

## OPERATING COSTING

1. S Travels has been promised a contract to run a tourist car on a 20 km. long route for a multinational firm. He buys a car costing ₹ 4,50,000. The annual cost of insurance and taxes are ₹ 7,500 and ₹ 1800 respectively. He has to pay ₹ 2500 per month for a garage where he keeps the car when it is not in use. The annual repair costs are estimated at ₹ 12,000. The car is estimated to have a life of 10 years at the end of which the scrap value is likely to be ₹ 50,000.

He hires a driver who is to be paid ₹ 3,000 per month plus 10% of the takings as commission. Other incidental expenses are estimated at ₹ 2,000 per month.

Petrol and oil will cost ₹ 220 per 100 kms. The car will make 4 round trips each day.

Assuming that a profit of 15% on takings is desired and that the car will be on the road for 25 days on an average per month, what should he charge per round-trip?

(RTP May 2012)

2. An Executive manager spends ₹ 10.00 per kilometer on taxi fares for his office work. He is considering two other alternatives, the purchase of a new Nano car or a second hand Innova car. The estimated cost figures are as follows:

Items	New Nano Car	Old Innova Car
Purchase Price	₹1,35,000	₹1,60,000
Sale price, after 5 years	₹25,000	₹40,000
Repairs and servicing per annum	₹12,000	₹18,000
Taxes and insurance per annum	₹3,200	₹2,400
Petrol consumption per liter	20 km	15 km
Petrol/ Diesel price, per liter	₹68.00	₹42.00

He estimates that he has to travel 10,800 km annually. Which of the three alternatives will be economical? If his official visit increases and he has to do 18,000 km per annum what should be his decision?

At how many km per annum will the cost of the two cars break-even and why? Ignore interest and income-tax

(RTP Nov 2012)

3. In order to develop tourism; Skyjet airline has been given permit to operate three flights in a week between Mumbai and Delhi (both side). The airline operates a single aircraft of 160 seats capacity. The normal occupancy is estimated at 70% throughout the year of 52 weeks. The one-way fare is ₹ 6,400. The cost of operation of flights is:

Fuel cost (variable)	₹ 1,80,000 per flight
Food served on board on non-chargeable basis	₹ 90 per passenger
Commission	5% of fare applicable for all booking
<b>Fixed cost:</b>	
Aircraft lease	₹ 4,20,000 per flight
Landing Charges	₹ 90,000 per flight

Required:

- (i) Calculate the net operating income per flight.
- (ii) The airline expects that its occupancy will increase to 144 passengers per flight if the fare is reduced to ₹ 5,440. Advise whether this proposal should be implemented or not.

(ATP Feb 2013)

4. Calculate total passenger Kilometers from the following information:  
Number of buses 12, number of days operating in a month 25, trips made by each bus per day 10, distance covered 20 kilometers (one side), capacity of bus 40 passengers, normally 90% of capacity utilization.

(Adopted RTP May 2010)

5. In order to develop tourism, Jet Airways has been given permit to operate three flights in a week between Malaysia and Singapore (both side). The airline operates a single aircraft of 160 seats capacity. The normal occupancy is estimated at 60% throughout the year of 52 weeks. The one-way fare is Rs. 7,200. The cost of operation of flights are:

Fuel cost (variable)	Rs. 96,000 per flight
Food served on board on non-chargeable basis	Rs. 125 per passenger
Commission	5% of fare applicable for all booking
<b>Fixed cost:</b>	
Aircraft lease	Rs. 3,50,000 per flight
Landing Charges	Rs. 72,000 per flight

Required:

Calculate the net operating income per flight.

- (ii) The airline expects that its occupancy will increase to 108 passengers per flight if the fare is reduced to Rs. 6,720. Advise whether this proposal should be implemented or not.

(Adopted RTP May 2011)