

**UNIVERSITY OF BOLTON**

**OFF CAMPUS DIVISION**

**IDM BOTSWANA**

**MSC SUPPLY CHAIN MANAGEMENT**

**SEMESTER 1 EXAMINATION 2019/2020**

**FINANCE FOR MANAGERS**

**MODULE NO: EBU7005**

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**DATE:** 11 January 2020

**TIME:** 3 hours

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**INSTRUCTIONS TO CANDIDATES:**

**THERE ARE SIX QUESTIONS ON THIS PAPER.  
ANSWER ANY FOUR QUESTIONS.**

**ALL QUESTIONS CARRY EQUAL MARKS**

**PRESENT VALUE TABLES INCLUDED ON PAGE  
THE BACK OF THIS EXAMINATION PAPER.**

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### Question 1

ABC Ltd is considering marketing a new product for which it will require an investment of £400,000 in production equipment.

The demand for the product, which will be sold at £25 per unit over the next 5 years is as follows:-

Yr 1 75,000  
Yr 2 75,000  
Yr 3 50,000  
Yr 4 40,000  
Yr 5 30,000

After this period it is expected that demand will fall back below the point at which production would be viable. The equipment would be scrapped (nil value).

Other information is given as follows :-

Variable costs £17 per unit in year 1 increasing by 2% for each year thereafter  
Promotional costs £100,000 (year one only)  
Other costs £250,000 per year  
Depreciation £80,000 per year

The impact of increase in stock, debtors and creditors at day1 will be £100,000.

Cost of Capital

The company's cost of capital is 15%

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### Question 1 continued

Required

- Calculate the payback period **(3 marks)**
- Calculate the net present value **(7 marks)**
- Calculate the internal rate of return **(7 marks)**
- Based upon your calculations determine whether the business should go ahead with the investment, giving reasons for your decision **(4 marks)**
- Suggest ways in which the basic analysis performed above might be improved to give management more insightful information about the project **(5 marks)**

### Question 2

You are a manager of a manufacturing company that produces three different products A, B and C. Information about the financial performance for the year is as follows :-

Product	A	B	C
<b>Sales &amp; Production</b>			
(Units)	1,000	2,000	1,500
Selling Price £/unit	325	150	195
<b>Labour Hours per unit</b>			
Constructors	20	10	12
Installers	5	5	5
<b>Cost - £/ hr</b>			
Constructors	10	10	10
Installers	5	5	5
<b>Material cost - £ per</b>			
Unit	50,000	20,000	40,000

Total fixed overheads were £50,000

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**Question 2 continued**

Required:

- a) Calculate the contribution per unit and the profit per unit for each product.  
Allocate the fixed costs on the basis of total labour hours **(8 marks)**
- b) Calculate the production mix that would have maximised profits if the constructors labour hours available had been limited to 30,000 **(12 marks)**
- c) Suggest reason why some overhead costs might not be relevant for decision making purposes **(5 marks)**

Past Examination Paper

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**Question 3**

Your company is considering trading with Sunshine Ltd. The accounts of that company are shown below.

**Sunshine Ltd****Profit & Loss for the period ended 31 December**

	<b>2018</b>	<b>2017</b>
	<b>£'000</b>	<b>£'000</b>
Turnover	9,000	5,000
Cost of Sales	<u>(7,920)</u>	<u>(4,250)</u>
Gross Profit	1,080	750
Other expenses	<u>(600)</u>	<u>(283)</u>
Operating profit	480	467
Interest payable	<u>(19)</u>	<u>(11)</u>
Profit before tax	461	456
Taxation	<u>(138)</u>	<u>(137)</u>
Profit after tax	323	319
Dividends	<u>(81)</u>	<u>(63)</u>
Retained profit	<u>242</u>	<u>256</u>

**Balance sheet as at 31 December**

	<b>£'000</b>	<b>£'000</b>
Tangible Assets	600	430
Investments	<u>15</u>	<u>15</u>
	615	445
Stock	600	300
Debtors	1,350	1,000
Cash	<u>0</u>	<u>45</u>
	1,950	1,345
Bank Overdraft	<u>(33)</u>	0
Creditors due less than 1 year	<u>(1,400)</u>	<u>(1,000)</u>
Net current assets	517	345
Total assets less current liabilities	<u>1,132</u>	<u>790</u>
Long term loans	<u>(250)</u>	<u>(150)</u>
Net assets	<u>882</u>	<u>640</u>
Ordinary share capital	150	150
Retained profits	<u>732</u>	<u>490</u>
Shareholders funds	<u>882</u>	<u>640</u>

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### Question 3 continued

Required:

- a) Calculate the following ratios for both years **(10 marks)**
1. Current ratio
  2. Acid test ratio
  3. Stock turnover
  4. Debtor days
  5. Creditor days
  6. Gross profit %
  7. Net profit %
  8. Asset turnover
  9. ROCE
  10. Gearing ratio
- b) Making full use of the information in the question comment on the performance of the business and recommend action for management **(8 marks)**
- c) Suggest what further information you might request from management to understand the financial performance of the business. **(7 marks)**

### Question 4

- a) Differentiate between Capital and Revenue expenditure. Illustrate your answer with examples of both types of expenditure. **(15 marks)**
- b) Discuss two ways in which the initial cost of a fixed asset may be apportioned against the income of an organisation **(10 marks)**

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### Question 5

You are a manager in a private sector organisation and you believe that the traditional method of budgeting is limiting the financial performance of the business. You are aware that other budgeting strategies exist and think that these should be considered by your organisation

#### Required

- a) Outline the traditional process of budgeting and critically examine why this might limit the financial performance of some organisations **(10 marks)**
- b) Give an alternative to traditional budgeting and explain how this would overcome the deficiencies identified in a) **(10 marks)**
- c) Set out a high level implementation plan for the alternative discussed in b) above **(5 marks)**

### Question 6

- a) Differentiate between Management and Financial accounting. **(10 marks)**
- b) Discuss ways in which Procurement might work with Management Accountants to improve the overall performance of the business. **(15 marks)**

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### Present Value Table

Present value of 1 i.e.  $(1 + r)^{-n}$   
 Where  $r$  = discount rate  
 $n$  = number of periods until payment

Discount rate ( $r$ )

Periods ( $n$ )	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

( $n$ )	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	0.594	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

**END OF QUESTIONS**