1. (a) Explain **four** uses of management accounting information. (8 marks)

(b) The following income statement was prepared by the management accountant of Ukweli Ltd.

	Ksh.	Ksh.
Sales revenue		720,000
Direct materials	80,000	
Direct labour	60,000	
Direct expenses	10,000	
	150,000	
Variable Production Overheads	90,000	240,000
Contribution		480,000
Fixed production overheads		270,000
Total Profit		210,000

Additional information:
Total units produced and sold for the period was 1,500.

Calculate:
(i) contribution per unit;
(ii) profit per unit;
(iii) break-even sales;
(iv) margin of safety in shillings. (12 marks)

2. (a) Wachuzi Ltd based in industrial area offers transport services within Nairobi town. The company has 15 lorries. Each lorry makes between 2000 to 4000 round-trips per year. Records indicate that a lorry that has made 2000 round-trips incurs an average operating costs of Ksh. 9,000 per round-trip. A lorry that has made 4,000 round-trips incurs an average operating cost of Ksh. 8,000 per round-trip.

(i) Using the high-low method, determine the cost estimation function.
(ii) Estimate the operating cost for a lorry that makes 6,500 round trips.

(8 marks)

(b) Bida Ltd is considering three projects; A, B and C. Information for each project is as follows.

Project A.
Has an initial cash outlay of Ksh. 10 million. The three possible outcomes with their probabilities and expected monetary returns are:

Outcome	Probability	Expected Monetary Returns
Good	0.45	Ksh. 50 million
Medium	0.30	Ksh. 65 million
Poor	0.25	Ksh. 20 million

Project B.
Has an initial cash outlay of Ksh. 15 million with the following outcomes:

Outcome	Probability	Expected Monetary Returns
Good	0.45	Ksh. 70 million
Medium	0.30	Ksh. 65 million
Poor	0.25	Ksh. 30 million

Project C.

Has an initial cash outlay of Ksh. 55 million and a sure expected monetary return of Ksh. 100 million.

(i) Draw a decision tree using the above information.
(ii) Advise the management of the company which projet to invest in .

(12 marks)

3. (a) Banda Ltd manufactures two types of products; A and B. The budgeted sales for the year 2010 were as follows:

Product	Quantity	Price per Unit (Ksh)
A	5,000	200
B	8,000	300

The balances at the beginning and end of the year were given as follows:

Product	January 2010 (units)	December 2010 (units)
A	300	900
B	500	1,200

Prepare: (i) Sales budget;
(ii) Production budget. (8 marks)

(b) Gama Ltd produces and sells four products; A, B, C and D. The relevant information is as follows:

Product/per unit	**A**	**B**	**C**	**D**
Selling price (Ksh)	30	48	25	75
Material cost (Ksh)	12	15	9	24
Labour cost (Ksh)	7	13	6	20
Overheads (Ksh)	2	5	4	7
Demand in units	6,000	6,000	6,000	6,000

All the products use the same material which is bought at Ksh. 3 per Kg. There is 100,000 Kg of the material available.

(i) Calculate the contribution per unit for each product.
(ii) Calculate the contribution per Kg of materials used for each product.
(iii) Advise the management on the sales mix to maximize contribution for the company. (12 marks)

4. (a) Explain **four** techniques that are used by employers to evaluate the performance of their employees. (8 marks)

(b) Balut enterprise is planning to invest Ksh 1,000,000 in either project A or B. The prospective operating cash inflows of the projects are as follows:

Year	**Annual cash inflow (Ksh. '000')**	
	Project A	**Project B**
1	100,000	500,000
2	300,000	400,000
3	600,000	300,00
4	400,000	80,000
5	500,000	80,000

The required rate of return is 6% compounded annually.

(i) Determine the Net Present Value (NPV) for each project.
(ii) Determine the Discounted Payback Period for the two projects.
(iii) Advise the management on the project to invest in. (12 marks)

5. (a) Explain **four** advantages the management accountant would gain from the use of management information system (computers). (8 marks)

(b) The following information was extracted from the books of XY Ltd for the year ended 31 December 2010.

REVENUE

PRODUCT	SELLING PRICE (Ksh)	UNITS	SALES VOLUME (Ksh)
A	269	100,000	26,900,000
B	134	150,000	20,100,000
			47,000,000

OPERATING COST BUDGET (KSH)

DEPARTMENT	VARIABLE COST (Ksh)	FIXED COSTS (Ksh)	TOTAL COST (Ksh)
Production	-	12,000,000	12,000,000
Marketing	10,562,500	2,950,00	13,512,500
Selling and distribution	5,687,500	1,300,000	6,987,500
	16,250,00	16,250,000	32,500,000

The cost of goods sold amounted to Ksh. 7,500,000.
Prepare the budgeted income statement for the year ended 31 December 2010. (12 marks)

6. (a) Explain **four** assumption of the Cost-Volume-Profit (C-V-P) analysis. (8 marks)

(b) Utumishi Electricals Ltd has 4 skilled electricians who are assigned tasks to meet the customers requirements. In the month of August 2011, five customers from different estates of Nairobi requisitioned Utumishi Electricals for service. The costs, in thousand shillings, to be incurred to assign each electrician to the different customers is given in the table below:

	CUSTOMERS				
ELECTRICIANS	ALI	BEN	CARO	GRACE	FAITH
ELI	6	18	20	12	13
EDU	12	8	12	20	16
EMA	16	19	15	11	7
ELKANA	13	14	10	25	22

Assign the electricians to the customers so as to minimize the total cost incurred.
(12 marks)

7. (a) Supasara Supermarket operates in one of the Nairobi estates. It has one cashier. The cashier serves 10 customers in 15 minutes. Customers arrive at the supermarket at an average of 10 in 20 minutes.

Calculate:

(i) the traffic intensity;
(ii) average time a customer spends in the system;
(iii) average number of customer in the queue;
(iv) the average time a customer spends waiting in the queue. (8 marks)

(b) Transpota Ltd runs three wholesale depots in three towns. It delivers sold goods to the customers premises. During the month of June 2011, there were 5 customers who required goods to be delivered as follows:

	CUSTOMERS				
	A	**B**	**C**	**D**	**E**
Demand	250	400	150	600	100

The three wholesale depots had in store goods as follows:

		Quantity
Depots	**I**	800
	II	400
	III	300

The costs, in thousands, of shillings of transporting goods to the customers are given as follows:-

		A	**B**	**C**	**D**	**E**
Depots	**I**	3	16	9	2	1
	II	1	9	3	8	17
	III	4	5	2	2	12

Calculate the initial total costs of transporting the goods to the customers using the Vogel's Approximation Method (VAM). (12 marks)