

## Section B – TWO questions ONLY to be attempted

- 3 Bluefin School (Bluefin) is a school for 12 to 17-year-old pupils. It currently has 1,000 pupils attending drawn from its local area. The school is run by an executive group comprising the head of school and two deputy head teachers. This group reports to a board of governors who are part-time and selected from the local community and parents. The school is wholly funded by the government.

The school's ethos is 'to promote learning, citizenship and self-confidence among the pupils. This is developed from a consensus, led by the board of governors and the head of school and informed by the views of the pupils' parents.'

The school information systems are highly decentralised. Each department keeps its own records on a stand-alone PC using basic word processing and spreadsheet packages. The school's administrative department has a small network in its own offices with compatible applications and also a database and financial recording and reporting package for use in schools (provided by the government).

The school is broken down into 11 academic departments such as mathematics, science and history. Each department head must prepare information for reporting to the board by inputting and processing the data. They obtain some help from an administrator who visits each department to spend a few hours per week helping in the recording and preparation of the departmental information. The department heads have different approaches to reporting their performance, with some using average marks in the annual exams for each class and some using pass rates of the annual exams. Some department heads present graphs of their data while most use tables of figures.

The information is passed from each department to the school administration office on a memory stick (USB flash drive). The school administration office prints out the information for each department and adds it to a financial report creating a governors' pack of usually about 13 pages for the annual review board meeting. The financial report is a detailed income and expenditure statement for the period under review (usually a two page print-out from the reporting package). An example of one of the 11 departments' report is given in the Appendix.

The board of governors meets every quarter and reviews the governors' pack once a year. The board are concerned that the information that they are receiving is not meeting their needs and that there are a number of problems with the control and security of some of the data.

It has been suggested that the school should consider improving its information systems by installing a network across the school to link the departmental computers and the administration department. A single database would be created to store all the performance information. The computers would then be linked to the internet in order to facilitate data transfer to other schools in the region and to the government.

Appendix

Bluefin School

Mathematics department

Year 2010/2011

	Class	Average marks	
		Current yr	Previous yr
		%	%
Year 1	A	63	59
	B	60	61
	C	51	55
	D	47	44
Year 2	A	61	70
	B	58	62
	C	49	47
	D	45	43
Year 3	A	67	67
	B	61	57
	C	50	50
	D	42	41
Year 4	A	62	58
	B	59	59
	C	50	54
	D	46	47
Year 5	A	57	58
	B	51	49
	C	47	48
Year 6		54	53

**Notes:**

Each year contains pupils of the same age.

Annual national exams are set in years 4, 5 and 6.

Each year group is divided into different classes in order to ensure that classes do not exceed 35 pupils.

(Not all pupils take every subject each year.)

Average marks are for the annual examinations.

**Required:**

- (a) **With reference to the current situation at Bluefin School, discuss the controls and security procedures that are necessary for management information.** (9 marks)
- (b) **Using the limited information available, evaluate the usefulness of the pack that is provided to the board of governors.** (6 marks)
- (c) **Evaluate the improvements suggested to the information systems at Bluefin.** (5 marks)

**(20 marks)**