NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

FIRST SEMESTER EXAMINATION - 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 ACCOUNTS	25
2 LABOUR COSTING	25
3 PROCESS COSTING	25
4 JOB COSTING	25

QUESTION 1

(25 Marks)

Skies Ltd is a contractor for the construction of building for NUST. The value of the contract is \$300 000 and payment by engineers 's certificate subject to retention of 10% of the amount certified this is to be held by NUST for six months after the completion of the contract.

The following information is extracted from the records of Skies Ltd

\$

	41.000
wages on site	41 260
Materials delivered on site by supplier	58 966
Materials delivered on site from store	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

- (a) Prepare the skies contract account to 31 December 2009. (15 marks)
- (b) Suggest a method by which profit could be prudently estimated. (1 mark)
- (c) Define the following terms related to construction accounts and give two examples of each:
 - (i) A variation
 - (ii) A claim
 - (iii) An incentive (9 marks)

<u>QUESTION 2</u> (25 Marks)

a) 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 not possible to exceed an output of 300 units per day.

REQUIRED

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

(10 marks)

- (b) Based on the data shown below you are required to calculate the remuneration of each employee, as determined of each of the following methods
 - (i) Hourly rate(ii) Basic piece rate
 - (iii) Individual bonus scheme using the Rowan scheme. (10 marks)

Details			
Name of employee	Big	Biggy	Bgboy
Units produced	540	400	440
Time allowed in minutes per unit	10	15	12
Time taken in hours	80	76	72
	\$	\$	\$
Rate per hour	3.75	3.15	3.60

Rate per unit	0.60	0.75	0.72
b) Briefly distinguish l	etween:		
(i) Straight	iece rates		
(ii) Piece rat	s with guaranteed day rates		
(iii) Differen	al piece rates.	(5 marks)

<u>QUESTION 3</u> (25 Marks)

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

Direct materials 3.200 Direct labour) litres, cost \$24.000 \$48.000
Factory overheads are	e absorbed at 120 % of prime cost.
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
Chemical X	\$100 per litre
Chemical Y	\$80 per litre
Chemical Z	\$60 per litre
Scrap	\$16 per litre
	Direct materials 3.200 Direct labour Factory overheads are Chemical X Chemical Y Chemical Z Scrap Chemical X Chemical Y Chemical Z Scrap

REQUIRED

Calculate for the period just ended:

a)	The joint costs to be apportioned to the joint products.	(5 marks)
b)	The total sales value of the output of the three products.	(3 marks)
c)	The share of the joint process costs charged to Chemical X, using	the volume of
	output method of apportionment	(2 marks)
d)	The share of the joint process costs charged to Chemical Y, using	the sales value
	method of apportionment.	(2 marks)
e)	Give two examples of industries in which joint costs are found. Fo	or each example
	what are the separable products at split off point.	(4 marks)
f)	Distinguish between the sales value at split off point method and the	he estimated net
	realizable value method.	(2 marks)
g)	In process 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	5

Scrap or waste, joint product or a by product. How far do you agree with the statement?

(7 marks)

QUESTION 3 (25 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 invoiced 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;
 - (ii) Direct labour;
 - (iii) Production overhead.

(17 marks)

b) Calculate the total cost and profit / (loss) of each of job X124 and job X125. **(8 marks)**