



Exam 2018, questions and answers

Air Transport & Management (University of Limerick)

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COMPILATION OF PAST EXAM PAPERS

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AIR TRANSPORTATION TERM AND DEFINITION

1. (a) Explain fully a **revenue cost pool**

ANSWER: P8 (2005 [R], 2006,2007,2008,2011 [R], 2012,2014,2016)

- Revenue Cost Pool – 1 airline operates the route on behalf of members of the pool and all costs and revenues are shared equally
- For example, Perth – Tokyo – JAL and Qantas in 1987

2. (b) Explain fully a **revenue sharing pool**

ANSWER: P8 (2003, 2005[R], 2006,2007,2008,2011,2012)

- Revenue Sharing Pool – all revenue is shared in proportion to the capacity provided by each member of the pool
- Effects;
 1. Reduced freedom of action for airlines
 2. Reduced competition

3. (a) Define the term **break of gauge**?

ANSWER: P11 (2003,2005,2007,2010)

- Break of Gauge - right to change from a larger aircraft to a smaller one in another country on a through service

4. (b) Define the following term: **multiple designation**?

ANSWER: P11 (2005,2006,2008,2011[R],2012)

- Multiple Designation - right of each party to a bilateral to designate as many airlines as it wishes to a route

5. (c) Define the following term: Combination Rights / Explain with an example **'Combination Rights'**.

ANSWER: P11 (2003,2007,2008,2010,2014,2016)

- Combination rights - an airline can carry 2 sets of 3rd & 4th freedom traffic on a single stopping service
- Combination rights – an example
 - First 3rd and 4th freedom set
New York > Paris
 - Second 3rd and 4th freedom set
New York > London

6. (a) Explain preferential fares**ANSWER: P26 (2004,2011,2013)**

- Available to passengers who meet specific requirements in terms of age, occupation etc
- Examples – student discounts, 50% discount for children under 12 and special offers for spouses to fly with partner
- Aim is partly developmental and partly social

7. (b) Explain the term promotional fare**ANSWER: P26 (2003,2007,2010,2014,2016)**

- Various low fares with restrictions on availability which offer passengers significant savings on normal fares
- Normally used where competition from charters was intense
- Originally aimed at stimulating market segments off peak by offering low fares but this involved a risk- Traffic would not meet expectations.
- Higher fare paying passengers could be displaced.

8. (c) Explain the 3 golden rules of pricing**ANSWER: P28 (2004,2005,2011,2013)**

1. Minimise dilution - fences
2. Minimise consumer surplus
3. Exploit elasticities

9. (d) Explain the term Consumer surplus**ANSWER: P28 (2003,2005,2006,2007,2008,2010,2011[R],2014,2016)**

- The difference between what they are willing to pay and what they actually pay.
- Max price that a consumer is willing to pay depends on the utility they get from the service.
- Day to day monitoring and control of availability in each class to max revenue

10. (e) Explain the term "yield management"**ANSWER: P28 (2003,2006,2007,2008,2010,2011[R])**

- Yield Management is an essential marketing tool and involves the manipulation of an airlines reservation control system to max passenger revenue
- It does this by trying to ensure that each seat is sold at the highest possible price

11. (a) Define the following term: **Gantt Chart**

ANSWER: Internet (2011,2013,2014,2016)

- A Gantt chart is a **type of bar chart** that **illustrates** a **project schedule**, named after its inventor, **Henry Gantt**, who designed such a chart around the **years 1910–1915**.
- **Modern Gantt charts** also show the **dependency relationships** between **activities** and **current schedule status**.

12. (b) What are the **advantages** of using a **Gantt Chart**?

ANSWER: Internet (2011,2013,2016)

- Helps **keep track** of schedule tasks
- **Break project into smaller** phases with **milestones** (Subtasks)
- **Shows what is to be delivered** with **each phase**.
- **Good** for **scheduling resources**

13. (c) What **steps** are involved in the development of a **Gantt chart**?

ANSWER: Internet (2012,2014,2016)

- Develop a **Work Breakdown Structure**
- **Gather necessary information** about all steps or processes included in a greater project.
- **Build timelines**
- **Evaluate Task Dependencies** or relationships between **phases or processes**
- **Share & Evaluate** the Plan with **Your Team**

14. (a) Define using an example, the **3rd** Freedoms of the Air

ANSWER: P7 (2006,2008,2011[R])

- To carry revenue passengers from Point in Home Country A to Point in Country B.

15. (b) Define using an example, the **4th** Freedom of the Air

ANSWER: P7 (2006,2008,2011[R])

- To carry revenue passengers from point in Country B to point in Home Country A.

16. (c) Define using an example, the **5th** Freedom of the Air

ANSWER: P7 (2006,2008,2012,2011[R])

- To carry revenue passengers from Point in Home Country A to Point in Country B, set down & pick up passengers to Point in Country C.

17. (d) Define using an example, the **6th** Freedom of the Air

ANSWER: P11 (2012,2016)

- Combination of 3rd and 4th freedom rights, enabling an airline to carry revenue traffic between two foreign countries via its own state. This was a very important right
- (e.g. Emirates: London - Dubai - Singapore)

18. (e) Explain with examples the **7th** Freedom of the Air

ANSWER: P11 (2010,2011,2012,2013)

- The right to carry revenue traffic between two foreign countries with no requirements to originate or terminate the service in the carriers' home state
- (e.g. Ryanair London Stansted – Stockholm Skavsta)

19. (f) Explain with examples the **8th** Freedom of the Air

ANSWER: P11 (2010,2011,2013,2014)

- The right to carry revenue traffic between two locations in a foreign country (cabotage) and then onwards to your home country
- (e.g. Air France flying from two domestic cities in Morocco)

20. (c) Explain with examples the **9th** Freedom of the Air

ANSWER: P11 (2014)

- Cabotage but without the requirement to continue onwards to your home country
- For example; Shanghai – Beijing by a non-Chinese airline

CHAPTER 1: INTRODUCTION TO AIR TRANSPORTATION

21. (*) The civil aviation industry is made up of **5 different Components**, list them.

ANSWER: P1 (2004,2005,2006,2008,2011[R],2012,2013,2014)

1. **Manufacturing** Industry
2. Maintenance, Repair and Overhaul (**MRO**)
3. **Airports**
4. **Financial**
5. **Other Aviation Services**

22. The international aviation industry is made up of 5 different elements. Describe fully the **MRO sector**.

ANSWER: P1 (2012,2014)

- Sector generates in the region of **\$60 billion annually**
- **Highly volatile, subject to rapid & unexpected changes** in **economic & international** business conditions
- **Asian markets** – hub of activity in future – **Singapore, China, Malaysia**
- Normally divided into the following;
 1. Heavy Airframe Maintenance
 2. Modifications
 3. Components Maintenance
 4. Engine Overhaul
 5. Line Maintenance
- **Key Players** –Singapore Technologies Aerospace (**ST Aerospace**), Lufthansa Technik (**LHT**), Air France-KLM, **Hong Kong Aircraft Co, AAR Corp** etc.

23. (*) Define the term **Air Transport**

ANSWER: P2 (Every Year)

- It includes **all civil flying** performed by **airlines and general aviation**
- **General aviation** - **noncommercial** use for example **business aircraft**
- We focus on the **commercial airline** industry.
- Air transport is a **major contributor to global economic** prosperity

24. (a) Explain fully the **nature of the airline product**.

ANSWER: P3 (2003,2006,2007,2008,2010,2011,2011[R],2013,2016)

- Its **demand is derived** from that of **other products and services**
- Part of a group of **heterogeneous** (different) products and services
- We **travel by air** to go on **holiday, visit friends, business** etc.
- **Most airlines** offer pretty much the **same product type**
- It is essentially a **homogenous** product - all involve transportation from **one point to another**

25. (b) What **consequences** did this produce for airlines? / Air transport is essentially a homogenous product, list two consequences of this?

ANSWER: P3 (2003,2007,2010,2011,2013) & (2005,2005[R])

1. **Costly efforts** to differentiate the product
2. It was **relatively easy for new entrants** to enter the market

26. (*) Identify the four main **challenges facing the airline industry** as identified by **Tyler**, CEO IATA (2015).

ANSWER: P4 (2016)

1. **Safety**
2. **Passenger Experience**
3. **Environmental sustainability**
4. **Financial sustainability**

27. Describe **fully recent developments** in the Eastern European, Middle East and Africa (EEMEA) airline sector, explaining why they are best **placed to deliver growth**.

