

EXAMINATION NO. \_\_\_\_\_



**2015 EXAMINATIONS**

**ACCOUNTING TECHNICIAN PROGRAMME**

**PAPER TC9: COSTING AND BUDGETARY CONTROL**

**FRIDAY 5 JUNE 2015**

**TIME ALLOWED : 3 HOURS  
9.00 AM - 12.00 NOON**

**INSTRUCTIONS**

1. You are allowed **15 minutes** reading **time before the examination begins** during which you should read the question paper and, if you wish, make annotations on the question paper. However, you are not allowed, **under any circumstances**, to open the answer book and start writing or use your calculator during this reading time.
2. Number of questions on paper – 5.
3. **Answer ALL** questions.
4. Each question carries 20 marks.
5. Show all your workings in order to gain full marks.
6. Marks will be awarded for clarity, correctness and logical presentation.
7. Use of non-programmable calculators is allowed.
8. Begin each answer on a fresh page.
9. **DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR**

This question paper contains 5 pages.

1. EX Limited is an established supplier of precision parts to a major aircraft manufacturer. It has been offered the choice of making either Part A or Part B for the next period, but not both.

Both parts use the same metal, of which 13,000 kg only are available, at K12.50 per kg. The parts are made by passing each one through two machine lines, S and T, whose capacities are limited. Target prices have been set and the following data are available for the period:

Part details

	<b>Part A</b>	<b>Part B</b>
Maximum call-off (units)	7,000	9,000
Target price per unit	K145	K115
Metal usage	1.6 kg	1.6 kg
Machine times		
Line S	0.6 hours	0.25 hours
Line T	0.5 hours	0.55 hours

Machine details

	<b>Line S</b>	<b>Line T</b>
Hours available	4,000	4,500
Variable overhead per hour	K80	K100

**Required:**

- (a) Define “limiting factor of production” **2 Marks**
- (b) Supported with calculations, justify which part should be made during the next period to maximize contribution **8 Marks**
- (c) As an alternative to the target price shown above, the aircraft manufacturer has offered the following alternative arrangement:

Target prices less 10% plus K60 per hour for each unused machine hour.

**Required:**

Decide whether your recommendation in (b) above will be altered and, if so, calculate the new contribution. **10 Marks**

**(TOTAL: 20 MARKS)**

**Continued/.....**

2. The following details have been extracted from the standard cost card for product X:

	(K/unit)
Variable overheads	
4 machine hours at K8.00/hour	32.00
2 labour hours at K4.00/hour	8.00
Fixed overhead	20.00

In October, 5,450 units of the product were made compared to a budgeted production target of 5,500 units. The actual overhead costs incurred were:

	K
Machine-related variable overhead	176,000
Labour-related variable overhead	42,000
Fixed overhead	109,000

The actual number of machine hours was 22,000 and the actual number of labour hours was 10,800.

**Required:**

- (a) State any **two** disadvantages of a standard costing system **2 Marks**
- (b) Calculate the following variances:
- (i) Machine-related variable overhead efficiency **2 Marks**
  - (ii) Labour related variable overhead efficiency **2 Marks**
  - (iii) Machine related variable overhead expenditure **2 Marks**
  - (iv) Labour-related variable overhead expenditure **2 Marks**
  - (v) Fixed overhead expenditure variance **2 Marks**
  - (vi) Fixed overhead volume **2 Marks**
- (c) Explain the meaning of, and give possible causes for, the following variances as calculated in (b) above:
- (i) Machine-related variable overhead efficiency variance **2 Marks**
  - (ii) Labour related variable overhead efficiency variance **2 Marks**
  - (iii) Labour-related variable overhead expenditure variance **2 Marks**

**(TOTAL: 20 MARKS)**

**Continued/.....**

3. Lather Ltd operates a single process to manufacture soap.

The following figures relate to a recent period:

Input	Material	20,000 kg at K5 per kg
	Labour	16,000 hours at K6.25 per hour
	Overhead	16,000 hours at K3 per hour

There is an expected loss of 5% of input weight, which can be sold for K1.20 per kg.

The actual output for the period was 18,800 kg and the closing work in progress was 1,000 kg, which was complete as to material and 50% complete as to labour and overhead.

**Required:**

- (a) In the context of process costing, state:
- (i) the costing treatment of normal loss **1 Marks**
  - (ii) the **four** costing treatments of by-products **4 Marks**
- (b) Prepare the following accounts:
- (i) The main process account **8 Marks**
  - (ii) The normal loss account **1 Mark**
  - (iii) The abnormal gain account **1 Mark**
- (c) The finished output is divided in the ratio 3:2 to produce the “Domestic” and the “Fragrant” brands. Perfume is added to the Fragrant brand at a cost of K0.5 per kg. Packaging costs are K0.2 per kg for the Domestic brand, and K0.4 per kg for the Fragrant brand. Each kg of finished output yields twenty bars of soap.

**Required:**

Calculate the cost of one bar of soap of the Domestic and of the Fragrant brand.

**5 Marks**

**Continued/.....**

4. Shannon Ltd has two production departments A and B, and two service departments X and Y. Budgeted activity levels and costs for April 2015 were as follows:

A	1,000 hours	K25,000
B	3,000 hours	K30,000

Service department costs are apportioned to the production departments on the following bases:

X	50% A 20% B 30% Y
Y	40% A 40% B 20% X

The overheads of the production departments are absorbed into product costs using a rate per hour.

During the month of April 2015, the actual activity levels and costs were as follows:

A	1,100 hours	K24,000
B	3,400 hours	K29,000
X		K6,000
Y		K4,000

**Required:**

- (a) Define the following terms:
- (i) Cost allocation **1 Mark**
  - (ii) Cost apportionment **1 Mark**
  - (iii) Cost absorption **1 Mark**
- (b) For each of the production departments, calculate the following for the month of April 2015:
- (i) Capacity ratio **4 Marks**
  - (ii) Budgeted absorption rate **4 Marks**
- (c) Calculate the overhead to be charged to each of the production departments for the month of April 2015 using the repeated distribution method. **6 Marks**
- (d) Calculate the amount of under or over absorption for each of the production departments for the month of April 2015. **3 Marks**

**(TOTAL: 20 MARKS)**

**Continued/...**

5. (a) In the context of inventory control and valuation,

(i) State any **four** advantages of a just-in-time (JIT) system. **4 Marks**

(ii) Mention any **four** methods of inventory valuation. **4 Marks**

(b) Define the following terms:

(i) Direct costs **1 Mark**

(ii) Prime cost **1 Mark**

(iii) Conversion cost **1 Mark**

(c) Mention and explain **two** methods used to separate fixed costs and variable costs in a semi-fixed cost. **4 Marks**

(d) (i) Other than the sales value method, mention any **two** other methods that are commonly used to apportion joint processing costs to joint products that emerge from a single process. **2 Marks**

(ii) Other than the repeated distribution method, mention **three** other ways of apportioning service department costs to production cost centers. **3 Marks**

**(TOTAL: 20 MARKS)**

**END**