

**UNIVERSITY OF BOLTON**  
**INSTITUTE OF MANAGEMENT**  
**BSC (HONS) BUSINESS**  
**SEMESTER 1 EXAMINATION 2019/2020**  
**FINANCIAL MANAGEMENT AND DECISION**  
**MAKING**  
**MODULE NO: BMP5006**

Date: Thursday 16 January 2020

Time: 10.00 – 1.00

---

**INSTRUCTIONS TO CANDIDATES:**

There are Five questions on this paper.

Answer ALL questions.

This examination is 3 hours.

This is a open book examination.

You must hand in this exam paper with your answer booklet.

(Discount tables are attached at the back of this question paper)

Students are allowed to bring into the exam hall one A4 sheet of paper with notes et al

---

Institute of Management  
 BSc (Hons) Business  
 Semester 1 Examination 2019-2020  
 Management Accountancy and Decision Making  
 Module No. BMP5006

**Question 1**

Carl Limited is considering which of three projects it should undertake.

The initial investment will be £15,000, and the cost of capital is 8 %.

The scrap/residual value at the end of the project period will be £2,000.

The net after tax cash flows of the projects are as follows:

	Project A £	Project B £	Project C £
Year 1	4,000	5,000	4,000
Year 2	6,000	5,000	5,000
Year 3	5,000	4,000	3,000
Year 4		3,600	5,000
Year 5			1,400

**Required :**

- (a) Calculate the, the Payback Period, and the net Present Value of for each project. (12 marks)
- b) For each of the above methods of project appraisal recommend which project should be taken up. (2 marks)
- c) Using all the information gathered from the above techniques which project would you recommend giving the reasons for this decision. (2 marks)
- d) Explain the uses, limitations and merits of the Payback Period compared to Net Present Value in investment appraisal. (4 marks)

**(Total 20 Marks)**

**Please turn the page**

Institute of Management  
 BSc (Hons) Business  
 Semester 1 Examination 2019-2020  
 Management Accountancy and Decision Making  
 Module No. BMP5006

### Question 2

Marsh Company has provided you with the financial statements for the last two years.

#### Marsh Company Income Statement for the year ends

	<u>2019</u>	<u>2020</u>
	£ 000	£ 000
Revenue	440	330
Cost of Sales	<u>(248)</u>	<u>(192)</u>
Gross Profit	192	138
Expenses	<u>(122)</u>	<u>(88)</u>
Operating Profit	70	50
Interest Payable	<u>(10)</u>	<u>(10)</u>
Profit Before Tax	60	40
Tax	<u>(11)</u>	<u>(7)</u>
Profit After Tax	<b><u>49</u></b>	<b><u>33</u></b>

#### Marsh Company Statement of Financial Position

	<u>2019</u>	<u>2020</u>
	£000	£000
Non-Current assets	405	361
Current assets:		
Inventory	45	28
Receivables	65	46
Cash	<u>7</u>	<u>10</u>
	117	84
Payables	<u>72</u>	<u>32</u>
Net current assets	45	<u>52</u>
	450	413
Long term loan	<u>100</u>	<u>100</u>
	<u>350</u>	<u>313</u>
Capital	250	250
Retained earnings	<u>100</u>	<u>63</u>
	<b><u>350</u></b>	<b><u>313</u></b>

Question 2 continued over the page

Institute of Management  
BSc (Hons) Business  
Semester 1 Examination 2019-2020  
Management Accountancy and Decision Making  
Module No. BMP5006

**Question 2 Continued**

**Required:**

(a) You are required to calculate the following ratios:

- (i) Gross profit margin
- (ii) Operating profit margin
- (iii) Expenses to sales
- (iv) Return on Capital Employed
- (v) Asset turnover
- (vi) Non-current asset turnover
- (vii) Current Ratio
- (viii) Quick Ratio
- (ix) Inventory days
- (x) Receivables days
- (xi) Payable days
- (xii) Interest cover

(12 marks)

(b) In light of your calculations comment on the performance of the company over the last two years.

(8 marks)

**(Total Marks 20)**

**Please turn the page**

Institute of Management  
 BSc (Hons) Business  
 Semester 1 Examination 2019-2020  
 Management Accountancy and Decision Making  
 Module No. BMP5006

**Question 3**

Jones plc manufactures one product, and the entire product is sold as soon as it is produced. There are no opening or closing inventories and work in progress is negligible. The company operates a standard costing system and analysis of variances is made every month. The standard cost card for a product is as follows.

