences</li> </ul>	
	<ul> <li>Contracting States which have notified ICAO that no differences exist</li> </ul>	
	<ul> <li>Contracting States from which no information has been received</li> <li>Summary of differences</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 04 00 00	ANNEX 1 – PERSONNEL LICENSING	
	Status of ANNEX components	ICAO ANNEX 1
	<ul><li>Define the term "Standard"</li></ul>	
	<ul> <li>Define the term "Recommended Practice" or "Recommendation" respectively</li> </ul>	
	<ul> <li>Essential Definitions (as far as not defined in JAR-Documents)</li> <li>Recall the following so as to be able to choose the correct one from a set of different</li> </ul>	
	definitions:	
	Aeroplane, aircraft, aircraft - category, aircraft certificated for single-pilot operation, aircraft - type of, certify as airworthy (to), co-pilot, dual instruction time, flight crew member, flight plan, flight procedures trainer, flight simulator, flight time, instrument flight time, instrument ground time, instrument time, maintenance, medical assessment, pilot (to), pilot-in-command, rating, rendering (a license) valid, synthetic flight trainer (flight simulator, flight procedures trainer, basic instrument flight trainer)	
	JAR-FCL - Flight Crew Licensing	JAR-FCL 1
	<ul> <li>Foreword and Preamble</li> </ul>	
	<ul> <li>Describe the relationship of JAR-FCL to ICAO ANNEX 1</li> </ul>	
	<ul> <li>State the meaning of the abbreviation "JAR-FCL"</li> </ul>	
	<ul> <li>Indicate the general content of JAR-FCL 1 / 2 / 3</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 04 00 00		
	<ul> <li>JAR-FCL 1 / General Requirements</li> <li>Recall the following definitions so as to be able to choose the correct one from a set of different definitions:</li> </ul>	JAR-FCL 1
	Category of ACFT, dual instruction time, flight time, flight time as SPIC, instrument time, instrument flight time, instrument ground time, MCC, multi-pilot-aeroplanes, night, PPL, CPL, proficiency check, rating, renewal, revalidation, skill test, solo flight time, type of ACFT	
	<ul> <li>Explain the requirements to act as a flight crew member of a civil aeroplane registered in a JAA</li> <li>Member State</li> </ul>	
	<ul> <li>State to what extent JAA Member States will accept licences etc. issued by other JAA Member States</li> </ul>	
	<ul> <li>List the maximum period of time for which the different licences may be issued</li> </ul>	
	<ul> <li>Describe the two factors which are relevant for the validity of a licence</li> </ul>	
	<ul> <li>State the requirement regarding a medical certificate</li> </ul>	
	<ul> <li>When applying for a licence</li> </ul>	
	<ul> <li>When exercising the privileges of a licence</li> </ul>	
	<ul> <li>Explain why a Pilot shall not exercise the privileges of a licence, related ratings or authorisations when he is aware of any decrease in medical fitness</li> </ul>	
	<ul> <li>List the restrictions for licence holders with an age of 60 years or more</li> </ul>	
	Define the term "State of licence Issue"	
	<ul> <li>Explain the term "Normal Residency" for normal circumstances</li> </ul>	
	<ul> <li>Describe the specifications for flight crew licences as mentioned in Appendix 1 to JAR-FCL 1.075</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 04 00 00	IAD FOL 4 (Occurrencial Dilettices of (Assessing) CDI (A)	
	<ul> <li>JAR-FCL 1 / Commercial Pilot Licence (Aeroplane) - CPL(A)</li> </ul>	JAR-FCL 1
	<ul> <li>Name the minimum age at which one may obtain a CPL(A)</li> </ul>	
	<ul> <li>State the class of medical certificate by which an applicant for a CPL(A) shall prove the required medical fitness</li> </ul>	
	<ul> <li>Name the kind of medical certificate required when exercising the privileges of a CPL(A)</li> </ul>	
	<ul> <li>State the class of aeroplane on which a CPL(A) holder has the privilege to act as PIC in Commercial Air Transport</li> </ul>	
	<ul> <li>State which pilot's licence is required to act as co-pilot in Commercial Air Transportation</li> </ul>	
	– JAR - FCL 1 / Airline Transport Pilot Licence (Aeroplane) - ATPL(A)	
	<ul> <li>Name the minimum age for an ATPL(A)</li> </ul>	
	<ul> <li>State the class of medical certificate required for an ATPL(A)</li> </ul>	
	<ul> <li>Describe the privileges of the holder of an ATPL(A) with regard to aeroplanes engaged in Air Transportation</li> </ul>	
	<ul> <li>State the total flight experience required for an ATPL(A)</li> </ul>	
	<ul><li>JAR - FCL 1 / Ratings</li></ul>	
	<ul> <li>Explain the requirements for Class- Type Ratings, Instrument Flight and Instructor Ratings laid down in the JAR-FCL</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 04 00 00	<ul> <li>JAR-FCL 3 / Medical Requirements</li> <li>Describe the relevant content of JAR-FCL 3 - Medical Requirements (administrative parts and requirements related to licensing, only)</li> </ul>	JAR-FCL 3

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 05 00 00 010 05 01 00	RULES OF THE AIR (based on ANNEX 2)  ANNEX 2	Differences in Doc. 7030 - Regional Supplementary Procedures
	<ul> <li>Essential Definitions</li> <li>Recall the definitions issued in ANNEX 2 so as to be able to choose the correct one from a set of different definitions except:         <ul> <li>acrobatic flight, air-ground control radio station, air taxiing, flight status, unmanned free balloon</li> </ul> </li> <li>Applicability of the Rules of the Air         <ul> <li>Explain to what extent the ICAO Rules of the Air apply in general</li> <li>Explain to what extent the ICAO Rules of the Air apply over the High Seas</li> <li>State the three possible rules which must be complied with on the movement area of an AD or when in flight</li> <li>State who decides about flying IFR or VFR in VMC</li> <li>State who aboard an ACFT is primarily responsible for the operation of the ACFT in accordance with the Rules of the Air</li> <li>Indicate under what circumstances departure from the Rules of the Air may be allowed</li> <li>Explain the duties of the PIC concerning pre-flight actions in case of an IFR flight</li> <li>State who has the final authority as to the disposition of the ACFT</li> </ul> </li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 05 01 00	<ul> <li>Explain the interrelation between intoxicating liquor, narcotics or drugs and the assignment to act as a flight crew member</li> </ul>	
	General Rules	
	<ul> <li>State the basic requirements for minimum height over congested areas of cities, towns or settlements or over an open-air assembly of persons</li> </ul>	
	<ul> <li>Define when the cruising levels shall be expressed in terms of FLs</li> </ul>	
	<ul> <li>Define under what circumstances cruising levels shall be expressed in terms of altitudes</li> </ul>	
	<ul> <li>Explain the limitation for proximity to other ACFT and the Rules for the Right-of-Way, including holding at taxi-holding positions and lighted stop bars</li> </ul>	
	<ul> <li>Describe the significance of Light Signals displayed to and by ACFT</li> </ul>	
	<ul> <li>Describe the requirements for simulated instrument flights</li> </ul>	
	<ul> <li>Indicate the basic rules for an ACFT operating on and in the vicinity of an AD</li> </ul>	
	<ul> <li>Give a survey of the requirements for the submission of a flight plan (PLN)</li> </ul>	
	<ul> <li>Describe the contents of a flight plan (PLN)</li> </ul>	
	<ul> <li>Explain the considerations concerning changes to a flight plan (PLN)</li> </ul>	
	<ul> <li>State how an arrival report shall be made after landing by a flight for which a flight plan (PLN) has been submitted covering the entire flight or the remaining portion of a flight to the destination AD</li> </ul>	
	<ul> <li>Describe which items must be included in an arrival report</li> </ul>	