ANSWER: P4 (2016)

- Over the last **10 years** EEMEA Airlines have grown global **market share to 11% from 3%**
- **Key Players** in this region - **New Age Carriers!**
 1. Turkish Airlines
 2. **Aeroflot**
 3. **Pegasus**
 4. Emirates
 5. Air
 6. Arabia
 7. **Qatar**
 8. **Etihad**
- Reasons for best placed to deliver growth and take further market share given
 - (1) **solid cost advantage** thanks to young fleets and weakening currencies (Turkey, EE, Russia)
 - (2) **exposure to growing markets**.
- By **2015** EEMEA Airlines already **accounted for 31%** of EEMEA **capacity**.

28. How did the introduction of **new technology aircraft** in the **1960s/1970s** produce **problems** for the airline industry?

ANSWER: Flying Off Course, P11 (2003,2007,2010)

- Due primarily to the **increasing efficiency of the jet engine**
- For a given level of **propulsive thrust successive engines** were able to **carry a larger payload** and to **carry it faster** as well.
- This **combined with other economies arising** from the greater size of aircraft
- Resulted in ever-decreasing costs per capacity tonne kilometre
- Between 1960- and 1970-unit costs per available tonne kilometre **were halved** in **constant value terms**.
- During the 1970s airline unit costs expressed in current values **began to rise rapidly** because of **world inflation**.
- They **rose** particularly **sharply** following the **fuel crises** of **1973 and 1978**.

CHAPTER 2: AIRLINE REGULATIONS

29. (*) What **factors are covered** by **non-economic regulation** / List four factors covered by non- economic regulation

ANSWER: P6 (2004,2007,2010,2011,2016)

1. **Airworthiness**
2. **Maintenance & Overhaul**
3. **Personnel**
4. **Aircraft Operations**
5. **Infrastructure**

30. (*) What was the **outcome** of the **Paris Convention in 1919**?

ANSWER: P6, P7 (2004,2007,2010,2011,2013,2014)

- It stated that countries have **sovereign rights to the airspace** over their territory
- **5 Freedoms of the Air** were developed
- **England** was the **first off the mark** with their **Air Navigation Act 1920**
- All aircraft were **required to be registered in a single state** and thus have a **nationality**.
- The 1919 Paris Convention had also **provided for innocent passage** of the aircraft of **other jurisdictions in times of peace**.
- The 1919 Convention **Prohibited** aircraft **from carrying explosives or weapons**.
- An international dispute resolution bureaucracy was **set up** called the **International Commission for Air Navigation**.

31. (a) How was the **air transport industry regulated** in the **post war era**? /

How was the air transport industry regulated in the post **WW1** era? /

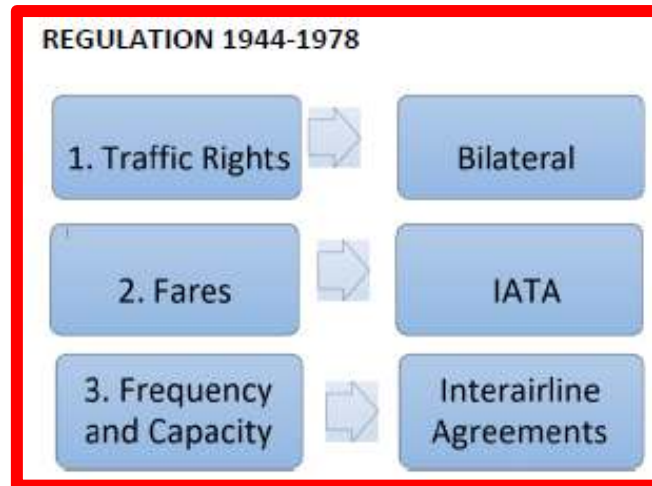
How was the air transport industry regulated in the post **WW2** era? /

(*) Discuss the development of airlines in Europe in the early years before WW2

(This question 'before WW2' means WW1)

ANSWER:

(2004,2006,2007,2008,2010,2011,2011[R]2012,2013) & (2016) & (2013)



1. Exchange of Traffic Rights - Bilaterals

☐ Since no multilateral agreement had been reached it was left to individual countries to make specific arrangements

☐ **Bilaterals** are **agreements between 2 countries** containing the following information;

1. **Bilateral articles – capacity and fares**
2. **Schedule of routes**
3. **Memoranda of Understanding**

☐ 2 types of bilaterals

1. **Protectionist**
2. **Liberal**

☐ **Good example** of a liberal bilateral was the **one negotiated between** the **USA** and the **UK** in **1946** – **Bermuda 1**

☐ **5th freedoms** were widely available, **no control of frequency & capacity**, fares decided by **IATA** mechanisms.

2. Control of Fares - IATA

☐ International Air Transport Association (IATA)

– Havana 1945 – to represent airline interests

☐ Process of setting fares pre 1979 was rigid

☐ Traffic conferences met 4-6 months in advance and agreed on 200,000 passenger & 100,000 cargo fares

☐ Decisions had to be **unanimous** – difficult as airlines could use **veto**

☐ IATA provided a **coherent worldwide structure** but **there was no price competition – cartel**

☐ **Not all airlines joined IATA** – SIA & charters which gave them advantages when pricing

☐ Demands for **more flexibility post 1979** so changes were introduced

3. Inter Airline Pooling Agreements

☐ Forbidden in the USA due to Anti-Trust legislation

☐ **Revenue Cost Pool** – 1 airline **operates the route** on **behalf of members of the pool** and **all costs and revenues** are **shared equally**

☐ For example, Perth – Tokyo – JAL and Qantas in 1987

☐ **Qantas** operated the route and revenues/ costs were shared equally

☐ All partners have incentive to market and sell the service since they share profits

☐ **Revenue Sharing Pool** – all revenue is **shared in proportion** to the capacity **provided by each member of the pool**

☐ Effects;

1. **Reduced freedom** of action for airlines

2. **Reduced competition**

☐ **Interairline Royalty Agreements** - Ability to **buy 5th freedom rights** for a **royalty fee** – for e.g. **London – Athens route**

32. (b) Explain the **factors favouring regulation** above.

ANSWER: P9 (2004,2007,2010,2011,2013)

1. **Without regulation** there would be **chaos**
2. **Public utility role**
3. **Charters** would be **advantaged**

33. (c) Explain two **consequences of such regulation**.

ANSWER: P9 (2005,2012,2016)

1. **Imposed Constraints on Markets, Outputs & Price**
2. **Fares not related to lowest costs**
3. **Monopoly Profits**

CHAPTER 3: AIRLINE DEREGULATION-OPEN MARKETS

34. Explain fully the post **1978 Open Market Bilateral** typical differences **between US and Foreign airlines**

ANSWER: P12 (2006,2008,2010,2011,2011[R],2012,2013,2014,2016)

	Traditional	New Open Market
1. Market Access	Only to points specified Limited 5 th – more in US Bilaterals Charter rights not included	Open access – airlines can fly between any 2 points Extensive 5 th in US bilateral but limited in intra EU Unlimited charter rights
2. Designation	Single – some multiple in US	Multiple
3. Capacity	50:50 No capacity/frequency controls in liberal bilaterals but subject to review	No frequency or capacity controls
4. Tariffs	Double approval by both governments IATA mechanisms used	DD & COR

- It's clear that the open market bilaterals **offered more to the US than EU**
- Only the US** could fly from any point in the US (which was the **largest traffic** generator) & benefit from **multiple designation**, since, most other countries only had one international airline.
- However, **US carriers** at the time were **perceived as weak** and **not overly aggressive** – Pan Am and TWA.

