National University of Science and Technology

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

SECOND SEMESTER SUPPLEMENTARY EXAMINATION: 2013

DATE: 2013

SUBJECT: ACCOUNTING 2B: CAC 2206

TIME ALLOWED: THREE (3) HOURS

MARKS: 100

INSTRUCTIONS TO THE CANDIDATES

1. Answer **all** questions
2. Begin each Full question on a new page

INFORMATION FOR CANDIDATES

1. All workings should be shown
2. All answers should be presented in good style

Question 1 [25 marks]

H Ltd manufactures two types of refrigerators the Defy and Capri. Information on each fridge follows

	Defy	Capri
Units manufactured and sold	8 000 units	9 000 units
Selling price	$3 800	$3 000
Variable costs per unit	$1 900	$1 400
Product and plant re- engineering	$20 000	$15 000
Inspection	8 000 hours	9 000 hours
Re work costs	$219 000	$129 000
Liability claims	$200 000	$100 000
Guarantee repairs	$253 000	$206 000
Plant maintenance	$600 000	$400 000
Estimated lost sales from poor quality	1 200 units	800 units

The labour rate for inspection is $80 per hour

Required

- **(a)** Calculate the cost of quality for Defy and Capri in total and per quality category [15]
- **(b)** Calculate the ratio of each cost of a quality item as a percentage of sales.[5]
- **(c)** Compare and comment on the costs of quality for Defy and Capri [5]

Question 2 [30 marks]

New trends Ltd is a new business which has been formed to buy standard DVD units and modify them to the specific needs of customers .The business will acquire fixed assets costing $200,000 and a stock of 1,000 standard DVD units on the first day of business .The fixed assets are expected to have a five year life with no residual value at the end of that time.

Sales are forecast as follows.

	Year 1				Year 2
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1
Modified DVD unit	8,100	8,400	8,700	7,800	8,100

The selling price of each unit will be $90

The cost of production of each unit is specified as follows:

	$
Cost of standard unit purchased	30
Direct labour	33
Fixed overhead	12
	75

i. The fixed overhead per unit includes an allocation for depreciation .The annual depreciation is calculated on a straight line basis and is allocated on the basis of a cost per unit to be produced during the year.
ii. Suppliers of standard DVD units will allow one month's credit.
iii. Customers are expected to take two months' credit.
iv. Wages will be paid as they are incurred in production.
v. Fixed overhead costs will be paid as they are incurred.
vi. The stock of finished goods at the end of each quarter will be sufficient to satisfy 20% of the planned sales of the following quarter.
vii. The stock of standard DVD units will be held at constant at 1,000 units.

It may be assumed that the year is divided into quarters of equal length and that sales, production and purchases are spread evenly throughout the year.

Required.

Prepare, for each quarter of the first year of trading:

(a) The sales budget;
(b) The production budget; and
(c) The cash budget.

Question 3 [20 marks]

The annual demand for S Ltd's product is 12 000 units

The following particulars are applicable

Purchase price	$110 per unit
Ordering cost	$150 per order

The carrying costs are 16.50% per annum

In addition to the 16.50% carrying costs the following stock holding costs are incurred

Storage rental	$8.60 per unit per year
Insurance	9% of the unit cost per year

The following special offer has been received from the supplier. A discount of 20 % on the purchase price will be offered and the number of orders per annum will be 6. If the offer is accepted, additional storage space will be needed

Required

(a) Determine the number of orders to be placed annually without taking the special offer into account [3]

(b) Calculate whether the special offer should be accepted or not [12]

(c) With the advent of just in time (JIT) companies must not both about inventory management .Discuss [5]

Question 4 [25 marks]

The following budgeted information relates to B plc for the forthcoming period:

	Products		
	A	**B**	**C**
	(000)	**(000)**	**(000)**
Sales and production (units)	50	40	30
	$	$	$
Selling price (per unit)	45	95	73
Prime cost (per unit)	32	84	65
	Hours	**Hours**	**Hours**
Machine department (machine hours per unit)	2	5	4
Assembly department direct labour hours per unit)	7	3	2

Overheads allocated and apportioned to production departments (including service cost centre costs) were to be recovered in product costs as follows:

Machine department at $1.20 per machine hour
Assembly department at $0.825 per direct labour hour

You ascertain that the above overheads could be re-analysed into 'cost pools' as follows:

Cost pool	**$**	**Cost driver**	**Quantity for the period**
Machining services	357 000	Machine hours	420 000
Assembly services	318 000	Direct labour hours	530 000
Set-up costs	26 000	Set-ups	520
Order processing	156 000	Customer orders	32 000
Purchasing	84 000	Suppliers orders	11 200
	941 000		

You have also been provided with the following estimates for the period:

	Products		
	A	**B**	**C**
Number of set-ups	120	200	200
Customer orders	8 000	8 000	16 000
Suppliers' orders	3 000	4 000	4 200

Required:

(a) Prepare and present profit statements using:
- (i) conventional absorption costing **[8**]
- **(ii)** activity-based costing; **[12]**

(b) Comment on why activity-based costing is considered to present a fairer valuation of the product cost per unit. **[5]**

END OF EXAMINATION PAPER