

## **Sudanese Certified Council Accountants (SCCA) Exams**

### **Paper F5- Performance Management**

**Question paper for exam session: JUN 2026**

#### **Section (A)**

**This section consists of 25 questions. All questions are compulsory and must be attempted and every question bears 2 marks. Total available marks for this section are 50 marks**

1- A company makes two products using the same type of materials and skilled workers.

The following information is available:

|                         | <b>Product A</b> | <b>Product B</b> |
|-------------------------|------------------|------------------|
| Budgeted volume (units) | 1,000            | 2,000            |
| Material per unit (\$)  | 10               | 20               |
| Labor per unit (\$)     | 5                | 20               |

Fixed costs relating to material handling amount to \$100,000. The cost driver for these costs is the volume of material purchased.

General fixed costs, absorbed on the basis of labor hours, amount to \$180,000.

**Using activity-based costing, what is the total fixed overhead amount to be absorbed into each unit of product B (to the nearest whole \$)?**

**A. \$113**

**B. \$120**

**C. \$40**

**D. \$105**

**2- Which of the following statements describes target costing?**

- a)** It calculates the expected cost of a product and then adds a margin to it to arrive at the target selling price
- b)** It allocates overhead costs to products by collecting the costs into pools and sharing them out according to each product's usage of the cost driving activity
- c)** It identifies the market price of a product and then subtracts a desired profit margin to arrive at the target cost
- d)** It identifies different markets for a product and then sells that same product at different prices in each market.

**3- X Co uses a throughput accounting system. Details of product A, per unit, are as follows:**

Selling price                      \$320

Material costs                      \$80

Conversion costs                      \$60

Time on bottleneck resource 6 minutes

What is the return per hour for product A?

- a) \$40
- b) \$2,400
- c) \$30
- d) \$1,800

**4- Which of the following statements regarding environmental cost accounting are true?**

**(1)** The majority of environmental costs are already captured within a typical organization's accounting system. The difficulty lies in identifying them

(2) Input/output analysis divides material flows within an organization into three categories: material flows; system flows; and delivery and disposal flows

(3) One of the cost categories used in environmental activity-based costing is environment-driven costs which is used for costs which can be directly traced to a cost center

(4) Environmental life-cycle costing enables environmental costs from the design stage of the product right through to decommissioning at the end of its life to be considered

a) (1), (2) and (4)

b) (1) and (4) only

c) (1), (3) and (4)

d) (2) and (3) only

5- A company manufactures and sells a single product with a variable cost per unit of \$36. It has a contribution ratio of 25%. The company has weekly fixed costs of \$18,000.

**What is the weekly breakeven point, in units?**

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

6- A company makes and sells product X and product Y. Twice as many units of product Y are made and sold as that of product X. Each unit of product X makes a contribution of \$10 and each unit of product Y makes a contribution of \$4. Fixed costs are \$90,000.

**What is the total number of units which must be made and sold to make a profit of \$45,000?**

- A. 7,500
- B. 22,500
- C. 15,000
- D. 16,875

7- A distributor of video discs is developing its budgeted cost of goods sold for next year. The

distributor has developed the following range of sales estimates and associated probabilities for the year:

| Sales Estimate | Probability |
|----------------|-------------|
| \$ 60,000      | 25%         |
| 85,000         | 40%         |
| 100,000        | 35%         |

The distributor's cost of goods sold averages 80% of sales. What is the expected value of the distributor's budgeted cost of goods sold?

- A. \$85,000
- B. \$84,000
- C. \$68,000
- D. \$67,200

8- Stock X has the following probability distribution of expected future returns:

Expected

| Probability | Return |
|-------------|--------|
| .1          | -20%   |
| .2          | 5%     |
| .4          | 15%    |
| .2          | 20%    |
| .1          | 30%    |

The expected rate of return on Stock X is

- A. 10%
- B. 12%

C. 16%

D. 19%

9- The following costs have arisen in relation to the production of a product:

(i) Planning and concept design costs

(ii) Testing costs

(iii) Production costs

(iv) Distribution and customer service costs

**In calculating the life cycle costs of a product, which of the above items would be included?**

A (iii) only

B (i), (ii) and (iii) only

C (i), (ii) and (iv) only

D All of the above

10- Ace Limited is considering a new project that will require the use of a currently idle machine. The machine has a current book value of \$12,000 and a potential disposal value of \$10,500 (before \$200 disposal costs) and hence has been under depreciated by \$1,500 over its life to date. If the machine is to be fit for purpose on the new project it will have to be relocated at a cost of \$500 and refitted at a further cost of \$800.

