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# ACCA – Paper F2 and FMA Management Accounting June 2015 Final Assessment

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## Marking Report

### Notice to Markers

- 1 When commenting about the script performance, please ensure on individual questions and on overall assessment your comments cover areas of examination technique including:

<ul style="list-style-type: none"><li>• Time management</li></ul>	<ul style="list-style-type: none"><li>• Handwriting</li></ul>	<ul style="list-style-type: none"><li>• Presentation and layout</li></ul>	<ul style="list-style-type: none"><li>• Use of English</li></ul>
<ul style="list-style-type: none"><li>• Points clearly and concisely made</li></ul>	<ul style="list-style-type: none"><li>• Relevance of answers to question</li></ul>	<ul style="list-style-type: none"><li>• Coverage and depth of answer</li></ul>	<ul style="list-style-type: none"><li>• Accuracy of calculations</li></ul>
<ul style="list-style-type: none"><li>• Calculations cross-referenced to workings</li></ul>	<ul style="list-style-type: none"><li>• All parts of the requirement attempted</li></ul>	<ul style="list-style-type: none"><li>• Length of answers equates to marks available</li></ul>	<ul style="list-style-type: none"><li>• Read the question carefully</li></ul>

- 2 For each question, please provide suitable constructive comments

Question Number	General Comments	Exam Technique Comments

**ACCA FINAL ASSESSMENT**

**Management Accounting  
(FMA)**

**June 2015**

Time allowed **2 hours**

This paper is divided into 2 sections:

Section A: All 35 questions are compulsory and **MUST** be attempted.

Section B: All **THREE** questions are compulsory and **MUST** be attempted.

**Formulae Sheet is on page 3**

**Do not open this paper until instructed by the supervisor**

**This question paper must not be removed from the examination hall**

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**Paper F2 and FMA**

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## FORMULAE AND TABLES

### Regression analysis

$$y = a + bx$$

$$a = \frac{\sum y}{n} - \frac{b \sum x}{n}$$

$$b = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2}$$

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}}$$

### Economic order quantity

$$= \sqrt{\frac{2C_o D}{C_h}}$$

### Economic batch quantity

$$= \sqrt{\frac{2C_o D}{C_h \left(1 - \frac{D}{R}\right)}}$$

## PRESENT VALUE TABLE

Present value of 1, i.e.  $(1 + r)^{-n}$

Where  $r$  = discount rate

$n$  = number of periods until payment

Periods (n)	Discount rate (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239

Periods (n)	Discount rate (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065

## ANNUITY TABLE

Present value of an annuity of 1, i.e.  $\frac{1-(1+r)^{-n}}{r}$

Where  $r$  = discount rate

$n$  = number of periods

Periods (n)	Discount rate (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606

Periods (n)	Discount rate (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.968	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675

## SECTION A

### ALL 35 QUESTIONS ARE COMPULSORY AND MUST BE ATTEMPTED

#### Each question is worth 2 marks

**1 Which of the following statements is true of spreadsheets?**

- A Spreadsheets are the best means for long-term storage of data
- B Spreadsheet packages automatically identify and correct data errors
- C Spreadsheets reduce the risk of human error
- D Spreadsheets allow data to be analysed and sorted easily

**2 The following details are available for a company:**

Budget labour hours	8,500
Budgeted overheads	\$148,750
Actual labour hours	7,928
Actual overheads	\$146,200

Based on the data given above, what is the amount of overhead under/over absorbed?

- A \$2,550 under-absorbed
- B \$7,460 over-absorbed
- C \$2,550 over-absorbed
- D \$7,460 under-absorbed

**3 Over the last two months the following production costs were incurred by Department Z:**

	<i>Level of activity</i>	<i>Production cost</i>
May	5,269 units	\$36,614
June	4,821 units	\$33,926

In July budgeted production was 2,560 units.

What would be the budgeted production cost?

- A \$20,360
- B \$15,360
- C \$18,880
- D \$5,000



- 4 The annual demand for an item produced by Fish Ltd is 10,000 units. The cost of placing an order is \$320 and the cost of holding an item in stock for one year is \$60.**

What is the economic order quantity to the nearest unit?