35. Compare and contrast elements of the **Bermuda 2 (1977) bilateral** and the **USA – Dutch (1978) bilateral**.

ANSWER: P12 (2004,2006,2010,2011,2011[R],2012,2013,2014,2016)

Bermuda 2 (1977) bilateral

- US 5th freedoms through London to Hong Kong reduced
- UK gateways in US increased 9-14
- Combination services and break of gauge extended

US-Dutch Bilateral (1978)

- UK accepted MD on routes over 600,000, but only two airlines from each country were allowed to operate to and from LHR.
- This effectively created a government enforced cartel that inhibited competition
- Wide exchange of cargo rights
- Capacity control through forecasts and scheduling
- Both governments must approve fares
- Fell short of liberalizing the market
- The real trendsetter was the US-Dutch bilateral

Key elements

1. MD accepted, no capacity or frequency controls
2. US airlines - full 5th through Amsterdam and beyond
3. Dutch given access to 5 US gateways, New York, Chicago, Houston, LA + 1 other
4. Unlimited charter rights to any point with COR. US renegotiated - Belgium & Germany
5. US also renegotiated with Singapore, Thailand, Korea etc. in line with the US -Dutch bilateral

36. What were the **outcomes** of **deregulation on the North Atlantic/Pacific routes** from 1978-1991?

ANSWER: P13 (2003,2007,2010,2012)

1. New **carriers** and increased **capacity**
2. Downward **Pressure on Yields**
3. Collapse of **charter traffic**
4. Increased **US market share**
5. Higher **Load factors**

SOME CONCLUSIONS ON US RENEGOTIATIONS

- By 1990 the spread of open market bilaterals was patchy, most **liberalised** was **US-Canada**
- **North Atlantic**
 1. no capacity/frequency **constraints**
 2. **fares** now more flexible
 3. **entry of carriers** was easier due to MD
- **Pacific routes**
 1. A **similar pattern** developed

CHAPTER 4: EU LIBERALISATION

37. (*) By the **1980s** pressure for **regulatory change** was **growing in Europe**. Explain why this was the case / Why was **pressure for change** developing in Europe in Mid 1980s?

ANSWER: P14 (2007,2010,2011,2013)

1. **Charters offered much lower fares**. For example, London - Athens with a charter was 64% cheaper
2. **Introduction of wide-bodied aircraft in 1970s** forced airlines to find new ways of raising demand
3. The **influence of the EU Commission and Parliament**

38. (*) Outline the **key elements** of the **UK – Ireland Bilateral (1985-88)**.

ANSWER: P14 (2007,2010)

1. **Multiple Designation**
2. **No capacity control**
3. **Double disapproval**
4. **Open Route Access**

39. (*) Outline the key elements of the **1987 EU Liberalisation Package**

ANSWER: P15

- (Approved Dec 7/87)
- **Fares**; **governments** are **obliged to agree fares** if they reflect costs
- Zones of **discount fares** can be set up
- **Capacity** - **Equal sharing abandoned**
- 55% could be provided by 1 airline up to 1988, 60% by 1990

40. Explain four differences between Traditional pre 1984 EU Bilaterals and New EU Open Market Bilaterals / Compare and contrast the features of traditional versus new open market bilaterals

ANSWER: P15 (2016) & (2004,2006,2008,2011[R],2012)

	Traditional pre 1984	New Open Market
Market Access	Only to specified points	Open route access
Designation	Generally single	Multiple
Capacity	50:50	None
Tariffs	Double Approval	DD

- It's clear that EU Open Market bilaterals had changed significantly from their pre 1984 counterparts
- In terms of market access the EU Open Market bilaterals were also more liberal than those on the North Atlantic route where significant restrictions were still in place

41. (*) Outline the key elements of the 1990 EU Liberalisation Package

ANSWER: P16 (2016)

1. More liberal zoning system
 2. An airline of a member state with 60% capacity could increase it by 7.5% over each of the following 2 years
 3. Increased market access, MD on routes with 140,000+ in 1990, declining to 100,000+ in 1992
- Increased 5th freedoms (50%)

42. What was the **outcome of the EU third package** open skies agreement in **1993**? /

Explain fully the **EU Third Liberalisation Package (1993)** /

Explain the elements of the EU Third Liberalisation Package (1993) /

Explain the **elements** of the EU Third Liberalisation Package (1993) and **its significance**

ANSWER: P16 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013)

- Open market access – **abolished restrictions on cabotage** (consecutive) and 7th, from April 1st, 1997
- **Opening up access for carriers throughout the EU** to all national and international routes within the EU
- There are **no price controls** – **complete freedom** but **some safeguards** to prevent excessive pricing
- **Harmonisation of criteria** for granting operating licenses –
- **No distinction** between scheduled & charter.
- This package went further than the US open skies bilaterals in a number of ways;
 1. Multilateral
 2. Explicitly allowed cross border ownership

43. (*) Explain **two ways** in which the **1993 EU package** of reform **went further than the US–EU Open Skies bilaterals**

ANSWER: P16 (2016)

1. **Multilateral**
 2. **Explicitly allowed cross border ownership**
- The EU while **allowing greater freedoms** also started to apply the competition rules more effectively
 - **Designed to prevent anti-competitive behavior** – cartels, monopolies, restrictive agreements, mergers and state aid - applied more strictly
 - For example, **no more state aid for airlines** –
 1. Governments can **offer support** for the **operation of services** to meet social service needs
 2. **Mergers which exceed stated threshold** must be **referred** to the EU Commission – **Air France and UTA**

CHAPTER 5: MOVES TOWARDS OPEN SKIES 1992+

44. Explain fully the **Show Cause Order** / Explain fully the Show Cause Order and how it **affected IATA**/ Explain the 'Show Cause Order' and its **significance for air transport**.

ANSWER: P17 (2003,2007,2011,2014)

- In **June 1978** the **US** issued the 'show cause order' whereby **IATA** had to show cause why exemption should remain
- If the US exemption was withdrawn, then **no airline flying into the US could be party to IATA fares**
- This would have had **serious implications** for the airline industry
- By **1980** the **US** agreed to abide by **IATA fares** **but** **US airlines** were forbidden to join in
- As a result, many **US airlines** left **IATA**
- This led to a **serious undermining of IATA**
- The **order was abandoned** in **1984** and some **US airlines** crept back into **IATA** as **trade association** members with **no participation in fare setting**
- This marked the beginning of the end of **IATAs** critical role in fare setting
- By **1992** the **USA** felt that the open market style bilateral was **too restrictive**
- **US airlines** believed that future expansion **should be international** rather than the mature domestic market
- **US** felt that they would **do better than foreign competitors** **due to lower costs and domestic feed**
- As a result, they started a new wave of **bilateral renegotiations**

45. (*)By1992therewere**increasingcalls**fortheairlineindustrytooperateinthesame way as any other. How had the international airline industry **matured in the previous decade**?

ANSWER: P17 (2014)

- The international airline industry had matured during the previous decade –
 1. **Growing concentration** in the **US** – the **emergence of the big 3**
 2. **Outside of US airlines** searched for marketing benefits of large scale operations **through alliances**
 3. Ownership – **Privatisation** – 1987 **British Airways**
 4. **Emphasis on reducing state aid**

46. Explain fully the **USA – Dutch Open Skies (1992) bilateral** / Explain the elements of the US-Dutch Bilateral Agreement (1992)

ANSWER: P18 (2004,2014,2016)

US-Dutch Open Skies Agreement (1992)

- **September 1992** US – Dutch signed what was effectively the **first open skies agreement** which contained the following;
- **Open route access** – airlines from either country can fly to any point in the other **with full traffic rights**
- **Unlimited 5th freedoms** and **no tariff controls**
- Airlines **free to code share** or make other **commercial agreements**
- **Break of gauge permitted**
- Also **re-emphasized some older concepts** such as **MD**, **open charter access** and **no frequency & capacity controls**
- After this bilateral there was a lull (*Stillness) in terms of further developments

47. Compare and contrast the **US – Dutch 1978 agreement** and the **US – Dutch 1992 open skies agreement**?

ANSWER: P12, P18 (2004,2010,2011,2011[R],2012,2014,2016)

US-Dutch Bilateral (1978) (Same in Question 35)

- **UK accepted MD** on routes over 600,000, but only **two airlines from each country** were **allowed to operate to and from LHR**.
- This effectively created a government **enforced cartel** that inhibited competition
- **Wide exchange of cargo rights**
- **Capacity control** through forecasts and scheduling
- **Both governments** must **approve fares**
- Fell **short of liberalizing** the market
- The **real trendsetter** was the US-Dutch bilateral

US-Dutch Open Skies Agreement (1992)

- (Answer at the previous question)

48. Compare and contrast **Open market** and **Open Skies Bilaterals**.

ANSWER: P18 (2004,2011[R],2012,2014,2016)

	Open Market	Open Skies
Market Access	Named number of points	Unlimited
	Generally unlimited 5 th	Unlimited 5 th
	No Cabotage or 7th	No Cabotage or 7th
Designation	Multiple	Multiple
Capacity	None	None
Tariffs	DD	Free pricing
Code Sharing	Not part of bilateral	Permitted

49. Explain fully the **EU – USA Open Skies Agreement (2008)**

ANSWER: P19 (2010,2011,2011[R],2012)

- Introduced **new commercial freedoms** for airlines and a framework for **regulatory co-operation in transatlantic aviation**
- Replaced individual member bilateral agreements
- Open Skies Agreement – Key Elements
 1. The **right to fly between any point in the EU to any point in the US without pricing/capacity restrictions**
 2. The right to **continue flights beyond the US to third countries** (5th freedom)
 3. The right to **operate all cargo flights between the US & a third country** with no requirement that service starts or ends in home country
 4. **7th freedom rights**
 5. A number of access points to the **Fly America programme**
 6. **More freedom** to enter into commercial agreements
 7. **Antitrust immunity**, rights in the area of **franchising / branding**
- **Eliminated Bermuda II** updated in **1997**. Restricted access to LHR. It only allowed **BA, Virgin, United and American Airlines into LHR**
- The new Open Skies agreement **allows any US carrier to serve any point in Europe unrestricted** and this **includes service to London Heathrow**.
- However, the shortage of landing slots at Heathrow will impede progress.

