



**GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY**

Faculty of Engineering  
Department of Mechanical Engineering

BSc Engineering Degree  
Semester 6 Examination – October 2023  
(Intake 38- ME, MC, and EE)

**ME 3212- Entrepreneurship for Engineers**

The time allowed: 02 hours

Date: 06 October 2023

**INSTRUCTIONS TO CANDIDATES**

This paper contains Five (05) questions on Three (03) pages.  
Answer any FOUR (04) questions.

**Question No. 01**

**EcoTech Innovations: From Passion to Profit**

John is a passionate environmentalist who has always been concerned about the impact of human activities on the planet. He has a background in environmental science and recently completed his master's degree in sustainable technology. John is now contemplating starting his own business in the field of green technology, but he's unsure about how to identify a viable opportunity and generate innovative ideas for his venture. He has limited financial resources but a strong desire to make a positive impact on the environment while also achieving financial success.

- a) How can John begin to identify potential opportunities for his EcoTech startup? Provide three (03) such ideas. (05 Marks)
- b) John is passionate about the environment but has limited financial resources. How can he leverage his passion and skills to attract potential investors or secure funding for his EcoTech startup? Provide at least two (02) strategies that he can pursue. (05 Marks)
- c) Briefly explain the creative process that John can adopt to generate innovative ideas for his EcoTech startup. (05 Marks)
- d) Develop a detailed step-by-step action plan for John, outlining the key actions he should take to move from the concept stage to the implementation stage of his EcoTech startup. Include specific strategies for opportunity recognition, idea generation, funding, and any other crucial aspects. (10 Marks)

**(Total: 25 Marks)**

### Question No. 02

#### Sustainable Sips: A Coffee Shop Venture

Sarah is an aspiring entrepreneur who has always been passionate about sustainability and loves coffee. She is considering opening a coffee shop with a strong focus on eco-friendly practices, such as using biodegradable cups and sourcing coffee beans from sustainable farms. Sarah believes there is a growing market for eco-conscious consumers. However, she's unsure about the feasibility of her coffee shop venture, the competitive landscape in the coffee industry, and how to effectively manage potential risks.

- a) Explain the importance of conducting a feasibility study in entrepreneurship. What key components should Sarah consider when conducting a feasibility study for her coffee shop venture? (05 Marks)
- b) Identify at least three (03) key factors to be considered for the bargaining power of suppliers in the coffee industry that could impact the success of her business. (05 Marks)
- c) What are the potential risks or challenges that Sarah may face when starting her sustainable coffee shop? Provide two (02) specific risks or challenges, and briefly discuss strategies she can implement to mitigate them. (05 Marks)
- d) Develop a Risk management plan for Sarah's coffee shop venture. Outline the steps she should take to identify, assess, and mitigate risks. Include strategies for both internal and external risks. (10 Marks)

(Total: 25 Marks)

### Question No. 03

#### EcoTech Innovations Inc.: Launching a Sustainable Household Appliance

EcoTech Innovations Inc. is a startup founded by Alex, an entrepreneur with a passion for environmental sustainability. The company aims to develop and market a new household appliance that is energy-efficient and eco-friendly, catering to environmentally conscious consumers. Alex is in the early stages of product development but is faced with the challenge of formulating a marketing strategy, building a capable team, and ensuring successful product development.

- a) Explain the importance of Marketing planning in Entrepreneurship. (05 Marks)
- b) List the stages of the new product development process that Alex should follow for the successful launch of the eco-friendly household appliance. (05 Marks)
- c) What key Human Resource practices should Alex implement to build a competent team for product development and marketing? List key HR practices. (05 Marks)

- d) Develop a comprehensive STP (Segmentation, Targeting and Position) analysis for Alex for the launch of EcoTech Innovations' sustainable household appliance.

(10 Marks)

(Total: 25 Marks)

✂ Question No. 04

- a) List three (03) reasons why new ventures need financing. (05 Marks)
- b) Briefly discuss the difference between equity financing and debt financing. (05 Marks)
- c) List the names of three (03) financial statements included in the business plan for a start-up company. (05 Marks)
- d) Discuss the components of a Business Plan. (10 marks)

(Total: 25 Marks)

Question No. 05

Write short notes on the following topics.

- a) Invention
- b) Management Prowess
- c) SWOT Analysis *expert*
- d) Financial Stability
- e) Niche Marketing

(Marks: 5x5= 25)

(Total: 25 Marks)

-----End of question paper-----