<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>Extra information</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>liver disease – alcohol skin cancer – ionising radiation type 2 diabetes - obesity</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>02.1</td>
<td>31.8 / 31.83 / 31.834</td>
<td>Allow 1 mark for 31.833 or allow 1 mark for correct substitution into equation.</td>
<td>2</td>
</tr>
<tr>
<td>02.2</td>
<td>40</td>
<td>Allow answer in range of 35–45.</td>
<td>1</td>
</tr>
<tr>
<td>02.3</td>
<td>as BMI increases risk of developing (Type 2) diabetes increases at an increasing rate</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>02.4</td>
<td>any one from: • age • ethnic background • genes • amount of exercise / activity</td>
<td>Allow if others in the family have it.</td>
<td>1</td>
</tr>
<tr>
<td>02.5</td>
<td>measure the amount of sugar in the blood / urine, raised levels of sugar indicate diabetes</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>02.6</td>
<td>any two from: • eat less sugar / carbohydrates • do more exercise • lose weight</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>03.1</td>
<td>mitosis</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>03.2</td>
<td>cells break off travel in the blood</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>03.3</td>
<td>any three from: • more men die from lung cancer than women • number of deaths from lung cancer has increased over the years • the average number of cigarettes smoked per person per year has increased over the years • women smoke fewer cigarettes (on average) per year • the link between smoking cigarettes and</td>
<td></td>
<td>3</td>
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</tbody>
</table>
## 03.4 lung cancer is stronger in men than in women

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>any one from:</td>
<td></td>
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<tr>
<td>• coronary heart disease</td>
<td></td>
</tr>
<tr>
<td>• stroke</td>
<td></td>
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<tr>
<td>• emphysema</td>
<td></td>
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<tr>
<td>• bronchitis</td>
<td></td>
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<td>• asthma</td>
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### 04

<table>
<thead>
<tr>
<th>0 marks</th>
<th>Level 1 (1–2 marks)</th>
<th>Level 2 (3–4 marks)</th>
<th>Level 3 (5–6 marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No relevant content.</td>
<td>At least one action should be described.</td>
<td>Several actions (at least three) should be described and at least one correct explanation.</td>
<td>Actions should be clearly described with several of these correctly explained. Both things to do and things to avoid should be included.</td>
</tr>
</tbody>
</table>

### Examples of the points made in the response:

**Things a person should do:**
- eat a balanced diet – to control weight / provide the correct nutrients
- exercise (regularly) – to control weight or maintain the heart / bones / joint mobility / muscle strength / reaction time or improve mood
- get enough sleep / rest
- regular health checks / vaccinations as necessary

**Things to avoid:**
- smoking – can cause cancer / heart disease / circulatory problems / lung disorders
- too much alcohol – can cause liver disease / affect brain function
- too much salt – can cause high blood pressure

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<tbody>
<tr>
<td></td>
<td>Allow a named nutrient – correctly linked to its effect.</td>
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<tr>
<td>04</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>too much fat / energy – can lead to obesity / Type 2 diabetes / joint problems</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td></td>
<td>illegal drugs / named drug - allow correctly linked effect</td>
</tr>
<tr>
<td></td>
<td>too much UV light – skin cancer</td>
</tr>
<tr>
<td></td>
<td>carcinogens / named carcinogen – cause cancer</td>
</tr>
</tbody>
</table>