- A 325
- B 330
- C 327
- D 337

- 5 Which of the following statements is true when looking at a line graph?**

- A The x-axis is the dependant variable and the y-axis is the independent variable
- B The x-axis is the independent variable and the y-axis is the dependent variable
- C The x-axis is always representing units
- D The y-axis is always representing money

- 6 What would the cost involved in reworking a product be classified as?**

- A Prevention cost
- B Appraisal cost
- C Internal failure cost
- D External failure cost

- 7 Which of the following are characteristics of a good employee reward system?**

- (i) fairness
  - (ii) understandable
  - (iii) consistent
  - (iv) objective
- A (ii) only
  - B (i) and (ii)
  - C (i), (ii) and (iv)
  - D All of the above

- 8 A company budgets to make 3,000 units of product ERT in 600 hours. Actual output was 2,800 units of ERT which took 650 hours.**

What is the labour efficiency ratio, to the nearest percent?

%
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- 9 A company uses a predetermined overhead absorption rate based on machine hours. The budgeted factory overhead for one year was \$68,000, but the actual overhead incurred was \$72,000. In the period, 17,500 machine hours were worked and overheads were over-absorbed by \$2,375.

What was the budgeted level of machine hours?

- A 16,530
  - B 16,000
  - C 17,090
  - D 16,520
- 10 The following information relates to the receipt of flour into the storeroom of a bakery and the issue of the flour to the bakers for the month of August:

1 August opening balance 500 kg valued at \$1,225

4 August receipt of 250 kg at \$2.50 each

10 August issue of 600 kg

15 August receipts of 550 kg at \$2.70 each

23 August issue of 400 kg

26 August receipt of 200 kg at \$2.95 each

31 August issue of 150

What is the value of the closing inventory if the issues were valued using FIFO?

\$
----

- 11 When accounting for the outputs of a chemical manufacturing process, what are the costs incurred in the process shared between?

- A The main products and the by-products
- B The main products only
- C The by-products only
- D None of the above

- 12 A proportional random sample is taken from several well defined groups.

What is this form of sampling known as?

- A Systematic sampling
- B Quota sampling
- C Stratified sampling
- D Cluster sampling

**13 What is depreciation of manufacturing equipment usually classified as in the cost accounts of a business?**

- A production overheads
- B administration overheads
- C direct expenses
- D selling overheads

**14 The numbers below have been calculated to use in a linear regression analysis, in order to estimate the total cost line for a company.**

$x$  = number of units

$y$  = total costs (in \$000)

$\sum x$  = 25

$\sum y$  = 271

$\sum xy$  = 550

$\sum x^2$  = 65

$\sum y^2$  = 30,275

$n$  = 15

What is the variable cost per unit using regression analysis?

- A \$1.55
- B \$2.38
- C \$4.21
- D \$5.45

**15 A company manufacturing a single product has the following costs at two different activity levels:**

Activity level (units)	15,000	25,000
Total costs (\$)	94,500	151,500

Variable costs are constant at all activity levels, but fixed costs increase by \$2,000 every 10,000 units.

What are the fixed costs at an activity level of 5,000 units?

\$
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ACCA F2 AND FMA : MANAGEMENT ACCOUNTING

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- 16 Overheads for maintenance department S1 are apportioned 45%, 40% and 15% among the manufacturing departments M1, M2 and M3.**

What will be the overhead apportioned to M2 if the service department's overheads total \$74,425?

- A \$11,163
- B \$29,770
- C \$33,491
- D \$44,655

- 17 Below are the sales volumes for the first six months of next year.**

<i>Month</i>	<i>Volume</i>
Jan	4,000
Feb	5,000
Mar	4,500
Apr	4,600
May	5,600
Jun	5,100

Using a 3 month moving average what is the correct monthly variation for March?

- A -200
- B 200
- C -300
- D 300

- 18 A company uses an industry wage rate index to forecast future monthly wage costs. Employees receive a pay increase in January each year. The current monthly wage cost of \$17,800 was calculated when the wage index was 132. The forecast wage rate index for January is 139.**

What will the wage cost for January be, to the nearest \$?