CHAPTER 6: AIRLINE PASSENGER DEMAND

50. Explain fully the **relationship** between **price and demand** for air travel.

ANSWER: P23 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013,2014,2016)

Price / Fare Levels

- Huge influence on demand - the **lower the price** the **more people will travel**
- Relationship between price and demand is called **PRICE ELASTICITY (Pe)**
- Price Elasticity of Demand in Selected Markets
 1. France -0.66
 2. Scandinavia -0.27
 3. **Germany -0.62**
 4. **Ireland -0.81**
 5. **Portugal -0.12**
 6. Greece -0.33

51. Explain how recent **changes in the social environment** influence **demand for air travel**

ANSWER: P23 (2016)

1. Air travel is embedded in social life in new ways - **events** that would have in the past been **held locally** (e.g. **birthdays, anniversaries**, hen/stag nights)
2. Tourism **increasingly coupled** (and **masked with VFR** and/or business)
3. **Trophy tourism**; **increasing performances of touring** the world as collectors of places and ticking destinations off a mental list
4. There have been significant changes in **levels of public concern** about the **environment and growing evidence of air travel decisions** taken with a '**carbon conscience**'

52. Explain fully the key product features **affecting consumer travel decisions** and choice of airline

ANSWER: P24 (*) (2010,2011,2013)

1. **Scenic**
2. **Climatic**
3. **Historical**
4. **Price**

53. What factors affect the level of demand on **specific routes**?

ANSWER: P24 (2006,2008,2011[R],2012,2014)

1. Level of **Tourist Attraction**
2. **Exchange Rate Fluctuations**
3. **Travel restrictions**
4. Earlier **population movements** and **migration**
5. Strong **Cultural and Historical links**
6. **Migrant Flows**
7. Level of Economic **Activity Administrative Capitals**, exploration and development of oil fields or **new industrial complexes**

54. Why do **peaks and troughs** occur in passenger demand? / (a) Explain why peaks and troughs in demand for the airline product occur

ANSWER: P25 (2005,2006,2008,2011[R],2012)

1. **Institutional**- School holidays, Chinese New Year, Bank Holidays
2. **Climatic** - **Summer Mediterranean Winter USA** or skiing

55. (*) What is **market segmentation**

ANSWER: P25 (2006,2011[R],2012)

- **Identification of different groups of passengers** with **different growth rates** who respond **differently to fares or external factors**
- Size and characteristics of each segment is essential for **forecasting demand** and **price planning**

56. What factors are involved in **airline marketing**?

ANSWER: P25 (2003,2007,2010,2011,2012,2013,2014,2016)

1. **Market segments that can be served**
2. **Air services offered and their product features**
3. **The product selling**
4. **Product standards and features**

This answer from Notes (As below)

1. Identify markets and market segments that can be served
2. Decide what air services should be offered and their product features
3. Plan & organize the selling of the product
4. Review and monitor product standards and features

CHAPTER 7: AIRLINE PRICING

57. (*) **Profitability depends on the interplay** of which 3 factors

ANSWER: P26 (2004,2011,2013)

1. Unit costs
2. Unit revenues
3. Load Factors

58. (a) Explain fully **cost related** pricing policies. / Explain fully 'cost related pricing' strategies and **why they were once popular**

ANSWER: P27 (2003,2007,2010,2011,2013) & (2006,2008,2011[R],2012,2014,2016)

- Relate fares to the costs incurred in providing the service
- The strategy was popular for **two main reasons**:
 1. More equitable to charge what it costs instead of cross subsidising for example 50% discount for children – it does not cost 50% less to carry them
 2. Economic efficiency- unless fares are related to cost then inefficient carriers will continue to operate protected by high fares

59. (b) What **problems** are typically associated with this approach?

ANSWER: P27 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013,2014,2016)

1. Joint costs problem – You would have to average for all users rather than separate the costs specific to each sector
2. Problem routes – some routes not enough revenue generated to continue operation - Yet if market divided in 2 segments with different elasticities could charge more to one group at no extra cost
3. Cost variations – different regions have different cost levels so fares would vary

60. (a) Explain **fully demand related** pricing policies.

ANSWER: P27 (2003,2007,2010,2011,2013)

- In Favour of Demand Related
 1. **Allows an airline greater pricing freedom** to generate sufficient revenues to cover costs ie. Charge more to price inelastic and less to price elastic
 2. **Does not guarantee profits** especially in price competitive markets -
 3. Due to Short run MC and instability of fares, **demand related fares may reach low levels** where **not enough to total costs** especially if extra capacity is put on

61. (b) What **problems** are typically associated with this approach.

ANSWER: P27 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013,2014,2016)

1. How to prevent **passengers** who are **willing to pay more** from switching to lower fares – **fences have to be established**
2. How to stop **too many seats at low fares being sold** and thereby **reducing the capacity** for higher paying passengers?

62. Explain fully the **differences** between **cost** and **demand related** pricing strategies

ANSWER: P27 (2004,2012,2014,2016)

- **Cost Related Pricing.**

Relate fares to the costs incurred in providing the service

- **Demand Related Pricing (Dynamic Pricing)**

Base fares for different categories of service not on costs but on what the customer is willing to pay

- **In Favour of Cost Related**

1. **More equitable to charge what it costs** instead of cross subsidising for example 50% discount for children – it does not cost 50% less to carry them
2. **Economic efficiency**- unless fares are related to cost then inefficient carriers will continue to operate protected by high fares

- **In Favour of Demand Related**

1. Allows an **airline greater pricing freedom** to generate sufficient revenues to cover costs ie. Charge more to price inelastic and less to price elastic
2. **Does not guarantee profits** especially in price competitive markets -
3. Due to Short run MC and instability of fares, **demand related fares may reach low levels** where not enough to total costs especially if extra capacity is put on

CHAPTER 8: AIRLINE COST

63. (*) Explain the **difference** between **operating** and **non-operating** airline **costs**.

ANSWER: P29 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013,2014,2016)

Operating Costs

- Costs which are associated with the operation of an airline
 1. Direct Operating Costs – **Depends on aircraft type**
 2. Indirect Operating Costs – not dependent on aircraft type – **passenger and administration related.**

Non-Operating Costs

- Costs not directly associated with the operation of an airline
 1. Interest on Loans.
 2. Gains/Losses from **retiral of property**
 3. Gains/Losses from **affiliated companies**
 4. Gains/Losses from **foreign exchange transactions**
 5. **Direct government subsidy/payments**

64. (*) List the factors included in **non-operating costs**.

ANSWER: P29 (2003,2006,2007,2008,2011,2011[R],2012,2013,2014,2016)

