

## Question

## Marks

17	A library uses a <i>flat file</i> database to store details about members and the books they borrow. Here is part of the file.																																												
	<table border="1"> <thead> <tr> <th>Membership Card ID</th> <th>Member Name</th> <th>Telephone</th> <th>Book Reference</th> <th>Book Title</th> <th>Date Borrowed</th> </tr> </thead> <tbody> <tr> <td>KP102</td> <td>Mary Smith</td> <td>987265</td> <td>BK234</td> <td>Emma</td> <td>12/3/09</td> </tr> <tr> <td>KP982</td> <td>James Main</td> <td>967364</td> <td>BK287</td> <td>The Green Mile</td> <td>12/3/09</td> </tr> <tr> <td>KP102</td> <td>Mary Smith</td> <td>978265</td> <td>BK290</td> <td>Pride and Prejudice</td> <td>02/4/09</td> </tr> <tr> <td>KP982</td> <td>Jimmy Main</td> <td>967364</td> <td>BK205</td> <td>Blaze</td> <td>14/4/09</td> </tr> <tr> <td>KP982</td> <td>James Main</td> <td>967364</td> <td>BK106</td> <td>The Dark Tower</td> <td>21/4/09</td> </tr> <tr> <td>KP345</td> <td>Jo Jones</td> <td>911235</td> <td>BK287</td> <td>The Green Mile</td> <td>15/5/09</td> </tr> </tbody> </table>		Membership Card ID	Member Name	Telephone	Book Reference	Book Title	Date Borrowed	KP102	Mary Smith	987265	BK234	Emma	12/3/09	KP982	James Main	967364	BK287	The Green Mile	12/3/09	KP102	Mary Smith	978265	BK290	Pride and Prejudice	02/4/09	KP982	Jimmy Main	967364	BK205	Blaze	14/4/09	KP982	James Main	967364	BK106	The Dark Tower	21/4/09	KP345	Jo Jones	911235	BK287	The Green Mile	15/5/09	
Membership Card ID	Member Name	Telephone	Book Reference	Book Title	Date Borrowed																																								
KP102	Mary Smith	987265	BK234	Emma	12/3/09																																								
KP982	James Main	967364	BK287	The Green Mile	12/3/09																																								
KP102	Mary Smith	978265	BK290	Pride and Prejudice	02/4/09																																								
KP982	Jimmy Main	967364	BK205	Blaze	14/4/09																																								
KP982	James Main	967364	BK106	The Dark Tower	21/4/09																																								
KP345	Jo Jones	911235	BK287	The Green Mile	15/5/09																																								
	A flat file database has a number of limitations. The same data is often entered several times. This duplication of data can lead to inconsistencies such as data being entered differently or incorrectly.																																												
	(a)	Explain what is meant by the term “flat file database”.	1																																										
<b>Answer</b> DB 3.3		<ul style="list-style-type: none"> <li>All data held in one table</li> </ul>	KU																																										
	(b)	From the table above, give <b>one</b> example where data is duplicated.	1																																										
<b>Answer</b> DB 3.3		<ul style="list-style-type: none"> <li>BK287</li> <li>The Green Mile</li> <li>KP102</li> <li>Mary Smith</li> <li>KP982</li> <li>967364</li> </ul>	PS																																										
	(c)	James Main cannot remember which books he has borrowed from the library. The librarian enters the query “James Main” into the Member Name field.																																											
	(i)	Explain what is meant by a “query”.	1																																										
<b>Answer</b> DB 5.2		<ul style="list-style-type: none"> <li>Processes (searching and/or sorting) carried out to extract information from a file</li> </ul>	KU																																										
	(ii)	Explain why this query for James Main will not show all the information about books he has borrowed using his membership card.	1																																										
<b>Answer</b> DB 3.3		<ul style="list-style-type: none"> <li>Jimmy Main and James Main are the same person</li> <li>Only finds James Main’s loans, not Jimmy Main’s yet they have the same membership card ID</li> </ul>	PS																																										
	(iii)	State a query that would find all the books borrowed by James Main.	1																																										
<b>Answer</b> DB 3.3		<ul style="list-style-type: none"> <li>Query Membership Card ID field for KP982.</li> <li>Query Member name = James Main OR Member name = Jimmy Main</li> </ul>	PS																																										
<b>Total marks for Section 2</b>			<b>(30)</b>																																										

[END OF SECTION 2 – PART A]