S4 Tourism and Hospitality Practice Paper: Tour Costing and Pricing, Visitor Arrivals and Seasonality, Hotel Occupancy and RevPAR, Tourism Multiplier and Leakage, Promotion Cost-Effectiveness, Carrying Capacity and Sustainability (100 marks)

Level: S4 | Subject: Tourism and Hospitality | 60 minutes | 100 marks | 24 questions | question paper

Section A: Tourism Products, Costing and Pricing (17 marks)

Each question is worth 4-5 marks; show your working.

#	Question	Marks
1	A destination recorded 2.4 million visitor arrivals in 2024 and 3.0 million in 2025. Average length of stay rose from 2.5 nights to 3.0 nights. (a) Calculate the increase in arrivals in number and in percentage. (b) Calculate total visitor-nights in each year.	5
2	The per-person cost of a tour: air ticket HK$3,200, 4 nights hotel HK$4,800, meals HK$1,200, local transport HK$600, guide HK$400. The agency adds a 15% markup on total cost. Calculate (a) total cost per person, (b) the selling price, (c) profit per person.	4
3	A museum charges HK$50 per ticket with 1,200 visitors a day and 260 opening days a year. The ticket price rises by 10% and attendance falls by 8%. Calculate (a) the original annual revenue, (b) the new price and daily attendance, (c) the new annual revenue and the percentage change.	4
4	A visitor spends HK$7,200 in total, made up of shopping 42%, accommodation 28%, food 15%, transport 10% and others 5%. (a) Check that the percentages add up. (b) Calculate the amount of each item.	4

Section B: Visitor Arrivals and Seasonality (16 marks)

Each question is worth 4 marks; give units in every answer.

#	Question	Marks
5	Arrivals in January, February and March were 320,000, 280,000 and 400,000. (a) Calculate the average monthly arrivals. (b) Calculate the seasonality index of March (index = monthly arrivals / average x 100).	4
6	A cruise terminal handled 48 ships in a year, each carrying 2,500 passengers on average; 85% went ashore and each spent HK$850 ashore. Calculate (a) total cruise passengers, (b) the number going ashore, (c) total spending ashore.	4
7	An air route has 42 flights a week, each with 220 seats, and an average load factor of 88%. (a) Calculate weekly seats and weekly passengers. (b) Calculate annual passengers over 52 weeks.	4
8	In 2024 there were 5.0 million visitor arrivals, 18% of them business travellers. In 2025 arrivals rose to 5.4 million with 15% business travellers. Calculate the change in the number of business travellers (in number and in percentage).	4

Section C: Hotel Operations, Occupancy and Break-even (18 marks)

Each question is worth 4-5 marks; all amounts are in HK$.

#	Question	Marks

9	A hotel has 300 rooms, an average occupancy of 82% over 30 days and an ADR of HK$1,150. Calculate (a) room-nights sold, (b) total room revenue, (c) RevPAR.	5
10	A hotel has 180 rooms, fixed costs of HK$4,500,000 a month and variable cost of HK$320 per room-night sold. It sold 6,000 room-nights at HK$1,050. (a) Calculate total contribution. (b) Calculate the profit or loss for the month. (c) Calculate the break-even room-nights.	5
11	A hotel has 45 room attendants who clean 5,400 room-nights in 30 days. (a) Calculate the average rooms cleaned per attendant per day. (b) If the number of rooms to clean rises by 20% with productivity unchanged, how many attendants are needed?	4
12	A hotel restaurant has monthly revenue of HK$2,800,000, food cost HK$840,000, labour cost 25% of revenue and other operating expenses 18%. (a) Calculate the food cost percentage. (b) Calculate the profit and profit margin.	4

Section D: Tourism Multiplier, Jobs and Leakage (17 marks)

Each question is worth 4-5 marks; state the multiplier formula you use.

#	Question	Marks
13	A destination receives a tourism injection of HK$600,000,000 with a marginal propensity to consume of 0.8. (a) Calculate the multiplier using k = 1 / (1 - mpc). (b) Calculate total income generated. (c) If leakage pulls mpc down to 0.6, how much less income is generated?	5
14	Tourism creates direct income of HK$250,000,000, indirect income of HK$125,000,000 and induced income of HK$75,000,000. (a) Calculate the total economic impact. (b) Calculate the tourism multiplier (total impact / direct income).	4
15	Every HK$1,200,000 of tourism spending creates one direct job, and each direct job supports 0.6 indirect jobs. With tourism spending of HK$600,000,000, calculate (a) direct jobs, (b) indirect jobs, (c) total jobs.	4
16	Of every HK$1,000 a visitor spends, 35% goes on imported goods (leakage). (a) Calculate the amount retained in the local economy. (b) If the import share rises to 45%, how much less is retained (in amount and in percentage)?	4

Section E: Promotion Cost-Effectiveness and Source Markets (16 marks)

Each question is worth 4 marks; round to one decimal place where appropriate.

#	Question	Marks
17	A tourism board spends HK$180,000 on an online campaign that gets 150,000 impressions and 4,500 bookings. (a) Calculate the CPM. (b) Calculate the cost per booking. (c) Calculate the conversion rate.	4
18	An agency sells a HK$11,730 tour package on 12% commission. (a) Calculate the commission. (b) Calculate the net amount received. (c) If the commission rate falls to 9%, how much less does the agency receive?	4
19	A tourism board runs a trade familiarisation trip for 20 agents at HK$8,500 each. 35%% of the agents later bring 6 bookings each at HK$12,000 per booking. Calculate (a) the cost of the trip, (b) the revenue generated, (c) the return on investment (net gain / cost).	4
20	A survey of 2,000 visitors finds that 32% are repeat visitors. Repeat visitors spend HK$6,500 each on average and first-time visitors HK$8,200 each. (a) Calculate the number in each group. (b) Calculate total and average spending of the sample.	4

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

Each question is worth 4 marks; state any assumptions.

#	Question	Marks
21	A hiking trail is 4.2 km long; management allows one visitor per 10 m, with 4 turns a day, 300 days a year. (a) Calculate the instantaneous carrying capacity. (b) Calculate annual visitor-days.	4
22	A resort has 250 rooms at 78% occupancy, using 380 litres per room-night sold. (a) Calculate rooms sold per day and daily water use. (b) If water-saving measures cut use by 15%, calculate the new daily use.	4
23	A site receives 1,200 visitors a day, each producing 1.8 kg of waste, 62% of which is recycled or sorted. (a) Calculate total daily waste. (b) Calculate the waste sent to landfill.	4
24	A hotel pays HK$120,000 a year for eco-certification and then saves HK$45,000 on energy, HK$28,000 on water and HK$17,000 on waste handling each year, with savings growing 8% a year. (a) Calculate the net cost in year one. (b) State in which year the cost is recovered.	4