Module Title: Managing Finance & Financial Decisions
Level: Five
Time Allowed: Two hours, plus 15 minutes reading time. Students must not commence answering the questions until the reading time has ended.

Instructions to students:
- Enter your student number not your name on all answer books.
- During the 15 minutes reading time, students are permitted to make notes on the examination paper but not the answer book. Students should begin answering the questions after the reading time has ended.
- Answer three questions: one question from Section A and two out of three questions from Section B.
- Where a question has more than one part, the division of marks is stated.
- Begin each question in a separate answer book; label each answer book clearly with the number of the question you are answering.
- Students are permitted to take one sheet of A4 paper (two sides of notes) into the examination room. Notes must be handwritten. All notes should be attached to the answer book at the end of the examination.
- The use of a non-programmable calculator is permitted.

No. of Pages: 6
No. of Questions: 4
Section A

Answer the question below.

Question 1

Tweedle Plc acquired 75% of Dum Plc one year ago, on 31st March 2016, when Dum Plc had £1,750,000 £1 ordinary shares and £900,000 retained profits.

The following are the balance sheets of Tweedle Plc and Dum Plc as at 31st March 2017:

<table>
<thead>
<tr>
<th></th>
<th>Tweedle Plc</th>
<th>Dum Plc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£000</td>
<td>£000</td>
</tr>
<tr>
<td>Non-current Assets</td>
<td>5300</td>
<td>3420</td>
</tr>
<tr>
<td>Investment in Dum Plc</td>
<td>2100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7400</td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td>(2980)</td>
<td>(462)</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td></td>
<td>740</td>
</tr>
<tr>
<td></td>
<td>6920</td>
<td>4160</td>
</tr>
<tr>
<td>Non-current Liabilities</td>
<td>(1120)</td>
<td>(1310)</td>
</tr>
<tr>
<td></td>
<td>5800</td>
<td>2850</td>
</tr>
</tbody>
</table>

*Financed by:*

- Ordinary Share Capital: 4000 | 1750
- Retained Profit: 1800 | 1100
- 5800 | 2850

Required:

   (18 marks)

b. Calculate the current ratio from the individual accounts of Tweedle Plc and Dum Plc and from the Consolidated Balance Sheet.  
   (6 marks)

c. Evaluate the level of Gearing in the individual companies and the combined group.  
   (6 marks)

d. What conclusions can you draw from your results in parts b. and c. above?  
   (4 marks)

(Total: 34 marks)
Section B

Answer two out of three questions.

Question 2

Tweedle currently has issued share capital of £2,650,000 £1 ordinary shares with a market value of £6.12.

In order to finance an additional factory site, necessary due to recent expansion of the business, it has been decided to raise some additional capital via a 1 for 5 rights issue offering shares at a discount of £5.73.

Required:

a. What do you understand about raising capital via a rights issue? (2 marks)

b. From the information above calculate the ex-rights price for the rights issue under consideration. (2 marks)

c. If the rights issue is not taken up by the shareholders it can be sold on the market. What could the right be sold for in the above scenario? (2 marks)

d. A major shareholder of Tweedle plc has 650,000 shares and is concerned as to the effect on the value of his holding initially after the rights issue.

i. Show the value of this shareholders holding before any rights issue. (1 mark)

ii. Calculate the value had the shareholder fully taken up the offer. (4 marks)

iii. What would be his value if all the rights had been sold? (2 marks)

iv. The shareholder decides to purchase three quarters the shares on offer and sell the remaining rights. Demonstrate how the total of his holding will be unaffected immediately after the rights issue. (4 marks)

v. How much additional capital will Tweedle Plc generate from the rights issue? (2 marks)
e. Tweedle Plc has issued ordinary shares but is investigating the option of including preference shares into its capital structure. Explain the four types of preference shares the company could issue.

(8 marks)

f. What characteristics distinguish convertible loan stock from ordinary loan stock and why would you consider the issue of convertible loan stock to be attractive?

(6 marks)

(Total: 33 marks)

Question 3

Tweedle plc will require various additional machinery and equipment once the new factory has been acquired. For part of its manufacturing operations a specific machine is necessary and two such machines have been identified for possible investment:

<table>
<thead>
<tr>
<th></th>
<th>Machine 1</th>
<th>Machine 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Original investment required</td>
<td>900,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Estimated future cash flows:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>216,000</td>
<td>344,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>256,000</td>
<td>344,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>296,000</td>
<td>264,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>336,000</td>
<td>244,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>196,000</td>
<td>284,000</td>
</tr>
<tr>
<td>Estimated residual value</td>
<td>120,000</td>
<td>80,000</td>
</tr>
</tbody>
</table>

The company requires a return of 14% on their investment. They also require a payback period within four years and their target Accounting Rate of Return should be in line with their ROCE of 18%.

The present value of £1 received at the end of ‘n’ years, given a 14% rate of interest is as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>0.877</td>
</tr>
<tr>
<td>Year 2</td>
<td>0.769</td>
</tr>
<tr>
<td>Year 3</td>
<td>0.675</td>
</tr>
<tr>
<td>Year 4</td>
<td>0.592</td>
</tr>
<tr>
<td>Year 5</td>
<td>0.519</td>
</tr>
</tbody>
</table>
Required:

a. Calculate for both machines:
   i. The Payback Period.
   ii. The Accounting Rate of Return.
   iii. The Net Present Value.

   (22 marks)

b. From your calculations which machine should Tweedle Plc select?

   (2 marks)

c. Discuss the advantages and disadvantages of the three investment techniques you have used in your appraisal of the two machines.

   (9 marks)

   (Total: 33 marks)

Question 4

Tweedle Plc is a manufacturing company for a single product and uses a standard costing system. The following standard card applies to this product:

- Direct material 8 Kg’s at £41 per Kilo           £328
- Direct wages 6 hours at £28 per hour           £168
- Selling price                                               £744

In April production and sales were budgeted at 12,000 units which can be compared with the actual data for the month:

- Production and sales 12,450 units.
- Actual materials consumed 97,110 kg’s costing £4,369,950.
- Actual labour hours worked were 68,475 with a wage cost of £1,985,775.

Required:

a. Calculate the following variances from the information above:
   i. The total material variance.
   ii. The material price variance.
   iii. The material usage variance.
   iv. The total labour variance.
   v. The labour rate variance.
   vi. The labour efficiency variance.

   (12 marks)
b. Give sensible reasons for the adverse and favourable variances you have calculated.  

(8 marks)

c. Briefly explain the rationale of operating a standard costing system.  

(4 marks)

d. Standard costing refers to different standards being basic, attainable and ideal. Differentiate between these terms and identify the standard most often used to measure production efficiency.  

(9 marks)

(Total: 33 marks)