Note: Higher level questions are marked with an asterisk*

3. John Jones

a) Atom Plc

\[
\text{Gearing ratio} = \frac{(400)}{(500 + 300 + 400 + 400)} \times 100\% = 25\%
\]

Ball Plc

\[
\text{Gearing ratio} = \frac{(200)}{(800 + 400 + 200 + 20)} \times 100\% = 12.5\%
\]

b) Atom Plc is more highly geared than Ball Plc. Hence it is committed to paying a higher proportion of fixed dividend and interest payments out of its profits. High gearing accentuates the rate of return to the ordinary shareholders. In times of low profits, the ordinary shareholder will receive little or no dividend in a highly geared company. But when profits far exceed fixed interest and dividend payments, a greater return will be attributable to the ordinary shareholders in a highly geared company.

The downside is that high gearing increases risk as follows:

- If the company cannot meet its obligations for interest and/or capital repayments due, then the lenders may seek to exercise their security.

- There is also the increased risk of fluctuating returns to the ordinary shareholders in a highly geared company.
c)  

<table>
<thead>
<tr>
<th></th>
<th>Atom</th>
<th>Ball</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit before interest</td>
<td>400,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Less Interest on debentures</td>
<td>48,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Profits available to ordinary shareholders</td>
<td>352,000</td>
<td>380,000</td>
</tr>
<tr>
<td>Number of ordinary shares</td>
<td>500,000</td>
<td>800,000</td>
</tr>
<tr>
<td>Profit available per ordinary share</td>
<td>£0.704</td>
<td>£0.475</td>
</tr>
</tbody>
</table>

4. Upton Ltd  

a) **Ordinary shares** entitle their owner to receive an ordinary dividend from the company, if one is paid, and ordinary shareholders are entitled to vote at general meetings of the company.  

b) Upton Ltd’s retained profit for the year:  

- Profit after tax £145,000  
- Ordinary dividend £30,000  
- Retained profit for the year £115,000
c) \( \frac{30,000}{500,000} = 6 \) pence per share was paid to the ordinary shareholders as a dividend.

d) Earning per share of Upton Ltd is \( \frac{145,000}{500,000} = 29 \) pence per share.

e) Upton Ltd’s current gearing ratio is:
\[
\frac{25,000}{250,000 + 115,000 + 280,000 + 25,000} \times 100\% = 3.7\%
\]

f) If Upton Ltd takes out a further loan for £30,000 this increases the gearing ratio to 56%.
\[
\frac{55,000}{250,000 + 280,000 + 115,000 + 55,000} \times 100\% = 7.8\%
\]

5. Eyre Plc

a. True. An ordinary share issue will reduce the gearing proportion. By increasing the number of shares this will increase the equity in the company, leaving debt unchanged.

b. True. Repayment of a long-term loan will reduce the gearing proportion. Repaying a long-term loan will reduce the level of debt and therefore decrease the gearing proportion.

c. False. Repayment of a short-term loan will have no effect on the gearing proportion as only long-term loans are included in the calculations. In calculating the gearing proportion short-term loans are not included.

*6. Appleby Plc*

a) Investment ratios for Appleby Plc:

   Earnings per share
   
   \[
   \frac{9m - 0.5m}{3.6m} = 236 \text{ pence}
   \]
Price to earnings ratio

\[ \frac{1,830}{236} = 7.8 \text{ times} \]

Dividend yield

\[ \frac{\£1.2m}{(18.3 \times 3.6 \text{ million}) \times 100} = 1.8\% \]

Or, per share calculation \( \frac{33.3\text{pence}}{1,830 \text{ pence} \times 100} = 1.8\% \)

Dividend cover

\( \frac{(\£9m - \£0.5m)}{\£1.2m} = 7.08 \text{ times} \)

b) Earnings per share has been forecast to decrease from 236 pence to 200 pence indicating that the company is forecasting a decrease in the level of profits that each share will earn. This could be due to a downturn in predicted profitability; for example, as a result of a more competitive trading environment.

The price to earnings ratio has been predicted to increase from 7.8 times to 12.2 times. This is a measure of the market’s perception of how well the company may do long term and reflects a positive attitude of the market to the company in terms of profitability.

Dividend cover is predicted to fall from 7.1 times to 5.0 times. This decrease in dividend cover indicates that the company may in the future find it slightly more difficult to maintain its current level of dividend payment, although the coverage of five times is still comfortable. The dividend yield is low at 1.8% but shareholders will expect rewards by way of capital growth.

7. Joisa plc

a)
Chapter 9 - Capital structure and Investment Ratios

Solutions to practice questions

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earnings per share</strong></td>
<td>15 pence</td>
<td>22 pence</td>
<td>43 pence</td>
</tr>
<tr>
<td></td>
<td>£0.9m/6m</td>
<td>£1.3m/6m</td>
<td>£2.6m/6m</td>
</tr>
<tr>
<td><strong>Price to earnings (PE) ratio</strong></td>
<td>7.3 times</td>
<td>5.5 times</td>
<td>4.3 times</td>
</tr>
<tr>
<td></td>
<td>£1.1/0.15</td>
<td>£1.2/0.22</td>
<td>£1.85/0.43</td>
</tr>
<tr>
<td><strong>Dividend yield</strong></td>
<td>7.6%</td>
<td>9.7%</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>(0.5m/6m)/1.1 x 100</td>
<td>(0.7m/6m)/1.2 x 100</td>
<td>(0.9m/6m)/1.85 x 100</td>
</tr>
<tr>
<td><strong>Dividend cover</strong></td>
<td>15 pence/8.3 pence</td>
<td>22 pence/11.6 pence</td>
<td>43 pence/15 pence</td>
</tr>
<tr>
<td></td>
<td>1.8 times</td>
<td>1.9 times</td>
<td>2.9 times</td>
</tr>
</tbody>
</table>

b) Earnings per share has increased over the period 2017–2019, showing that fundamentally the company has been improving its profitability over the period considered. However, the PE ratio has fallen, perhaps suggesting less confidence from the market in the future profit growth for the company.

Dividend yield has fallen in 2019 but at 8.1% it remains a very good rate of return. The dividend cover shows that Joisa plc can easily cover its dividend payments.

Luxy would need to consider the above factors in deciding whether to purchase Joisa.