UNIVERSITY EXAMINATIONS: 2026/2027

PAN AFRICA CHRISTIAN UNIVERSITY

END OF SEMESTER EXAMINATION FOR THE DEGREE OF

MAY- AUGUST 2026

OPERATIONS MANAGEMENT

END TERM EXAMINATION

DATE: AUGUST, 2026 **TIME: 3 HOURS**

INSTRUCTIONS: Question One is Compulsory, Choose Three Other Questions

USE THE CASE STUDY BELOW TO ANSWER QUESTIONS SECTION A AND B (questions two, three and four)

Mid- air is Europe's largest low-cost airline (LCA). Operating its low-fare, no-frills formula, has over 1,700 employees and a growing fleet of around 50 Boeing 737 aircraft to provide services over 70 routes to 13 countries throughout Europe. Operating from its Dublin headquarters, it carries around 12 million passengers every year. But Mid- air was not always so successful. Entering the market in early 1985, its early aim was to provide an alternative low-cost service between Ireland and London to the two market leaders, British Airways and Aer Lingus. Mid- air chose this route because it was expanding in both the business and leisure sectors. However, the

airline business is marked by economies of scale and Mid- air, then with a small fleet of old -fashioned aircraft, was no match for its larger competitors. The first six years of Mid- air operation resulted in an IR £20 million loss. In 1991, Mid- air decided to rework its strategy. 'We pattemed/ Mid- air after Southwest Airlines, the most consistently profitable airline in the US,' says Michael O'Leary, Mid- air Chief Executive. 'Southwest founder Herb Kelleher created a formula for success that works by flying only one type of airplane - the 737 - using smaller airports, providing no-frills service on-board, selling tickets directly to customers and offering passengers the lowest fares in the market. We have adapted his model for our marketplace and are now setting the low-fare standard for Europe. '

Whatever else can be said about Mid- air strategy, it does not suffer from any lack of clarity. It has grown by offering low-cost basic services and has devised an operations strategy which is in line with its market position. The efficiency of the airline's operations supports its low-cost market position. Turnaround time at airports is kept to a minimum. This is achieved partly because there are no meals to be loaded onto the aircraft and partly through improved employee – productivity. All the aircraft in the fleet are identical, giving savings through standardization of parts, maintenance and servicing. It also means large orders to a single aircraft supplier and therefore, the opportunity to negotiate prices down. Also. because the company often uses secondary airports, landing and service fees are much lower. Finally, the cost of selling its services is reduced where possible. Mid- air has developed its own low-cost internet booking service.

In addition, the day-to-day experiences of the company's operations managers can modify and refine these strategic decisions. For example, Mid- air changed its baggage-handling contractors at Stansted airport in the UK after problems with misdirecting customers' luggage. The company's policy on customer service is also clear. *'Our customer service,' says Michael O'Leary, 'is about the most well defined in the world. We guarantee to give you the lowest air fare. You get a safe flight. You get a normally on-time flight. That's the package. We don't, and won't, give you anything more. Are we going to say sorry for our lack of customer service? Absolutely not. If a plane is cancelled, will we put you up in a hotel overnight? Absolutely not. If A plane is delayed, will we give you a voucher for a restaurant? Absolutely not.*

SECTION A (COMPULSORY)

QUESTION ONE Compulsory (15 Marks)

a. Define the term capacity utilisation in relation to the case study (3 marks)
b. Explain why Mid-air prioritizes keeping its aircraft in the air for 30% longer than traditional carriers. (12 marks)

SECTION B

(ANSWER ANY THREE (3) QUESTIONS IN THIS SECTION)

QUESTION TWO (15 marks)

a. Analyze how selling directly via the internet (removing travel agents) impacts Mid-air's Supply Chain Management costs. (15 marks)

QUESTION THREE (15 marks)

a. Explain the difference between **Yield** and **Net Margin** in relation to the case study (6 marks)
b. Discuss reasons why a high yield not always a guarantee of high profit for an airline (9 marks)

QUESTION FOUR (15 marks)

a. Define **Load Factor in relation to the case study.** (5 marks)
b. Explain how a high load factor allows Mid-air to spread its fixed costs. (10marks)

QUESTION FIVE (15 marks)

a. Explain Operations Management using a hospital as an example (3 Marks)
b. Discuss four importance of Operations Management to an Organisation giving an example of each from a hospita perspective. (12 Marks)

QUESTION SIX (15marks)

a. State the objective in designing a product. (2 Marks)
b. Explain the steps involved in designing a product. (8 Marks)
c. Discuss the use of Project Evaluation Review Technique/Critical Path Method techniques for managing projects. (5 marks)