- A \$16,904
- B \$18,744
- C \$19,553
- D \$20,227

- 19 Workwear Inc supplies shirts embroidered with the customer's logo to a number of large companies. The following information has been estimated for a typical batch of 100 of the most popular cotton shirt:**

Design of logo	\$50
Setting up of embroidery machine	2 hours @ \$25 per hour
Shirts	\$130 for 50
Thread and consumables	\$20
Embroiderer's wages	5 hours @ \$11 per hour

What is the cost for a batch of 200 shirts?

- A \$750
  - B \$770
  - C \$820
  - D \$870
- 20 Which of the following is most likely to be used as a cost unit for a hospital ward?**

- A Meals served
- B Patient days
- C Operations undertaken
- D Doctors hours

- 21 A paint company has recorded the following information for a process for the last month:**

	\$
Raw materials (350 litres)	4,250
Labour and overheads	2,495
Actual output	325 litres

Normal output is expected to be 95 litres for every 100 litres of raw material.

What is the average cost per unit of completed output, to 2 decimal places?

\$
----

**ACCA F2 AND FMA : MANAGEMENT ACCOUNTING**

**22 Process Inc uses process costing to value its product at each stage of production. The following information is available from process 1:**

Materials	\$3,750	500 kg
Labour	\$3,000	100 hours
Overheads	\$1,125	–
Output	–	425 kg

The normal loss is 10% of the inputs and can be sold for \$2.50 per kg. There is no opening or closing work-in-progress.

What is the value of the output to process 2?

- A \$6,500.00
- B \$6,693.75
- C \$7,319.44
- D \$7,500.00

**The following information is to be used for questions 23 and 24:**

The following information relates to product Delta which is manufactured by Alpha Beta Inc.

Alpha Beta uses absorption costing.

Extract from cost card:

	<i>\$ per unit</i>
Direct materials	5.30
Direct labour	5.20
Variable overhead	3.80
Fixed overhead	2.90
	17.20

The fixed overhead charged to each unit of the product is based on a monthly production level for product Delta of 1,000 units.

In the last month, actual production was 1,150 units and the costs incurred were as follows:

	\$
Direct materials	6,250
Direct labour	5,870
Variable overhead	5,230
Fixed overhead	3,230
	20,580

**23 What is the flexed budget for direct materials and labour at 1,150 units?**

- A Materials \$6,095, labour \$5,980
- B Materials \$5,980, labour \$6,095
- C Materials \$7,188, labour \$6,751
- D Materials \$5,300, labour \$5,200

**24 What are the total variance for fixed overheads and the variable overheads expenditure variance?**

- A Fixed overheads \$105 (A), variable overheads \$860 (F)
- B Fixed overheads \$105 (F), variable overheads \$860 (A)
- C Fixed overheads \$105 (A), variable overheads \$860 (A)
- D Fixed overheads \$105 (F), variable overheads \$860 (F)

**25 The division of a business has produced the year end accounts. The income statement shows a profit before interest and tax of \$250,000 and the statement of financial position show net assets of \$1,300,000. The business has a notional cost of capital of 13%.**

What is the RI and ROI for the division?

- |   | <i>RI</i> | <i>ROI</i> |
|---|-----------|------------|
| A | \$81,000  | 19%        |
| B | 19%       | \$81,000   |
| C | \$217,500 | 8%         |
| D | 8%        | \$217,500  |

**26 In a forecasting model based on  $y = a + bx$ , the intercept is \$234. The value of  $y$  is \$491 and  $x$  is 20.**

What is the value of the slope, to two decimal places?

- A -24.55
- B -12.85
- C 12.85
- D 24.85

**27 Animal Farm Inc manufactures two products, Bull and Cow. The raw material used in the manufacture of these products is Grass. The expected production levels for the products for next year are as follows:**

	<i>Production (units)</i>	<i>Grass – requirements per unit (kg)</i>
Bull	3,000	5
Cow	4,500	6

The expected price of Grass for the next year is \$1.50 per kg. The opening inventory is 2,500 kg. The company has a target to halve inventory levels by the end of the year.

What is the value for next year of the material purchases budget for Grass, to the nearest \$?

\$

- 28 A care home is looking at assessing its performance. They have measured the number of people visited per care home worker per week.**

Which of the three E's best describes this measure?

