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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATION, 2024/2025ACADEMIC YEAR SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (BUSINESS ADMINISTRATION)

Date: 11th April, 2024 Time: 11.30am –1.30pm

KBA 202 - PRODUCTION AND OPERATIONS MANAGEMENT

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

AMAZON: PIONEERING FRICTIONLESS E-COMMERCE AND OPERATIONAL EXCELLENCE

In the competitive landscape of e-commerce, Amazon stands as a towering giant, its success a testament to its relentless pursuit of customer satisfaction and operational excellence. At the heart of Amazon's strategy lies a simple yet powerful principle: removing friction from the buying process. This philosophy permeates every aspect of the customer experience, from browsing products to making a purchase. Take, for example, Amazon's innovative features like one-click buying and dash buttons. These seemingly mundane additions have revolutionized the way consumers shop for household items. With just a click of a button, customers can seamlessly replenish their supplies, eliminating the hassle of navigating through complex checkout processes. But Amazon's commitment to quality products and services goes beyond convenience. The company's advanced logistics infrastructure ensures that customers receive their orders swiftly and reliably. Through strategic investments in warehouses, distribution centers, and delivery networks, Amazon maintains a shipping advantage that sets it apart from competitors.

Behind the scenes, Amazon's capacity planning strategies play a crucial role in supporting its growth and scalability. By leveraging data analytics and machine learning, the company accurately forecasts demand and allocates resources accordingly. This optimization extends to every aspect of operations, from warehouse layouts to automated fulfillment processes, ensuring maximum efficiency and cost-effectiveness. The results speak for themselves. Amazon's market dominance is undisputed, capturing the lion's share of the growth in U.S. e-commerce. Central to this success is the unwavering loyalty of Amazon Prime members, who enjoy a frictionless shopping experience coupled with exclusive benefits. In the ever-evolving landscape of e-commerce, Amazon's strategic genius shines bright. By prioritizing quality, convenience, and operational excellence, the company continues to set the benchmark for success in the digital era, leaving its competitors scrambling to keep up.

Required

- a) Analyse three approaches accessible to Amazon's production and operations managers for utilization in judgmental forecasting. (6 marks)
- b) How does the case study exemplify the strategic utilization of information technology by Amazon to innovate its e-commerce operations and maintain a competitive edge in the industry? (4 marks)
- c) How does Amazon's operational management, as portrayed in the case study, demonstrate the relevance of operations management in a firm? (6 marks)
- Quality should be the concerns of Amazon right from the time the product /service is designed (because it is difficult to rectify a poorly designed product when it is at the production stage); up to the time that it reaches the customer. Firms refer to this as Total quality management (TQM). Why is it important for Amazon to provide quality products and services? (8 marks)
- e) Planning is a management process that involves setting objectives, identifying strategies, and outlining actions to achieve organizational goals. Advice Amazon on 3 benefits of planning.

 (6 marks)

QUESTION TWO (20 MARKS)

- a) Discuss six management themes encountered across various organizational contexts, showcasing both opportunities and best practices frequently observed by managers.
 - (6 marks)
- b) In what ways do service operations and goods production operations share commonalities despite their distinct nature. (6 marks)
- c) What were Frederick Winslow Taylor's core principles and beliefs regarding the "Science of Management" and how did he propose to achieve efficiency and productivity within organizations. (8 Marks)

QUESTION THREE (20 MARKS)

- a) Discuss the different types of planning within the context of organizational management, examining their distinct characteristics, purposes, and applications. (6 marks)
- b) Manufacturing and service organization differ because manufacturing is goods oriented and service is act- oriented. Briefly discuss this statement outlining the differences involved.
- c) Explore Challenges posed by the emerging Trends in production and operations management and recommend strategies of mitigating these challenges. (8 marks)

QUESTION FOUR (20 MARKS)

- a) What are some of the most prevalent challenges faced in productions and operations management, and how do these challenges influence the efficiency and effectiveness of manufacturing processes? (8 marks)
- b) Discuss the solutions available for addressing problems in operations management. (8 marks)
- c) Planning is a fundamental aspect of organizational management, but it is not without its challenges. Discuss the various challenges encountered in the planning process (4 marks)

QUESTION FIVE (20 MARKS)

- Using a diagram and accompanying explanation, illustrate the stages of a product life cycle and discuss the key characteristics and implications of each stage for production and operations managers.
 (8 marks)
- b) Analyse the differences between Match strategy, Lag strategy, and Lead strategy as employed by production and operations managers in capacity planning, emphasizing the strategic considerations and operational implications associated with each strategy. (6 marks)
- c) Examine the relationship between production and operations management and procurement department. (6 marks)