Beckley Hill (BH) is a private hospital carrying out two types of procedures on patients. Each type of procedure incurs the following direct costs:

Procedure	**A**	**B**
	$	$
Surgical time and materials	1,200	2,640
Anaesthesia time and materials	800	1,620

BH currently calculates the overhead cost per procedure by taking the total overhead cost and simply dividing it by the number of procedures, then rounding the cost to the nearest 2 decimal places. Using this method, the total cost is $2,475·85 for Procedure A and $4,735·85 for Procedure B.

Recently, another local hospital has implemented activity-based costing (ABC). This has led the finance director at BH to consider whether this alternative costing technique would bring any benefits to BH. He has obtained an analysis of BH's total overheads for the last year and some additional data, all of which is shown below:

Cost	**Cost driver**	**$**
Administrative costs	Administrative time per procedure	1,870,160
Nursing costs	Length of patient stay	6,215,616
Catering costs	Number of meals	966,976
General facility costs	Length of patient stay	8,553,600
Total overhead costs		17,606,352

Procedure	A	B
No. of procedures	14,600	22,400
Administrative time per procedure (hours)	1	1·5
Length of patient stay per procedure (hours)	24	48
Average no. of meals required per patient	1	4

Required:

(a) Calculate the full cost per procedure using activity-based costing. (6 marks)

Examiners Report

This first question was a ten mark question covering activity-based costing. Part (a) covered the calculations, asking candidates to calculate the activity-based cost per procedure. The setting for the question was a private hospital providing two types of procedures to patients.

The overheads included costs such as nursing costs and general facility costs, the costs for which were driven by the length of patient stay. This question was not as well answered as previous activity based costing questions.

In the question, there were 14,600 of procedure A being performed by the hospital each year and 22,400 of procedure B. The length of patient stay for each procedure was 24 hours and 48 hours respectively.

An example of a common error being made as regards nursing costs was that candidates would take the nursing costs and divide them by 72 hours (24 + 48) without first multiplying the number of hours for each procedure by the number of those procedures being carried out.

Even more worryingly, another common error was to take the nursing costs and derive a cost per procedure for A by dividing the nursing costs by 24, then for B, by dividing the nursing costs by 48.

This made absolutely no sense at all. It was these kinds of fundamental errors that meant marks for this question were not as high as usual.

Part (b) asked candidates to advise the finance director whether activity-based costing should be introduced, making reference to the findings in part (a).

Candidates should have observed that the main components of the overhead costs were nursing and general facility costs, both of which were driven by patient hours. Therefore, if patient hours were to be used as the basis of absorbing the overheads rather than simply the number of procedures, a fairer allocation of overheads could be achieved without the time and effort involved in implementing activity based costing.

Only a handful of answers identified this key point. It is important that candidates learn to stand back and look at the big picture in questions at this level, a skill that is very much needed when moving on to the professional level papers.

Please note that where advice is asked for as to whether to implement something, a conclusion should be given.