		£
Direct Materials	0.5 kilos at £4 per kilo	2.00
Direct Wages	2 hours at £8.00 per hour	16.00
Variable Overheads	2 hours at £0.30 per hour	<u>.60</u>
Standard Variable Cost		18.60
Standard Contribution		<u>13.40</u>
Standard Selling Price		<u>32.00</u>

Budgeted output for the month of June 2015 was 5,100 units.

Actual results for June 2015 were as follows:

Production of 4,850 units was sold for £150,350.

Materials consumed in production amounted to 2,300 kgs at a total cost of £9,800.

Labour hours paid for amounted to 8,500 hours at a cost of £67,800.

Actual operating hours amounted to 8,000 hours.

Variable Overheads amounted to £2,600.

Required:

Calculate all variances and prepare an operating statement for the month ended June 2015. **(Total 20 marks)**

**Please turn the page**

Institute of Management  
BSc (Hons) Business  
Semester 1 Examination 2019-2020  
Management Accountancy and Decision Making  
Module No. BMP5006

**Question 4**

Hardaker Limited produces and sells two products.

Product A sells for £12 per unit and has a total variable cost of £7.90, while Product B sells for £17 per unit and has a total variable cost of £11.20.

For every 4 units of Product A sold, three of product B are sold.

Hardaker Limited fixed costs are £131,820 per period.

Budgeted sales revenue for the next period is £398,500.

**Required :**

- (a) Calculate the Breakeven points in Units. (5 marks)
- (b) Calculate the Margin of Safety in Units (5 marks)
- (c) Evaluate the relevance of Break Even Analysis in the modern manufacturing environment . (10 marks)

**(Total Marks 20)**

**Question 5**

Evaluate and detail the significant steps in setting a financial / cost controlling budget in a large organisation.

**(Total Marks 20)**

**END OF QUESTION PAPER**

Institute of Management  
 BSc (Hons) Business  
 Semester 1 Examination 2019-2020  
 Management Accountancy and Decision Making  
 Module No. BMP5006

### **Present Value Table**

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

Where  $r$  = discount rate and  $n$  = number of periods until payment

Period s (n)	Discount rate (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.99 0	0.98 0	0.97 1	0.96 2	0.95 2	0.94 3	0.93 5	0.92 6	0.91 7	0.90 9
2	0.98 0	0.96 1	0.94 3	0.92 5	0.90 7	0.89 0	0.87 3	0.85 7	0.84 2	0.82 6
3	0.97 1	0.94 2	0.91 5	0.88 9	0.86 4	0.84 0	0.81 6	0.79 4	0.77 2	0.75 1
4	0.96 1	0.92 4	0.88 8	0.85 5	0.82 3	0.79 2	0.76 3	0.73 5	0.70 8	0.68 3
5	0.95 1	0.90 6	0.86 3	0.82 2	0.78 4	0.74 7	0.71 3	0.68 1	0.65 0	0.62 1
6	0.94 2	0.88 8	0.83 7	0.79 0	0.74 6	0.70 5	0.66 6	0.63 0	0.59 6	0.56 4
7	0.93 3	0.87 1	0.81 3	0.76 0	0.71 1	0.66 5	0.62 3	0.58 3	0.54 7	0.51 3
8	0.92 3	0.85 3	0.78 9	0.73 1	0.67 7	0.62 7	0.58 2	0.54 0	0.50 2	0.46 7
9	0.91 4	0.83 7	0.76 6	0.70 3	0.64 5	0.59 2	0.54 4	0.50 0	0.46 0	0.42 4
10	0.90 5	0.82 0	0.74 4	0.67 6	0.61 4	0.55 8	0.50 8	0.46 3	0.42 2	0.38 6
11	0.89 6	0.80 4	0.72 2	0.65 0	0.58 5	0.52 7	0.47 5	0.42 9	0.38 8	0.35 0
12	0.88 7	0.78 8	0.70 1	0.62 5	0.55 7	0.49 7	0.44 4	0.39 7	0.35 6	0.31 9
13	0.87 9	0.77 3	0.68 1	0.60 1	0.53 0	0.46 9	0.41 5	0.36 8	0.32 6	0.29 0
14	0.87 0	0.75 8	0.66 1	0.57 7	0.50 5	0.44 2	0.38 8	0.34 0	0.29 9	0.26 3
15	0.86 1	0.74 3	0.64 2	0.55 5	0.48 1	0.41 7	0.36 2	0.31 5	0.27 5	0.23 9

Institute of Management  
 BSc (Hons) Business  
 Semester 1 Examination 2019-2020  
 Management Accountancy and Decision Making  
 Module No. BMP5006

(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