REF NO	
Describe the standard time as used in aviation  State for which flights an ATC CLR shall be obtained  State how a pilot may request an ATC CLR  State the action to be taken if an ATC CLR is not satisfactory to a PIC  Describe the possible reasons for not adhering to a current flight plan  State the deviation from TAS, to be reported to the appropriate ATS Service Unit  State the flight time deviation for the estimate over the next RP, that must be reported to the appropriate ATS unit  Describe the required actions to be carried out, if the continuation of a controlled VFR flight in VMC is not practicable anymore  Describe the provisions for transmitting a position report to the appropriate air traffic services unit including time of transmission and normal content of the message  Describe the necessary action of an ACFT when experiencing COM failure  State what information an ACFT being subjected to unlawful interference shall give to the appropriate ATS unit  Explain why ICAO urges the Contracting States to apply ICAO recommendations concerning interceptions of civil aircraft in a uniform manner  State the deviation from TAS, to be reported to the appropriate ATS Service Unit	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 05 01 00	<ul> <li>State the flight time deviation of an estimate for the next RP, that has to be reported to the appropriate ATS unit</li> <li>Describe the required actions to be carried out, if the continuation of a controlled VFR flight in VMC is not practicable anymore</li> <li>Describe the provisions for transmitting a position report to the appropriate air traffic services unit including time of transmission and normal content of the message</li> <li>Describe the necessary action of an ACFT when experiencing COM failure</li> <li>State what information an ACFT being subjected to unlawful interference shall give to the appropriate ATS unit</li> <li>Explain why ICAO urges the Contracting States to apply ICAO recommendations concerning interceptions of civil aircraft in a uniform manner</li> <li>Visual Flight Rules / VFR</li> <li>Recall the entire set of Visual Flight Rules as contained in the appropriate Chapter 4 of ANNEX 2, with special emphasis laid upon VFR-minima and VFR-cruising levels as well as the general application of the classification of Airspace</li> </ul>	
	<ul> <li>Instrument Flight Rules / IFR</li> <li>Give complete information about the required minimum levels for IFR-flights</li> <li>State the rules which must be followed when changing from IFR to VFR</li> <li>State the rules for IFR-flights within and outside CTA with special emphasis upon the cruising levels to be used</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 05 01 00	- Signals	Appendix 1 to ANNEX 2
	<ul> <li>Recall the entire set of signals described in Appendix 1 to ANNEX 2, except marshalling signals for helicopters (No. 16 through 20)</li> </ul>	
	- Interception of Civil Aircraft	Appendix 2 to ANNEX 2
	<ul> <li>State the primary task for interception of civil ACFT by military ACFT</li> </ul>	
	<ul> <li>List the possible reasons for intercepting a civil ACFT besides determining its identity</li> </ul>	
	<ul> <li>State what primary reaction is expected of an intercepted ACFT</li> </ul>	
	<ul> <li>State which FREQ should primarily be tried in order to contact the intercepting ACFT</li> </ul>	
	<ul> <li>State on which Mode and Code a transponder on board the intercepted ACFT should be operated</li> </ul>	
	Tables of cruising levels	Appendix 3 to ANNEX 2
	<ul> <li>Show your capability to use the tables of cruising levels contained in Appendix 3 of ANNEX 2</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 06 00 00	PROCEDURES FOR AIR NAVIGATION SERVICES / AIRCRAFT OPERATIONS  DOC 8168 / Vol. 1 – Flight Procedures	Differences in Doc. 7030 - Regional Supplementary Procedures
010 06 01 00	Foreword  - Translate the term "PANS-OPS" into plain language  - State the general aim of Doc. 8168 (PANS-OPS)	Doc. 8168 (PANS-OPS), Volume I Flight Procedures
010 06 02 00	Essential Definitions and Abbreviations     Essential Definitions     Recall all definitions includes in Doc. 8168 1 to such an extent that you can choose the correct definition from a series of offered samples	Doc. 8168 Vol I Chapter 1
	<ul> <li>Essential Abbreviations used in Doc. 8168</li> <li>Interpret all abbreviations as shown in Chapter 2</li> </ul>	Doc. 8168 Vol 1 Chapter 2 Abbreviationsf

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 06 03 00	Departure Procedures	
	General Criteria	
	<ul> <li>Explain whether or not the departure procedures described in this Document assume that all engines are operating</li> </ul>	
	<ul> <li>Name, in general, the factors which dictate the design of an instrument departure procedure</li> </ul>	
	<ul> <li>Decode the abbreviation "ATTCS</li> </ul>	
	<ul> <li>Explain in which situations the criteria for omni-directional departures are applied</li> </ul>	
	<ul> <li>Describe the alternative solution for flights which can only depart at higher speeds than prescribed for turning departures (i.e. in case of required turns of more than 15° to avoid an obstacle)</li> </ul>	
	Standard Instrument Departures	
	<ul> <li>Define the term "straight departure" as opposed to a "turning departure"</li> </ul>	
	<ul> <li>State who is responsible for the development of contingency procedures required to cover the case of engine failure or an emergency in flight which occurs after V<sub>1</sub></li> </ul>	
	Omni-directional Departures	
	<ul> <li>Explain in which case the "omni-directional method" is used to develop the departure criteria</li> </ul>	
	<ul> <li>Describe the possible solutions if obstacles do not permit development of omni-directional procedures</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	- Published Information - State the conditions that must be fulfilled if a departure route is to be labeled an RNAV route - Describe how restrictions for omni-directional departures will be expressed in the appropriate publication  - Area Navigation (RNAV) Departure Procedures Based on VOR / DME - Explain the connection between RNAV departure procedures based on VOR/DME and RNAV approach procedures based on VOR / DME  - Use of FMS / RNAV Equipment to Follow Conventional Departure Procedures - State the provisions for using FMS / RNAV equipment when flying conventional departure procedures	REWARKS

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 06 04 00	Approach Procedures	
010 06 04 00	<ul> <li>General Criteria (except tables "Speeds for procedure calculations")</li> <li>Name the five possible segments of an instrument approach procedure</li> <li>State the maximum angle between the final approach track and the extended RWY centre-line to still consider a non-precision-approach as being a "Straight-In APP"</li> <li>State the minimum obstacle clearance provided by the minimum sector altitudes / MSA established for an AD</li> <li>Name the special task for pilots caused by the fact that instrument approach procedures are based on tracks</li> <li>Name the most significant performance factor influencing the conduct of instrument APP procedures</li> <li>State the basic information (or conditions) for establishing the five categories of typical ACFT in connection with the description of instrument APP procedures</li> <li>State the aim for using five well defined categories of typical ACFT when describing instrument APP procedures</li> <li>List the five categories of ACFT used in connection with instrument APP procedures</li> </ul>	
	<ul> <li>Explain OCA / H for a precision APP procedure, a non-precision APP procedure and a visual (circling) procedure</li> </ul>	
	<ul> <li>Describe, in general terms, how operational minima for landing are developed</li> </ul>	
	<ul> <li>Name the operational minima which are finally produced starting from OCA / H in case of precision approaches or non-precision approaches, respectively</li> </ul>	
010 06 04 00	- Explain when OCH is referring to THR ELEV and when to AD ELEV (differentiating between precision)	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	approach, non-precision approach and visual manoeuvring (circling))	
	<ul> <li>Relate the highest approach obstacle, the highest missed approach obstacle and the highest obstacle in circling area to precision approach, non-precision approach and visual manoeuvring</li> </ul>	
	<ul> <li>Translate the abbreviations used with the calculation of decision altitude, decision height,</li> <li>minimum descent altitude and minimum descent height into plain language:</li> </ul>	
	DA / DH / OCA / OCH / MDA / MDH / MOC / DA/H / OCA/H / MDA/H	
	<ul> <li>State the minimum obstacle clearance (fixed margin for all ACFT) with and without final APP fix for a non-precision approach</li> </ul>	
	Approach Procedure Design	
	<ul> <li>Describe how the vertical cross-section for each of the five approach segments is broken down into the various areas</li> </ul>	
	<ul> <li>State within which area of the cross-section the Minimum Obstacle Clearance (MOC) is provided for the whole width of the area</li> </ul>	
	<ul> <li>Define the terms IAF, IF, FAF, MAPt and TP</li> </ul>	
	<ul> <li>Name the area within which the plotted point of an intersection fix may lie</li> </ul>	
	<ul> <li>Explain by which factors the dimensions of an intersection fix are determined</li> </ul>	
	<ul> <li>State the accuracy of facilities providing track (VOR, ILS, NDB)</li> </ul>	
010 06 04 00		

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the "other fix tolerance factors":	
	<ul> <li>Surveillance Radar (Terminal Area Radar / TAR, En-route surveillance radar / RSR)</li> </ul>	
	- DME	
	<ul> <li>75 MHz Marker Beacon</li> </ul>	
	<ul><li>Fixes overhead a station (VOR, NDB)</li></ul>	
	Describe the basic information relating to approach area sectors	
	<ul> <li>State the optimum descent gradient (preferred for a precision approach) in degrees and percent</li> </ul>	
	Arrival and Approach Segments	
	<ul> <li>Name the five standard segments of an instrument APP procedure and state the beginning and end for each of them</li> </ul>	
	Describe where an ARR route normally ends	
	<ul> <li>State whether or not omni-directional or sector arrivals can be provided</li> </ul>	
	Explain the main task for the initial APP segment	
	<ul> <li>Describe the maximum angle of interception between the initial APP segment and the intermediate</li> <li>APP segment (provided at the intermediate fix) for a precision APP and a non-precision APP</li> </ul>	
	Describe the main task of the intermediate APP segment	
010 06 04 00		

