Write your answers in the D1 answer book for this paper.

1. In the following list, eleven sports are identified by their initial letter

(V) Volleyball

(H) Handball

(W) Wheelchair basketball

(B) Baseball

(R) Rugby

(G) Golf

(C) Cricket

(P) Paratriathlon

(T) Tennis

(D) Diving

(S) Squash

(a) Explain why a binary search cannot be performed on this list in its current form.

(1)

(b) Write the list in an appropriate form and show how a binary search is used to try to locate (F) Football. You must make your choice of pivots clear.

(4)

(Total for Question 1 is 5 marks)

1.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

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Question 1 continued

(Total for Question 1 is 5 marks)