

MTP_Final_Syllabus 2008_Jun2014_Set 1

Paper- 15: MANAGEMENT ACCOUNTING-ENTERPRISE PERFORMANCE MANAGEMENT

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.
Attempt Question No. 1 (carrying 25 marks), which is compulsory and
Any five questions (each carrying 15 marks) from the rest.

1. (a) Expand the following abbreviations: [1×5=5]

- i. CBS
- ii. LCC
- iii. WAITRO
- iv. QFD
- v. MPS

(b) Define the following terms in not more than two or three lines. [1×5=5]

- (i) Data Mining
- (ii) Matrix Organizational Structure
- (iii) Bench Marking
- (iv) Contribution Approach
- (v) Talent Drain

(c) Choose the most appropriate one from the stated options and write it down. [5×2=10]

(i) The budgeted fixed overheads for a budgeted production of 40,000 units is ₹80,000. For a certain period the actual production was 44,000 units and actual expenditure came to ₹96,000. Then the volume variance is

- A. ₹16,000(A)
- B. ₹8,000 (F)
- C. ₹ 8,000 (A)
- D. None of these.

(ii) The current price of a product is ₹8,000 per unit and it has been estimated that for every ₹200 per unit reduction in price, the current level of sale, which is 10 units, can be increased by 1 unit. The existing capacity of the company allows a production of 15 units of the product. The variable cost is ₹4,000 per unit for the first 10 units; thereafter each unit will cost ₹400 more than the preceding one. The most profitable level of output for the company for the product will be

- A. 11 units
- B. 12 units
- C. 13 units
- D. 14 units

(iii) A particular job requires 800 kgs of material-G.

500 kgs. of the particular material is currently in stock.

The original price of the material-G was ₹ 300 but current resale value of the same has been determined as ₹ 200. If the current replacement price of the material-P is ₹ 0.80 per kg., the relevant cost of the material-P required for the job would be :

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- A. ₹ 640
- B. ₹ 440
- C. ₹ 300
- D. None of these.

(iv) The Selling price of the single product manufactured by a company is fixed at ₹ 4,500 per unit. In the coming year, 500 units of the product are likely to be sold. If the total value of investments of the company is ₹45 lakhs and it has a target ROI of 15%, the target cost would be :

- A. ₹ 2,790
- B. ₹2,850
- C. ₹ 3,150
- D. None of these.

(v) A company using a detailed system of standard costing finds that the cost of investigation of variances is ₹ 30,000 and if after investigation, it is found that the situation is out of control, the cost of correction is ₹ 50,000. If no investigation is made, the present value extra cost involved is ₹ 2,00,000. The probability of process, being out of control, is 20%. The cost of investigation would be :

- A. ₹ 6,000
- B. ₹ 10,000
- C. ₹ 40,000
- D. None of these.

(d) Fill in the blanks with appropriate word(s) :

[1×5=5]

- (i) VAR stands for _____.
- (ii) _____ has become a standard practice among many organizations as a way to add flexibility to chain.
- (iii) Balanced Score Card is a performance management and _____ methodology that helps executives translate an organization's mission statement and overall business strategy with specific quantifiable goals.
- (iv) Balanced Score Card is a way to translate _____ into _____.
- (v) Kaizen is a Japanese term comprising KAI = _____ and ZEN = _____.

2. (a) List the aims / objectives of Material Requirement Planning.

[5]

(b) A manufacturing Company has an installed capacity of 1,50,000 units p.a. Its cost structure is given below –

Variable Costs	₹10 per unit
Labour (Minimum ₹1,00,000 per month)	₹ 10 per unit
Overheads	₹ 4 per unit
Fixed Overheads	₹1,92,300 per annum.

Semi-Variable overheads ₹ 60,000 per annum at 75% capacity, which increases by ₹ 4,000 per annum for every 5% increase in capacity utilization for the year as a whole.

The capacity utilization for the next year is estimated at 75% for three months, 80% for six months and 90% for the remaining part of the year. If the company is planning to have a profit of 20% on the selling price, calculate the selling price per unit. [8]

(c) What is Decision Tree ?

[2]

3. (a) Write a note on Quality Function Deployment . [5]

(b) State the areas in which the application of learning curve theory can help a manufacturing organization? [6]

(c) Write Short Notes on Optimized Production Technology (OPT). [4]

4. (a) A company is organized into two large Divisions. Division 'A' produces a component which is used by Division 'B' in making a final product. The final product is sold for ₹ 400 each. Division A has a capacity to produce 2,000 units and the entire quantity can be purchased by Division B.

Division A informed that due to installation of new machines, its depreciation cost had gone up and hence wanted to increase the price of the component to be supplied to Division B to ₹220. Division B, however can buy the component from the outside market at ₹ 200 each. The variable costs of Division A are ₹190 and fixed costs ₹20 per component. The variable costs of Division B in manufacturing the final product by using the component is ₹ 150 (excluding the component cost).

Present statement indicating the position of each Division and the company as a whole taking each of the following situations separately.

