

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA– SEMESTER -II - EXAMINATION- SUMMER-2023

Subject Code: 1529502

Date: 12/07/2023

Subject Name: Management Accounting and Costing

Time: 10:30 AM TO 1:30 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

- Q.1** Explain the following terminologies: **14**
- (a) Absorbed and Unabsorbed cost
 - (b) Prime cost
 - (c) Controllable cost
 - (d) Cost Apportionment
 - (e) Committed cost
 - (f) Differential cost
 - (g) Profit Center

- Q.2** (a) Distinguish between cost and management accounting **07**
(b) Are all fixed costs sunk costs? Explain. Show why are sunk costs not relevant in decision making? **07**

OR

- (b) Explain clearly the difference between scrap, by-product, and joint products. Give the cost accounting treatment for each **07**

- Q.3** (a) The following information pertaining to a firm are available.

Annual consumption	12000 units (360 days)
Cost per unit	Rs 1
Cost per order	12
Inventory carrying cost (%)	20
Lead time (maximum, normal and minimum – days)	30-15-5
Daily consumption (maximum, normal and minimum – units)	45-33-15

Calculate the following: **07**

1. Economic order quantity
2. Re order level
3. Minimum level
4. Maximum level
5. Average stock level

- (b) Illustrate benefits and limitation of Activity Based Costing system **07**

OR

- Q.3** (a) The Aeronautical Ltd has production facility specializing in jobs for the aircraft components market. The traditional costing system has two direct cost categories, namely, direct materials and direct manufacturing labour

hours. The indirect cost allocation rate would have been Rs 115 direct manufacturing labour-hour.

The company has now decided to replace the single indirect cost pool with five indirect cost pools, representing five activity areas each with its own supervising and budget responsibility. The relevant data are as follows:

Activity area	Cost driver used as an allocation base	Cost allocation rate
Material handling	Parts	Rs.0.40
Lathe work	Turns	0.20
Milling	Machine Hours	20.00
Grinding	Parts	0.80
Testing	Units tested	15.00

Two representative jobs processed under the new system of the facility at the most recent period had the following features:

Particulars	Job 101	Job 102
Direct material costs per job	Rs. 9,700	Rs.59,900
Direct manufacturing labour cost per job	750	11,250
Direct manufacturing labour hours per job	25	375
Parts per job	500	2,000
Turns per job	20,000	60,000
Machine hours per job	150	1,050
Units per job	10	200

Compute the per unit manufacturing costs of each job under the activity based costing System **07**

(b) Define break even analysis and outline its uses and applications. **07**

- Q.4** (a) From the following details of store receipts and issues of material “Exe” in a manufacturing unit, prepare the store ledger using weighted average method of valuing the issues. **07**

November 1	Opening stock 2000 units @ Rs 5 each
3	Issued 1500 units to production
4	Received 4500 units @ Rs 6 each
8	Issued 1600 units of production
9	Returned to stores, 100 units of production dept (from the issues of November 3)
16	Received 2400 units @ Rs 6.50 each
19	Returned to supplier, 200 units out of the quantity received on November 4
20	Received, 1000 units @7.00 each
24	Issued to production, 2100 units
27	Received, 1200 units @ 7.5 each
29	Issued to production 2800 units

(b) Explain Life Cycle Costing with relevant example **07**

OR

- Q.4** (a) The ABC Ltd makes three products from one common input. Process I is the joint process and every 100 kgs of input yields: 60 kgs of product A; 30 kgs of product

B; and 5 kgs of product C and the remaining 5 kg is waste product with no market value.

Product A requires further processing in process II at an average cost of Rs 10 per kg. It is then sold at Rs 100 per kg. Product B is sold at split off point at Rs 50 per kg. Product C after further processing in process III (at Rs 2.5 per kg), is sold at Rs 5 per kg. The selling expenses associated with C are negligible, and the Company desires the cost of product C to be such as to earn a profit of 10% on sales.

During the current period, 100000 kgs of input was processed through process I (assume no inventories) and the total operating costs in Process I were Rs 5185000.

You are required :

- i) To determine the amount of Process I cost assigned to by Product C;
- ii) To determine the amount of joint costs to be assigned to A and B using the relative sales value approach;
- iii) To determine the amount of joint costs to be assigned to A and B, using the net realizable value less normal profit approach. **07**

(b) 'If sales forecast is subject to error, then , there is no purpose of budgeting.'

Do you agree? Also explain how a flexible budget can be used by management to help control costs. **07**

Q.5

Case Study

The GEC Ltd manufacturers pumps used in coolers. The firm has developed a forecasting tool that has been successful in predicting sales for the company $\text{Sales} = 10000 + (0.25 \times \text{coolers sold})$. The coming years cooler sales are Expected to be 2,00,000.

The pump contains material costing Rs 50. Direct labour is Rs 60 per unit and variable manufacturing overhead is Rs 40 per pump. Besides the variable manufacturing costs, there are commissions to sales people of 10 per cent of sales amount. The pump sell for Rs 250 per unit. Fixed costs of manufacturing are Rs 10,00,000 per year and fixed selling and administrative expenses are Rs. 5,00,000 per year. Both are incurred evenly over the year.

sales are seasonal, and about 75 per cent are in the April – September period which begins from April 1. The sales forecast by months, as percentage of yearly sales, are given below :

April	10
May	15
June	20
July	15
August	8
September	7
October	5
November	3

The company has policy of keeping inventory of finished product equal to the budgeted sales for the following two months. Materials are purchased and delivered daily and no inventory is kept. The inventory of finished product on March 31 is expected to be 15,500 units.

You are required to prepare

- (a) Budgeted income statement for the first six months of the year **07**
- (b) Production budget by months for the first six months, in unit **07**

OR

- Q.5** (a) The XYZ ltd operates a chain of toy stores. The store sells 10 different styles of Toys with identical purchase costs and selling prices. The company is trying to Determine the desirability of opening another store, which would have the Following expense and revenue relationships per pair :

Variable data :

Selling price	Rs <u>30.00</u>
Cost of toy	19.50
Salesmen's commission	<u>1.50</u>
Total variable expenses	<u>21.00</u>

Annual fixed expenses:

Rent	60,000
Salaries	2,00,000
Advertising	80,000
Other fixed expenses	<u>20,000</u>
	3,60,000

- (a) Calculate the annual break – even point in sales amount and in unit sales.
If 35,000 toys are sold, calculate what would be the income of the stores? **07**
- (b) If the store manager was paid Rs 0.30 per pair commission, what would the annual break – even point be in sales amount and in unit sales?
refer the original data, if sales commissions were discontinued in favour of Rs 81,000 increase in fixed salaries, what would the annual break even point be in amount and in unit sales? **07**
