Question 1

This question is about aviation authority legislation as it is applied to the business aviation industry. Discuss the main JARs and FARs that have been formulated to cover operational and airworthiness requirements for the various categories of business aircraft. Your answer should explain the key differences between the various requirements and how they are interrelated. You should also discuss the current issues around the requirements in different parts of the world and how they might change in the future.

[20 marks]

Question 2

Discuss the origin and evolution of the Very Light Jet (VLJ), including its primary target markets, operating strategy and the current status of the leading projects. Your answer should also include discussion of the proposed Small Aircraft Transportation System (SATS), including its aims and objectives, the technological and operational challenges, and the business aviation community’s views.

[20 marks]

Question 3

Discuss the origin and evolution of fractional ownership programmes, outlining the current situation with regard to the main operators. Explain the basic principles behind fractional ownership, detailing the factors that must be considered by a company considering the fractional ownership programme, and the cost elements involved. Describe the recent changes and additions to the basic fractional model, explaining why they have been introduced.

[20 marks]

Question 4

Describe the International Standards for Business Aircraft Operations (IS-BAO), explaining its primary objective and the reason behind its introduction. What body has drawn up the standard, and why are they seen as being in the best position to do so? Explain the main areas of aircraft operations covered by the standard and the process a new operator will need to go through to adapt it to his needs.

[20 marks]
Question 5

A large corporation has decided to investigate the case for operating a sole-use business aircraft. In order to justify the acquisition, it must identify both the potential benefits to its business and the overall cost of operation. List and describe five of the main potential benefits and explain your reasoning for each one. List and describe the various acquisition options that might be available.

[10 marks]

Business aircraft generally have a much lower annual utilisation than commercial airliners. Describe both the benefits and the problems of low utilisation, both operational and financial. How might a corporate operator improve utilisation during periods when his aircraft is not required on company business, and what issues must he consider before doing so?

[10 marks]

Question 6

What do current market forecasts have to say about business aircraft industry growth in the next ten years? Your answer should include discussion of the individual aircraft manufacturers market share, approximate indication of sales in the main business jet categories and ownership types. Which areas of the world are seen as key for business aircraft fleet growth over the same period? Explain your reasoning.

[14 marks]

The traditional full-service carriers have adopted a number of strategies to combat the challenge of increased business aircraft utilisation. Describe these strategies and discuss how effective you think they might be.

[6 marks]

Question 7

This question is about the market for helicopters in business and corporate aviation. Discuss the rationale behind the selection of a helicopter operation rather than a fixed-wing aircraft. Your answer should include the helicopters main advantages, but also its possible disadvantages, from both operational and financial points of view. What future developments might change the rationale you have described, and why?

[10 marks]

Describe the safety performance of rotary-wing aircraft, and compare it with other aircraft types. Your answer should outline the main issues in flight safety of helicopter operations and should also include some of the steps already in place and planned to address them, by both the operators and the regulators.

[10 marks]
Question 8

Explain the principal of off-shore registration as it applies to aircraft ownership and operation. Your answer should explain why some business aircraft owners chose off-shore registration and the rules about which countries can be used and how, giving examples of those most commonly used. Discuss the current issues that some regulators have with the increasing use of off-shore registration, and make your own analysis of how you think the situation might change.

[20 marks]