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	State the main task of the final APP segment	
	<ul> <li>Name the two possible aims of a final APP</li> </ul>	
	<ul> <li>Explain the term "final approach point" in case of an ILS approach</li> </ul>	
	<ul> <li>State what happens if an ILS-GP becomes inoperative during the APP</li> </ul>	
	<ul> <li>Missed Approach</li> </ul>	
	<ul> <li>Name the three phases of a missed approach procedure and describe their geometric limits</li> </ul>	
	<ul> <li>Describe the main task of a missed approach procedure</li> </ul>	
	<ul> <li>State at which height / altitude the missed approach is assured to be initiated</li> </ul>	
	<ul> <li>Define the term "missed approach point (MAPt)"</li> </ul>	
	<ul> <li>Describe how an MAPt may be established in an approach procedure</li> </ul>	
	<ul> <li>State the pilot's reaction if, upon reaching the MAPt, the required visual reference is not established</li> </ul>	
	<ul> <li>Describe what a pilot is expected to do in the event a missed approach is initiated prior to arriving at the MAPt State whether the pilot is obliged to cross the MAPt at the height / altitude required by the procedure or whether he is allowed to cross the MAPt at an altitude / height greater than that required by the procedure</li> </ul>	
010 06 04 00	Visual manoeuvering (circling) in the vicinity of the AD	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe what is meant by "visual manoeuvring (circling)"	
	Describe how a visual manoeuvring (circling) area can be constructed	
	<ul> <li>Describe how a prominent obstacle in the visual manoeuvring (circling) area outside the final approach and missed approach area has to be considered for the visual circling</li> </ul>	
	<ul> <li>State for which types of ACFT the obstacle clearance altitude/height within an established visual manoeuvring (circling) area is determined</li> </ul>	
	<ul> <li>Describe how an MDA/H is specified for visual manoeuvring (circling) if the OCA /H is known</li> </ul>	
	<ul> <li>State the conditions to be fulfilled before descending below MDA / H in a visual manoeuvring (circling) approach</li> </ul>	
	<ul> <li>Describe why there can be no single procedure designed that will cater for conducting a circling approach in every situation</li> </ul>	
	<ul> <li>State how the pilot is expected to behave after initial visual contact during a visual manoeuvring (circling)</li> </ul>	
	<ul> <li>Describe what the pilot is expected to do if visual reference is lost while circling to land from an instrument approach</li> </ul>	
010 06 04 00	- Aera Navigation (RNAV) Approach Procedures based on VOR / DME	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the provisions that must be fulfilled before carrying out VOR / DME RNAV approaches	
	- Explain the disadvantages of the VOR / DME RNAV system	
	<ul> <li>List the factors on which the navigational accuracy of the VOR / DME RNAV system depends</li> </ul>	
	- State whether the VOR / DME / RNAV approach is a precision or a non-precision procedure	
	- Use of FMS / RNAV equipment to follow conventional non-precision approach procedures	
	<ul> <li>State the provisions for flying the conventional non-precision approach procedures using an available FMS / RNAV equipment</li> </ul>	
010 06 05 00	Holding Procedures	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>In-flight Procedures</li> </ul>	
	<ul> <li>Explain why deviations from the in-flight procedures of a holding established in accordance with Doc.</li> <li>8168 are dangerous</li> </ul>	
	<ul> <li>Describe how the right turns holdings (as described in Doc. 8168) can be transferred to left turns holding patterns</li> </ul>	
	Describe the shape and terminology associated with the holding pattern	
	<ul> <li>State the bank angle and rate of turn to be used whilst flying in a holding</li> </ul>	
	<ul> <li>Explain why pilots in a holding pattern should attempt to maintain tracks and how this can be achieved</li> </ul>	
	Describe where outbound timing begins in a holding pattern	
	- State where the outbound leg in a holding terminates if the outbound leg is based on DME	
	<ul> <li>Describe the three heading-entry-sectors for entries into a holding pattern and at the same time define the terms "parallel entry", "offset entry" and "direct entry"</li> </ul>	
	- State the still air time for flying the outbound entry heading with or without DME	
	<ul> <li>Describe what the pilot is expected to do when clearance is received specifying the time of departure from the holding point</li> </ul>	
010 06 05 00	Obstacle Clearance	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>Describe the layout of the basic holding area, entry area and buffer area of a holding pattern</li> </ul>	
	<ul> <li>Describe the layout of the basic holding area, entry area and buffer area of a holding pattern</li> <li>State which obstacle clearance is provided by a minimum permissible holding level referring to the holding area, the buffer area (general only) and over high terrain or in mountainous areas</li> </ul>	
010 06 06 00	Altimeter Setting Procedures	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	- Introduction	
	<ul> <li>Describe the two main objectives for altimeter settings</li> </ul>	
	<ul> <li>Define the terms "QNH" and "QFE"</li> </ul>	
	<ul> <li>Describe the different terms of altitude or flight levels respectively which are the references during climb or descent to change the altimeter setting from QNH to 1013,2 hPa and vice versa</li> </ul>	
	Basic Requirements	
	<ul> <li>Define the term "flight level / FL"</li> </ul>	
	State where flight level zero shall be located	
	<ul> <li>State the pressure interval by which consecutive flight levels shall be separated</li> </ul>	
	Describe how flight levels shall be numbered	
	Define the term "transition altitude"	
	<ul> <li>State how transition altitudes shall normally be specified</li> </ul>	
	<ul> <li>Explain how the calculated height of the transition altitude (which shall be as low as possible but normally not less than 900 m / 3000 ft above the AD) shall be expressed in practice</li> </ul>	
	<ul> <li>State where transition altitudes shall be published</li> </ul>	
	Define the term "transition level"	
010 06 06 00	State when the transition level is normally passed to ACFT	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>State how (in terms of altitudes or flight levels) the vertical position of aircraft shall be expressed at or below the transition altitude and how this shall be done at or above the transition level</li> </ul>	
	Define the term "transition layer"	
	<ul> <li>Describe when the vertical position of an aircraft passing through the transition layer shall be expressed in terms of flight levels and when in terms of altitude</li> </ul>	
	<ul> <li>State when the QNH altimeter setting shall be made available to departing ACFT</li> </ul>	
	<ul> <li>Explain when the vertical separation of aircraft during en-route flight shall be assessed in terms of altitude and when in terms of flight levels</li> </ul>	
	<ul> <li>Explain when, in air-ground communications during an en-route flight the vertical position of an ACFT shall be expressed in terms of altitude and when in terms of flight levels</li> </ul>	
	<ul> <li>Describe why QNH altimeter setting reports should be provided from sufficient locations</li> </ul>	
	<ul> <li>State how a QNH altimeter setting shall be made available to ACFT approaching a controlled AD for landing</li> </ul>	
	<ul> <li>State under which circumstances the vertical positioning of an ACFT above the transition level may be by reference to altitudes (QNH)</li> </ul>	
010 06 06 00	- Procedures Applicable to Operators and Pilots	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Name the three different "qualities" the altitudes or flight levels selected for a flight should have	
	<ul> <li>Describe a preflight operational test in case of QNH setting and in case of QFE setting including indication (error) tolerances referred to the different test ranges</li> </ul>	
	<ul> <li>State on which setting at least one altimeter shall be set prior to taking off</li> </ul>	
	<ul> <li>State where during climb the altimeter setting shall be changed from QNH to 1013,2 hPa</li> </ul>	
	<ul> <li>Describe when a pilot of an ACFT intending to land at an AD shall obtain the "number" of the transition level</li> </ul>	
	<ul> <li>Describe when a pilot of an ACFT intending to land at an AD shall obtain the actual QNH altimeter setting</li> </ul>	
	<ul> <li>State where the altimeter settings shall be changed from 1013,2 hPa to QNH during descent for landing</li> </ul>	
010 06 06 00	Simultaneous Operation on parallel or near-parallel RWY's	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the two basic modes, applicable to simultaneous parallel instrument approaches	ICAO Doc 8168 Part VII
	<ul> <li>Describe the following different operations:</li> <li>Simultaneous instrument departures</li> <li>segregated parallel approaches / departures</li> <li>semi-mixed and mixed operations</li> </ul>	
	<ul> <li>State what you understand by "NOZ" and "NTZ"</li> </ul>	
	<ul> <li>name the airborne requirements (equipment) for conducting parallel approaches</li> </ul>	
	<ul> <li>State which kind of approaches (Straight-in, Circling etc.) parallel approaches have to be conducted</li> </ul>	
	<ul> <li>State whether or not radar monitoring is required for simultaneous independent parallel approaches and how weather conditions are of influence thereto</li> </ul>	
	<ul> <li>State the maximum angle of interception for ILS localizer CRS on MLS final APP Track in case of simultaneous independent parallel approaches</li> </ul>	
	<ul> <li>State conditions that must be met before vertical separation between two ACFT flying simultaneous independent approaches can be reduced below 300 m / 1000 feet</li> </ul>	
	<ul> <li>Describe the special conditions for tracks on missed approach procedures and departures in case of simultaneous parallel operations</li> </ul>	
010 06 07 00	Secondary Surveillance RADAR (SSR) Transponder Operating Procedures	Regional Supplementary Procedures see Doc. 7030

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Operation of Transponders	
	<ul> <li>State when and where the pilot shall operate the transponder provided the ACFT carries a serviceable transponder</li> </ul>	
	<ul> <li>State on which mode and code the pilot shall operate the transponder in the absence of any ATC directions or regional air navigation agreements (except in cases of emergency, COM failure or unlawful interference)</li> </ul>	
	<ul> <li>Indicate in what circumstances the pilot shall operate the Mode C, unless otherwise directed by ATC, provided the Transponder of the ACFT is equipped with Mode C</li> </ul>	
	<ul> <li>State whether or not the pilot shall "SQUAWK IDENT" at his own discretion</li> </ul>	
	<ul> <li>Describe the accuracy with which level information shall be given by the pilot in air / ground RTF communications whilst the transponder is operated in Mode C</li> </ul>	
	<ul> <li>State to which mode and code a pilot shall set the transponder of his ACFT</li> </ul>	
	<ul> <li>in a state of emergency or indicating a COM failure</li> </ul>	
	<ul> <li>if his ACFT is subject to unlawful interference in flight</li> </ul>	
	<ul> <li>Describe the consequences following a transponder failure in flight</li> </ul>	
	<ul> <li>State the primary action of the pilot in the case of a unservicable transponder before departure when no repair or replacement at this aerodrome is possible</li> </ul>	
010 06 07 00	– Phraseology	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	State how pilots shall acknowledge mode / code setting instructions	
	Operation of ACAS equipment	
	<ul><li>Define the term "ACAS"</li></ul>	
	Describe the intention of ACAS indications	
	<ul> <li>Describe what reaction is expected by a pilot who deviates from ATC instructions or the CLR in response to a resolution advisory</li> </ul>	
010 07 00 00	ANNEX 11 - AIR TRAFFIC SERVICES / ATS	Differences in Doc. 7030 - Regional Supplementary

