



**Extra Reading Time:** 15 Minutes  
**Writing Time:** 02 Hours 45 Minutes

**Maximum Marks:** 90

**Roll No.:**

- (i) Attempt all questions.
- (ii) Answers must be neat, relevant and brief.
- (iii) In marking the question paper, the examiners take into account clarity of exposition, logic of arguments, effective presentation, language and use of clear diagram/ chart, where appropriate.
- (iv) Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper.
- (v) Use of non-programmable scientific calculators of any model is allowed.
- (vi) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
- (vii) Question No.1 – “Multiple Choice Question” printed separately, is an integral part of this question paper.
- (viii) **Question Paper must be returned to invigilator before leaving the examination hall.**

**Answer Script will be provided after lapse of 15 minutes Extra Reading Time (9:30 a.m. or 2:30 p.m. [PST] as the case may be).**

**Marks**

**Q. 2 (a)** Differentiate between value analysis and functional analysis.

**03**

**(b)** Pak Products Ltd., sells restaurant equipment and supplies throughout the country. The management of company intends to add an ice cream machine to its line of products and is in process of negotiation with an overseas manufacturer who has demanded Rs. 7,000 per ice cream machine.

Management of Pak Products Ltd., believes that the ice cream machine could be sold to its customers for Rs. 7,500 each. At that price, annual sales of the ice cream machines would be 40,000 units. If the ice cream machine is added to Pak Products Ltd., product lines, the company will have to invest Rs. 20,000,000 in inventories and special warehouse fixtures. The variable cost of selling the ice cream machine would be Rs. 500 per unit.

**Required:**

**(i)** If Pak Products Ltd., requires a 20% return on investment (ROI), what is the maximum amount the company would be willing to pay to the overseas manufacturer for an Ice cream machine?

**04**

**(ii)** After negotiations, management has concluded that the overseas manufacturer would not sell the ice cream machine at a lower price for Pak Products Ltd., to earn its 20% required ROI. What alternative could be opted if the management does not want to give up the idea of adding machine to its line of products?

**01**

**(c)** English Shoes Ltd., supplies shoes to Karachi Shoes Company and Lahore Shoes Company. Each pair of shoes has a list price of Rs. 1,000 which costs Rs. 500 to English Shoes Ltd. As Lahore Shoes Company buys in bulk it receives a 10% trade discount for every order for 100 pairs of shoes or more. Karachi Shoes Company receives a 15% discount irrespective of order size, because the company itself collects the shoes, thereby saving the seller any distribution cost. The cost of administering each order is Rs. 100 and the distribution cost is Rs. 2,000 per order. Karachi Shoes Company makes 10 orders in the year, totalling 420 pairs of shoes, and Lahore Shoes Company places 5 orders for 100 pairs.

**Required:**

Who is most profitable client for the English Shoes Ltd.? Show your workings.

**07**

**Q. 3** Suppose you have been working as management accountant at ABC Ltd. Your company manufactures a variety of lawn mowers. The production manager of your company has approached you for some costing advice on submitting a tender to an overseas customer for a state-of-the-art lawn mower. It is one time order and the costs associated with lawn mower are as follows:

	Rupees
Material-X at cost	8,000
Material-Y	16,000
Direct labour	12,000
Supervision	4,000
Manufacturing overheads	24,000
	64,000

You ascertain the following:

- Material-X is available in stock which has no other use within the factory except use in the lawn mower and it would cost Rs. 3,500 to dispose of. Material-Y would have to be procured from the market for Rs. 16,000.
- Direct labour costs of Rs. 12,000 relate to workers that will be transferred to this lawn mower from another project. Extra labour will need to be recruited to the other project at a cost of Rs. 14,000.
- Supervision costs have been charged to bid on the basis of  $33\frac{1}{3}\%$  of labour costs and supervision of manufacturing the lawn mower will be carried out by existing staff during the normal duty hours.
- Manufacturing overheads have been charged to the project at the rate of 200% on direct labour.
- The company is currently operating at a point above break-even.
- A special type of machinery for Rs. 20,000 is required to complete the lawn mower as per customer's satisfaction. The special machinery will have no other use to the company after completing the lawn mower and could be disposed of for Rs. 10,500 on completion of the lawn mower.
- The production manager has told you that the overseas customer is not willing to pay more than Rs. 60,000 in any cost and a competitor is ready to accept the order at the price of Rs. 60,000. He also expressed that Rs. 80,000 would be a fair price of the lawn mower considering the profit margin and purchase of new machinery for lawn mower. He further makes it clear that the project should only be undertaken if it shows a profit.

