

Seat No. : \_\_\_\_\_

**AC-144**

**April-2016**

**5<sup>th</sup> Year M.B.A. Integrated  
Management Control System**

**Time : 3 Hours]**

**[Max. Marks : 100**

1. Quantum Computers Co. produces and sells laptop computers. The company is currently deciding whether or not to continue concentrating on the laptop computer market or to expand by entering the highly competitive computer desktop workstation market. Most of the management staff has been with Quantum for a long time. Michael Mitchem, Quantum's president, wants his management staff to assist him in Quantum's strategic planning process. Mitchem has scheduled a three-day offsite meeting for the management staff to join together for the company's strategic planning process. **20**

Required :

- (i) What functional areas should be discussed during the strategic planning process ?
  - (ii) Identify at least six factors to be considered in a thorough strategic planning process that will move a company such as Quantum Computers Inc. to another level of product development.
  - (iii) Identify at least three benefits that Quantum Computers Inc. can derive from a participator/strategic planning process.
  - (iv) Discuss the expected behaviour of the managers at Quantum Computer Inc. who participate in the three-day offsite strategic planning meeting.
2. (A) "Implementing the concept of Profit Center in organization will help in nurturing good general managers." Discuss. **10**
- (B) XYZ Ltd. is a growing textile company and want to introduce the concept of responsibility center in its organization. Discuss how it can implement the concept in their organization in various units. **10**

**OR**

- (B) Discuss various methods of measuring profitability with examples. **10**

3. (A) Nicefit manufactures ready-made garments by a simple process of cutting the clothes in various shapes and sewing the corresponding pieces together to form the finished products. The Sewing Department and the Cutting Department report to the Production Manager who along with Engineering Manager reports to the Director – Manufacturing. The Sales Manager, Publicity Manager and the Credit Manager report to the Managing Director of the Company.

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The Accounts Department reports the following for the last quarter of 2002 :

Particulars	Budgeted (₹)	Actual (₹)
Bad Debt Losses	5,000	3,000
Cloth used	31,000	36,000
Advertising	4,000	4,000
Audit Fees	7,500	7,500
Credit Reports	1,200	1,050
Sales Representative :		
Travelling Expenses	9,000	10,200
Sales Commission	7,000	7,000
Cutting Labour	6,000	6,600
Thread	500	450
Sewing Labour	17,000	18,400
Credit Dept. Salaries	8,000	8,000
Cutting Utilities	800	700
Sewing Utilities	900	950
Director Marketing :		
Salaries & Admn. Exp.	20,000	21,400
Production Engineering Expenses	13,000	12,200
Sales Management Office Expenses	16,000	15,700
Production Manager Office Expenses	18,000	17,000
Director – Manufacturing Salaries & Administration Expenses	21,000	20,100

Using the above data, prepare responsibility accounting reports for the director-Marketing, the director-Manufacturing and the Production Manager.

- (B) ABC Company has a decentralized organization with a divisional structure. Each Division Manager is evaluated on the basis of ROI.

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The Plastics Division produces a plastic container that the Chemical Division can use. Plastics can produce up to 1,00,000 of these containers per year. The variable costs of manufacturing the plastic containers are ₹ 450. The Chemical Division labels the plastic containers and uses them to store an important industrial chemical, which is sold to outside customers for ₹ 5,000 per container. The division's capacity is 20,000 units. The variable costs of processing the chemical (in addition to the cost of the container itself) are ₹ 2,600.

Required : (Assume each requirement is independent, unless otherwise indicated.)

- Assume that all of the plastic containers produced can be sold to external customers for ₹ 1,200 each. The Chemical Division wants to buy 20,000 containers per year. What should the transfer price be ?
- Refer to Requirement 1. Assume ₹ 200 of avoidable distribution costs. Identify the maximum and minimum transfer prices. Identify the actual transfer price, assuming that negotiation splits the difference.
- Assume that the Plastics Division is operating at 75 percent of capacity. The Chemical Division is currently buying 20,000 containers from an outside supplier for ₹ 950 each.