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 01 00	- Essential Definitions	Procedures
	<ul> <li>Recall the following definitions to such an extent that you can choose the correct one from a series of offered samples, all definitions given in ANNEX 11 except the following ones:</li> </ul>	
	accepting unit, accuracy, air-taxiing, conference communications, cyclic redundancy check (CRC), data quality, geodetic datum, integrity (aeronautical data), printed communications, station declination	
010 07 01 01	- General	
	<ul> <li>Name the objectives of the air traffic services / ATS</li> </ul>	
	- Describe	
	<ul> <li>the three basic air traffic services / ATS</li> </ul>	
	<ul> <li>the three basic air traffic control services / ATC</li> </ul>	
	<ul> <li>State the designation for those portions of the airspace where flight information service / FIS and alerting service will be provided</li> </ul>	
	<ul> <li>State the designations for those portions of the airspace where ATC service will be provided</li> </ul>	
	<ul> <li>Indicate whether or not CTAs and CTRs designated within a FIR shall form part of that FIR</li> </ul>	
010 07 01 01	<ul> <li>Distinguish between the various classes of airspace (A through G) and explain whether</li> <li>IFR or VFR flights are permitted</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>what kind of air traffic services are offered (e.g. air traffic control service, separation, traffic information, air traffic advisory service, flight information service)</li> </ul>	
	<ul> <li>State the meaning of the expressions RNP 4, RNP 1 etc. (see also definitions)</li> </ul>	
	Describe the purpose for establishing FICs	
	State the reason for the establishment of ATC units	
	- Airspace	
	Explain which airspace shall be included in an FIR	
	<ul> <li>Name the lower limit of a CTA as far as ICAO standards are concerned</li> </ul>	
	<ul> <li>State whether or not the lower limit of a CTA has to be established uniformly</li> </ul>	
	<ul> <li>Explain why an UIR or Upper CTA should be delineated to include the Upper Airspace within the lateral limits of a number of lower FIR or CTAs</li> </ul>	
	Describe in general the lateral limits of CTRs	
	<ul> <li>State the minimum extension (in NM) of the lateral limits of a CTR</li> </ul>	
	<ul> <li>State the upper limits of a CTR located within the lateral limits of a CTA</li> </ul>	
010 07 01 01	- Minimum Flight Altitudes	
	<ul> <li>State where MNM Flight Altitudes shall be determined (and promulgated) and who is responsible for this</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>Emergencies</li> <li>Describe the operation of a transponder (Mode and Code) in case of distress, emergency or unlawful interference</li> <li>State on which emergency frequency a pilot can expect the ATS to contact him in case of an interception</li> </ul>	
	<ul> <li>Time units</li> <li>Name the time units used by ATS</li> </ul>	
010 07 01 02	Air Traffic Control Service / ATC  - Provision of ATC	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Name all classes of airspace in which ATC shall be provided	
	<ul> <li>Name the ATS units providing ATC service (aera control centre, approach control service, aerodrome control tower)</li> </ul>	
	Describe which unit(s) may be assigned with the task to provide specified services on the apron	
	Name the purpose of clearances and informations issued by an ATC unit	
	<ul> <li>Describe the aim of clearances issued by ATC with regard to IFR, VFR or special VFR flights and refer to the different airspaces</li> </ul>	
	- Separation	
	- State how separation between ACFT shall be obtained by an ATC unit	
	State the ICAO documents in which details of current separation minima are prescribed	
	- Clearances	
	List the various (five possible) parts of an ATC clearance	
	Describe the various aspects of clearance co-ordination	
	<ul> <li>State how ATC shall react when it becomes apparent that traffic, additional to that one already accepted, can not be accommodated (or only at a given time)</li> </ul>	
010 07 01 02	Control of persons and vehicles at aerodromes	
	Explain why the movement of persons, vehicles and towed ACFT on the manoeuvring area	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	of an AD shall be controlled by the AD TWR (as necessary)	
010 07 01 03	Flight Information Service / FIS	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Applicability and scope of FIS	
	- State for which aircraft FIS shall be provided	
	State whether or not FIS shall include the provision of pertinent SIGMET and AIRMET information	
	State which informations FIS shall include in addition to SIGMET and AIRMET information	
	<ul> <li>Indicate which other information the FIS shall include in addition to the special informations given in ANNEX 11</li> </ul>	
	Operational FIS broadcasts	
	Name the three major types of operational FIS broadcasts	
	- Give the meaning of the acronym ATIS in plain language	
	<ul> <li>Show that you are acquainted with the basic conditions for transmitting an ATIS as indicated in ANNEX 11</li> </ul>	
	Mention the four possible messages	
	<ul> <li>List the basic informations concerning ATIS broadcasts (e.g. frequencies used, number of ADs included, updating, identification, acknowledgment of receipt, language and channels, ALT setting)</li> </ul>	
010 07 01 04	– Alerting Service	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 01 05	<ul> <li>Indicate the ACFT to which alerting service shall be provided</li> <li>Name the unit which shall be notified by the responsible ATS unit immediately an ACFT is considered to be in a state of emergency</li> <li>Name the three stages of emergency and describe the basic conditions for each kind of emergency</li> <li>Show knowledge of the meaning of the expressions INCERFA, ALERFA and DETRESFA</li> <li>Describe limiting conditions for the information of ACFT in the vicinity of an ACFT being in a state of emergency</li> <li>Appendix 1 to ANNEX 11</li> </ul>	
	<ul> <li>Describe the reason for establishing a system of route designators and required navigation performance (RNP)</li> <li>State whether or not a prescribed RNP type is considered an integral part of the ATS route designator</li> <li>Show general knowledge of the composition of an ATS route designator</li> <li>Appendix 4</li> <li>Show knowledge of all information concerning ATS airspace classification (as described in Appendix 4 to ANNEX 11)</li> </ul>	
010 07 02 00	Missing Number	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	This number is missing in AMC-FCL 1.470	
010 07 03 00	Rules of the air and air traffic service – Doc 4444 - RAC / 501/11	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	(Differences in Doc. 7030 - Regional Supplementary Procedures)	
	<ul> <li>Explain in plain language, the meaning of the abbreviation "PANS-RAC".</li> </ul>	
	- Essential Definitions	
	<ul> <li>Recall all definitions given in Doc 4444 to such an extent that you can choose the correct one from a series of offered samples except the following:</li> </ul>	
	accepting unit / controller, AD taxi circuit, aeronautical fixed service (AFS), aeronautical fixed station, air-taxiing, allocation, approach funnel, assignment, data convention, data processing, discrete code, D-value, flight status, ground effect, normal operating zone (NOZ), no transgression zone, receiving unit / controller, sending unit / controller, transfer of control point, transferring unit / controller, unmanned free balloon	
	Relationship to other documents	
	Describe the relationship between Doc 4444 and other documents	
010 07 03 01	General Provisions	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>State whether or not the procedures described in Doc. 4444 are directed exclusively to ATS services personnel</li> </ul>	
	<ul> <li>State whether or not a clearance issued by ATC units does include prevention of collision with terrain and if there is one exception to this. Name this exception</li> </ul>	
	<ul> <li>State how a flight plan should be submitted prior to departure and to which ATS unit it should normally be delivered</li> </ul>	
	<ul> <li>State, for a controlled or an uncontrolled flight for which a flight plan has been submitted, the delay after which a flight plan shall be amended or a new flight plan filed</li> </ul>	
	– Explain	
	<ul> <li>how the change from IFR to VFR can be initiated by a PIC</li> </ul>	
	<ul> <li>how the appropriate ATS unit shall reply upon a request for a change from IFR to VFR</li> </ul>	
	<ul> <li>what kind of known traffic conditions are the basis for ATC clearances</li> </ul>	
	<ul> <li>the procedures to be followed or to be expected when an ATC clearance is not suitable to the PIC of an ACFT</li> </ul>	
	<ul> <li>the general aim for the issuance of ATC clearances by air traffic services units</li> </ul>	
	<ul> <li>how a PIC (or an operator) may be involved if traffic, additional to that already accepted, can not be accommodated within a given period of time</li> </ul>	
010 07 03 01		