**What is the relevant cost of using the machine on the new project?**

A \$9,000

B \$10,300

C \$11,600

D \$13,300

11- The following extracts relate to company W for 2024 and 2025:

|                                          | 2024   | 2025   |
|------------------------------------------|--------|--------|
| Statement of profit or loss extract:     |        |        |
| Revenue                                  | 20,000 | 26,000 |
| Statement of financial position extract: |        |        |
| Receivables                              | 4,400  | 6,740  |
| Cash                                     | 120    | 960    |

**What is the receivables collection period for 2024 and 2025?**

|   | 2024    | 2025     |
|---|---------|----------|
| A | 80 days | 95 days  |
| B | 82 days | 108 days |
| C | 75 days | 111 days |
| D | 95 days | 80 days  |

12-The CS ratio for a business is 0.4 and its fixed costs are \$1,600,000. Budget revenue has been set at 6 times the amount of the fixed costs.

**What is the margin of safety % measured in revenue?**

A 58.3%

B 58.7%

C 59.1%

D Cannot be determined without more information

13- EFG uses an Activity Based Budgeting system. It manufactures three products, budgeted details of which are set out below:

|                                    | Product E | Product F | Product G |
|------------------------------------|-----------|-----------|-----------|
| Budgeted annual production (units) | 75,000    | 120,000   | 60,000    |
| Batch size (units)                 | 200       | 60        | 30        |
| Machine set-ups per batch          | 5         | 3         | 9         |
| Purchase orders per batch          | 4         | 2         | 2         |
| Processing time per unit (minutes) | 3         | 4         | 4         |

Three cost pools have been identified. Their budgeted costs for the year ending 30 June 20X3 are as follows:

|                         |           |
|-------------------------|-----------|
| Machine set-up costs    | \$180,000 |
| Purchasing of materials | \$95,000  |
| Processing              | \$110,000 |

**What is the budgeted machine set-up cost per unit of product F?**

- A \$0.1739
- B \$0.35
- C \$6.96
- D Cannot be determined without any more information

14- A company uses activity-based costing to calculate the unit cost of its products. The figures for Period 3 are as follows: production set-up costs are \$84,000. Total production is 40,000 units of each of products A and B, and each run is 2,000 units of A or 5,000 units of B.

**What is the set-up cost per unit of B?**

- A \$0.10
- B \$0.08
- C \$0.60
- D \$0.29

**15- Which of the following strategies would be immediately acceptable methods to reduce an identified cost gap?**

- A- Reduce the desired margin without discussion with business owners
- B- Reduce the predicted selling price
- C -Source similar quality materials from another supplier at reduced cost

D -Increase the predicted selling price.

16- A company makes products A and B. It is experimenting with Activity Based Costing.

Production set-up costs are \$12,000; total production will be 20,000 units of each of products A and B. Each run is 1,000 units of A or 5,000 units of B.

**What is the set-up cost per unit of A, using ABC?**

A \$0.50

B \$0.10

C \$2.00

D \$10.00

17- A colleague has claimed the following to be benefits of lifecycle costing:

(i) It provides the true financial cost of a product

(ii) The length of the lifecycle can be shortened

(iii) Expensive errors can be avoided in that potentially failing products can be avoided

(iv) Lower costs can be achieved earlier by designing out costs

(v) Better selling prices can be set

(vi) Decline stages of the lifecycle can be avoided

**Which of the above statements is/are correct?**

A (i), (iii), (iv) and (v)

B (i) and (iii) only

C (iii) and (iv) only

D All of them

**18 - Strategic reports have many features, which of the following would be most likely true of a strategic report?**

A. Prepared regularly

B. Normally considered accurate and reliable

C. Highly summarized showing overall trends

D. Demonstrates current position

19- **The qualities of good information contained in reports are more easily remembered using the mnemonic ACCURATE. Which one of the following is not normally associated with a quality of good information?**

A- Adaptable to the needs of the user

B- Acceptable to the user

C- Accurate

D- Understandable by the user

20- Leaf Limited has had a mixed year. Its market share has improved two percentage points to 20% but the overall market had contracted by 5% in the same period. The budgeted sales were 504,000 units and standard contribution was \$12 per unit.

**The sales market size variance is:**

A \$1,680,000 Fav

B \$1,680,000 Adv

C \$302,400 Adv

D \$302,400 Fav

21- The following are types of Key Performance Indicators:

(i) Return on Capital Employed

(ii) Gross profit percentage

(iii) Activity ratios

(iv) Gearing ratio

**Which of the above KPIs would be used to assess the liquidity of a company?**

A (i) and (ii) only

B (iii) only

C (iv) only

D (iii) and (iv) only

**22-Electronic Executive Information Systems (EIS) and Expert Systems (ES) are examples of:**

A Customer relationship management software

B Database management systems

C Computer networking

D Decision based software

**23- Which of the following accounting procedures are used for controlling costs conditional on a given volume of production?**

|     | Flexible budgeting | Standard costing |
|-----|--------------------|------------------|
| A - | Yes                | Yes              |
| B - | Yes                | No               |
| C-  | No                 | Yes              |
| D - | No                 | No               |

24-Caroline has recently developed a new product. The nature of Caroline's work is repetitive, and it is usual for there to be an 80% learning effect when a new product is developed. The time taken for the first unit was 22 minutes. An 80% learning effect applies.

