Section A – ALL 25 questions are compulsory and MUST be attempted

Please use the Candidate Answer Booklet to record your answers to each multiple Choice question. Each question is worth 2 marks.

1) Gabra Company is a supermarket group that incurs the following costs:

I. The bought-in price of the good
II. Inventory financing costs
III. Shelf refilling costs
IV. Costs of repacking or 'pack out' prior to storage before sale.

Gabra Company's calculation of direct product profit (DPP) would include:

A. All of the above costs
B. All of the above costs except (ii)
C. All of the above costs except (iv)
D. Costs (i) and (iii) only

2) Which THREE of the following statements regarding the use of Activity Based Costing (ABC) information are correct?

A. An ABC system produces future information relating to product costs
B. ABC systems are useful for longer-term decisions because all factors of production become variable in the longer term
C. Unlike traditional systems, ABC systems assume that products consume activities in proportion to their production volumes
D. ABC systems remedy the tendency of traditional costing systems to over-cost high volume products and under-cost low-volume products

3) In which of the following ways might financial returns be improved over the life cycle of a product?

1. Maximizing the time to market
2. Minimizing the breakeven time
3. Maximizing the length of the life cycle

A. (1) and (2) only
B. (1) and (3) only
C. (2) only
D. (2) and (3) only

4) **Which method of pricing is most easily applied when two or more markets for the product or service can be kept entirely separate from each other?**
   - **A.** Price discrimination
   - **B.** Product line pricing
   - **C.** Skimming
   - **D.** Volume discounting

5) **Which of the following is a disadvantage of the ROI performance measure?**

   1. It encourages managers to focus on the long run rather than the short run.
   2. It discourages managers from investing in projects that would decrease divisional ROI but increase the profitability of the company as a whole.
   3. It encourages myopic behavior.
   4. All are disadvantages of the ROI measure.

   - **A.** 2, 3, 4
   - **B.** 1, 2, 3
   - **C.** 1, 2, 4
   - **D.** 3, 4, 5

6) **A company manufactures and sells a single product with a variable cost per unit of SDG 36. It has a contribution ratio of 25%. The company has weekly fixed costs of SDG18,000.**

   What is the weekly breakeven point, in units?

   - **A.** 1,500
   - **B.** 1,600
   - **C.** 1,800
   - **D.** 2,000

7) **The management accountant of a company has calculated his firm's breakeven point from the following data:**

Selling price per unit SDG 20
Variable costs per unit SDG 8
Fixed overheads for next year SDG 79,104
It is expected that next year, the firm will produce and sell 7,500 units.

What is the margin of safety?

A. 12.1%
B. 13.8%
C. 47.3%
D. 89.6%

8) **Which of the following statements is true of pricing?**
   A. Discrimination is always illegal, so everyone should pay the same amount.
   B. Early adopters get a discount for being first in the market.
   C. Pricing against a similar competitor is important in the Internet age.
   D. Price to make the most sales in that way you will always get the most profit.
9) **Which of the following conditions would need to be true for a price skimming policy to be sensible?**
   A. An existing product where the owners have decided to increase prices to move the product up market
   B. Where the product has a long lifecycle
   C. Where the product has a short lifecycle
   D. Where only modest development costs had been incurred
10) **Gloop is considering the further processing of its face foundation cream by adding an anti- aging compound. Existing sales are 25,000 tubs of cream but this is expected to increase by 25% if the anti-aging compound is added. The anti-ageing compound will cost SDG2.50 per tub and a royalty will be payable on sales revenue of 1.5% to the patent holder (Startled Limited). Gloop also thinks that the selling price of the cream will increase from SDG15 to SDG20 per tub. Other material costs will unaffected at SDG6 per tub.**
    Gloop operates a total absorption costing system and allocates fixed costs to products at the rate of SDG2 per SDG1 of sales revenue.

How much better off financially will Gloop be if it decides to proceed with this idea?

