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- Which of the following statements about variable cost is true?
 - a. variable cost varies with the level of activity
 - **b.** Variable cost is an unavoidable cost.
 - **c.** Variable cost is not relevant for decision-making.
 - **d.** Variable cost becomes fixed in the long run
- 2- The following extract is taken from the overhead budget of Division X

Budgeted activity 50% 80%

Budgeted overhead SDG 100,000 SDG130, 000

The overhead budget for an activity level of 85% would be:

- a. SDG 115,000
- **b.** SDG 120,000
- **c.** SDG 135.000
- **d.** SDG 160,000
- 3- One of the steps of the target costing technique is to identify the difference between the current cost and the target cost, this difference is called:
 - a. Target gap
 - **b.** Cost gap
 - c. Cost difference
 - **d.** Target price
- 4- A manager, who is responsible for both cost and revenues is responsible of
 - **a.** cost center
 - **b.** revenue center
 - **c.** profit center
 - **d.** investment center

5- the unit contribution is the difference between:

- a. Selling price and total cost per unit.
- **b.** Selling price and variable cost per unit.
- c. Selling price and material cost per unit.
- **d.** Selling price and fixed cost per unit.

6- Fixed cost per unit usually increases when:

- a. Production volume increases.
- b. Production volume decreases.
- **c.** Variable cost per unit decreases.
- **d.** Variable cost per unit increases.

7- Which of the following can be an opportunity cost?

- a. Sunk Cost.
- **b.** Standard Cost.
- c. Relevant Cost for decision-making.
- **d.** Irrelevant Cost for decision-making.

8- A government department is responsible for monitoring the performance of schools providing education for pupils aged between 11 and 18.

There is a separate government department that sets final examinations that help determine entry to university and support pupils' applications.

The head teachers at individual schools are responsible for teaching and submitting selected pupils for these examinations.

Which of the following statements is most valid in the context of this scenario?

- **a.** Head of teachers may only be evaluated on terms of financial indicators.
- **b.** Non-financial performance indicators can be manipulated by school head teachers.
- **c.** It is generally valid to compare the pass rates of different schools in the final examinations.
- **d.** It is not necessary to measure the schools financial performance.

9- Which of the following statements are correct?

- (i) Information is a key tool in the quest for competitive advantage.
- (ii) A cost of investing in information systems is always exceeds expected benefits.
- (iii) It is not possible to value the benefits from an improved information system.
 - **a.** (i), (ii)
 - **b.** (i), (iii)
 - c. (ii), (iii)
 - d. All of the three

10- A company is launching a new product. In order to manufacture this new product, two types of labour are required. The new product required 5 hours of skilled labour and 5 hours of semiskilled. a skilled employee is available and is currently paid SDG10 per hour. A replacement would, however, have to be obtained at a rate of SDG9 per hour for the work that would otherwise be done by the skilled employee. The current rate for semi-skilled workers is SDG5 per hour and an additional employee would be appointed for this work.

What is the relevant cost of labour to be used in making one unit of the new product?

- **a.** SDG45
- **b.** SDG50
- **c.** SDG70
- **d.** SDG75

11-The following statements have been made about zero base budgeting.

- The zero based budgeting process seeks to identify long-term benefits and improvements, even if they are sometimes made at the expense of short-term profitability.
- 2) A barrier to the use of zero base budgeting is the possibility that management may not have the skills to apply it.

Which of the above statements is/are true?

- **a.** 1 only
- **b.** 2 only
- c. Neither 1 nor 2
- **d.** Both 1 and 2

12-For a not for profit organisation with multiple objectives, which aspect of performance is the most difficult to assess?

- **a.** A Financial performance.
- **b.** Economy performance.
- c. Efficiency.
- d. Effectiveness.

13-Which one of the following is a characteristic of feedback?

- **a.** It is used mainly for planning purposes.
- **b.** It is secondary data.
- **c.** It comes from internal sources within the organisation.
- **d.** It consists entirely of financial information.

14-Which one of the following pricing policies is most likely to be the most appropriate for a new product for which the price elasticity of demand is expected to be inelastic?

- **a.** Marginal cost plus cost.
- **b.** Market skimming policy.
- **c.** Penetration pricing policy.
- **d.** Price discrimination policy.

