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<u>School of Management</u>

Mid - Term Examinations - November 2024

Semester: III	Date: 7-11-2024
Course Code: MBA4029/MBA3078	Time : 09:30am – 11:00am
Course Name: Product Planning and Control	Max Marks : 50
Program: MBA	Weightage: 25%

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 3marks.			3Mx5Q=15M		
1	Define the terms; (i) Production; (ii) Production planning; (iii) PPC.	3 Marks	Knowledge	C01	
2	List the function of production control.	3 Marks	Knowledge	C01	
3	What are the phases and main functions of PPC?	3 Marks	Knowledge	CO2	
4	What is meant by breakeven point and mention its significance?	3 Marks	Knowledge	CO2	
5	What is meant by Standardization and Simplification	3 Marks	Knowledge	CO2	

Part B

Answer ALL the Questions. Each question carries 10 marks.			10Mx2Q=20M			
6	A manufacturer sells an item for Rs.13 per unit. He incurs a fixed cost of Rs.60, 000 and a variable cost of Rs.8 unit. Find the break even production quantity and also the number of units to be produced to get a profit of Rs.12, 000.	10 Marks	Application	CO2		
	Or					
7	Discuss in detail about the various functions of Production planning and control.	10 Marks	Application	C01		

8	Explain with example the various aspects of Product development	10	Application	CO2
	and design.	Marks		
	or			
9	Explain different types of production systems and differentiate between them.	10 Marks	Application	CO2

Part C

Answer the Question. Question carries 15 marks.

10 After several months of brainstorming and market research, you 15 Analysis CO1 decided to launch a new affordable Electric Bike, 'SuperBike' with Solar Marks Battery Charger. Solar Battery Charger. No Cost on electricity, only 2hrs of Charging is required and in one charge the Bike will go for 150 KM/ Charge. Costs of one set (1+1) solar charger is Rs 10,000.00.

The quick market research reveals the followings:

• Target Market is India.

• 1.3 billion Indians are Residents of Cities, Towns and Villages.

• 30% Indian Lives in Cities and 40% in Towns and Semi-Towns.

• The market survey shows that 30% of City Youth Age between 20 -36 (i.e. 40% of Urban Population = Young Urbans) wish to have SuperBike, but only 50% can afford it.

• Similarly, the market survey also shows that 50% of 40% of Indian Youths (= Young Rural) Living in Towns and Semi-Towns' Population wish to have SuperBike, but only 30% can afford it.

• You decided to launch 2 Colour Variants of SuperBike – C one for Cities (with two Solar Charger) and another SuperBike – T for Towns (with two Solar Chargers).

• You decided Price (PA) the SuperBike – C as ₹ 35,000 and SuperBike – T as ₹ 30,000.

 \cdot Your target for SuperBike – C is 30% of Young Urban population who can afford the SuperBike.

 \cdot Your target for SuperBike – T is 50% of Young Town population who can afford the SuperBike

 \cdot You wish to capture 20% of Urban and 30% of Rural Market Share (FA) in future.

15Mx1Q=15M

a) Calculate the Market Size (QA) of "SuperBike – C" and SuperBike – T in Quantity & ₹ based on given Price? [Bloom's level: Application]

b) Calculate the present Size of Your Market Share in ₹ (VA) for SuperBike – C and SuperBike – T? [Bloom's level: Application]

c) Calculate Your Expected Yearly EBITDA for ₹ 3000 Margin Per Unit of SuperBike – C and 2000 Margin Per Unit of SuperBike – T after the 20% of dealers' discount on the MRP of SuperBike. ? [Bloom's level: Application]

D.Calculate the BEP for Super Bikes both by Volume and Value.

Note 1: EBITDA = Earnings before interest, tax, depreciation and amortization;

Note 2: MRP = Retail Markup Price and MRP = PA