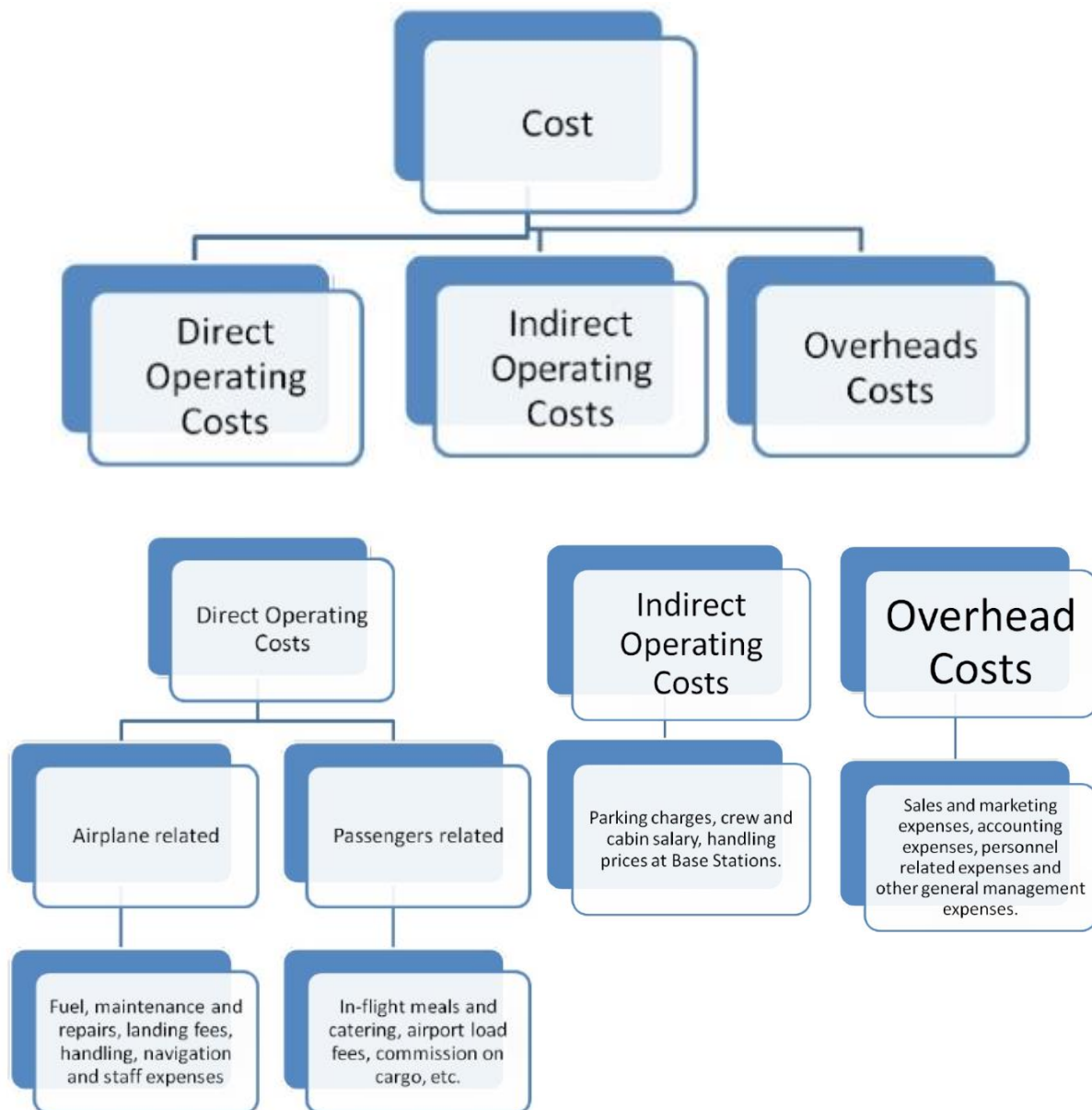
1. **Retiral of property**
2. **Interest on loans**
3. **Affiliated companies**
4. **Foreign exchange transactions**
5. **Direct government subsidy/payments**

65. (*) List the factors included in **overhead costs**.

ANSWER: Internet (2012)

Generally, these are managerial expenses towards sales, marketing or HR.

1. **Sales and marketing** expenses
2. **Accounting** expenses
3. **Personnel related** expenses
4. **Other general Management** expenses



66. Explain the key differences between fixed and variable costs, giving full examples of the elements of each and factors effecting them

ANSWER: P30, P31 (2012)

(Tips: Fixed cost = indirect operating cost; variable cost= direct operating cost)

VARIABLE COST (Direct Operating Costs)

1. Flight Operations

a) Flight Crew

- Salary & Expenses including allowance, pensions, insurance and any other social welfare payments

b) Fuel and Oil

- varies by aircraft type depending on size / thrust of engines & type and age of those engines
- Consumption depends on weight, wind & cruise altitude etc.

c) Airport and Enroute Charges –

- Airport charges: Airlines have to pay airport authorities for the use of runway and terminal facilities
- Enroute charges – use of navigational aids while flying
- Extra for hangarage/parking

(d) Insurance –

- Calculated as a % of purchase price - 1.5 - 3%
- Depends on region, number of aircraft insured and safety record

- (e) Rental / Lease of flight equipment /crew

- Operating Lease: generally, for 5 years or less with ownership resting with the lessor
- Financial Lease: after 10 years + aircraft ownership is transferred to the airline

2. Maintenance and Overhaul

- Pre Departure Inspections, A, B, C and D checks.
- Labour costs, costs of components/spares
- Administration – sub contract

Answer (Continued...)**3. Depreciation (*Reduction)**

- Writing off the **cost of an aircraft charge yourself** a certain amount each year.
- Used to be 12 years but **now 18-20**.
- Some airlines charge extra when they make good profits.

FIXED COST (Indirect Operating Costs)**1. Station and Ground Expenses**

- Costs of **providing a service at airport** other than landing fees.
- **Staff – salary and expense**
- **Handling and servicing of aircraft**
- **Passenger, freight and baggage handling**
- **Buildings and insurance**

2. Ticketing, Sales & Promotions

- **Staff, offices, advertising and commission** paid to travel agents

3. Passenger Services

- **Cabin crew costs, inflight catering Premiums** for **passenger insurance** - 30 - 35c per RPK

4. General Administration

- **Head Office**

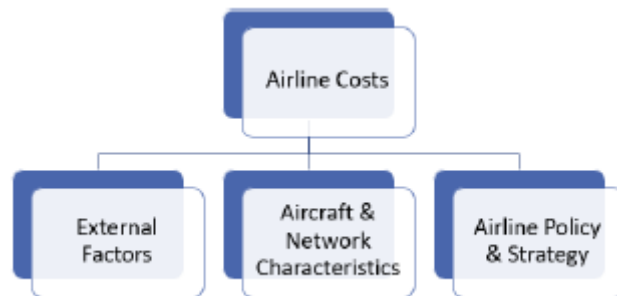
67. Explain fully, using examples, the factors that make up an airlines Direct Operating Costs (DOC)

ANSWER: 2003, 2004 ,2007,2010 (Repeat), 2011, 2013

- *(Answer is in previous question; Part Direct Operating Costs = Variable Costs)*

68. (*) Once the level of supply has been **decided 3 broad groups** determine **airline costs**.
What are they?

ANSWER: P31 (2003,2006,2007,2008,2010,2011,2011[R],2013)



69. Explain fully how **fuel prices** influence airline costs and what options are available to airlines to **reduce its negative impact**

ANSWER: P32 (2016)

Fuel Price influence airline costs

- The global airline industry's fuel bill is **estimated to total \$180 billion in 2018** (accounting for around 23.5% of **operating expenses at \$73.0/barrel Brent**).
- This is an **increase of 20.5% over 2017** and is **almost double the \$91 billion** fuel bill for **2005**, which accounted for 22% of operating expenses at \$54.5 Brent.
- In 2019 the fuel bill is forecast to be \$200 billion, accounting for around 24.2% of operating expenses at \$65 per barrel Brent.
- Industry **net profits of \$35.5 billion** are forecast for **2019**, following an estimated profit of \$32.3 billion in 2018.

Options available to airline to reduce its negative impact

1. **Negotiating the price**
2. **Fill up at cheaper airports**
3. **Reduce consumption**
4. **More fuel-efficient aircraft**

70. (*) What can airlines do to **reduce fuel costs**? / What airlines can do to reduce the amount spent on fuel?

ANSWER: P32 (2014)

1. Negotiating the price
2. Fill up at cheaper airports
3. Reduce consumption
4. More fuel-efficient aircraft

71. (*) What impact does **stage length** have on airline costs?

ANSWER: P33 (2003,2006,2007,2008,2010,2011[R])

- Longer the stage length the lower the unit costs, more time spent in the air, fewer landings, less M & O, less landing fees and lower station and ground costs.
- Savings on tickets and marketing relative to output
- Shorter length – too much time on the ground and more landing fees

72. (*) What **impact** does **aircraft size** have **on airline costs**? / Explain how aircraft size influences airline costs / What impact does aircraft size have on airline costs?

ANSWER: P33 (2004,2011,2013,2014)

- General rule – The larger the aircraft the lower its DOC per unit i.e. costs do not increase in proportion to payload
- **Aerodynamic Benefits** – larger aircraft has lower drag and more payload per unit of weight, also larger and more efficient engines.
- **Economies of size** – For example M & O and labour involved
- **Lower costs per SKM** – yet dearer round trip so the decision should all depend on demand

73. Discuss how an airline could **reduce its costs per hour**, using **two examples** each from **fixed and variable costs**, and **estimate the potential** for cost reduction in each case.