- 15- Which of the following about information to be decision whether to process joint products further is correct?
 - 1) The value of the common processing costs
 - 2) The final sales value of the joint product
 - **a.** Both (1) and (2)
 - **b.** Neither (1) nor (2)
 - **c.** Only (1)
 - **d.** Only (2)
- **16-** Mouse Co was about to commence production of a new product, its anticipated that the first unit will take 300 hours, learning curve effect is expected to be 75%.

The first 8 units have now been produced, as expected, the first unit took 300 hours and the total time of the 8 units is 823.2 hours.

What was the actual rate of learning which occurred?

- **a.** 70%
- **b.** 70.7%
- **c.** 75%
- **d.** 76.5%
- **17-**A company manufactures a single product which it sells for SDG 20 per unit, the unit cost of material is SDG 5, total operating cost is SDG 80,000 per month and each unit takes 2 machine hours, the number of machine hours is limited to 20,000 hour per month.

What is the through put accounting ration for this product?

- **a.** 2.500
- **b.** 1.250
- **c.** 5.000
- **d.** 1.875
- **18-** A company is considering manufacturing a new product(Product dot), the management team decided to use target costing to evaluate the worthiness of the product.

The following information is available about product dot:

Targeted selling price SDG18 per unit

Target profit margin 25% on cost

Current cost SDG15 per unit

The target cost gap is:

- **a.** SDG 1.25
- **b.** SDG 0.60
- **c.** SDG .25
- **d.** SDG1.75

19-A contract requires 100 hours of skilled lablour work, the labour is paid at SDG 5 per hour and workforce is currently fully occupied making another product which requires 2 hours per each unit produced, the contribution per unit is SDG 8.

What is the relevant cost for contract?

- **a.** SDG 1,300
- **b.** SDG 900
- c. SDG400
- **d.** SDG800
- **20-** A company has been asked to quote for a contract, it needs 2000 kg of material, from which 1,500 kg is currently in inventory, the company has no alternative use for this quantity, however, it could be sold for SDG 9 per unit. The current purchase price is SDG 10 per unit and the original cost existing quantity was SDG 8 per unit.

What is the relevant cost for material required?

- **a.** SDG18,500
- **b.** SDG18,000
- **c.** SDG17,000
- **d.** SDG20,000

21-Which of the following statement is/are true?

- 1- Breakeven point is the point in which sales revenue exceeds the total cost
- 2- Breakeven point can be calculated for a mix of products
 - **a.** Both (1) and (2) true
 - **b.** Neither (1) nor (2)
 - c. Only (1) true
 - d. Only (2) true
- **22-** A company has started to produce a new product, the first unit took 25 hours to produce, the company identified learning rate of 75%.

How long does it take to produce and additional 7 units(round to the nearest hour)?

- **a.** 59 hours
- **b.** 84 hours
- **c.** 175 hours
- **d.** 200 hours
- **23-** Juflin co is in progress to develop a new product, Juflin intends to use the target costing approach for this new product, it identified the target selling price of SDG 140 per unit and targets a markup on cost of 40%.

What is the target cost per unit of the product?

- a. SDG196
- **b.** SDG84
- c. SDG100
- **d.** SDG40

24-The following statements have been made about ABC and cost drivers.

- 1- A cost driver is any factor that causes a change in the cost of an activity.
- 2- For long-term variable overhead costs, the cost driver will be the volume of activity.
- 3- Traditional absorption costing tends to under-allocate overhead costs to low-volume products.

Which of the above statements is/are true?

- **a.** and (3) only
- **b.** and (3) only
- **c.** and (2) only
- **b.** All true
- **25-**Weaver Ltd prints two weekly newspapers: the Crystal Courier (40,000 copies in one weekly production run) and the Palace Bugle (25,000 copies in total, split over two production runs every week.) Production run set-up costs amount to SDG2,150 every week. Weaver co uses Activity Based Costing and cost drive the number of production runs as a cost driver.

What is the set-up cost for each copy of the Palace Bugle?

