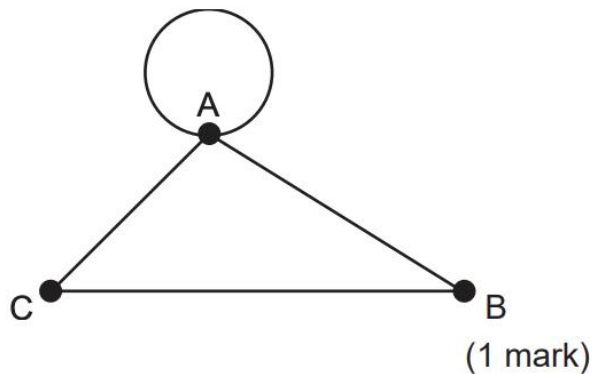


Question 1

(8 marks)

The graph shown represents three buildings A, B and C, with connecting walkways, at a local school.



- (a) Why is the graph planar? (1 mark)
- (b) Show that the graph satisfies Euler's formula. (2 marks)
- (c) Construct the adjacency matrix for the graph. (3 marks)

A student wishes to carry out closed walks of length two from Building A.

- (d) List all his possible walks. (2 marks)