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the complete ALT setting procedures, which include	
	<ul> <li>Expressing the vertical position of an ACFT in the vicinity of an AD</li> </ul>	
	<ul> <li>Defining the expressions transition level and transition altitude (see definitions)</li> </ul>	
	<ul> <li>Indicating the expression of vertical position when ascending or descending through the transition layer</li> </ul>	
	<ul> <li>Describing the reasons which call for the expression of the vertical position of the ACFT in terms of height above THR ELEV</li> </ul>	
	<ul> <li>Stating how the vertical position of an ACFT shall be expressed in case of en route flights</li> </ul>	
	<ul> <li>Mentioning who shall establish the transition level to be used in the vicinity of the relevant AD</li> </ul>	
	- Explaining the term "Transition Level / TL"	
	<ul> <li>Stating whether or not the pilot can request the TL to be included in the APP CLR</li> </ul>	
	<ul> <li>Describing when QNH ALT setting will be given to arriving or departing ACFT</li> </ul>	
	<ul> <li>Stating when the QFE shall <b>not</b> refer to the AD ELEV</li> </ul>	
	<ul> <li>Stating whether or not the ALT setting is rounded up and if so to what extent this is done</li> </ul>	
	<ul> <li>Describe when and where the term "Heavy" shall be included in an initial RTF message and to what class of ACFT it is applicable</li> </ul>	
	<ul> <li>State where the specifications for wake turbulence categories can be found</li> </ul>	
	Explain the meaning of the abbreviation "MLS"	
010 07 03 01		

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	State when the appropriate MLS capability designator shall be included in RTF contact	
	<ul> <li>Describe where position reports shall be made on routes defined by designated significant points</li> </ul>	
	<ul> <li>Describe the contents of position reports as well as the possible exceptions pending upon regional air navigation agreements or when using SSR Mode C</li> </ul>	
	<ul> <li>Explain the meaning of the abbreviation ADS</li> </ul>	
	Describe how ADS reports shall be made	
	- State to which unit an ADS report shall be made	
	Explain the meaning of the code word AIRPROX	
	<ul> <li>Describe when an Air Traffic Incident Report / ATIR has to be established and to whom it should be submitted</li> </ul>	
	<ul> <li>Explain the meaning of the abbreviation "ACAS"</li> </ul>	
	<ul> <li>Describe the difference in providing air traffic services to ACFT equipped with ACAS and to ACFT not equipped with ACAS</li> </ul>	
	<ul> <li>Report whether or not ATC controllers will normally be informed about the ACAS capability of an ACFT</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 02	Area Control Service / ACC	
	<ul> <li>General provisions for the separation of controlled traffic</li> <li>Name the two basic kinds of separation used in aviation</li> <li>Discriminate the type of separation provided within the various classes of airspace</li> <li>between flights of all types of flight rules</li> <li>between flights according to IFR</li> <li>between flights according to IFR and flights according to VFR</li> <li>between flights according to IFR and flights according to Special VFR</li> <li>between Special VFR flights</li> </ul>	
	<ul> <li>Vertical separation</li> </ul>	
	Describe how vertical separation is obtained	
	State the required vertical separation minimum	
	<ul> <li>Describe how minimum flight altitudes and lowest usable flight levels correspond to each other</li> </ul>	
	<ul> <li>Describe how the cruising levels of ACFT flying to the same destination at the expected approach sequence are correlated between each other</li> </ul>	
	<ul> <li>Name the conditions that must be adhered to, when two ACFT are cleared to maintain a specified vertical separation between them during climb or descent</li> </ul>	

- Horizontal separation - List the two main methods for horizontal separation - Describe how lateral separation of ACFT at the same level may be obtained - Explain the term "Geographical Separation" - Describe track separation between ACFT using the same navigation aid or method - Describe the three basic means for the establishment of longitudinal separation  - Reduction in separation - Describe the circumstances under which a reduction in separation minima may be allowed  - ATC Clearances - State why ATC clearances must be issued "early enough" to en-route ACFT - Prove that you are acquainted with the required contents of a clearance as given in DOC 4444 of ANNEX 11 - Define the term "clearance limit" - Explain the meaning of the following terms: "cleared via flight planned route", "cleared via (designation) departure" and "cleared via (designation arrival"  - State whether or not a clearance for a controlled flight can only concern level flight, climb or descent whilst maintaining own separation in VMC	JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	010 07 03 02	<ul> <li>List the two main methods for horizontal separation</li> <li>Describe how lateral separation of ACFT at the same level may be obtained</li> <li>Explain the term "Geographical Separation"</li> <li>Describe track separation between ACFT using the same navigation aid or method</li> <li>Describe the three basic means for the establishment of longitudinal separation</li> <li>Reduction in separation</li> <li>Describe the circumstances under which a reduction in separation minima may be allowed</li> <li>ATC Clearances</li> <li>State why ATC clearances must be issued "early enough" to en-route ACFT</li> <li>Prove that you are acquainted with the required contents of a clearance as given in DOC 4444 of ANNEX 11</li> <li>Define the term "clearance limit"</li> <li>Explain the meaning of the following terms: "cleared via flight planned route", "cleared via (designation) departure" and "cleared via (designation arrival"</li> <li>State whether or not a clearance for a controlled flight can only concern level flight, climb or</li> </ul>	Part IX Section 4.2.5.2.1 or ANNEX 11, Chapter 3

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 02	- Explain the meaning of the term "essential traffic"	
	List the content of essential traffic information	
	<ul> <li>State whether in case of a level change en-route if more than one level has been given in the original flight plan all levels shall be included in the re-clearance or only the changed level</li> </ul>	
	Emergency and communication failure	
	<ul> <li>State the Mode and Code of SSR equipment a pilot might operate in a (general) state of emergency or (specifically) in case the ACFT is subject to unlawful interference</li> </ul>	
	<ul> <li>state the special rights an ACFT in a state of emergency can expect from ATC</li> </ul>	
	<ul> <li>Describe the expected action of ACFT after receiving a broadcast from ATS concerning the emergency descent of an ACFT</li> </ul>	
	<ul> <li>State how it can be ascertained, in case of a failure of two-way communication, whether the ACFT is able to receive transmissions from the ATS unit</li> </ul>	
	<ul> <li>Explain the assumption based on which separation shall be maintained if an ACFT is known to have COM failure in VMC or in IMC</li> </ul>	
	<ul> <li>State on which frequencies appropriate information, for an ACFT encountering two way COM failure, will be sent by ATS</li> </ul>	
	<ul> <li>Describe the expected activities of an ATS-unit after having learned that an aircraft is being intercepted in or outside ist area of responsibility</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 03	Approach Control Service / APP	
	Departing ACFT	
	- Describe	
	<ul> <li>the essential content of an Air Traffic Control CLR for departing ACFT</li> </ul>	
	<ul> <li>the considerations the PIC has to make whenever ATC gives a take-off direction other than into the wind</li> </ul>	
	<ul> <li>Explain the kind of general CLR limits used in the case of a CLR for a climb "maintaining own separation in VMC"</li> </ul>	
	<ul> <li>Mention the kind of significant changes in the MET conditions in the take-off or climb-out area that should be transmitted to a departing ACFT without delay</li> </ul>	
	<ul> <li>List the informations in addition to MET conditions which shall be transmitted to departing ACFT</li> </ul>	
	Arriving ACFT	
	<ul> <li>State where arriving aircraft may be required to report to enable ATC to expedite departing ACFT</li> </ul>	
	<ul> <li>State whether it is possible to clear descending ACFT to maintain own separation whilst in VMC</li> </ul>	
	<ul> <li>Explain the meaning of the term "Visual Approach"</li> </ul>	
	<ul> <li>Inform about the required provisions to perform a visual approach</li> </ul>	
	<ul> <li>Indicate if separation will be provided between an ACFT performing a visual approach and other arriving and departing ACFT</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>Define the term "Ceiling"</li> <li>State the primary requirement for the execution of a visual approach and for the issuance of the appropriate CLR</li> <li>Describe what conditions must be met concerning the reported ceiling if a visual approach is planned</li> <li>State which information shall be given to the pilot by ATC if he is obviously not familiar with the instrument approach procedure and no CLR for a straight-in approach may be expected</li> <li>Explain how a pilot has to react when visual contact with terrain is established before completion of the APP procedure and when he desires to continue visually</li> <li>Describe who establishes procedures in accordance with which holding and holding pattern entry shall be accomplished</li> <li>Describe how levels at holding points shall normally be assigned</li> <li>State in which situations an ACFT may be given a special priority with regard to the APP sequence</li> <li>Name two alternative ways to issue an appropriate clearance to an aircraft within an approach sequence if the pilot indicates his intention to hold for weather improvement or for other reasons, when other holding aircraft indicate their intention to continue their approach-to-land</li> </ul>	REMARKS
	<ul> <li>Define the term "expected approach time (EAT)" and explain the difference to the "estimated time of arrival (ETA)"</li> </ul>	
	- State the reason for determining an EAT and state the time involved	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 03	<ul> <li>Name the anticipated delay which causes a revised EAT to be forwarded</li> </ul>	
	<ul> <li>List the four main groups of informations which shall be transmitted to the ACFT as early as practicable after communication has been established with the unit providing APP control service</li> </ul>	
	– Define the term "final approach"	
	<ul> <li>List the three main groups of information which shall be transmitted to the ACFT at the commencement of final approach</li> </ul>	
	<ul> <li>List the five main groups of information which shall be transmitted without delay to an ACFT on final approach</li> </ul>	
010 07 03 04	Aerodrome Control Service	
	- Function of an Aerodrome Control Tower	
	– General	
	<ul> <li>Describe the general task of a TWR with regard to issuing information and CLR to ACFT under its control</li> </ul>	
	<ul> <li>List for which ACFT and their given positions or flight situations TWRs shall prevent collisions</li> </ul>	
	<ul> <li>Name the AD equipment the operational failure or irregularity of which shall be immediately reported by the TWR</li> </ul>	
	<ul> <li>State that, in case that an ACFT does not land within a certain period of time, the TWR shall report to the ACC or FIC. State the duration of that period of time</li> </ul>	
	<ul> <li>Describe the procedures to be observed by the TWR whenever VFR operations are suspended</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 04	<ul> <li>Selection of RWY in use</li> <li>Explain the term "RWY-in-use"</li> <li>State the reasons which could eventually lead to the decision to use another TKOF or landing direction than the one into the wind</li> <li>Name the possible consequences for a PIC if the "RWY-in-use" is not considered suitable for the operation involved</li> <li>Information to ACFT by TWR</li> <li>List the series of information TWRs should give to ACFT</li> <li>Prior to taxi for take off</li> <li>Prior to enter the traffic circuit</li> </ul>	
	<ul> <li>Control of aerodrome traffic / Circuit</li> <li>State who is responsible for the avoidance of collision with other ACFT when operating in VMC</li> <li>Explain the term "essential local traffic"</li> <li>Give examples of essential information on AD conditions as listed in Doc. 4444</li> <li>State the sequence of priority between ACFT landing (or in the final stage of an approach to land) and ACFT intending to depart</li> <li>Indicate the order in which departures normally shall be cleared</li> </ul>	Doc. 4444 Part V, Section 8