- (iv) Assume that any joint benefit will be split evenly between the two divisions. What is the expected transfer price ? How much will the profits of the firm increase under this arrangement ? How much will the profits of the Plastics Division increase, assuming that it sells the extra 20,000 containers internally ?
- (v) Assume that both divisions have excess capacity. Currently 15,000 containers are being transferred between divisions at a price of ₹ 800. The Chemical Division has an opportunity to take a special order for 5,000 containers of chemical at a price of ₹ 3,375 per container. The manager of the Chemical Division approached the Manager of the Plastics Division and offered to buy an additional 5,000 plastic containers for ₹ 500 each. Assuming that the Plastics Division has excess capacity totaling at least 5,000 units, should the manager take the offer ? What is the minimum transfer price ? The maximum ? Assume that the Plastics Division Manager counters with a price of ₹ 550. Would the Chemical Division Manager be interested ?

**OR**

3. Mini Enterprises manufacture one product, and the entire product is sold as soon as it is produced. There is no opening and closing stocks and work-in-progress is negligible. The company operates a standard costing system and analysis of variance is made every month. The standard cost card for the product is as follows :

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Direct Material	0.5 kg at ₹ 4 per kg	₹ 2
Direct wages	2 hours at ₹ 2 per hour	₹ 4
Variable overhead	2 hours at ₹ 0.30 per hour	₹ 0.60
Standard cost	2 hours at ₹ 3.70 per hour	₹ 7.40
Standard profit		₹ 6
Standard selling price		₹ 20

The selling and administration expenses are not included in the standard cost and are deducted from profit as a period cost. Budgeted output for April 2015 was 5,100 units.

Actual results for April 2015 were as follows :

- (i) Production of ₹ 4,850 units was sold for ₹ 95,600.
- (ii) Material consumed in production amounted to ₹ 2,300 kg at a total cost of ₹ 9,800.
- (iii) Labour hours paid for amounted to 8,500 hours at cost of ₹ 16,800.
- (iv) Actual operating hours amounted to 8,000.
- (v) Variable overheads amounted to 2,600.
- (vi) Fixed overheads amounted to ₹ 42,300.
- (vii) Selling and administration expenses amounted to ₹ 18,000.

You are required to calculate all variances.

4. (A) For production of 10,000 electrical automatic irons, the following are the budgeted expenses :

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Particulars	Per unit (₹)
Direct material	60
Direct labour	30
Variable overheads	25
Fixed overheads (₹ 1,5,000)	25
Variable expenses (direct)	5
Selling expenses (10% fixed)	25
Administrative expenses (₹ 50,000 rigid for all levels of production)	5
Distribution expenses (20% fixed)	5
<b>Total Cost of sales per unit</b>	<b>160</b>

Prepare a budget for production of 6,000, 7,000 and 8,000 irons, showing distinctly marginal cost and total cost.

- (B) The operating performance of the three divisions of ABC company for 2016 is as follows :

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Particulars	Division A ₹	Division B ₹	Division C ₹
Sales	38,00,000	1,70,00,000	2,00,00,000
Operating profit	2,00,000	5,00,000	10,00,000
Investment	20,00,000	62,50,000	80,00,000

- Using the operating profit margin percentage as the criterion, which is the most profitable division ?
- Using the rate of return on investment as the criterion, which is the most profitable division ?
- Which of the two measures do you think gives the better indication of overall operating performance ? Explain your reasoning.

**OR**

- (B) Sil furnishes the following information from which you are required to calculate the prevailing Economic value added of the company :

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Particulars	
Common shares of Face value ₹ 1000 per share	1,58,000 units
12% debentures Face value ₹ 10 per share	50,00,000 units
Tax rate	30%
Financial leverage	1.1 times
Securities premium account (₹ in lakhs)	155
Free reserves (₹ in lakhs)	154
Capital reserves (₹ in lakhs)	109

It is a prevailing practice for companies in the industry to which Sil belong to pay at least a dividend of 15% p.a. to its common shareholders.

- Management control is essential for Non-Profit Organization.” Justify. 10
  - Explain transaction exposure, translation exposure and economic exposure in detail with example. 10

**OR**

- Discuss Management control systems for Professional Services Organizations. 10
- Explain in detail the management considerations for designing a control system for multinational organization. 10