   A. SDG125,000
   B. SDG134,500
   C. SDG137,500
   D. SDG200,000
11) **An incremental budgeting system is:**
    A. a system which budgets only for the extra costs associated with a particular plan.
    B. a system which budgets for the variable manufacturing costs only.
    C. a system which prepares budgets only after the manager responsible has justified the continuation of the relevant activity.

D. a system which prepares budgets by adjusting the previous year's values by expected changes in volumes of activity and price/inflation effects.

12) A master budget comprises the:

- **A.** budgeted income statement and budgeted cash flow only
- **B.** budgeted income statement and budgeted balance sheet only
- **C.** budgeted income statement and budgeted capital expenditure only
- **D.** budgeted income statement, budgeted balance sheet and budgeted cash flow only

13) VPS is a large manufacturing business that is introducing an activity based costing system into its business. VPS ships components via its own logistics operation to its central manufacturing centre in Glasgow from a wide variety of locations. It is attempting to identify the correct cost driver for the cost pool called 'component handling'.

Which of the following would be the correct figure to use?

- **A.** Average components per unit
- **B.** Total number of components shipped
- **C.** Average distance travelled by a component
- **D.** Total components-distance travelled

14) A company is selling a product at a price of SDG120 per unit. At this price it is selling 200,000 units per period. It has been estimated that for every SDG5 increase or reduction in price, sales demand will fall or increase by 10,000 units. At what selling price will total sales revenue per period be maximized?

- **A.** SDG 80
- **B.** SDG 90
- **C.** SDG 100
- **D.** SDG 110

15) What method of uncertainty or risk analysis is also called 'What if?' analysis?

- **A.** Decision tree analysis.
- **B.** Sensitivity analysis.
- **C.** Simulation modeling.
- **D.** Stress analysis.

16) A company produces and sells a single product. Budgeted sales are SDG2.4 million, budgeted fixed costs are SDG360,000 and the margin of safety is SDG400,000.

What are budgeted variable costs?

- **A.** SDG 1.640 million.
- **B.** SDG 1.728 million.

C. SDG 1.968 million.

D. SDG 2.040 million.

17) **The audit fee paid by a manufacturing company would be classified by that company as:**

A. Production overhead cost.

B. Selling and distribution cost.

C. Research and development cost.

D. Administration cost.

18) **A manager of an investment center can improve ROI by:**

A. Increasing average operating assets.

B. Reducing sales.

C. Increasing variable costs.

D. Reducing variable and/or controllable fixed costs.

19) **A company sells its product at SDG 200 per unit with a profit margin of 25% on the total cost.**

What is the total cost per unit?

A. SDG 140

B. SDG 160

C. SDG 180

D. SDG 130

20) **In which of the four perspectives of a balanced scorecard would Return on Capital Employed (ROCE) be likely to appear?**

A. Financial

B. Customers

C. Internal process

D. Learning and growth

21) **In which of the four perspectives of a balanced scorecard is the objective 'reduce staff turnover' mostly likely to be**

A. Financial

B. Customers

C. Internal process

D. Learning and growth

22) **A project would normally be undertaken if its net present value is:**

A. Negative

B. Positive

C. Zero

D. Less than the NPV of current projects

23) **A company has a target rate of return on investment of 20% and the divisional managers will receive a bonus when their divisions' annual ROI exceed this figure.**
Division A has an annual profit of SDG 600,000 and currently employs SDG 2.4 Million.
Division A manager is currently:

- **A.** Entitle for a bonus.
- **B.** Needs to increase the divisional profit to receive a bonus.
- **C.** Needs to decrease the divisional capital to receive a project.
- **D.** Needs to increase the divisional profit and decrease the capital to receive a bonus

24) Average time per customer's transactions is:

- **A.** A financial measure.
- **B.** Non-financial measure.
- **C.** Not a performance measure.
- **D.** Can be considered as both financial and non-financial measure.

25) Unit profit margin is the difference between:

- **A.** Selling price & unit total cost.
- **B.** Selling price & unit direct cost.
- **C.** Selling price & unit fixed cost.
- **D.** Selling price & unit margin contribution.