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 04	<ul> <li>State three basic conditions that must be fulfilled before a departing ACFT will normally be permitted to commence take off</li> <li>Describe the required action when, in the interest of expediting traffic, a "clearance for immediate take-off" has been issued to an ACFT before it enters the RWY</li> <li>State the three basic conditions that must be fulfilled before a landing ACFT will normally be permitted to cross the beginning of the RWY on its final approach</li> <li>List the three categories of ACFT on which wake turbulence separation minima are based</li> <li>State the minimum ground visibility required for the authorization of a special VFR flight to enter a CTR for the purpose of landing or to take off and depart directly from a CTR</li> <li>State the MNM ground visibility required for the authorization of a Special VFR flight to operate locally</li> </ul>	
010 07 03 05	FIS and Alerting Service  Define the term "Air Traffic Advisory Service"  Describe the objective of the air traffic advisory service  State to which ACFT air traffic advisory service will be provided  Explain why air traffic advisory service does not deliver "Clearances" but only "Advisory Information"  Describe the various aspects of the "Alerting Service"	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 07 03 06	Radar Services	
	<ul> <li>State to what extent the use of radar in air traffic services may be limited</li> </ul>	Doc 4444
	<ul> <li>State what radar derived information shall be available for display to the controller as a minimum</li> <li>Define the term "SSR"</li> </ul>	Part VI Sect 2.1
	<ul> <li>State the SSR Codes reserved for emergency, COM failure or unlawful interference</li> </ul>	
	<ul> <li>Name the two basic identification procedures used with radar</li> <li>Define the term "PSR"</li> </ul>	
	<ul> <li>Describe the circumstances under which an aircraft provided with radar service should be informed of its position</li> </ul>	
	<ul> <li>List the possible forms of position information passed to the aircraft by radar services</li> </ul>	
	<ul> <li>Define the term "radar vectoring"</li> </ul>	
	<ul> <li>State how radar vectoring shall be achieved</li> </ul>	
	<ul> <li>Describe the information which shall be given to an aircraft when radar vectoring is terminated and the pilot is instructed to resume own navigation</li> </ul>	
	<ul> <li>State the aims of radar vectoring as shown in Doc. 4444</li> </ul>	Doc. 4444, Part VI, Section
	<ul> <li>Indicate the standard horizontal radar separation in NM</li> </ul>	7.1
	<ul> <li>State the wake turbulence radar separation for ACFT in the APP and DEP phases of a flight when an ACFT is operating directly behind another ACFT at the same ALT or less than 300 m (1000 ft) below</li> <li>Describe what kind of action (concerning the transponder) the pilot is expected to perform in case of emergency if he has previously been directed by ATC to operate the transponder on a specific code</li> </ul>	
010 08 00 00	AERONAUTICAL INFORMATION SERVICE / AIS ANNEX 15	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 08 01 00	ANNEX 15	
	- Introduction	
	<ul> <li>State (in general) the object of the aeronautical information service</li> </ul>	
	<ul> <li>Name the three most important implementations in air navigation which have significantly changed the role and importance of aeronautical information/data within recent years</li> </ul>	
	Essential Definitions	
	<ul> <li>Recall the following definitions to such an extent that you can choose the correct one from an offered series of samples:</li> </ul>	
	Aeronautical information circular (AIC), aeronautical information publication (AIP), AIP amendment, AIP supplement, AIRAC, danger area, integrated aeronautical information package, international airport, international NOTAM office, manoeuvring area, movement area, NOTAM, pre-flight information bulletin (PIB), prohibited area, restricted area, SNOWTAM	
	- General	
	<ul> <li>State during which period of time an aeronautical information service shall be available with reference to an ACFT flying in the area of responsibility of an AIS, provided a 24-hours service is not available</li> </ul>	
	<ul> <li>Name (in general) the kind of aeronautical information / data which an AIS service shall make available in a suitable form for flight crews</li> </ul>	
	<ul> <li>Summarize the duties of an aeronautical information service concerning aeronautical informationdata for the territory of the State</li> <li>Give a brief statement about the WGS 84 system</li> </ul>	
		WGS 84
010 08 01 00		

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Aeronautical Information Publications (AIP)	
	- State the primary purpose of the AIP	
	<ul> <li>List the main parts of an AIP</li> </ul>	
	<ul> <li>Name that chapter of the AIP in which the pilot can find a List of significant differences between the national regulations and practices of the State and the related ICAO Standards, Recommended Practices and Procedures</li> </ul>	
	State how permanent changes to the AIP shall be published	
	<ul> <li>Explain what kind of information shall be published in form of AIP Supplements</li> </ul>	
	<ul> <li>Describe how conspicuousness of AIP Supplement pages is achieved</li> </ul>	
	- NOTAM	
	<ul> <li>Describe how information shall be published which in principal would belong to NOTAMs but includes extensive text and/or graphics</li> </ul>	
	<ul> <li>Summarize essential informations which lead to the issuance of a NOTAM</li> </ul>	
	<ul> <li>Summarize informations which should not be notified by NOTAMs</li> </ul>	
	- State to whom NOTAMs shall be distributed	
	<ul> <li>Explain how information regarding snow, ice and standing water on AD pavements shall be reported</li> </ul>	
	- State which information an ASHTAM may contain	
	<ul> <li>Describe the means by which NOTAMs shall be distributed</li> </ul>	
010 08 01 00		ANNEX 15, Appendix 4,
010000100	Aeronautical Information Regulation and Control (AIRAC)	Part 1 and Part 2)