ANSWER: P33 (2012) [Aircraft Types and Characteristics]

*(*Tips: This is under Operating Cost: Direct Operational Cost and Indirect Operational Cost) (Variable Cost= Direct Operational Cost & Fixed Cost = Indirect Operational Cost)*

DOC

- The **larger the aircraft**, the lower its DOC per unit. I.e. costs do not increase in proportion to payload.
- The **greater the aircraft speed**, the greater the output per hour so lower DOC
- **Take off and performance range** can reduce payloads lead to higher costs since costs are now spread over fewer unit of outputs.
- The **longer the stage length**, the lower the unit costs, more time spent in the air, fewer landings, less M&O, less landing fees and lower station and ground costs.
- **Percentage charter operation** can make DOC fly at night, better aircraft utilization, cheaper airports.
- **Percentage charter operation** can make savings on IOC. Less on tickets, sales, catering/cabin staff

CHAPTER 9: LOW COST CARRIERS

1. Explain the **main strategies pursued** by **Low Cost carriers** /

Explain the **different strategies** pursued by Low Cost carriers /

Explain the **components** of the LCC Business Strategy /

Explain the main strategies used by low cost airlines/

Explain the strategies adopted by low cost airlines? /

Explain fully the **recent development** of LCCs in **Hungary**

ANSWER: P35 (2010) & (2011) & (2013,2014) & (2004) & (2005) & (2016)

Core Concept	LCC
Costs / Fares	Low Costs / Low Fares – KISS principle
Airport Usage	Secondary Airports
Network Characteristics	High Frequency, Short haul , Point to Point Services
Fleet	Single Type Fleet
Sales and Distribution	Direct Sales and Distribution
Ancillary Revenue	High Emphasis
Customer Service	Focus on performance - punctuality, cancellations etc

74. Explain why **traditionally low cost carriers** have been **less successful in the EU when compared to the USA** /

(*) What are the **main challenges** for the Low cost airline sector **into the future**

ANSWER: P35 (2004,2006,2008,2011[R],2012) & (2011,2013,2014)

1. **Heavy airline traffic** congestion and delays, ATC, many airports have reached capacity
2. **Rail alternatives** – strong competition, UK – France Channel Tunnel, TGV – Paris to Marseilles
3. **Lingering national barriers** – language, culture
4. **High infra structure costs** – airport charges still remain high, account for 20% of Ryanair's costs.
5. **Lower demand for VFR** – still tends to be leisure/business
6. **Use of airports** – restrictions on slots
7. LCC **strength in domestic US market**
8. **Role of Charters in the EU.**

75. Explain fully the **low cost airline strategy** of **using secondary airports** and account for its success.

ANSWER: P35 (2007) [SPOTTED QUESTION]

Secondary rather than primary airports from which to operate

- **Lower charges** than primary
- **Less congested** than principal airports
- **Greater chance of obtaining a slot, a quicker turnaround, and less taxi time** which translates into shorter block time

76. Explain with examples how the use of **direct distribution and sales** is a **significant cost saver for LCCs** when **compared to traditional carriers**.

ANSWER: P36 (2016)

- **No tickets required** for example e-ticketing where only proof of identity is needed
- **No CRS - no CRS payment** which amounts to \$3 per fare and lower IT costs
- **Administration costs would be substantially reduced**
- **Mixture of direct distribution \ sales and CRS**
- **Maximize the use of Internet booking facilities**

77. Explain the competitive advantage of the **Low Cost Carrier (LCC)** in terms of **costs** when **compared to traditional airlines**. /

How do **Low cost airlines costs differ** from established airlines? /

Low cost airlines have much **lower costs /different cost levels** when compared to established airlines in a number of areas. Explain fully **what the areas are**

ANSWER: P36, P37 (2014) & (2003,2007,2010) & (2004,2006,2008,2011[R],2012)

1. Labour

- Cabin and flight crew costs may be lower per seat km since staff achieve higher productivity
- More intense working practices & shorter turn- around mean more flying per duty period
- Cabin Crew - Salaries are lower and less crew members per aircraft B737 3 for LCC but 5 for full service
- Avoid night stopping away from base

2. Aircraft & Fuel

- High aircraft utilisation – easyjet flew its B737s for 10.3 block hours per day whereas BA only achieved 6.9 hours
- New generation aircraft, commonality (*Unity)
- Fuel hedging, use of winglets

3. Distribution, Product and Overhead

- Direct sales only
- No Global Distribution System fees
- No commission on ticket sales
- Ticketless – savings on printed tickets and boarding passes

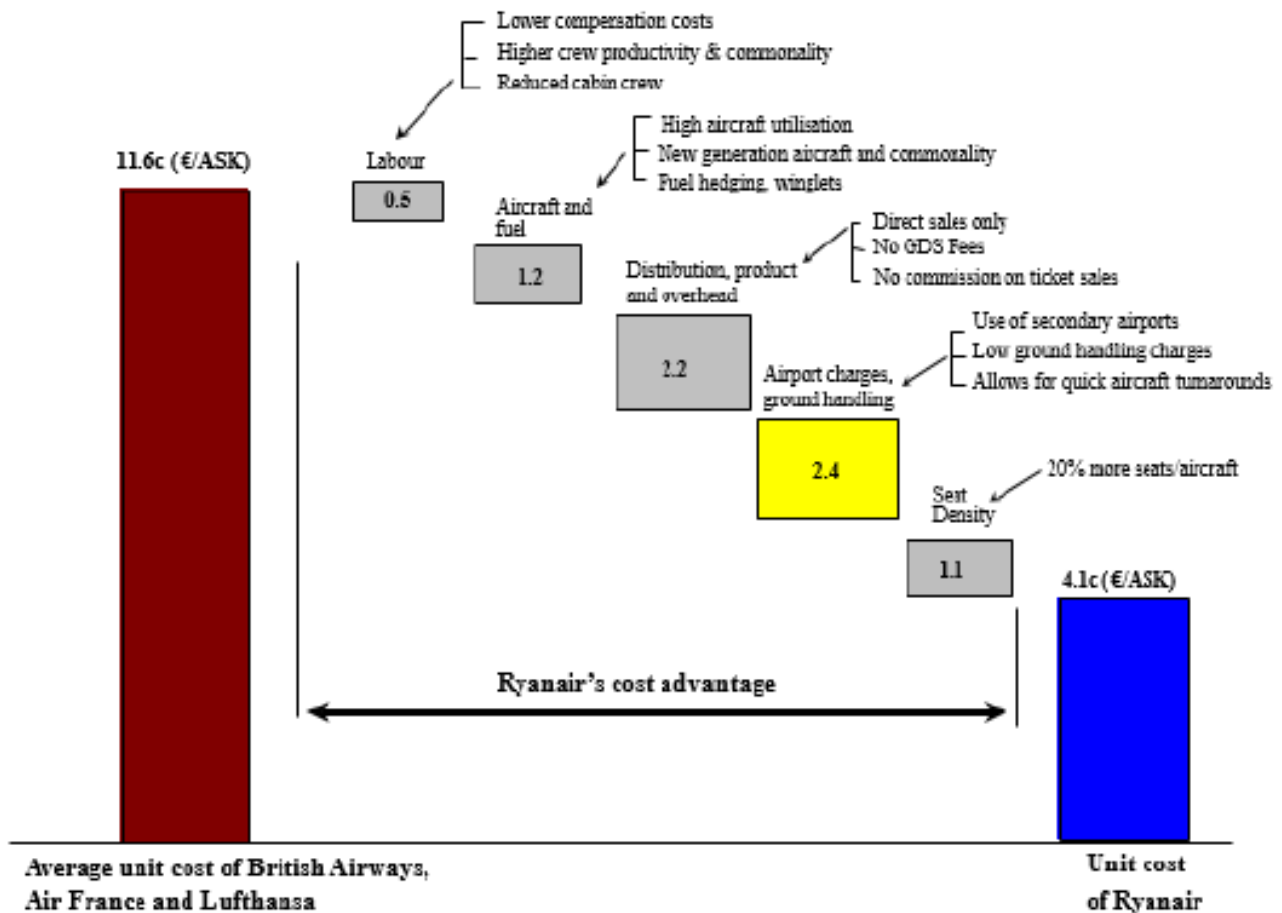
4. Airport Charges & Ground handling

- Low cost carriers obtain discounts and use secondary airports
- Passenger handling and station costs – low cost airlines invariably outsource this activity
- Low cost carriers do not usually carry cargo, which has the added necessary bonus of keeping turnaround times down

5. Seat Density

- 28 – 29-inch pitch – compared to 31-33
- Example, overall cost advantage for easyjet 16-17%

The competitive advantage of the low cost carrier



78. (*) What must the **LCC** sector do to ensure **long term survival**?