- A Economy
- B Efficiency
- C Effectiveness
- D Externality

- 29 Zed Inc makes 2 products, X and Y. The products go through two departments, Assembly and Finishing.**

The following has been estimated:

	<i>Assembly</i>	<i>Finishing</i>
Product X – labour hours	5	2
Product Y – labour hours	7	3
Overheads (\$)	250,000	175,000

Production is expected to be 3,000 units of X and 5,000 of Y

What are the overhead absorption rates for the two departments?

- A Assembly = \$8.33 per hour, Finishing = \$5 per hour
- B Assembly = \$5 per hour, Finishing = \$8.33 per hour
- C Assembly = \$11.90 per hour, Finishing = \$3.50 per hour
- D Assembly = \$3.50 per hour, Finishing = \$11.90 per hour

- 30 The following data relate to RP Ltd's production process:**

Opening work in process	Nil
Goods completed in the period	19,000
Closing work in process	4,000

The closing work in process was 100% complete with respect to materials, but only 70% complete with respect to conversion cost. The conversion cost for the period was \$118,810.

What was the conversion cost per equivalent unit?

- A \$5.50
- B \$5.00
- C \$5.21
- D \$5.45



- 31 Clear Sky restaurant wants to use the balanced scorecard approach to monitor objectives and performance in its restaurant. The head chef would like to know how much revenue is from new dishes he has created.**

Which perspective would this come under?

- A Financial perspective
- B Customer perspective
- C Internal perspective
- D Learning perspective

- 32 Epsilon Inc manufactures two products, Theta and Omega. Data relating to the next year are given below:**

The expected production levels for the products for next year and labour hours are as follows:

	<i>Production (units)</i>	<i>Direct labour hours (per unit)</i>
Theta	300	15
Omega	450	20

The standard rate for labour hours is \$8.50 per hour.

What is the value of the direct labour budget for the next year?

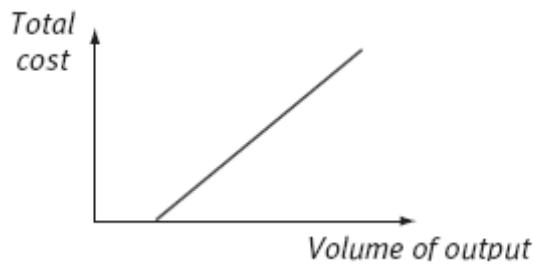
- A \$13,500
- B \$70,125
- C \$114,750
- D \$127,500

- 33 In a period, there was a favourable variable overhead efficiency variance of \$6,750. The standard variable overhead absorption rate per hour was \$3 and 15 hours were allowed for each unit as standard. The actual hours worked were 21,750.**

What was the number of units actually produced?

- A 150
- B 1,300
- C 1,450
- D 1,600

34 The following is a graph of cost against volume of output:



To which of the following costs does the graph correspond?

- A Electricity bills made up of a standing charge and a variable charge
- B Bonus payments to employees when production reaches a certain level
- C Sales commission payable per unit up to a maximum amount of commission
- D Bulk discounts on purchases, the discount being given on all units purchased

35 The following information relates to Job 1234, which is being carried out by XY Limited to meet a customer's order.

	<i>Department A</i>	<i>Department B</i>
Direct materials consumed	\$10,000	\$6,000
Direct labour hours	800 hours	400 hours
Direct labour rate per hour	\$4	\$5
Production overhead per direct labour hour	\$4	\$4
Administration and other overheads	20% of full production cost	

What is the cost to the customer for Job 1234?

- A \$20,800
- B \$26,000
- C \$30,720
- D \$31,200

## SECTION B

### ALL THREE QUESTIONS ARE COMPULSORY AND MUST BE ATTEMPTED

1 Phantom plc has just developed a new product to be called the Ghost and is now considering whether to put it into production. The following information is available:

- (i) Costs incurred to date in the development of Ghost amount to \$500,000.
- (ii) Production of Ghost will require the purchase of new machinery at a cost of \$2,700,000 payable immediately. This machinery is specific to the production of Ghost and will be obsolete and valueless when production ceases. The machinery has a production life of four years.
- (iii) Production costs of Ghost (at year 1 prices) are estimated as follows:

	\$
Direct material	8.00
Direct labour	12.00
Variable overheads	12.00

In addition, fixed production costs (at year 1 prices), including straight-line depreciation on plant and machinery specific to this project, will amount to \$700,000 per annum.