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>List circumstances to which information are concerned which shall or should be distributed as AIRAC</li> <li>State the sequence in which AIRACs shall be issued and state how many days in advance of the effective date the information shall be distributed by AIS</li> </ul>	
	Aeronautical Information Circulars (AIC)	
	<ul> <li>Describe reasons for the publication of AIC</li> </ul>	ANNEX 15, Chapter 7
	- Pre-flight and Post-flight Information	
	<ul> <li>List (in general) which details shall be included in aeronautical informations provided for pre-flight planning purposes at the appropriate Ads</li> </ul>	
	<ul> <li>Summarize the additional current informations relating to the AD of departure that shall be provided as pre-flight information</li> </ul>	
	<ul> <li>Describe how a recapitulation of current NOTAM and other information of urgent character shall be made available to flight crews</li> </ul>	
	<ul> <li>State which post-flight information from aircrews shall be submitted to AIS for distribution as required by the circumstances</li> </ul>	
	<ul> <li>Contents of Aeronautical Information Publication / AIP</li> <li>Name the different parts of the AIP</li> </ul>	ANNEX 15, Appendix 1
010 08 01 00	State in which main part of the AID the following informations can be found	
	<ul> <li>State in which main part of the AIP the following informations can be found for training purposes the sequence of topics should be varied,</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	for questions a considerable reduction in the number of used topics is advisable	
	<ul> <li>entry, transit and departure of ACFT, passengers, crew and cargo</li> <li>ACFT instruments, equipment and flight documents</li> <li>Differences from ICAO Standards, Recommended Practices and Procedures</li> <li>Location indicators, aeronautical information services, minimum flight altitude, VOLMET-service, SIGMET-service</li> <li>General rules and procedures (especially general rules, VFR, IFR, ALT setting procedure, interception of civil ACFT, unlawful interference, air traffic incidents)</li> <li>ATS airspace (especially FIR, UIR, TMA)</li> <li>ATS routes (especially lower ATS routes, upper ATS routes, area navigation routes</li> <li>Navigation warnings (especially prohibited, restricted and danger areas)</li> <li>Aprons, TWYs and check locations/positions data</li> <li>AD surface movement guidance and control system and markings</li> <li>RWY physical characteristics, declared distances, APP and RWY lighting</li> </ul>	
	<ul> <li>AD radio navigation and landing aids</li> <li>charts related to an AD</li> </ul>	ANNEX 15, App 1, Section AD 2.24
010 09 00 00	AERODROMES ANNEX 14, Volume I	
010 09 01 00	ANNEX 14	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Essential Definitions	
	<ul> <li>Recall the following definitions to such an extent that you can choose the right one from a series of offered samples, all definitions issued in ANNEX 14 except the following:</li> </ul>	
	Accuracy, aircraft classification number, cyclic redundancy check, data quality, effective intensity, ellipsoid height (geodetic height), geodetic datum, geoid, geoid ondulation, integrity (aeronautical data), light failure, lighting system reliability, orthometric height, station declination, usability factor	
	- Reference Code	
	<ul> <li>Describe, in general terms, the intent of the AD reference code as well as its composition of two elements</li> </ul>	
010 09 01 01	Aerodrome Data	
	Conditions of the movement area and related facilities	
	<ul> <li>List the four most important declared RWY distances and recall the appropriate definitions</li> </ul>	
	<ul> <li>List the matters of operational significance or affecting ACFT performance which should be reported to AIS and ATS units for the transmission to ACFT involved</li> </ul>	
010 09 01 01	Describe the four different types of water deposit on the RWY	
	Name the three defined states of frozen water on the RWY	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>Physical Characteristics of ADs</li> <li>Define the term "RWY strip"</li> <li>State the length, width and grading of RWY strips</li> <li>Define the term "RWY end safety area"</li> <li>State the length and width of a RWY end safety area</li> <li>Define the term "Clearway"</li> <li>State the origin, length and width of a clearway</li> <li>Define the term "Stopway"</li> <li>State the width of a "Stopway"</li> <li>Describe where a radio-altimeter operating area should be established and how far it should extend laterally and longitudinally</li> <li>State the reason for a taxiway widening in curves</li> <li>Explain when holding bays should be provided</li> <li>Describe where taxi-holding positions shall be established</li> <li>Define the term "road-holding position"</li> </ul>	
010 09 01 02	Visual Aids for Navigation	
	<ul> <li>Indicators and Signalling Devices</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the wind direction indicators with which ADs shall be equipped	
	Describe a landing direction indicator	
	- Explain the capabilities of a signalling lamp	
	State which characteristics a signal area should have	
	– Markings	
	<ul> <li>Name the colours used for the various markings (RWY, TWY, ACFT stands, apron safety lines)</li> </ul>	
	<ul> <li>State where a RWY designation marking shall be provided and how it is designed</li> </ul>	
	<ul> <li>Describe the application, location and characteristics of</li> </ul>	
	RWY centre line marking, THR marking, aiming point marking, TDZ marking, RWY side stripe marking, TWY centre line marking, taxi-holding position marking, TWY intersection marking, ACFT stand markings, apron safety lines, road holding position marking, information marking	
	– Lights	
	<ul> <li>Describe mechanical safety considerations regarding elevated approach lights and elevated RWY-, stopway- and taxiway-lights</li> </ul>	
010 09 01 02	<ul> <li>Discuss the relationship of the intensity of RWY lighting, the approach lighting system and the use of a separate intensity control for different lighting systems</li> </ul>	
	<ul> <li>List the conditions for the installation of an AD beacon and describe its general characteristics</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Name the different kinds of operations for which a simple APP lighting system shall be used	
	<ul> <li>Describe the basic installations of a simple APP lighting system including the dimensions and distances normally used</li> </ul>	
	<ul> <li>Describe the principle of a precision APP category I lighting system including such informations as location and characteristics</li> </ul>	
	<ul> <li>Describe the principle of a precision APP category II and III lighting system including such informations as location and characteristics, especially mentioning the inner 300 m of the system</li> </ul>	
	<ul> <li>Describe the wing bars of PAPI and APAPI</li> </ul>	
	<ul> <li>Describe what the pilot will see during approach, using PAPI or APAPI</li> </ul>	
	<ul> <li>Name application, location and characteristics of:</li> </ul>	
	RWY edge lights, RWY threshold and wing bar lights, RWY end lights, RWY centre line lights, RWY touchdown zone lights, stopway lights, taxiway centre line lights, taxiway edge lights, stop bars, taxiway intersection lights, RWY guard lights, road holding position lights	
	No knowledge is required about light spacing	
010 09 01 02	- Signs	
	State the general purpose for installing signs	
	<ul> <li>Explain what signs are the only ones on the movement area utilizing red</li> </ul>	
	List the provisions for illuminating signs	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	State the purpose for installing mandatory instruction signs	
	<ul> <li>Name the kind of signs which "mandatory instruction signs" shall include</li> </ul>	
	<ul> <li>Describe by which sign a pattern "A" taxi-holding position (i.e. at an intersection of a taxiway and a non-instrument, non-precision approach or take-off RWY) marking shall be supplemented</li> </ul>	
	<ul> <li>Describe by which sign a pattern "B" taxi-holding position (i.e at an intersection of a taxiway and a Precision approach Category I, II or III RWY) marking shall be supplemented</li> </ul>	
	<ul> <li>Describe the location of a RWY designation sign at a taxiway / RWY intersection, of a NO ENTRY sign and a category I, II or III holding position sign</li> </ul>	
	<ul> <li>Name the sign with which it shall be indicated that a taxiing ACFT is about to infringe an obstacle limitation surface or to interfere with the operation of radio navigation aids (e.g. ILS/MLS critical / sensitive area)</li> </ul>	
	Name the colours used with a mandatory instruction sign	
	<ul> <li>Describe the various possible inscriptions on RWY designation signs and on holding position signs (Category I, II, III or joint Category II/III)</li> </ul>	
010 09 01 02	Describe the inscription on a taxi-holding position sign "en-route" on a taxiway (i.e. other than a taxi-	
	way / RWY-, RWY / RWY- or taxiway / taxiway-intersection)	
	State when information signs shall be provided	
	- State the role of "information signs"	
	Describe the colours used with information signs	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Describe the possible inscriptions on information signs	
	<ul> <li>Explain application, location and characteristics of aircraft stand identification signs and of road- holding position signs</li> </ul>	
	- Markers	
	Describe the following:	
	Markers used to delimit a RWY when no lights are provided, Application, location and characteristics (especially colour) of unpaved RWY edge markers, TWY edge markers, the centre line markers, unpaved TWY edge markers, boundary markers	
010 09 01 03	Visual aids for denoting obstacles	
	<ul> <li>Marking of Objects</li> </ul>	
	<ul> <li>State how fixed or mobile objects shall be marked if colouring is not practicable</li> </ul>	
	Describe marking by colours (fixed or mobile objects)	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>Explain the use of markers for the marking of objects, overhead wires, cables etc.</li> </ul>	
	<ul> <li>Explain the use of flags for the marking of objects</li> </ul>	
	<ul> <li>Lighting of objects</li> </ul>	
	<ul> <li>Name the different types of lights to indicate the presence of objects which must be lighted</li> </ul>	
	<ul> <li>State the time period/s of the 24 hours of a day during which high-intensity lights are intended for use</li> </ul>	
	<ul> <li>Describe (in general terms) the location of obstacle lights</li> </ul>	
	<ul> <li>Describe (in general and for normal circumstances) colour and sequence of low-intensity obstacle lights, medium-intensity obstacle lights and high-intensity obstacle lights</li> </ul>	
	<ul> <li>State where you can find information about lights to be displayed by ACFT</li> </ul>	
010 09 01 04	Visual Aids for Denoting Areas of Restricted Use	
	<ul> <li>Describe (in general) closed markings on RWYs and taxiways or portions thereof (including colours)</li> </ul>	
	<ul> <li>State how the pilot of an ACFT moving on the surface of a taxiway, holding bay or apron shall be warned that the shoulders of these surfaces are "non-load-bearing"</li> </ul>	
	<ul> <li>Describe the pre-threshold marking (including colours)when the surface before the threshold is not suitable for normal use by ACFT</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 09 01 05	Emergency and other services	
	Name the principal objective of a rescue and fire fighting service	
	<ul> <li>List the most important factors bearing on effective rescue in a survivable ACFT accident</li> </ul>	
	<ul> <li>Explain the basic information the AD category (for rescue and fire fighting) depends upon</li> </ul>	
	<ul> <li>Describe what is meant by the term "response time" and state its normal and maximum limits</li> </ul>	
	<ul> <li>State the reasons for emergency access roads and for satellite fire fighting stations</li> </ul>	
	<ul> <li>Describe the reason for providing a special apron management service and state what has to be observed if the AD control tower is not participating in the apron management service</li> </ul>	
	<ul> <li>State who has a right of way against vehicles operating on an apron</li> </ul>	
	<ul> <li>Describe the actions ground servicing of an ACFT with regard to possible event of a fuel fire</li> </ul>	
010 09 01 06	Attachment A to ANNEX 14	
	Calculation of declared distances	
	<ul> <li>List the four types of "declared distances" on a runway and also the appropriate abbreviations</li> </ul>	
	<ul> <li>Explain the circumstances which lead to the situation that the four declared distances on a runway are equal to the length of the runway</li> </ul>	
	<ul> <li>Describe the influence of a clearway, stopway and/or displaced threshold upon the four "declared</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	distances"	
	Radio altimeter operating area	
	<ul> <li>Describe purpose, physical characteristics, dimensions and position of a radio altimeter operating area</li> </ul>	
	Approach lighting systems	
	<ul> <li>Name the two main groups of approach lighting systems</li> </ul>	
	<ul> <li>Describe the two different versions of a simple approach lighting system</li> </ul>	
	<ul> <li>Describe the two different basic versions of precision approach lighting systems for CAT 1</li> </ul>	
	<ul> <li>Describe the diagram of the inner 300 m of the precision approach lightiming system in the case of CAT II and III</li> </ul>	
	<ul> <li>Describe how the arrangement of an approach lighting system and the location of the appropriate threshold are interrelated between each other</li> </ul>	
010 10 00 00	FACILITATION ANNEX 9	
	- Foreword	
	- Explain the aim of ANNEX 9, as indicated in the foreword	Annex 9, Art. 37, 22 ICAO-Convention, 23
	Essential Definitions	
	<ul> <li>Recall the following definitions to such an extent that you can choose the correct one from a series of</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	offered samples:	
	Aircraft equipment, airline, airline and operator's documents, baggage, cargo, crew member, flight crew member, ground equipment, international airport, pilot-in-command, State of registry	
010 10 01 00	Entry and departure of ACFT	
	<ul> <li>Describe, purpose and use of ACFT documents - as far as the "General declaration" is concerned</li> </ul>	
	<ul> <li>State whether or not a "General Declaration" will be required by an ICAO Contracting State under normal circumstances</li> </ul>	
	<ul> <li>State the kind of information to be given by crew members whenever a "General Declaration" is required by a Contracting State</li> </ul>	
010 10 02 00	Entry and departure of persons and their baggage	
	<ul> <li>Requirements and procedures only as far as the crew and other operators personnel are concerned</li> </ul>	
	<ul> <li>Explain the reasons for the use of Crew Member Certificates / CMC for flight crews and cabin attendants engaged in International Air Transport</li> </ul>	
	<ul> <li>Explain in which cases ICAO Contracting States shall accept the CMCs as an identity document instead of a passport or visa</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
KEI NO	State whether the entry-privileges for crews of scheduled international air services can be extended to other flight crews of ACFT operated for remuneration or hire but not engaged in scheduled International Air Services	
010 11 00 00	SEARCH AND RESCUE / SAR (Based on ANNEX 12)	
010 11 01 00	ANNEX 12	
	- Essential Definitions	
	<ul> <li>Recall the following definitions to such an extent that you can choose the correct one from a series of offered samples</li> </ul>	
	alert phase, distress phase, emergency phase, operator, pilot-in-command, radio direction- finding station, rescue co-ordination center, rescue unit, State of registry, uncertainty phase	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
010 11 01 01	<u>Organisation</u>	
	<ul> <li>Establishment of SAR regions and service units</li> <li>Describe the areas within which SAR services shall be established from ICAO contracting States</li> </ul>	
	<ul> <li>State the period of time per day within which SAR services shall be available</li> <li>State who delineates SAR regions</li> <li>Describe for which areas rescue coordination centres shall be established</li> </ul>	
010 11 01 02	<u>Co-operation</u>	
	Co-operation between States and services	
	<ul> <li>Describe why contracting States should develop common SAR procedures</li> </ul>	
	<ul> <li>State why contracting States shall arrange for all ACFT, vessels and local services and facilities which do not form part of the SAR organisation to co-operate fully with the latter</li> </ul>	
010 11 01 03	Operating Procedures	
	<ul> <li>State how long a PIC who observes that either another ACFT or a surface craft is in distress should keep the "craft in distress" in sight.</li> </ul>	
	<ul> <li>List the information a PIC shall report to the rescue co-ordination centre or air traffic services unit when he observes that another ACFT or a surface craft is in distress</li> </ul>	
	<ul> <li>Describe the duties of the first ACFT reaching the scene of an accident (and not being a SAR ACFT) with regard to all other ACFT subsequently arriving at the scene of distress</li> </ul>	