ANSWER: P41 (2011, 2013)

- Drive retentions and returns [Always Getting Better (AGB) Summary]
 1. Fix the things Pax don't like
 2. Improve the travel experience
 3. Improve the digital experience
 4. Develop the offer
 5. Improve brand and marketing

1. Costs / Fares

- ☐ **Adopt the KISS strategy** – Keep it Simple Stupid. No frills/low cost service offering
- ☐ Simple product with conservative route development
- ☐ Low fares are also offered with a very simple pricing structure, unrestricted
- ☐ The price range is stated in advance, with prices increasing nearer to the departure date.
- ☐ Traditionally no boarding card/seat allocation – leads to quicker check in & passenger sit down so quick turnaround
- ☐ Little or no inflight service –reduced costs, quicker turnaround, fewer required
- ☐ Revenue earned by selling simple food and drink
- ☐ Simple organizational structure with a focus on costs and efficiency
- ☐ Outsourcing of ground handling and maintenance
- ☐ No FFP, interlining, transport to and from aircraft

2. Secondary Airports

- ☐ Secondary rather than primary airports from which to operate
- ☐ Lower charges than primary
- ☐ Less congested than principal airports
- ☐ Greater chance of obtaining a slot, a quicker turnaround, and less taxi time which translates into shorter block time

3. Short haul- Point to Point Services

- ☐ High frequency, short haul services
- ☐ Offers the potential for unit cost savings, aircraft utilization, labour productivity etc.
- ☐ Low comfort acceptable on short sectors
- ☐ Good punctuality

4. Fleet Commonality

- ☐ Simple fleet is also used by these low cost startups - commonality leads to increased crew flexibility and cheaper maintenance
- ☐ High aircraft utilization

5. Direct Distribution & Sales

- ☐ No tickets required for example e-ticketing where only proof of identity is needed
- ☐ No CRS - no CRS payment which amounts to \$3 per fare and lower IT costs
- ☐ Administration costs would be substantially reduced
- ☐ Mixture of direct distribution \ sales and CRS
- ☐ Maximize the use of Internet booking facilities

6. Ancillary Revenues – Highly emphasised

- ☐ Expanding revenue from ancillary activities has become an important part of the LCC strategy

7. Customer Service

- ☐ Focus on delivery of best customer service in terms of punctuality, lost baggage and fewer cancellations than rivals
- ☐ Traditionally less emphasis on relationship building, customer problem solving and data management

CHAPTER 10: RYANAIR THE LOW-COST CARRIER

79. Account for **Ryanair's success** as a low cost carrier.

ANSWER: P38 (2006,2008,2011[R])

- Largely the product of liberalisation in the EU
- Started operations in **1985** serving Dublin to Luton and Gatwick
- Within **4 years** had **lost €25 million** and was on the **verge of bankruptcy**
- 1990/1991 – major turning point for Ryanair
- Company was relaunched as low fares airline
- Younger management team appointed
- CEO – Charismatic Michael O'Leary
- Used the South West model
- **Eliminated 14 unprofitable routes, standardized aircraft type and fare reduction of 70%**

1997 – EU

- Liberalisation allowed Ryanair to **develop hubs outside of Ireland** such as **Stansted to Stockholm, Oslo.**
- Further European expansion – Dublin – Paris, Brussels.

CHAPTER 11: FULL SERVICE CARRIERS

80. (*) Define the term '**Full Service Network carrier**'

ANSWER: P44 (2016)

- A "legacy" or "full service carrier" is an airline that focuses on **providing a wide range of pre-flight and on-board services**, including **different service classes**, and a **network of connecting flights**.
- A full-service carrier typically **offers passengers inflight entertainment, checked baggage, meals, beverages and comforts** such as **blankets and pillows** in the ticket price.

81. (*) Identify the **distribution channels** typically used by **Full Service Network carriers**

ANSWER: P45 (2016)

1. **Travel agents**
2. **Online travel agents**
3. **Sales Office**
4. **Call centres**
5. **Tour operators**
6. **Website**
7. **Corporate travel website**
8. **Travel portals (e.g: Opodo)**
9. **Mobile phones**

82. Explain fully any **four characteristics** associated with **Full Service Network Carriers**

ANSWER: P45 (2016)

1. **Fleet:** Different aircraft types, **from small regional feeder aircraft to B747/B777/A340/A380 long range widebody aircraft**
2. **Geographical network range:** **Domestic**, European and worldwide flights (some smaller FSNCs, however, stick to Europe) with **focus on the respective home country**
3. **Network structure:** **Hub-and-spoke network** (feeder flights from the respective hubs), often **complemented by selected decentralised non-hub flights**
4. **Schedules:** **wide range of O&D's (origin & destinations)** offered via the respective hub, high frequencies
5. **Service range:** **2-4 service classes, dedicated services in business and first class**
6. **Pricing:** **complex yield management**, price discrimination

83. Explain the **business strategies** associated with **Full Service airlines**

ANSWER: P46 (2014, 2016)

1. Service offering

- FSCs offer **multiple service attributes** which are **fully bundled**
- For example;
- **Flexible check in, premium desks, airport lounge usage, inflight technology, seating, crew, catering, transfer and baggage handling**
- **Seating and inflight technology**
- **Crew and catering**

2- Global Network Connectivity

- FSCs typically use primary airports in a designated region
- Use of **capital city airport** where possible
- **Complex route networks** with **many hubs**
- **Augmented through strategic alliance** membership
- **Hub and spoke** rather than point-to-point.

3. Target Market

- **Business** and **premium leisure market**

4. Distribution Channels

- **Multichannel** including **travel agents** and **tour operators**
- These work in tandem with the airlines **own website sales**

5. Customer Engagement & Relationship Management

- Structured approach on a **one to one basis**
- **Alliance based FFP**

84. Explain the current **Aer Lingus business strategy**.

ANSWER: P49 (2013,2014,2016)

Aer Lingus Strategy

- Equally, the 'full service' model adopted by many flag carriers was deemed **not competitive because**:
 1. There is a **relatively small business market to/from Ireland**.
 2. The **Dublin hub is in a disadvantageous geographical position** for short-haul connecting flows.
 3. Most importantly, **low fares are embedded** in the **Irish market place** and in the **Irish consumer mind-set**.
- The airline's **primary markets** are **Ireland, the United Kingdom, Europe** and the **United States**.
- **Destinations served** in the **United States** partly **reflect those regions and cities** where the Irish-American diaspora are concentrated, namely **New York, Boston** and **Chicago**.
- The Irish people typically **undertake several overseas flights a year**.
- This is **partly driven by Ireland's status as an island nation** but also reflects the **inherent propensity** among the Irish to travel to **visit overseas friends, relatives** and **colleagues**.
- This is a well-established feature of Irish national behaviour and contrasts significantly with several other European countries:
 1. **Warsaw and Barcelona transfer traffic through Dublin** was also developed
 2. **Targeted cities with no or poor transatlantic service**
 3. **Agreement with jetBlue in USA**

85. (a) Explain two reasons why **Aer Lingus** was viewed **as an attractive acquisition by IAG**

ANSWER: P50 (2016)

1. **LHR slots**.....which constrained Bas expansion?
 - **Dublin-LHR one of the busiest** and **most profitable** routes in Europe
 - **Walsh** argued that the value of the LHR slots was in using them on Dub- LHR
2. The **Aer Lingus brand**
3. **Potential for expansion out of Dublin airport**

(Source Irish Independent 2015)

86. (b) Explain two **concerns** raised **by the initial IAG bid for Aer Lingus**

ANSWER: P50 (2016)

1. **Jobs**; Fears about likely cuts arising from consolidation. Iberia experience?
2. **Connections**; potential loss of international links for Shannon and other airports
3. **Loss of the brand**

87. The **2001 crisis** for Aer-Lingus exposed a number of long **standing issues**. Discuss these issues / Explain fully the problems faced by Aer Lingus in 2001

ANSWER: Internet (2013,2016)

- Airline industry has experienced a **very difficult trading environment**
- The airline was in decline prior to the impact of the **terror attacks** in the us on **11 September 2001**.
- All Aer Lingus **transatlantic flights** have been cancelled while the airline awaits instructions on new security measures before resuming its service.
- In response, airline faced enormous **operating and financial difficulties**
- This led to **loss of income**.
- In addition, the airline **cut staff numbers and destinations** and **reduced its fleet**.
- The solution to which lay in a **restructuring of the industry** throughout the European Union
- **Survival plan included**: a **cost reduction programme** of almost €190 million, a reduction in staff numbers of over 2,000, a **pay freeze** and **radical changes** in work practices.