- (i) If there are no alternative use for the production facilities of A, will the company benefit if Division B buys from outside suppliers at ₹ 200 per component?
- (ii) If internal facilities of A are not otherwise idle and the alternative use of the facilities will give an annual cash operating saving of ₹30,000 to Division A, should Division B purchase the component from outside suppliers?
- (iii) If there are no alternative used for the production facilities of Division A and the selling price for the component in the outside market drops by ₹15, should Division B purchase from outside suppliers?
- (iv) What transfer price would you fix for the component in each of the above circumstances? [10]

(b) The sales Manager of the Electronic Toy Company is considering two toys: a doll and a game. The toys have discrete probability distribution of cash inflows in each of the next three years.

Event	Doll (₹)	Probability	Game
Prosperity	20,000	0.2	42,000
Normal	15,000	0.5	20,000
Recession	9,000	0.3	(5,000)

- (i) For each toy item, compute
 - The expected value of the cash inflow in each of the next three years.
 - The standard deviation
- (ii) Which toy would you select and why? [5]

5. (a) State the differences between Strategic Planning and Management Control. [6]

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(b) Five Swimmers are eligible to compete in a relay team that should have four swimmers swimming different styles- backstroke, breaststroke, free style and butterfly. The time taken for the five swimmers - Anand, Balu, Chandru, Deepak and Eswar – to cover a distance of 100 metres in various swimming styles are given below in minutes: seconds. Anand swims backstroke in 1:09, breaststroke in 1:15 and has never competed in free style or butterfly. Balu is a free style specialist averaging 1:01 for 100 metres but can also swim breaststroke in 1:16 and butterfly in 1:20. Chandru swims all styles, backstroke 1:10, breaststroke 1:12, free style 1:05 and butterfly 1:20. Deepak swims only butterfly at 1:11 while Eswar swims backstroke 1:20, breaststroke 1:16, free style 1:06 and butterfly 1:10. Which swimmers should be assigned to which swimming style? Who will not be in the team? [9]

6. (a) The Himalaya Snow Co. Ltd. manufactures and sells direct to consumers 10,000 jars of "Himalaya Snow" per month at ₹ 1.25 per jar. The company's normal production capacity is 20,000 jars of snow per month. An analysis of costs for 10,000 jars show :

	₹
Direct material	1,000
Direct labour	2,475
Power	140
Miscellaneous supplies	430
Jars	600
Fixed expenses for manufacturing, selling & admin.	<u>7,955</u>
Total	<u>12,600</u>

The company has received an offer for the export under a different brand name of 20,000 jars per month at ₹0.75 a jar.

Write a short report on the advisability of accepting the offer. [7]

- (b) Patients arriving at a village dispensary are traded by a doctor on a first-come-first serve basis. The inter arrival time of the patients is known to be uniformly distributed between 0 and 80 minutes, while their service time is known to be uniformly distributed between 15 and 40 minutes. It is desired to simulate the system and determine the average time a patient has to be in the queue for getting service and the proportion of time the doctor would be idle.

Carry out the simulation using the following sequences of random numbers. The numbers have been selected between 00 and 80 to estimate inter-arrival times and between 15 and 40 to estimate the service times required by the patients.

Series I	07	21	12	80	08	03	32	65	43	74
Series II	23	37	16	28	30	18	25	34	19	21

The dispensary starts serving patients at 8.00 a.m. [8]

7. (a) Technotik Ltd., specializes in the manufacture of Computers. It is planning to introduce a new computer specially designed for children. Development of the New Computer is to begin shortly and Technotik Ltd., is in the process of preparing a Product Life-Cycle Budget. It expects the new product to have a life-cycle of 3 years from the time of its introduction in the market before the computer becomes obsolete due to technological advancement of other competitive products.

The following information is available :

Particulars	Year-1	Year-2	Year-3

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Units manufactured & sold	25,000	1,00,000	75,000
Computers per batch	40	50	50
Price per Computer (₹)	4,500	4,000	3,500
R&D and Design Cost (₹)	450 Lakh	50 Lakh	-
Production Cost:			
Variable Cost per unit (₹)	1,600	1,500	1,500
Variable Cost per batch (₹)	7,000	6,000	6,000
Fixed Cost (₹)	300 Lakh	300 Lakh	300 Lakh
Marketing Cost:			
Variable Cost per unit (₹)	360	320	280
Fixed Cost (₹)	200 Lakh	150 Lakh	150 Lakh
Distribution Cost:			
Units produced per batch	20	16	12
Variable Cost per unit (₹)	100	100	100
Variable Cost per batch (₹)	1,200	1,200	1,000
Fixed Cost (₹)	120 Lakh	120 Lakh	120 Lakh
Customer Service Cost per unit (₹)	200	150	150

You are required to prepare budgeted life-cycle operating profit for the new computer.

[2+2+2+2]

(b) What are the various stages/steps to be taken in the implementation of Total Quality Management? [7]

8. Write short notes on any three: [5×3=15]

- (a) Enterprises Risk Management (ERM)
- (b) Backflush accounting
- (c) Limitations Of Standard Costing
- (d) Extended Supply Chain