

F E D E R A L U N I V E R S I T Y O F T E C H N O L O G Y , M I N N A SCHOOL OF ELECTRICAL ENGINEERING AND TECHNOLOGY DEPARTMENT OF MECHATRONICS ENGINEERING FIRST SEMESTER 2019/2020 ACADEMIC SESSION

COURSE: MCE 515: Entrepreneurship for Mechatronics Engineer

TIME ALLOWED: 2 HOURS | CREDIT UNIT: 2 LEVEL: 500

Instruction: Answer Question 1 and Any other two questions.

Question 1 (50 Marks)

- a) A final Student is in the process of completing the TEF 2021 application and he needs to upload a Business Plan (BP). But does not know what a BP is. Help the student by:
 - i. Explaining the basic parts of a business plan. (5Marks)
 - ii. Enumerating the objectives of a business plan. (5Marks)
 - iii. Describing the contents of a business plan. (10Marks)
- b) Self-motivation is said to be a key feature an entrepreneur must possess.
 - i. Why is motivation required in the life of an entrepreneur? (2Marks)
 - ii. What motivates an entrepreneur. (2 Marks)
 - iii. Describe any 6 qualities of a good entrepreneur. (2 Marks)
 - iv. Describe any 4 skills that an entrepreneur must possess. (2 Marks)
 - v. Identify and describe any 4 classes of entrepreneurs. (2 Marks)
- c) Briefly discuss what Intellectual Property means, its importance and the need for it to be protected. (10 Marks)
- d) Explain the concept of marketing strategy using the 4P's of marketing. (10Marks)

Question 2 (25 Marks)

- a) The Vice President of DOME Limited has granted you an audience to pitch your startup idea to him in order to access a grant of 2 Million Naira. You are required to prepare a Business Canvas Model (BMC) of your idea showing all the basic components of the BMC. (10Marks)
- b) Explain the following financial concepts:
 - i. Profit Margin (5 Marks)
 - ii. Return on Investment (5Marks)
 - iii. Break-Even Point (5 Marks)

Question 3 (25 Marks)

- a) Two potential entrepreneurs are on the verge of establishing a startup. The duo are required to carry out an internal, external and environmental analysis of their proposed startup. As a consultant to the duo, explain the concept and components of SWOT and PESTLE analysis as it relates to the startup. (10Marks)
- b) Risk is inevitable in the life of an entrepreneur.
 - i. Identify any 4 possible risks a startup could encounter. (5Marks)
 - ii. Discuss the ways to mitigate risk in startups. (5Marks)
 - iii. Discuss the process of managing risk in startups. (5Marks)

Question 4 (25 Marks)

- a) You have been asked to chair a session with young and aspiring entrepreneurs from the Department of Mechatronics Engineering, where you are required to discuss the entrepreneurial process. In clear terms, identify and describe in brief the entrepreneurial process. (10 Marks)
- b) It is important to deliver quality products and services to one's customers in order to succeed as an entrepreneur.
 - i. Explain the term Quality. (5Marks)
 - ii. Why the need for Quality. (5Marks)
 - iii. differentiate between Quality Control and Quality Assurance. (5Marks)