CHAPTER 12: AIRLINE ALLIANCES

88. (*) Define the term “**strategic alliance**”.

ANSWER: P51 (2003,2006,2007,2008,2010,2011,2011[R],2012,2013,2014)

- A **Strategic alliance** links the facets of 2 or more firms in a trading partnership that provides for the mutually beneficial trade of technologies, skills or products among members
- An **alliance** is where two or more airlines agree to cooperate in a number of fields
 1. Scheduling, marketing, purchasing, administration, maintenance
 2. Member airlines are likely to have generally complimentary services without much overlap

89. Describe the **different types of alliances** that airlines **may enter into**.

ANSWER: P52 (2011,2013)

STAR ALLIANCE

- The Star Alliance is the world's largest global airline alliance headquartered in Frankfurt, Germany
- It was founded in 1997

ONEWORLD

- Oneworld was founded on 1 February 1999.
- The alliance's stated objective is to be the first-choice airline alliance for the world's frequent international travellers.
- Its central alliance office is currently based in New York.

SKYTEAM

- Sky Team was founded on 22 June 2000
- Its management team, SkyTeam Central is based at the World Trade Center Schiphol Airport, Netherlands
- SkyTeam was the last of the three major airline alliances to be formed

90. (*) Explain why airlines **entered into strategic alliances** / Why have airlines **formed strategic alliances**

ANSWER: P53 (2003,2007,2010) & (2006,2008,2011[R],2012)

1. The inability of airlines to grow naturally.

- The home markets limited in size & infrastructure constraints.
- **High marketing** and other costs required to develop **outside of the home area**

2. The Inability of airlines to grow by acquisition;

- **Legislation constrains airlines** from **increasing ownership** and **control of airlines in other countries**

3. To increase the opportunity for earning a profit

- Airlines need to operate in more markets i.e. they need to grow

1. Explain the factors necessary for **successful strategic alliances** in the **airline industry**

ANSWER: P51, P53 (2004, 2008, 2011)

(Own answer combination of definition and advantages of alliances for airlines)

- They have five factors for successful strategic alliance which are:
Scheduling, marketing, purchasing, administration, maintenance
- 1. **Increased efficiency** and **productivity through network economies of those scope**
- 2. **Knowledge** and **Information sharing**
- 3. **Stability** and **insulation**
- 4. **Increased market power** and **co-ordination**

91. (*) What **opportunities** are provided by alliance membership

ANSWER: P53

(2004,2011,2013)

ADVANTAGES OF ALLIANCES FOR AIRLINES

1. Increased **efficiency and productivity** through **network economies** of scope; **purchasing leverage, schedule co-ordination, and reduced marketing costs**
2. **Discounted fares** for connecting services
3. Increased **market power** and **co-ordination**
4. **Cooperate with airlines** that previously were competitors
5. **Knowledge and Information sharing**
6. **Stability** and **insulation**

92. (*) What **benefits** do alliances offer **passengers**? /

What advantages do strategic alliances offer for the **consumer**. /

ANSWER: P53

(2014) & (2006,2007,2010,2011[R],2012, 2016)

1. Greater **choice of destinations** throughout the network.
2. Higher **frequency of service**
3. Improved **passenger services**
4. **More routes** to build **Frequent Flyer Miles**

93. What **disadvantages** do strategic alliances offer for the **consumer**.

ANSWER: P54 (2003,2007,2010,2012,2014,2016)

1. **Lower network fares** make point to point competition more difficult and may lead to less competition
2. **Reduced consumer choice of airlines**
3. **Confusion about which airline is providing the service**
4. Potential for **fewer direct services**

94. (*) What is a **code share agreement**?

ANSWER: P55 (2004,2014)

- An **agreement** where an **operating carrier** allows its flights to be marketed by another carrier.
- **Can be used as a targeted route specific approach** to enhance revenue without the 'strings' or alliance membership.

95. Explain the key differences between alliance membership and a code share?

ANSWER: P55 (2004,2014)

Code-sharing Bilateral	Criteria			Alliance membership
<p>An agreement where an operating carrier allows its flights to be marketed by another carrier</p> <p>Can be used as a targeted route specific approach to enhance revenue without the 'strings' of alliance membership</p>	Potential Opportunities			Typically enables more extensive revenue opportunities with code-sharing across multiple member carriers In addition, offers further benefits including shared facilities and frequent flyer (FFP) offerings.
	✓	Network extension	✓	
	✓	New distribution channels	✓	
	✓	Reduced route competition	✓	
	✓	Capacity rationalization	✓	
		Joint purchasing	✓	
		Shared systems	✓	
		Shared facilities (lounges)	✓	
	✓	Reciprocal FFP earning	✓	
	✓	Reciprocal FFP redemption	✓	
	Potential Restrictions			
		Standardizations (IT, FFP)	✓	
		Investment	✓	
		Non-alliance partner limitations	✓	
Note: Most carriers have a combination of alliance membership and independent code sharing				

CHAPTER 13: OPERATIONAL LEASE AND AIRCRAFT LEASING

96. What are the **advantages/disadvantages** associated with an **operating lease**? /

(a) What are the strategic advantages of an operational lease? /

(b) What are the disadvantages of an operational lease?

ANSWER: (2013) & (2014) & (2014)

<https://www.conklindd.com/t-leaseprosandcons.aspx>

Operating Lease Advantages

1. **Leasing is less capital intensive> than cash purchase.** A company (or individual) can use their cash for other purposes versus keeping it tied up in an aircraft.
2. **Leasing shifts the residual value risk to the lessor.** Aircraft values, unlike most property, depreciate over time. Companies that tried to sell their aircraft in 2001 - 2003 saw a significant loss in value over what they probably anticipated.
3. **Leasing is better than financing if your company does not need the tax write-off from tax depreciation.** Aircraft can be written off to zero value for tax purposes in eight or fewer years. If during that time period a company expects significant profit, the tax depreciation of an aircraft is one way to protect those profits. If the company (or individual) does not or cannot take the tax write-off, leasing allows the lessor the tax write-off. The user still can write off the lease payments as an expense, so both parties win.
4. **Leases can be for relatively short periods.** Leases can run three years or longer. Shorter leases may even be available. If you have a need for an additional aircraft for the next few years only, a lease allows you to walk away at lease end without having to be concerned with selling an owned aircraft. Those who completed their lease in 2001-2003 did not face the loss of residual value that the owner did.

Operating Lease Disadvantages

1. **A lease can place restrictions on the operations of the aircraft.** A lease may restrict where you can base or how you can operate the aircraft. A lease may restrict geographic regions to which you can fly. A lease may prohibit commercial operations. These can be arranged for as part of the initial lease agreement.
2. **Leases have return conditions.** When returning an aircraft from a lease, you must return it in some pre-agreed state of condition. The return conditions protect the lessor, not you as the lessee. You will likely pay a penalty for high utilization, or for engines that are not on a guaranteed maintenance program, and wear and tear beyond that accepted in the lease. When you own it, you can fly it as much as you need as you, the owner, accept the residual value risks.
3. **Early returns from a lease can be costly.** If you break a lease, you may be responsible for the remaining lease payments.
4. **With a lease, you may lose tax advantages.** An aircraft can be written off to a zero-tax basis. Leases don't allow you that benefit as the lease payments can only be taken as expenses. This may result in higher short-term taxes as the aircraft depreciation allowance can easily exceed the lease payment deduction.

97. Explain why **Ireland** has developed as a **hub for aircraft leasing**.

ANSWER: <https://www.caficointernational.com/aircraft-leasing-ireland-growth/> (2014)

1. A taxation regime which provides for a stable and competitive headline rate of corporation tax and a tax depreciation write-off period of eight years;
2. An **extensive network of double taxation treaties with 74 countries** currently in effect.
3. Deep, **multi-disciplinary skills market** – technical, legal, financial.
4. **Legacy experience** which comes from **40 years involvement** in the industry.
5. Ireland's extensive double taxation treaty network plays a key role in **creating a positive business environment for lessors**.
6. The **country's position as a global leader** for the availability of skilled labour has proven to be another driver of success in attracting business which is mirrored **in the findings of the IMD World Talent Ranking report**.
7. **Specialist aviation finance programmes** at UCD & UL provide a steady flow of talent for firms operating here.