- (iv) The selling price of Ghost will be \$80.00 per unit (at year 1 prices). Demand is expected to be 25,000 units per annum for the next four years.
- (v) The retail price index is expected to be at 5% per annum for the next four years and the selling price of Ghost is expected to increase at the same rate. Annual inflation rates for production costs are expected to be as follows:

	%
Direct material	4
Direct labour	10
Variable overheads	4
Fixed costs	5

- (vi) The company's cost of capital in money terms is expected to be 15%.

#### Required

Indicate whether each of the following items are relevant or irrelevant cash flows for a net present value (NPV) evaluation of whether to introduce the new product.

- (i) \$500,000 incurred to date in the development of the new product (1 mark)
- (ii) Purchase of machinery at a cost of \$2,700,000 (1 mark)
- (iii) \$700,000 straight line depreciation (1 mark)

Calculate the following values if Phantom decides to manufacture Ghost:

- (iv) The sales value in year 2 (2 marks)
  - (v) The direct material cost in year 1 (1 mark)
  - (vi) The present value of the direct labour cost for the 3<sup>rd</sup> year of the project (2 marks)
  - (vii) The present value of the variable overheads for the 3<sup>rd</sup> year of the project (2 marks)
- (Total: 10 marks)**

2 Missed Out Ltd manufacture a standard sea fishing rod.

The standard cost card for one rod is:

	\$ per rod
Material 1.2 kg @ \$12 per kg	14.40
Labour 4.50 hours @ \$7.50 per hour	33.75

Fixed overhead are budgeted to be \$108,000 per annum accrued evenly over the year.

The budgeted production for March is 500 rods

Actual output for the month of March was 520 rods.

Actual material purchased and used was 650 kg and the cost was \$7,735.

2,100 labour hours were worked at a cost of \$15,540.

Actual fixed overhead was \$8,750.

Missed Out Ltd employs 10 operatives on producing the hand-made product.

**Required:**

Calculate the following variances for the month of March:

- (i) Direct material price variance (1 mark)
  - (ii) Direct material usage variance (1 mark)
  - (iii) Direct labour rate variance (1 mark)
  - (iv) Direct labour efficiency variance (1 mark)
  - (v) Fixed overhead expenditure variance (1 mark)
  - (vi) Fixed overhead volume variance (2 marks)
  - (vii) Fixed overhead capacity variance (1.5 marks)
  - (viii) Fixed overhead efficiency variance (1.5 marks)
- (Total: 10 marks)**

**3 Required**

Calculate the appropriate figures for each GAP in the following statements

- (i) A company has a return on capital employed of 23.75% and made an operating profit for the period of \$95,000. The capital employed is \$ GAP 1

It also operates with a gross profit margin of 20%, and the gross profit for the period was \$150,000. The sales revenue for the period was \$ GAP 2

- (ii) A company has inventory at the beginning of the year of \$100,000 and at the end of the year of \$200,000. During the year the company had sales revenue of \$1,250,000 and cost of sales of \$750,000. The inventory holding period (based on average inventory) is GAP 3 days.

- (iii) A company has a profit from operations of \$800,000, finance costs of \$100,000 and a profit before tax of \$700,000. At the year-end they had total debt of \$2,000,000 and total equity of \$4,000,000.

The companies' interest cover is GAP 4 times and their gearing is GAP 5 % based on (D/E) or GAP 6 % based on  $(D / (D+E))$  (answers to 2 d.p.)

- (v) A company with sales revenue of \$3,040,000 and gross profit of \$1,090,000 has trade receivables of \$250,000, cash of \$100,000, inventory of \$80,000 and trade payables of \$215,000.

The current ratio is GAP 7 and the quick ratio is GAP 8 (answers to 2 d.p.)

The trade receivables period is GAP 9 days and the trade payables period is GAP 10 days.

(1 mark for each gap = total 10 marks)