**Required:**

- (a) Calculate the bid price of lawn mower for the production manager, clearly stating how you have arrived at your figures and giving reasons for the exclusion of other figures. 12
- (b) Write a brief report to the production manager stating at what price ABC Ltd., should go ahead with the tender for the lawn mower, bearing in mind that the competitor is ready to undertake the project for Rs. 60,000. Support your arguments with reasons. 03
- (c) State four non-monetary factors that should be taken into account before tendering for this project. 02

**Q. 4 (a)** The Data Company produces three products, 'A', 'B', and 'C', as the result of initial joint processing plus separable processing after the split-off point. Records for July show the following:

Products	A	B	C	Total
Materials used (Rs.)	–	–	–	300,000
Joint processing cost (Rs.)	–	–	–	340,000
Separable processing costs (Rs.)	100,000	160,000	140,000	–
Unit produced	6,000	12,000	6,250	–
Unit sold	4,000	9,000	4,250	–
Unit sales price (Rs.)	100	75	80	–

**Required:**

- (i) Calculate the cost assigned to ending inventory for each product and in total, assuming no beginning inventory and using the market value method for joint cost allocation. 09
- (ii) A prospective customer is willing to buy all the output of product 'B' at the split-off point for Rs. 60 per unit. Would you recommend the Data Company to accept this offer? Is there any advantage which would make the sale of product 'B' at split-off point desirable? 04
- (b) "Benchmarking is the establishment through data gathering, of targets and comparators, through whose use relative levels of performance and particularly underperformance can be identified. By the adoption of identified best practices, it is hoped that performance will improve." What are the three distinct approaches to benchmarking? Explain. 06

**Q. 5 (a)** XYZ Ltd., has produced just one fairly successful product in the past. Recently, however, a new version of this product has been launched. Development work continues to add a related product to the product list. Given below are some details of the activities during the month of June:

	Existing Product	New Product
Units produced	50,000	10,000
Cost of units produced (Rs.)	750,000	140,000
Sales revenue (Rs.)	1,100,000	250,000
Hours worked	10,000	2,500
Development costs (Rs.)	94,000	

**Required:**

- (i) Calculate performance indicators that could be calculated for each of the four perspectives on the balanced score card. 07
- (ii) Suggest how this information would be interpreted. 02
- (b) Crescent Company is a decentralized organization with three semi-autonomous divisions – Beta, Delta, and Gamma. Management desires a minimum return of 15% on all its investments. The financial results for 2013 of all the three divisions are summarized as under:

Rs. '000'			
Division	Sales	Segment Income	Investment in Operating Assets
Beta	20,000	600	4,000
Delta	10,000	1,000	5,000
Gamma	3,000	480	2,000

The Gamma Division has been offered a government contract to supply a new electronic product in large quantities to military installations. Production of the new electronic product would require an additional investment in operating assets of Rs. 1,000,000. Annual sales and segment income from the government contract would be Rs. 2 million and Rs. 180,000 respectively.

**Required:**

- (i) Calculate the margin earned, turnover of assets, and return on investment (ROI) for each division. 06
- (ii) Compute the residual income (RI) for each division. 03
- (iii) Evaluate how the contract of electronic product would affect the Gamma division's profit performance, based on return on investment and residual income using the 2013 results. 06

**Q. 6** Skyways Ltd., has three manufacturing divisions. Blue Division manufactures product 'B' which is then sold to Green Division as a component of product 'G'; product 'G' is then sold to White Division which uses it as a component in processing product 'W'. Product W, the final product is sold for Rs. 5,600 each.

Product 'B' and 'G' have no outside market. A unit of product 'W' uses one unit of product 'B' and one unit of product 'G'. Current standard costs and other data relating to the three products for the forthcoming year 2014 are shown below:

	Rupees		
Product	'B'	'G'	'W'
<b>Standard cost per unit:</b>			
Material purchased from outside	400	600	200
Direct labour (variable)	200	200	400
Variable overhead	200	200	400
Fixed overhead	600	800	200
Standard volume (units)	10,000	10,000	10,000
Stock and work in process (average)	14,000,000	3,000,000	6,000,000
Fixed assets (net)	6,000,000	9,000,000	3,200,000

The following alternative rules may be practiced for the inter-divisional transfer pricing of products 'B' and 'G' to the White Division during the next year:

- Standard cost per unit, plus an additional charge per unit based on a 10% return per annum on average stocks and work in process and on fixed assets.
- Standard variable cost per unit, plus a fixed monthly charge equal to their total fixed overhead costs together with a 10% return per annum on the current average stocks, work in process and fixed assets.

**Required:**

As a general manager of White Division, your aim is to maximize your reported divisional profits.

- (a) Prepare a profit and loss forecast for the White Division for 2014 on the basis of 90% of standard volume under each of the alternative rules for the inter – divisional transfer pricing of products 'B' and 'G'. **13**
- (b) Comment, with reasons, as to which of the two transfer pricing rules is likely to be preferred by the managing director of Sky Ways Ltd. **02**

**THE END**