S5 Tourism and Hospitality Studies Practice Paper (Set 1): Visitor Arrivals and Growth Rate, Hotel Occupancy and RevPAR, Food Cost and Gross Margin, Demand Elasticity and Exchange Rate, Service Quality and Complaints, Sustainable Tourism and Carrying Capacity

S5 Tourism and Hospitality Studies | Time: 75 minutes | Total: 100 marks | 24 questions

---

Section A: Visitor Arrivals and Growth Rate (16 marks)

Show the formula and full working; give answers to 3 significant figures with units.

1. A destination recorded 1,200,000 visitor arrivals in year one and 1,470,000 in year two. Find the growth rate of arrivals (%).

Growth rate = (1,470,000 - 1,200,000) / 1,200,000 × 100% = 22.5%.

2. Overnight visitors made up 62% of year-two arrivals and the rest were same-day visitors. Find the number of overnight visitors.

Overnight visitors = 1,470,000 × 0.62 = 911,400.

3. Overnight visitors stayed 3.2 nights on average. Find the total visitor-nights of overnight visitors in that year.

Total visitor-nights = 911,400 × 3.2 = 2,916,480.

4. Each overnight visitor spent HK$1,850 per night on average. Find the tourism receipts of that year in HK$ billion (3 significant figures).

Receipts = 2,916,480 × HK$1,850 = HK$5,395,488,000 ≈ HK$5.40 billion.

Section B: Hotel Occupancy, ADR and RevPAR (18 marks)

Use 30 days per month; give percentages to 1 decimal place and money to the nearest dollar.

5. A hotel has 480 rooms and sold 10,800 room-nights in the month. Find the occupancy rate (%).

Available room-nights = 480 × 30 = 14,400; occupancy = 10,800 / 14,400 × 100% = 75.0%.

6. Room revenue for the month was HK$12,420,000. Find the average daily rate (ADR), i.e. revenue per room sold.

ADR = HK$12,420,000 / 10,800 = HK$1,150.

7. Find the RevPAR (revenue per available room) of the month and check it with ADR and occupancy.

RevPAR = HK$12,420,000 / 14,400 = HK$862.50; check: HK$1,150 × 0.75 = HK$862.50.

8. The hotel has monthly fixed costs of HK$7,200,000 and a contribution margin of HK$950 per room-night sold. Find the break-even occupancy rate (%) to 1 decimal place.

Break-even room-nights = HK$7,200,000 / HK$950 = 7,579; occupancy = 7,579 / 14,400 × 100% = 52.6% (about 253 rooms per day).

Section C: Food Cost and Gross Margin (16 marks)

Compute margins on selling price; give money to 2 decimal places.

9. A set menu is sold at HK$168 and food cost is 35% of the selling price. Find the food cost and the gross profit per cover (HK$).

Food cost = HK$168 × 0.35 = HK$58.80; gross profit = HK$168 - HK$58.80 = HK$109.20.

10. 4,200 covers were sold in the month. Find total food and beverage revenue and total gross profit (HK$).

Revenue = 4,200 × HK$168 = HK$705,600; total gross profit = 4,200 × HK$109.20 = HK$458,640.

11. Monthly labour cost was HK$180,000, other fixed costs HK$120,000 and food cost 35% of revenue. Find the operating profit and operating margin (%) of the month.

Operating profit = HK$705,600 - HK$246,960 - HK$180,000 - HK$120,000 = HK$158,640; margin = HK$158,640 / HK$705,600 × 100% = 22.5%.

12. If total monthly fixed costs are HK$300,000, find the break-even number of covers and explain why it must be rounded up.

Contribution per cover = HK$109.20; break-even covers = HK$300,000 / HK$109.20 = 2,747.25, which must be rounded up to 2,748 covers because covers are whole numbers.

Section D: Demand Elasticity and Exchange Rate (18 marks)

Give elasticities as absolute values with the type (elastic, unit elastic or inelastic); percentages to 2 decimal places.

13. A theme park raised its ticket price by 8% and attendance fell by 12%. Find the price elasticity of demand (absolute value), state its type and the direction of total revenue change.

PED = 12% / 8% = 1.50, greater than 1 so demand is elastic; with elastic demand a price rise lowers total revenue.

14. Per-capita income in a source market rose 5% and arrivals from that market rose 8%. Find the income elasticity and state whether the tourism product is a necessity or a luxury.

Income elasticity = 8% / 5% = 1.50, greater than 1 so it is a luxury good (demand grows faster than income).

15. A traveller has a budget of HK$8,000 and the exchange rate is HK$0.068 per 100 Japanese yen. Find the amount of yen obtainable.

Yen = HK$8,000 / HK$0.068 × 100 = 117,647 yen.

16. The yen then depreciated to HK$0.058 per 100 yen with the budget unchanged. Find the percentage increase in yen obtainable and explain the effect on demand for travel to Japan.

Yen = HK$8,000 / HK$0.058 × 100 = 137,931; increase = (137,931 - 117,647) / 117,647 × 100% = 17.24%. The same budget buys more yen, so spending in Japan is effectively cheaper and demand rises.

Section E: Service Quality and Guest Complaints (16 marks)

Give percentages to 1 decimal place and money to the nearest dollar.

17. A hotel served 3,000 guests in the month and received 180 complaints. Find the complaint rate (%).

Complaint rate = 180 / 3,000 × 100% = 6.0%.

18. Of the complaints, 45% were about room cleanliness, 30% about staff attitude and 25% about food and beverage. Find the number of complaints in each category.

Cleanliness = 180 × 0.45 = 81; attitude = 180 × 0.30 = 54; food and beverage = 180 × 0.25 = 45; total 180.

19. Each complaint costs HK$320 on average to recover. Find the total recovery cost of the month and suggest one measure to lower the complaint rate.

Recovery cost = 180 × HK$320 = HK$57,600; measure: check housekeeping against a checklist and call the room two hours after check-in.

20. A survey found 1,200 promoters and 450 detractors out of 3,000 respondents. Find the net promoter score (NPS) and explain its managerial meaning.

NPS = (1,200 - 450) / 3,000 × 100 = 25; a positive score means more promoters than detractors, supporting repeat visits and referrals.

Section F: Sustainable Tourism and Carrying Capacity (16 marks)

Give percentages to 1 decimal place and mass to the nearest unit with units.

21. A site covers 45 hectares and can accommodate 25 visitors per hectare per day. Find its physical carrying capacity (visitors per day).

Physical carrying capacity = 45 ha × 25 = 1,125 visitors per day.

22. In peak season the site receives 1,500 visitors per day on average. Find the percentage over capacity and state two possible consequences.

Over capacity = (1,500 - 1,125) / 1,125 × 100% = 33.3%; consequences: faster trail and vegetation damage, poorer visitor experience and safety.

23. Each shuttle bus carries 55 passengers and runs 40 times per day. Find the daily capacity of the shuttle service and judge whether it can handle peak-season demand.

Shuttle capacity = 40 × 55 = 2,200 per day, above the 1,500 peak, so it is sufficient if arrival slots are booked in advance.

24. Each visitor generates 0.8 kg of waste per day and the recycling rate is 35%. Find the daily waste and recycled amounts (kg) at the carrying-capacity limit.

Waste = 1,125 × 0.8 = 900 kg per day; recycled = 900 × 0.35 = 315 kg per day, leaving 585 kg for off-site disposal.

TutorZoneOriginal material written for TutorZone, not from any school or publisher.