	REMARKS
Describe the required reaction of a PIC of an ACFT whenever a distress signal and / or message or equivalent transmission is intercepted by RTF or radiotelegraphy  Show knowledge of all SAR signals	Annex 12 Appendix A
SECURITY (based on ANNEX 17)  ANNEX 17 (Safeguarding International Civil Aviation Against Acts of Unlawful Interference)	
General  - State the aims and objectives of aviation security  Organisation	No definitions of interest to the pilot in ANNEX 17
	<ul> <li>Describe the required reaction of a PIC of an ACFT whenever a distress signal and / or message or equivalent transmission is intercepted by RTF or radiotelegraphy</li> <li>Show knowledge of all SAR signals</li> </ul> ECURITY (based on ANNEX 17) NNEX 17 (Safeguarding International Civil Aviation Against Acts of Unlawful Interference) eneral <ul> <li>State the aims and objectives of aviation security</li> </ul>

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Co-operation and co-ordination	
	<ul> <li>Describe how (ICAO) Contracting States shall co-operate with other States in respect to aviation security and which co-ordination between States is suggested by ICAO</li> </ul>	
	- Preventive Security Measures	
	<ul> <li>Describe the objects not being allowed (for reasons of aviation security) from being introduced on board an aircraft engaged in international civil aviation</li> </ul>	
	Management of Response to Acts of Unlawful Interference	
	<ul> <li>Describe the assistance each (ICAO) Contracting State shall provide to an ACFT subjected to an act of unlawful seizure</li> </ul>	
	<ul> <li>State the circumstances which could prevent a State to detain an ACFT on the ground after being subjected to an act of unlawful seizure</li> </ul>	
	Connection to other Annexes and Documents	Attachment to ANNEX 17
	<ul> <li>Explain where further information in addition to ICAO ANNEX 17 concerning aviation security is available</li> </ul>	
	(Name the various annexes and documents and list these annexes and documents)	
	- The following learning objectives all refer to situations in which unlawful interference occurs to	Rules of the Air, Attachment B -

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	an ACFT  - ICAO ANNEX 2	Unlawful Interference In case the ACFT is unable
	<ul> <li>Describe what the PIC should do unless considerations aboard the ACFT dictate otherwise</li> </ul>	to notify an ATS unit of the unlawful interference
	<ul> <li>Describe what the PIC should do in case that the ACFT must depart from its assigned track or cruising level</li> </ul>	
	<ul> <li>what should he attempt in regard to broadcast warnings</li> </ul>	
	<ul> <li>at which level should he proceed if no applicable regional procedures for in-flight- contingencies have been established</li> </ul>	
010 12 01 02	- ANNEX 6	ANNEX 6 Chapter 13, Security
	<ul> <li>Describe the special considerations referring to flight crew compartment doors in regard to aviation security</li> </ul>	
	<ul> <li>Explain what an operator shall do to minimize the consequences of acts of unlawful interference</li> </ul>	
	<ul> <li>Explain what an operator shall do to have appropriate employees available who can contribute to the prevention of acts of sabotage or other forms of unlawful interference</li> </ul>	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	<ul> <li>ANNEX 14</li> <li>Describe what minimum distance an isolated ACFT parking position (after the ACFT is subject of unlawful interference) should have from other parking positions, buildings or public areas</li> <li>Document 4444</li> <li>Describe the considerations that must take place with regards to a taxi clearance in case an ACFT is known or believed to be subject of unlawful interference</li> </ul>	ANNEX 14, Chapter 3 Physical Characteristics  Rules of the Air and Air Traffic Services, Part V, AD Control Service, Control of AD Traffic, Control of Taxiing ACFT
010 13 00 00	AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION	based on ANNEX 13
010 13 01 00	- ANNEX 13	
	Essential Definitions	
	<ul> <li>Recall the following definitions to such an extent that you can choose the correct one from a series of offered samples</li> </ul>	
	aircraft, flight recorder, incident, investigation, maximum mass, operator, serious incident, serious injury, State of design, State of manufacture, State of occurrence, State of the operator, State of registry	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS
	Recall the definition of the term "Accident" in general terms	
	<ul> <li>Define the difference between "Serious Incident" and "Accident"</li> </ul>	
	- Applicability	
	<ul> <li>Describe the geographical limits, if any, within which the specifications given in ANNEX 13 apply</li> </ul>	
	- General	
	<ul> <li>State the real objective of the investigation of an accident or incident</li> </ul>	
	List of examples of serious incidents	
	<ul> <li>Determine whether a certain occurrence has to be defined as a serious incident or as an accident</li> </ul>	
010 14 00 00	<u>JAR-FCL 1 and 3</u> see 010 04 00 ICAO (Annex 1)	
	National Law	
	Learning objectives with reference to National Law will be published after decision of the JAR-FCL C	

JAR-FCL REF NO	LEARNING OBJECTIVES	REMARKS