**What is the time to be taken for the fourth unit in minutes?**

A- 17.6 minutes

B - 14.08 minutes

C- 15.45 minutes

D- 9.98 minutes

25- The budgeted electricity cost for a business is \$30,000 based upon production of 1,000 units. However if 1,400 units were to be produced the budgeted cost rises to \$31,600.

**Using the high/low approach what would be the budgeted electricity cost if 2,100 units were to be produced?**

A - \$8,400

B - \$17,600

C- \$26,000

D- \$34,400

## Section (B)

### **Question One:**

Inman Inc. is a manufacturer of a single product and is starting to develop a budget for the coming year.

Because cost of goods manufactured is the biggest item, Inman's senior management is reviewing how costs are calculated.

In addition, senior management wants to develop a budgeting system that motivates managers and other workers to work toward the corporate goals. Inman has incurred the following costs to make 100,000 units during the month of September.

|                                           |           |
|-------------------------------------------|-----------|
| Materials                                 | \$400,000 |
| Direct labor                              | 100,000   |
| Variable manufacturing overhead           | 20,000    |
| Variable selling and administrative costs | 80,000    |
| Fixed manufacturing overhead              | 200,000   |
| Fixed selling and administrative costs    | 300,000   |

Inman Inc.'s September 1 inventory consisted of 10,000 units valued at \$72,000 using absorption costing. Total fixed costs and variable costs per unit have not changed during the past few months. In September, Inman sold 106,000 units at \$12 per unit.

**1. Using absorption costing, calculate the following.**

- Inman's September manufacturing cost per unit **(2 Marks)**
- Inman's September 30 inventory value **(2 Marks)**
- Inman's September net income **(2 Marks)**

**2. Using variable costing, calculate the following.**

- Inman's September manufacturing cost per unit **(2 Marks)**
- Inman's September 30 inventory value **(2 Marks)**
- Inman's September net income **(2 Marks)**

**3. Identify and explain one reason why the income calculated in the previous two questions might differ (2 Marks).**

**4. Identify and discuss one advantage of using each of the following:**

- absorption costing **(2 Marks)**
- variable costing **(2 Marks)**

**5.**

- Identify one strength and one weakness each of authoritative budgeting and participative

Budgeting **(2 Marks)**.

- Which of these budgeting methods will work best for Inman Inc.? Explain your answer **(2 Marks)**.
- Identify and explain one method the top managers can take to restrict the Production Manager from

taking advantage of budgetary slack **(2 Marks)**.

**Total Marks**

**25 Marks**

**Question Tow:**

Maxwell Mechanical Inc. specializes in servicing central air conditioning units. Maxwell Mechanical employs licensed HVAC technicians and apprentices. Each service call requires a combination of both types of labor. Maxwell's standard time and cost for each service call are as follows.

|                        | <u>TIME</u> | <u>WAGE</u> |
|------------------------|-------------|-------------|
| <b>HVAC TECHNICIAN</b> | 1.0 hour    | \$30/hour   |
| <b>APPRENTICE</b>      | 3.0 hours   | \$14/hour   |

During the month of May, Maxwell serviced 1,500 air conditioning units. HVAC technicians worked a total of 1,900 hours with a total labor cost of \$60,800.

Apprentices worked a total of 4,000 hours with a total labor cost of \$52,000. The service calls require a certain amount of direct materials. For the month of May, Maxwell experienced a favorable direct materials price variance of \$5,000 and an unfavorable direct materials usage variance of \$8,000.

1. Explain how Maxwell could use management by exception **(2 Marks)**.
2. Calculate Maxwell's total direct labor rate variance for the month of May. Show your calculations **(2 Marks)**.
3. Calculate Maxwell's total direct labor efficiency variance for the month of May. Show your calculations **(2 Marks)**.
4. Without performing any calculations, explain how Maxwell could further analyze the labor efficiency Variance **(2 Marks)**.

5. Identify one possible cause and one corrective action for the combination of a favorable direct materials price variance and an unfavorable direct materials usage variance experienced by Maxwell in May **(2 Marks)**.

**Total**

**25 Marks**

**Total Marks**

**100 Marks**