- a. SDG0.018 per copy
- **b.** SDG0.033 per copy
- c. SDG0.043 per copy
- **d.** SDG0.057 per cop

Section B - the 2 questions are compulsory and MUST be attempted Question (1)

Alpha Industrial complex is one of divisions of conquet company, its management team drafted a plan for the next three years as follows:

	Year 1	Year 2	Year 3
	SDG Million	SDG Million	SDG Million
Profit before Interest and Tax Asset Base(at the start of the	16.50	14.85	13.20
Year)	132.00	137.50	143
ROI	12.5%	10.8%	9.2%

The Board of Directors have indicated to the divisional management that their plan is not acceptable because of the declining profitability, accordingly the divisional management team is currently considering two separate project to improve the profitability.

Project A

This project involves revenue expenditure in years 1 and 2 followed by positive cash flows in year 3.

	Year 1	Year 2	Year 3
	SDG Million	SDG Million	SDG Million
Cash flow	(5.50)	(5.5)	22

Project B

This is a purchase of new machinery in year 1 which will results in labor cost saving in years 2 and 3:

	Year 1	Year 2	Year 3	
	SDG Million	SDG Million	SDG Million	
Cash flow	(5.75)	5	10	

The two projects are mutually exclusive and only one of them can be selected due to cash flow limitation, the cost of capital is 10%.

The management of Alpha complex are currently evaluated on ROI(rounded to two decimal places), however; one of the Board members suggested to use RI as an additional performance measure in conjunction with the ROI.

The divisional management team are entitled to a bonus equals 25% of their salaries(total to SDG 275,000 per annum) and for each additional 1% increase in ROI(above the 10%) they are also entitled to an additional bonus of 2.5% of their salaries, however; the total bonus shall not exceed 50% of the management team's annual salaries.

For the first draft of the plan the bonus of them management team has been correctly calculated as SDG82,500 for year 1, 68,750 for year 2 and nil for year 3.

There are some worries within the board of directors of conquet about the current divisional performance measurement system, the majority of the board members believes that it is inefficient as it persuades the divisional managers to manipulate the financial indicators to secure their bonus, accordingly the board is assessing the suitability of

balance scorecard to evaluate the divisions performance and counter the short termism of the divisional managers.

Required:

(a) (i) Calculate ROI and the alpha complex's manager's bonus for each of the 3 years for the two projects.

(6 marks)

(ii) Comment on the effect of the current bonus system on the manager's choice of the two projects.

(6 marks)

(b) Suggest THREE reasons why the Board of directors may choose to use the residual income (RI) in addition to the Return on Investment (ROI) to assess the divisional performance.

(6 marks)

(c) Briefly explain the concept of balance scorecard and discuss how its introduction will remove some of the limitations of the current divisional performance measurement system in Conquet.

(7 marks)

Question (2)

NYE Co manufactures three standard products which it sells to several large wholesale chains.

Production is highly automated and occurs in large batches. Goods are shipped to customers in slightly smaller batches. Details of a typical month's output are as follows

	Product A	Product B	Product C
		100,000.0	225,000.0
Units of output	50,000.00	0	0
Production machine hours per unit	0.30	0.20	
production batch size (units)	1250.0	2,000.00	3,750.00
shipment batch size (units)	1,000.00	1,000.00	2,500.00

Two types of indirect labour are employed – 4 quality control inspectors (at a cost each SDG 4,000/month) and 9 administrators (at a monthly cost of SDG 3,500 each). Each employee works a standard 180 hours per month.

The role of the quality control staff is to inspect a sample from each batch of output produced. The standard inspection time is 4 hours per batch. The administrators perform two tasks – shipment processing work (which takes 3 hours per batch shipped) and monitoring of production (at a rate of 1 hour of administrator time for every 600 units of output).

In addition to the production machinery (which has a capacity of 100,000 production machine hours per month) there are two additional types of Specialised machinery which perform automated production setup and automated shipment loading procedures. Details of these two machines are provided below

	Setup machinery	Loading machinery
monthly capacity	800 hours	520 hours
	5 hours/batch	2 hours/batch
usage rates	produced	shipped

Required:

- (a) Briefly explain the concept of activity based budgeting. (5 marks)
- **(b)** Use activity based budgeting to assess whether the resources currently owned or employed by the company are sufficient to meet typical monthly output. Comment on any significant surplus/shortfall in resource.

(14 marks)

(c) Briefly outline THREE advantages that may be claimed for the use of activity based budgeting rather than a traditional incremental budgeting system.

(6 marks)