



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI, ABUJA**  
**FACULTY OF MANAGEMENT SCIENCES**  
**2024 1 EXAMINATION**

**COURSE CODE ENT 893**

**COURSE TITLE: ENTREPRENEURSHIP**

**TIME ALLOWED: 2HOURS**

**Instruction: 1. Attempt question number one (1) and any other two (2)**

**2. Question number one (1) is compulsory and attracts 30 marks, while any other two questions attract 20 marks each**

**3. Present your answers any points in a clearly and orderly manner**

**QUESTION ONE CASE STUDY:** You were introduced to The Cut Buddy, a plastic hair and beard grooming tool that began selling on Amazon in 2016, in The Business Plan. Following funding from the *Shark Tank* investor Daymond John, the company plans to expand into retail and extend its product line.

- A. How would a business plan for the company's ecommerce business differ from a retail distribution outlet?
- B. Discuss how changes to aspects of the original business plan affected the outcome of the success of The Cut Buddy.
- C. What do you think should be the key markets and strategies moving forward for the company?  
**30 marks (10 marks each)**

**QUESTION TWO**

- 1. The financial components of a business plan are very important because they are part of a business plan. The financial plan is a core component of a business plan. It enables the entrepreneur to relate the business to the financial environment, why and how? **10 marks**
- 2. The management of manufacturing based operations is not an easy walk-over for the entrepreneur. And it can be very challenging especially where the entrepreneur has no formal training in manufacturing, what is your opinion? **10 marks**

**QUESTION THREE**

- a. Outline and discuss the raw materials in a manufacturing facility available in your organization as warehouse manager. **10 marks**
- b. As a warehouse manager, what are the major management functions in Manufacturing company you work? **10 marks**

**QUESTION FOUR**

- a. It will be very important to recognise the fact that service organizations provide services for which they receive payments. Service organizations may not manufacture goods. What will be your philosophical think on the subject matter? **15 marks**
- b. What do think are the Role of Operation Mangers? **5 marks**

### QUESTION THREE

(3a) Discuss the effect of the nuclear charge in the spin-orbit charge. hence list the two possible  $j$ -values electrons can have under the influence of magnetic field. (3 marks)

(3b) Given that the bonding molecular orbital of a molecule is given as,  $|\psi\rangle^2 = N^2 [\psi_{(1s)}(A) + \psi_{(1s)}(B)]^2$ , expand the equation and state the significant of the three main component of the equation. (12 marks)

### QUESTION FOUR

(4a) What can the orbital term  $2p$  electrons give rise to? (2 marks)

(4b) Complete the missing terms in the Table below

Atomic orbital 1	Atomic orbital 2	Molecular orbital	
s-orbital	s-orbital	$\sigma$ (sigma) orbital	
s-orbital	$P_z$ orbital		(2 marks)
$P_z$ orbital	$P_z$ orbital		(2 marks)
$P_x$ orbital	$P_x$ orbital		(2 marks)
$P_y$ orbital	$P_y$ orbital		(2 marks)

(8 marks)

(4c) Draw the following shapes and identify the number of lines of symmetry for each of them: rhombus, square and a scalene triangle (5 marks)

### QUESTION FIVE

(5a) Enumerate any five (5) types of internal coordinates. (5 marks)

(5b) List the various classes of symmetry point group. (5 marks)

(5c) Using diagrams, describe improper rotation operation in methane. (5 marks)

### QUESTION SIX

(6a) Calculate the magnitude of spin for the following particles: (i) electron (ii) proton and neutron. (13 marks)

(6b) State the Dulong and Petit postulate on heat capacity of a solid. (2 marks)