



DEPARTMENT FAHRZEUGTECHNIK UND FLUGZEUGBAU

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Aircraft Systems SS 2016

Part 2: Description of the A321

Datum: 30.06.2016

Part 2: 30 minutes

Last name:	First name:
Matrikelnummer:	
Result:	% von max. 100% . Total result is given on the sheet of Part 1

Hints:

- Please work on this examination without notes or books.
- Please return this sheet. In this way you will maintain a full document.
- For the Multiple-Choice-Tasks here only one answer of the given three answers is correct.
- Mark the answers on this task sheet.

ATA21 AIR CONDITIONING

1. The AIR CONDITIONING system of the A321 takes pressurized air from ...

- A) ... electrical compressors
- B) ... the engine compressors
- C) ... the Blue hydraulic system

2. The AVIONIC VENTILATION SYSTEM is a ...

- A) ... fully automatic system
- B) ... manually controlled system
- C) ... semi-manually controlled system

ATA22 AUTO PILOT

3. Which computer provides the AUTOPILOT (AP) function?

- A) Elevator Aileron Computer (ELAC)
- B) Auto Pilot Computer (APC)
- C) Flight Management and Guidance Computer (FMGC)

4. The VERTICAL and LATERAL FLIGHT PLANS are part of the

- A) Flight Guidance Part
- B) Flight Management Part
- C) Auto Pilot Part

ATA23 COMMUNICATION**5. Which of the following functions are part of the CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS)?**

- A) Galley Monitoring
- B) Cockpit Voice Recording
- C) Service Interphone

ATA24 ELECTRICAL POWER**6. Which VOLTAGE SOURCES are available to the A321 during cruise?**

- A) One Auxiliary Power Unit (APU), external power, one emergency generator
- B) Two engine driven generators, one emergency generator, two batteries, one APU
- C) One APU, two batteries, one Power Cycle Machine, two engine driven generators

ATA27 FLIGHT CONTROLS**7. The AILERONS belong to ...**

- A) ... primary as well as secondary flight controls
- B) ... primary flight controls
- C) ... secondary flight controls

8. The flight control NORMAL LAW provides ...

- A) ... full protection against fatal operating conditions
- B) ... only partial protection
- C) ... no protection

ATA28 FUEL**9. The JET PUMPS of an A321 ...**

- A) ... supply the engines with fuel from the Wing Tanks
- B) ... transfer fuel from the Center Tank to the Wing Tanks
- C) ... protects the fuel system against over pressure and spilling

ATA29 HYDRAULIC POWER**10. The GREEN HYDRAULIC SYSTEM can be pressurized by ...**

- A) ... one engine driven pump and the Ram Air Turbine
- B) ... one electrical pump and a hand pump
- C) ... one engine driven pump and the Power Transfer Unit

ATA30 ICE AND RAIN PROTECTION**11. The COCKPIT WINDOWS are heated by ...**

- A) ... bleed air
- B) ... electrical current
- C) ... ram air

ATA31 INDICATING AND RECORDING**12. Information from the ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS) is displayed on screens as follows:**

- A) PFD (Primary Flight Display) and ND (Navigation Display)
- B) EWD (Engine/Warning Display) and SD (System Display)
- C) ECAM (Electronic Centralized Aircraft Monitoring)

ATA32 LANDING GEARS**13. In normal operation, the two MAIN LANDING GEARS are operated ...**

- A) ... hydraulically
- B) ... electrically
- C) ... mechanically

14. The ANTI-SKID SYSTEM avoids the wheels to lock ...

- A) ... in the landing gear bay after retraction of the gear
- B) ... during extension of the landing gear with gravity
- C) ... during braking

ATA 33 LIGHTS**15. The STROBE LIGHTS have the task ...**

- A) ... to light the engine inlets
- B) ... to improve the visibility of the aircraft by other aircraft
- C) ... to allow other aircraft to determine the flight direction of the aircraft

ATA34 NAVIGATION**16. GROUND SPEED data is provided from the part of the Air Data Inertial Reference Unit (ADIRU) called ...**

- A) ... Air Data Reference Part
- B) ... Inertial Reference Part
- C) ... Total Speed Data Part

ATA35 OXYGEN

17. The OXYGEN SYSTEM of an A321 provides PASSANGERS with oxygen from ...

- A) ... high pressure compressors of both engines
- B) ... one high pressure oxygen cylinder
- C) ... chemical oxygen generator units

ATA36 PNEUMATIC

18. The BLEED AIR SYSTEM is (among other things) used for ...

- A) ... engine starting
- B) ... nose wheel steering
- C) ... flight controls

ATA38 WATER AND WASTE

19. The WATER AND WASTE SYSTEM of the A321 consists of ...

- A) ... potable water and waste systems
- B) ... water und waste collection and ventilation systems
- C) ... potable water, waste water and toilet systems

ATA49 AUXILIARY POWER UNIT

20. In flight, the AUXILIARY POWER UNIT supports systems as follows:

- A) air conditioning and hydraulic systems
- B) electrical and hydraulic systems
- C) air conditioning and electrical systems