**Roll No.:-------------------**

**FIRST INTERNAL EXAMINATION**

**School of Business Studies**

**Himgiri Zee University, Dehradun, Examination: 2022-2023**

**BBA Aviation, Semester-V**

**Subject-Aviation Finance and Insurance (Subject Code BAV 301)**

**Time: 1 Hour Max Marks: 50**

**Section- A**

**Note: Attempt all questions from**

**Question 1 Explain the Factors Determining the Value a/Traffic Rights. (20)**

A large number of factors may contribute to the value of traffic rights on a route, but they might be grouped in three main categories:'

**Route characteristics. Management characteristics. Transaction characteristics.**

**The first refers** to the existing and expected level of traffic on the route, the degree to which it fits an airline's existing network, as well as the mix of traffic and variation in demand by season, month, day or hour. The existing degree of economic regulation of the route will be important, and will dictate the degree to which frequency can be increased, and market-based air fares introduced. It will also indicate the number of competitors on the route, reflected in the air services agreement between the countries at each end of the route. Competition and the ability to add frequency might also be constrained by the availability of slots at airports (e.g., Tokyo Narita and London

**The second** of the above categories refers to management skills in combining routes into an effective and profitable network. Strategic issues are also relevant, as well as the efficiency of the airline in controlling costs and enhancing revenues. For example, some of Pan-American's loss making international routes were turned into profit by the management of airlines that acquired them (helped by far better domestic feed). These factors are clearly difficult to quantify, but can be captured indirectly through their effect on the first group of factors mentioned above.

**The third** category relates to the characteristics of the transaction. These would depend on the type and timing of the transaction: whether it was incremental to an airline's network or the acquisition of a division or airline; whether it was combined with other assets such as slots or aircraft; its timing in the economic cycle; and whether it was a distress sale. Some of the US route rights acquisitions, especially those bought from Pan Am, concerned a large number of routes comprising the regional operations of the vendor. These would include both aircraft and slots.

**Question 2 Explain the valuation of intangible assets. (20)**

**Route or Traffic Rights:**

An airline's intangible assets would include mainly its route/traffic rights, and the rights to take-off and landing slots at congested airports. They might also include items such as brand value, and management and staff experience and training. Scheduled airlines operate international air services using traffic rights granted to them by governments. Most of these rights are still negotiated bilaterally between two countries, with each country designating one or more carriers to take advantage of the traffic rights that the designating states have negotiated. The negotiation of these rights was originally pursued according to a quid pro quo approach, with countries exchanging routes of comparable value. This was later to become the doctrine of an equal exchange C! economic benefits, which dominates most bilateral negotiations today. For one country to negotiate effectively with another, it needs to evaluate a complex web of options, which would encompass fifth and even sixth freedom rights in addition to third and fourth freedom It would also need to consider the so-called soft rights, including such areas as transfers of foreign exchange, and the opening of sales offices, as well as increasingly code sharing and ground handling.

**Rights to Airport Slots**

A growing number of capital city airports are suffering from runway congestion at peak periods. At such times, demand for take-off or landing times (slots) far exceeds the available supply. Examples of this are the slot controlled or 'high density' airports in the US (New York Kennedy and La Guardia, Washington National and Chicago O'Hare), London Heathrow and Frankfurt in Europe, and Tokyo Narita in Asia. Some additional capacity can often be obtained by improved air traffic control techniques or technology, but badly needed extra runways are usually ruled out because of environmental restrictions or lack of green fields for expansion. New airports are sometimes possible (e.g., Hong Kong Chep Lap Kok or Munich), but these take considerable time and money to build. Slots are allocated by a system of historical precedence or 'grandfather rights'. An airline that has used a slot in the previous season can use it again in the next corresponding season. Since airlines need both take-off slots at the origin airport.