Section B – the 2 questions are compulsory and MUST be attempted

Question (1)

KL manufactures three type of fruit juices, fafa , zafa and lafa. Each product uses the same materials and the same type of direct labour but in different quantities. The company currently uses a cost plus basis to determine the selling price of its products using the full cost method with the overheads being absorbed on the basis of direct labour hour.

However, the Managing Director is concerned that the company may be losing sales because of its approach to setting prices. He thinks that a marginal costing or activity based costing approaches may be more appropriate, particularly since the workforce is guaranteed a minimum weekly wage and has a three month notice period.
The direct costs of the three products are shown below:

	faza **SDG**	**zafa** **SDG**	**lafa** **SDG**
Budgeted annual production (units)	15,000	24,000	20,000
Cost per unit:			
Direct materials	35	45	30
Direct labour (SDG10 per hour)	40	30	50

In addition to the above direct costs, KL incurs annual indirect production costs of SDG 1,044,000.

An analysis of the company's indirect production costs shows the following:

Cost item	**SDG**	**Cost Driver**
Material ordering costs	220,000	Number of supplier orders
Machine setup costs	100,000	Number of batches
Machine running costs	400,000	Number of machine hours
General facility costs	324,000	Number of machine hours

The following additional data relate to each product:

	faza	zafa	lafa
Machine hours per unit	5	8	7
Batch size (units)	500	400	1,000
Supplier orders per batch	4	3	5

Required:

A. Given the Managing Director's concern about KL's approach to setting selling prices, discuss the advantages and disadvantages of marginal cost plus pricing AND total cost plus pricing.

(6 marks)

B. Calculate the full cost per unit of each product using KL's current method of absorption costing.

(4 marks)

C. Calculate the full cost per unit of each product using Activity Based Costing.

(8 marks)

D. Explain how Activity Based Costing could provide information that would be relevant to the management team when it is making decisions about how to improve KL's profitability.

(7 marks)

(25 marks)

Question (2)

The Q organization is a large, worldwide respected manufacturer of consumer electrical and electronic goods. Q constantly develops new products that are in high demand as they represent the latest technology and are “must haves” for those consumers that want to own the latest consumer gadgets. Recently Q has developed a new handheld digital DVD recorder and seeks your advice as to the price it should charge for such a technologically advanced product.

Market research has discovered that the price demand relationship for the item during the initial launch phase will be as follows:

Price(SDG)	**Demand (units)**
100	10,000.00
80	20,000.00
69	30,000.00
62	40,000.00

Production of the DVD recorder would occur in batches of 10,000 units, and the production director believes that 50% of the variable manufacturing cost would be affected by a learning and experience curve. This would apply to each batch produced and continue at a constant rate of learning up to a production volume of 40,000 units when the learning would be complete.

Thereafter, the unit variable manufacturing cost of the product would be equal to the unit cost of the fourth batch. The production director estimates that the unit variable manufacturing cost of the first batch would be SDG 60 (SDG 30 of which is subject to the effect of the learning and experience curve, and SDG30 of which is unaffected), whereas the average unit variable manufacturing cost of all four batches would be SDG 52.71

There are no-manufacturing variable costs associated with the DVD recorder.

Required

(a) Explain the relevance of the product life cycle to the consideration of alternative pricing policies that might be adopted by Q.

(10 marks)

(b) Calculate the rate of learning that is expected by the production director.

(4 marks)

(c) Calculate the optimum price at which Q should sell the DVD recorder in order to maximize its profits during the initial launch phase of the product.

(8 marks)

(d) Q expects that after the initial launch phase the market price will be SDG 57 per unit. Estimated product specific fixed costs during this phase of the product’s life are expected to be SDG 15,000 per month and during this phase of the product life cycle, Q wishes to achieve a target monthly profit from the product of SDG30,000. Calculate the number of units that need to be sold each month during this phase in order that Q achieves this target monthly profit.

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(3 marks)

(25 marks)