PGDM 2015-17
Managerial Accounting: DM 205
Trimester – II End-Term Examination: December2015

Time allowed: 2 hrs 30 min   Max Marks: 50

Roll No: ____________

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work please use answer sheet.
Make assumptions wherever necessary and write them down at the end of solution.

Section A: Attempt 3 out of 5 questions; each question is of 5 marks

A1: North Plc has two divisions, A & B, whose respective performances are under review. Division A is currently earning a profit of Rs 35,000 and has net assets of Rs 150,000. Division B is currently earning a profit of Rs 70,000 and has net assets of Rs 325,000. North Plc has a current cost of capital of 15%.
Required:
Using the information above, calculate the roi and residual income figures for the two divisions under review & comment on your results. State which method would be more useful when comparing divisional performance & why?

A2: The following are the costing records for the year 2012 of a manufacturing Company. Production 1,00,000 units; Cost of raw materials ₹20,00,000; Labour cost ₹12,00,000; Factory overheads ₹8,00,000; Office overheads ₹4,00,000; Selling Expenses ₹1,00,000, Rate of Profit 25% on the selling price. The manufacturing Company decided to produce 1,50,000 units in 2013. It is estimated that the cost of materials will increase by 20%, thelabour cost will increase by 10%, 50% of the overhead charges are fixed and the other 50% are variable. The selling expenses per unit will be reduced by 20%. The rate of profit will remain the same.
Prepare a cost statement for the year 2013 showing the total profit and selling price per unit.
Statement of Cost & Profit (Cost Sheet) (Output 1,00,000 units)

A3: If an external, perfectly competitive market exists for an intermediate product what should be the transfer price? Why?

A4: Explain the concept of 'relevant cost' with a suitable example.

A5: Explain how the business environment has changed over the past decades and discuss how this has had an impact on managerial accounting?

Section B: Attempt 2 out of 3 questions; each question is of 10 marks

B1: Starlight Co. and Jupiter Co. Ltd. sell the same type of product. Budgeted Profit & Loss A/c. of these companies for the year ended 31st march 2012 given below.

	Starlight Co. (₹000)		Jupiter Co. (₹000)	
Sales		300		300
Less: Variable Cost:				
Material	100		80	
Labour	110		100	
Overhead	30	240	20	200
Fixed Cost	30		70	
Profit		30		30

You are required to find out the break-even point of each Company. Also state clearly which Company is likely to earn greater profit if there is (i) heavy demand; and (ii) poor demand for its product.

B2: Starkuchen GmbH has been in the food-processing business three years. For its first two years (2006 and 2007), its sole product was raisin cake. All cakes were manufactured and packaged in 1 kg units. A normal costing system was used by Starkuchen. The two direct-cost categories were direct materials and direct manufacturing labour. The sole indirect manufacturing cost category – manufacturing overhead – was allocated to products using a units of production allocation base.

In its third year (2008) Starkuchen added a second product – layered carrot cake – that was packaged in 1 kg units. This product differs from raisin cake in several ways:

- More expensive ingredients are used,
- More direct manufacturing labour time is required
- More complex manufacturing is required

In 2008, Starkuchen continued to use its existing costing system where a unit of production of either cake was weighted the same.

Direct materials costs in 2008 were €0.60 per kg of layered carrot cake. Direct manufacturing labour cost in 2008 was €0.14 per kg of raising cake and €0.20 per kg of layered carrot cake.

During 2008, Starkuchen sales people reported greater-than-expected sales of layered carrot cake and less-than-expected sales of raisin cake. The budgeted and actual sales volume for 2008 was as follows:

	Budgeted	**Actual**
Raisin Cake	160000 kg	120000 kg
Layered carrot cake	40000 kg	80000 kg

The budgeted manufacturing overhead for 2008 was €210800.

At the end of 2008, Wolfgang Iser, the accountant of Starkuchen, decided to investigate how use of an activity based costing system would affect the product cost numbers. After consultation with operating personnel, the single manufacturing overhead cost pool was subdivided into five activity areas. These activity areas, their driver, their 2008 budget rate and the driver units used per kilogram of each case are as follows:

Activity	**Driver**	**Budgeted 2008 cost per driver unit**	**Driver units per kg of raisin cake**	**Driver units per kg of layered carrot cake**
1. Mixing	Labour time	€0.04	5	8
2. Cooking	Oven time	€0.14	2	3
3. Cooling	Cool room time	€0.02	3	5
4. Creaming / Icing	Machine time	€0.25	0	3
5. Packaging	Machine time	€0.08	3	7

Required

1. Calculate the 2008 unit product cost of raising cake and layered carrot cake with the normal costing system used in the 2006 to 2007 period.
2. Calculate the 2008 unit product cost per cake under the activity-based normal costing system.
3. Explain the differences in unit product costs calculated in requirements 1 and 2
4. Describe three uses Starkuchen might make of the activity-based cost numbers.

B3:A company manufactures two components in one of its factories. Material A is oneof several materials used in the manufacture of both components.
The standard direct labour hours per unit of production and budgeted productionquantities for a 13-week period were:

Standard Budgeted	Direct labour production	Hours quantities
Component X	0.40 hours	36 000 units
Component Y	0.56 hours	22 000 units

Throughout the 13-week period 53 direct workers were employed, working astandard 40-hour week.
The following actual information for the 13-week period is available:
Production:
Component X, 35 000 units
Component Y, 25 000 units
Direct wages paid, £386 540
Material A purchases, 47 000 kilos costing £85 110
Material A price variance, £430 F
Material A usage (component X), 33 426 kilos
Material A usage (quantity) variance (component X), £320.32 A
Required:
(a) Calculate the direct labour variances for the period.
(b) Calculate the standard purchase price for material A for the period and the standard usage of material A per unit of production of component X.

Section C: Compulsory Case Study 15 Marks

XYZ Ltd. is going through a bad phase and has prepared a flexible budget for the coming quarter. The following information is provided from the same:

Production capacity	40%	60%	90%	100%
Cost	(₹)	(₹)	(₹)	(₹)
Direct Labour	16,000	24,000	32,000	40,000
Direct Material	12,000	18,000	24,000	30,000
Production Overheads	11,400	12,600	13,800	15,000
Administrative Overhead	5,800	6,200	6,600	7,000
Selling & Distribution Overheads	6,200	6,800	7,400	8,000
	51,400	67,600	86,800	1,00,000

However, due to recession the Company will have to operate at 50% capacity in the coming quarter. Selling prices has to be lowered to an uneconomic level and expected sales revenue for the coming quarter, will be ₹49,500. But it is projected that in the next quarter following the coming quarter, the concern will operate at 75% capacity and generates sales revenue of ₹90,000. The Management is considering a suggestion to keep the operation suspended in the coming quarter and restart operation from the quarter when it is expecting to operate at 75% capacity. If the operation i8s suspended in the next quarter it is estimated that:
(i) The present fixed cost for the quarter would be reduced to ₹11.000.
(ii) There will be cost of ₹7,500 for closing down operations.
(iii) There would be additional maintenance cost of ₹1,000 for quarter.
(iv) There would be a onetime cost of ₹4,000 in re opening the plant.

You are required to advice weather the factory should be kept operational during the coming quarter and also what will be the profit at 75% capacity utilization level.