**Question 3 Write down the valuation of airline as a whole? (10)**

A market price per share would be available for an airline which is quoted on a stock market. Given the total number of shares issued, this would give a market valuation for the airline as a whole. or market capitalization . Such valuation would change by the minute, by the hour or day, depending on supply and demand for the shares. This in turn would be determined by changes in investors' desire to hold shares in general (versus cash), and their wish to hold shares in the sector and the company.

**Discounted Cash Flow (DCF) Method**

The first method of valuing an airline's value is often described as a 'three-phase DCF'. The first phase is the initial period over which detailed forecasts for the airline are prepared. This would be at least three years into the future, and probably not more than five. The second phase is characterized by investment opportunities and the potential for expansion over the next, say, five to 10 years, while the third phase the return on capital is expected to gradually fall towards the company's cost of capital. The maximum for all three phases would be 40 years. Cash flows are forecast over each of the three periods and discounted to present values using the airline's WACC. Total Enterprise Value is then the addition of the opening invested capital, the DCF value and the present value of any terminal value at the end of the period. This may be adjusted by the addition of any non-airline assets and minorities to give an equity value, which, divided by the number of shares issued, gives a value per share of the equity.

**Ratio Method**

The alternative method that is commonly used by financial advisers is the application of price-earnings and related ratios. The steps taken to price shares using price earnings ratios would be as follows:

Estimate the airline's earnings or net profits for the current year and at least one future year. Estimate the historical or projected PIE ratio for the airline, based on a comparison of PIE ratios of similar airlines, and perhaps with reference to the relationship of the PIE of airlines quoted in the marlcet to the PIE rallo of the market as a whole. Calculate the airline's market capitalization (earnings multiplied by the PIE ratio).

The main problem with the above procedure is the estimation of the PIE ratio. There are a number of distortions that could be introduced to the valuation, such as variations in depreciation policies, off-balance sheet financing and operating leases. Tax policies might also differ, and local markets introduce added bias to the comparisons.

**OR**

**Question 4 Explain the sources of finance in aviation industry. (10)**

**Sources of Internal Finance**

Internally, generated funds come from the cash retained in the business, or net profits (after paying interest, tax, and dividends) but before providing for depreciation. Deferred taxes and the profits from the sale of assets will also be internal sources of finance. For many airlines, depreciation is the largest single internal source; some airlines, such as Singapore Airlines, have also in the past generated substantial cash from aircraft sales. The identification of the cash available for investment from an airline's financial statements was described in Chapter 2. The amount of retained earnings available for capital investment will depend on:

**The airline's dividend policy.**

**The government's taxation policy.**

The proportion of capital expenditure financed from internal sources is often called the se/f1inancing ratio. The ratio is subject to very wide swings from a low at the low point in the airline economic cycle, when aircraft deliveries and investment is high and cash flow low, to a high when cash flow is improved and investment lower.

**Sources of External Finance**

**Short-term**

Bank overdraft most airlines will have a facility with one or more commercial banks to run a deficit on their current account up to an agreed limit, which will be based on the overall financial health of the company. This may be secured against certain assets. The rate of interest charged will vary with market rates.

Short-term loans these will differ from overdrafts by being for fixed amounts to be re-paid at a fixed future date. A fixed or variable interest rate will be charged, and security or other conditions may be stipulated (such as a maximum debt/equity ratio).

Trade creditors Goods and services purchased by airlines do not generally have to be paid for upon delivery in cash, such that some short-term finance will be available. This will either be free credit, or there will be an implicit cost in terms of cash discount foregone. This should be offset against trade debtors, where the airline is providing short-term finance to others.

**Long-term**

Shareholders J equity capital Finance from owners of the airline. These owners or shareholders have the right to vote at meetings of the company, the right to a dividend (if one is paid), and the right to a capital distribution on liquidation (if sufficient cash is available after settling all other claims). Outside the USA and many European countries, many of the world's scheduled airlines are still more than 50 per cent ownedby their governments. Other categories of shareholder might be:

**Other airlines. Financial institutions. Employees. Other individual.**