(a) Sports performers need to process information to make decisions. These decisions can affect the outcome of their performance.

Complete the diagram below to show the various stages of a basic information processing model.

(b) Using a named skill from a team sport of your choice (e.g. football, hockey), explain the input stage of information processing.

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

(2)
(Total 5 marks)

2 Using the stages of the information processing model, analyse how a performer hits a ball or shuttlecock in a racket sport of your choice (for example squash, tennis or badminton).

(Total 6 marks)
Mark schemes

[AO1 = 3]

(a) Award **one** mark for each of the following points up to a maximum of three marks.

Do not credit Input stage.

Max 3 marks

[b] [AO2 = 2]

(b) Award **one** mark for each of the following points up to a maximum of two marks.

- Performer takes in information from the display / environment via senses (sight, hearing, etc), e.g. sight of the ball / noise from team mates (1)
- They choose what information is most important to them at that time / blocking out irrelevant information, e.g. sight when watching a cricket ball flying through the air (1)
- This is called selective attention, i.e. attending to the most relevant sense, e.g. the ball (1)

Accept any other suitable explanation of the input stage of information processing. Explanations must be related to performing a skill in a named team sporting activity.

Max 2 marks
<table>
<thead>
<tr>
<th>Level</th>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5 – 6</td>
<td>Knowledge of the stages of information processing is accurate and generally well detailed. Application to a performer hitting a ball/shuttlecock is mostly clear and effective. Analysis is thorough, reaching valid and well-reasoned links to all stages. The answer is generally clear, coherent and focused, with appropriate use of terminology throughout.</td>
</tr>
<tr>
<td>2</td>
<td>3 – 4</td>
<td>Knowledge of the stages of information processing is evident but is more detailed for some stages than others. There is some appropriate and effective application to a performer hitting a ball/shuttlecock, although not always presented with clarity. Any analysis is clear but reaches valid and well-reasoned links to only some of the stages. The answer lacks coherence in places, although terminology is used appropriately on occasions.</td>
</tr>
<tr>
<td>1</td>
<td>1 – 2</td>
<td>Knowledge of the stages of information processing is limited. Application to a performer hitting a ball/shuttlecock is either absent or inappropriate. Analysis is poorly focused or absent, with few or no reasoned links to any stage. The answer as a whole lacks clarity and has inaccuracies. Terminology is either absent or inappropriately used.</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>No relevant content.</td>
</tr>
</tbody>
</table>
Possible content may include:

**AO1 – Knowledge of the stages of information processing, e.g.**
• The stages are input, decision making, output, and feedback

**AO2 – Application to a performer hitting a ball/shuttlecock, e.g. tennis**
• Input – sight of the ball moving towards the player
• Decision making – which shot to play / movement to make
• Output – shot selected to play
• Feedback – did you play a good shot / hit the ball?

**AO3 – Analysis/evaluation of the stages of information processing being used by a performer hitting a ball/shuttlecock, e.g. tennis**
• (Input) Information from the display – how is the opponent holding the racket / swinging the racket / how is the ball flying (with spin) / where is the ball after it has landed
• (Input) Selective attention – blocking out everything, e.g. noise / other visual stimuli / other than key focus points above, i.e. the ball
• (Decision making) Selection of appropriate response from memory – have you dealt with this before / have you seen this a similar type of shot before
• (Decision making) – Recall of relevant tennis shot from the long term memory / executed by short term memory
• (Output) Information sent to muscles to carry out the response – choice of shot / movement of feet / movement of racket
• (Output) Credit use of appropriate muscles for a tennis shot, i.e. deltoid / pectorals
• (Feedback) Received via self (intrinsic / kinaesthetic) and / or others (extrinsic) – did you hit ball / how did it feel / where did it go / did you misread the ball

Credit other suitable responses relevant to the question. This can relate to any racket sport.