INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

PROFESSIONAL-III (NEW/EXISTING) EXAMINATION—SUMMER, 2003

Monday, the 26th May, 2003

STRATEGIC MANAGEMENT ACCOUNTING/ MANAGEMENT ACCOUNTING 1241

Time Allowed—2 Hours 40 Minutes *Maximum Marks—90*

- (i) *Attempt ALL questions.*
- (ii) *Answer must be neat, relevant and brief.*
- (iii) *In marking paper, the examiners take into account clarity of exposition, logic of arguments, presentation, language and use of clear diagram/chart where appropriate.*
- (iv) *Read the instructions printed on the top cover of answer script CAREFULLY before attempting the paper.*
- (v) *Use of non-programmable scientific calculators of : O Casio fx-82 LBO, Casio fx-82 Super, O Casio fx-350 D, O Casio fx-350 HA models 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 paper.*

Marks

Q. 2 (a) Distinguish between "Real Rate of Return" and "Nominal Rate of Return". 7

(b) AB Group owns a large store in Karachi. The store is old fashioned and the annual after tax profits of Rs. 3,000,000, for the year immediately concluded, are likely to decrease by 10% each year over previous year. They have two options either to immediately spend Rs. 5,000,000 to upgrade the store and maintain after tax annual profit of Rs. 3,000,000 for five years from now and sell the shop for Rs. 18,500,000 after a period of five years OR they let the business run without upgrading, and sell the shop for Rs. 15,000,000 at the end of year 5 from now.

Required :

Assuming that the cost of capital is 12% p.a, and the profits are only raelized at the end of each year, which course of action will be beneficial to AB Group. 15

Q.3 A sports good manufacturer is considering the launch of a new sporting system based on DVDs linked to personal computer, enabling much greater realism to be achieved. Two proposals are being considered. Both use the same production facilities and only one product can be launched due to limited production facilities.

The following data are the best estimates, the firm has been able to establish : Marks

Particulars	Football System	Cricket System
Annual volume (units)	40,000	30,000
Selling price (Rs)	130 per unit	200 per unit
Variable production costs (Rs)	80 per unit	100 per unit
Fixed production costs (Rs)	600,000	600,000
Fixed selling and administration costs (Rs)	450,000	1,350,000

The higher selling and administrative costs for the cricket simulator reflects the additional advertising and promotion costs expected to be necessary to sell the more expensive cricket system.

The firm has a minimum target of Rs. 200,000 profit per year for new products. The management recognizes the uncertainty in the above estimates and wishes to explore the sensitivity of the profit on each product to change in the values of the variables i.e., volume, price, variable cost per unit, and fixed costs.

Required :

(i) Calculate the expected profit from each product. 4

(ii) Calculate the critical value for each variable i.e., the value at which the firm will earn Rs. 200,000, assuming that all other variables remain as expected. Also express the critical values as absolute values and as percentage change from the expected values. 12

(iii) Discuss the factors which should be considered in making a choice between the two products. 6

Q. 4 A manufacturing concern is in the stage of developing the use of standard costing throughout its divisions. A full standard costing system has already been implemented in its all other divisions, including the use of mix and yield material variances, and attention has now turned to Division B where the main problem is labour.

Marks

Division B makes highly complex work stations which incorporate material handling, automatic controls etc. Manufacturing is a team effort and the team specified for a specific workstation comprises :

1 supervisor paid Rs. 96 per hour.
12 fitters paid Rs. 72 per hour.
5 electricians paid Rs. 72 per hour.
3 electronic engineers paid Rs. 84 per hour.
4 labourers paid Rs. 48 per hour.

Output is measured in standard hours and 95 standards hours are expected for every 100 clock hours. During a period the following actual data were recorded :

Particulars	Actual hours	Actual Pay Rs.
Supervisors	180	17,712
Fitters	850	61,200
Electricians	410	30,012
Electronic engineers	240	21,600
Labourers	300	14,400
Total	1,980	144,924

1,786 standard hours were produced.

The factory director of division B is keen to gain the maximum information possible from the standard costing system. He sees no reason why the normal labour efficiency variance could not be divided into sub-variances in order to show separately the effects of non-standard team composition and team productivity similar to the material usage variances which can be sub divided into mix and yield variances.

Required :

(i) Calculate the labour rate variance. 7

(ii) Calculate :

a) the team composition variance 6

b) the team productivity variance and 6

c) labour efficiency variance. 5

P.T.O.

Marks

Q. 5 (a) With respect to the concept of relevant costs, what quantitative and qualitative factors could be relevant in a decision making process ? 6

(b) Beside many other products, the Excellent Corporation, presently makes 20,000 units of watches in 200 batches of 100 units each. The mixed overhead costs of purchasing, receiving and set-up consists of fixed cost of Rs. 500,000, plus variable costs of Rs. 5,000 per batch. The Excellent Corporation commences production only after it had received firm customer order. The Corporation's customers are pressurizing the Company to supply watches in smaller batch sizes. The Excellent Corporation anticipates that next year 20,000 units of watches will be manufactured in 400 batches of 50 units each. Through continuous improvement, the Corporation expects to reduce variable purchasing, receiving and set-up costs to Rs. 3000 per batch. No other changes in fixed costs and per unit variable costs are anticipated. The fixed overhead costs of plant depreciation, insurance and administration is Rs. 2,300,000. Other information is as under :

Particulars	Rs. (Per unit)
Cost of direct material	800
Direct manufacturing labour	100
Variable manufacturing overheads	400

Another manufacturer offers to sell to the Excellent Corporation, 20,000 units of watches next year for Rs. 1,450 each, whatever the delivery schedule, may be.

Required :

(i) Calculate the total current cost of production i.e, at existing batch size. 4

(ii) Calculate the total expected cost of production for next year i.e., at smaller batch size, and 4

(iii) Recommend whether the Excellent Corporation should make the watches itself or buy from outside manufacturer considering the production in smaller batches next year. 8

THE END