



GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY
Faculty of Engineering
Department of Aeronautical Engineering

BSc Engineering Degree
Semester 5 Examination – May 2024
(Intake 39 - ENG)

MF 3122 – PRINCIPLES OF MANAGEMENT

Time allowed: 2 hours

17 May, 2024

ADDITIONAL MATERIAL PROVIDED

None

INSTRUCTIONS TO CANDIDATES

This paper contains 05 questions on 04 pages.

Answer FOUR (04) questions including question No 01

This is a closed book examination.

This examination accounts for 80% of module assessment. The total maximum mark obtainable is 80. The marks assigned for each question and part are indicated in square brackets.

If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it in the script.

Assume reasonable values for any data not given in or provided with the question paper, and clearly make such assumptions made in the script.

All examinations are conducted under the rules and regulations of the KDU.

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Question No. 1

Questions a, b, c, and d of question no. 1 are based on the following case study.

Bluesky Software (Pvt) Ltd. is a newly founded software development company by two friends, Peter and Nick. Peter is a graduate in business management, and Nick graduated recently in software engineering. The company has experienced rapid growth since it was founded three years ago. Originally, the company specialized in developing software for online training programs, but it has now diversified into other areas, including gaming software. The gaming aspect of the business has been particularly successful, with several lucrative contracts from multiple gaming companies coming its way over the past few months.

Bluesky does not have a formal management process or hierarchical structure to streamline the business. Its work is project-based, so all employees are on a contract basis as per the availability of projects. The two owners bring these contract employees together to work on one project, then move them on to different other projects with the company as per project requirements. The two owners of the company prefer to keep things as loose as possible and do not insist on lots of rules, regulations, or formal procedures. It is very much a free-flowing kind of environment, and its culture seems to be supportive at a glance. Peter's main responsibility is the general administration of the business, while Nick is responsible for managing software development projects as per their expertise. Peter and Nick believe that their business processes are effective and efficient at present and will remain the same in the future. They strictly believe that smaller is manageable and lucrative in a competitive business environment.

However, in recent times, competition in the industry has increased with several new players entering the market. In addition, the economy has been in a period of downturn. Both of these factors have made an impact on Bluesky's net income, and they seem to worsen the economic conditions in the coming months.

In this circumstance, the two owners have felt that it is difficult to manage the company on their own with their existing managerial skills and without formal levels of management. Due to a higher level of job mobility, the company often faces a shortage of contract employees, which has led to problematic situations in the efficiency and effectiveness of almost all business functions, software projects, and overall business performance. In response to this ongoing situation, the two owners have decided to maximize the economic performance of the company while minimizing budget allocations for social and environmental concerns.

Meanwhile, the owners of Bluesky Software have decided to take an independent consultation from a professionally qualified agent on management.

You are required to:

- a. Conduct a SWOT analysis for Bluesky Software (Pvt) Ltd. [10]
- b. Explain current and probable future issues at Bluesky. [10]
- c. Recommend practical solutions for the issues you have already identified. [10]
- d. Discuss the advantages of contingency planning for remaining competitive in the future. [10]

Note: You are allowed to make appropriate assumptions where necessary.

[Total 40 marks]

Question No. 2

- a. A strategic approach to enhancing organizational performance is a top priority in the competitive business world. Explain the process of management by objectives (MBO) and how it can enhance employee performance in contemporary engineering organizations. [10]
- b. Analyze the concept of emotional intelligence for effective relationship management while proposing an appropriate leadership style for a rapidly changing engineering context of your choice. [10]

[Total 20 marks]

Question No. 3

- a. Organizational control is an essential process for all types of organizations, but the required level and type of control depend on different organizational contexts. Explain how environmental stability and environmental complexity can determine the level of organizational control required for a rapidly changing business context. [10]
- b. Total quality management (TQM) is a structured process to improve the quality of internal practices. Explain the concept of TQM and appropriate TQM techniques for its effective implementation in a newly started civil engineering firm. [10]

[Total 20 marks]

Question No. 4

- a. "Organizational strategy and organizational structure are interdependent." Comment on the statement while explaining strategic choices in mechanistic and organic organizational structures. [10]
- b. Critically analyze the effectiveness of the functional approach to departmentalization and the team approach to departmentalization for product and process innovation. [10]

[Total 20 marks]

Question No. 5

- a. Managers should be ethical. However, managers face ethical dilemmas that can sometimes lead them to be unethical. Briefly describe your opinion with an appropriate example. [10]
- b. The field of management is responsible for creating and sustaining ethical organizations. Analyze the contribution of the value-oriented approach and the structure-oriented approach to managing organizational ethics and social responsibility. [10]

[Total 20 marks]

End of the Question paper