

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

FIRST SEMESTER EXAMINATION - FEBRUARY 2010

MANAGEMENT AND COST ACCOUNTING II CAC 2105

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

- i. Answer all **four** questions
- ii. Begin each answer on a new page

QUESTION	TOPIC	MARKS
1	CONTRACT COSTING	20
	LABOUR COSTING	10
2	PROCESS COSTING	25
3	JOB COSTING	12
4.	OVERHEADS	33

QUESTION 1 (30 MARKS)

A) Skies Ltd is a contractor for the construction of a shopping mall at Luveve for the Local Authority. The value of the contract is \$300 000 and payment by engineers's certificate is subject to a retention of 10% of the amount certified, this is to be held by the City of Bulawayo for six months after the completion of the contract.

The following information is extracted from the records of Skies Ltd

	\$
Wages on site	41 260
Materials delivered on site by supplier	58 966
Materials delivered on site from stores	10 180
Hire of plant	21 030
Expenses charged to contract	3 065
Overheads charged to contract	8 330
Materials on site at 31 December 2009	11 660
Work certified	150 000
Payment received	135 000
Work in progress at cost (not the subject of a certificate to date)	12 613
Wages accrued to 31 December 2009	2 826

Required

- i) Prepare the Skies contract account to 31 December 2009. (15 marks)
- ii) How is IAS 11 applied in determining profits on contracts? (5 marks)

B) A team of five employees is rewarded by means of a group incentive scheme. The team receives a basic hourly rate for output up to and including 200 units per day.

The basic rate of pay for members of the team is:

	Number of employees	Hourly rate
		\$
Team leader	1	14
Operatives	3	10
Junior operatives	1	6

For outputs exceeding 200 units per day the hourly rate for all members of the team is increased, for all hours worked that day. The increases in hourly rate, above the basic hourly rate, are as follows,

Output per day	increase in hourly rate
Unit's	%
201 to 250	10
251 to 280	12
281 to 300	15

Due to a limitation on machine capacity it is possible to exceed an output of 300 units per day.

REQUIRED

Prepare a graph to show the hourly group remuneration cost for the range of output from zero to 300 units per day. (10 marks)

QUESTION 2 (25 MARKS)

Chemicals X, Y and Z are produced from a single joint process. The information below relates to the period just ended.

Input to process:	direct materials	3.200 litres, cost \$24.000
	Direct labour	\$48.000

Factory overheads are absorbed at 120 % of prime cost.

Output from process:	chemical X	1.440 litres
	Chemical Y	864 litres
	Chemical Z	576 litres
	Scrap	10 % input, credited to the process Account at sales value as it occurs

Selling prices:	Chemical X	\$100 per litre
	Chemical Y	\$80 per litre
	Chemical Z	\$60 per litre
	Scrap	\$16 per litre

REQUIRED

Calculate for the period just ended:

- The joint costs to be apportioned to the joint products; (5 marks)
- The total sales value of the output of the three products; (3 marks)
- The share of the joint process costs charged to Chemical X, using the volume of output method of apportionment (2 marks)
- The share of the joint process costs charged to Chemical Y, using the sales value method of apportionment. (2 marks)
- Give examples of industries in which joint costs are found. For each example what are the separable products at split off point. (4 marks)
- Distinguish between the sales value at split off point method and the estimated net realizable value method. (2 marks)
- In costing it is neither the technology nor the cost incurred but the market price of the item which determines whether an item is classified as scrap or waste, joint product or by product. How far do you agree with the statement? (7 marks)

QUESTION 3**(12 Marks)**

A company manufactures carpet for the hotel industry. No finished stocks are carried as the company only manufactures specifically to customer order. At the end of month 6 one incomplete job remained in progress. Production costs incurred on the job to the end of month 6 were

Direct materials	\$7 220
Direct labour	\$6 076
Production	\$10 416

During month 7 the company accepted two further jobs (job X124 and job X126) and incurred prime costs as follows.

	Job X124	job X125	job X126
Direct material issued from stores	\$6.978	\$18.994	\$12.221
Direct material returned to stores	nil	(\$700)	(\$2.170)
Direct material transfers	nil	\$860	(\$860)
Direct labour hours	780	2.364	1.510

Direct month is paid at a rate of \$7.00 per hour. Production overheads are absorbed at a rate of \$12.00 per direct labour hour.

During month 7, jobs X124 and X125 were completed. On completion of a job, 20% of the total production cost is added in order to recover distribution, selling and administration costs. The amounts involved to customers during month 7 for the completed jobs were:

Job X124	\$60,000
Job X125	\$79,000

Required

a) For each of the jobs calculate the following total costs:

- i) Direct material; (4 marks)
- ii) Direct labour; (4 marks)
- iii) Production overhead. (4 marks)

QUESTION 4 (33 Marks)

The following information relate to a manufacturing company with three production and two service departments.

	Production departments			Service departments		Total
	A	B	C	X	Y	
No of employees	30	75	25	6	14	150
Labour hours	1510	3320	950	252	595	6627
Plant and machinery values	\$225000	\$75000	\$45000	\$17000	\$85000	\$447000
Area (square meter)	7 500	10 000	3 500	500	1000	22500
Material requisitions	1 400	300	250		550	2500
Maintenance hours (minor work)	75	30	45			150
KWH(000)	300	70	50	10	170	600
Machine hours	8 400	1 100	300			9 800

During the period the following data were recorded

	Production departments			Service departments		Total
	A	B	C	X	Y	
Indirect materials	\$2 500	\$1000	\$1500	\$300	\$1700	\$7000
Indirect labour	\$5250	\$2500	\$2250	\$4250	\$11750	\$26000
Major maintenance work	\$18500	\$7500	\$4500			\$30500

The following details were obtained from the accounts relating to the period.

	\$
Fire insurance	1 250
Power	4 500
Heating and lighting	2 000
Rates	1 800
Machine depreciation	8 400
Machine insurance	850
Canteen deficit	4 250
Balance of maintenance costs (excluding major works)	17 500

Required

- Prepare an overhead analysis using the data provided and calculate suitable overhead absorption rate for A, B and C departments. (30 marks)
- Explain the difference between the terms overhead allotment, apportionment and absorption (3 marks)