

FINANCIAL MANAGEMENT, SYSTEMS & TECHNIQUES

Certificate stage examination

4 June 2008

From 10.00am to 1.00pm
plus ten minutes reading time from 09.50am to 10.00am

Instructions to candidates

*There are **seven** questions on this question paper*

*Answer **six** questions in total*

***Both compulsory questions from Section A
Four of the five questions from Section B***

*The questions in Section A carry, in total, **40** marks
The questions in Section B each carry a total of **15** marks*

All workings should be shown. Where calculations are required using formulae, calculators may be used but steps in the workings must be shown. Calculations with no evidence of this (for example, using the scientific functions of calculators) will receive no credit. Programmable calculators are not permitted in the examinations room.

Formula sheets, statistical tables, graph paper and cash analysis paper are available from the invigilator, where applicable.

Where a question asks for a specific format or style, such as a letter, report or layout of accounts, marks will be awarded for presentation and written communication.

SECTION A (Compulsory – answer both questions)

1

You are a project accountant at Hillington Police Authority.

You have returned from two weeks leave and have three urgent items in your email inbox that need to be dealt with today.

1. Email from the Chief Constable's recently-appointed Personal Assistant dated yesterday:

"We received a Freedom of Information Act (FOI) request yesterday asking for the costs of hospitality, conference and travelling expenses for the Chief Constable over the past five years. I've not dealt with a FOI request before. Is it the same as the Data Protection Act?"

I have also been asked to draft a report on various aspects of computer crime. I understand that those who commit computer-related crimes can be divided into the following main categories:

- *Computer criminals;*
- *Information warriors;*
- *Hackers.*

Please can you briefly explain each category and state the basic motives behind the actions of hackers?"

2. Email from an Accounts Assistant dated today:

"I have just received a phone call from someone at Red Ltd. He was very annoyed. He is chasing an invoice that has been outstanding for a long while and said something about making a claim under a Late Payments Act.

The details are as follows:

Invoice amount = £22,350, number of days outstanding as of today = 150 days

Please could you let me know what to do?"

3. Email from your manager:

"You may recall before you went on holiday that we were carrying out some analysis on the new call-handling system that we implemented last year. The computerised system has now produced some information showing the duration (in minutes) of all emergency calls received since the implementation, which we need to do some further analysis on.

A colleague has produced some preliminary data as follows:

- *Data is normally distributed*
- *$N = 21,353$, $\sum x = 153,741.6$, $\sum(x-\mu)^2 = 350,243$*

Could you start by calculating the mean and standard deviation (and explain what they both mean)?

Then, based on the data, please calculate the proportion of emergency calls that took less than five minutes and the proportion of emergency calls that took more than 10 minutes. Thanks."

• **Requirement for question 1**

- (a) Prepare a response for the Chief Constable's Personal Assistant.
- (i) Briefly explain what the main differences are between the Freedom of Information Act (FOI) 2000 and the Data Protection Act 1998. 2
 - (ii) Briefly explain each of the three categories of computer-related crime. 3
 - (iii) State the basic motives behind the actions of hackers. 4
- (b) In preparation for a response to the Accounts Assistant, calculate the penalty interest and compensation that could be claimed (as of today) under the Late Payment of Commercial Debts (Interest) Act 1998 (as amended by the Late Payment of Commercial Debts Regulations 2002). Assume a bank base rate over the period of 5.2%. 3
- (c) Prepare a response for your manager.
- (i) Calculate the mean and standard deviation with the information given. 2
 - (ii) Explain the terms mean and standard deviation. 2
 - (iii) Using the above information calculate the proportion of emergency calls with a duration of:
 - less than 5 minutes,
 - more than 10 minutes. 4

(20)

2

Streamside NHS Trust has gone into partnership with Brook City Council for the provision of equipment for people with social and health care needs. A Joint Equipment Store (JES) has been set up (with Streamside as the lead partner), which provides a range of equipment including wheelchairs.

The Manager of the store is concerned about the increasing demand for equipment combined with the lack of storage space. Also, following a benchmarking exercise with similar joint ventures, it would appear that costs of storage at JES are higher than comparable organisations.

It has been suggested that a pilot scheme is set up to investigate the use of the Economic Order Quantity (EOQ) method of ordering equipment for next year to try to address the issues relating to storage space and cost. It has been decided to use the purchase of standard wheelchairs for the pilot.

Data has been extracted from the computerised stores system for the use of new standard wheelchairs purchased over the past three years.

Current year	Last year	Two years ago
260	226	199

Based on demographic data it is assumed that the number of new wheelchairs required next year will increase at twice the percentage of increase from last year to the current year. There is a lead time of 10 working days for delivery of wheelchairs (assume 250 working days a year). Stock-holding costs have been calculated as follows: £8 per 10 wheelchairs, per annum.

Each order costs £30 (regardless of quantity).

• **Requirement for question 2**

- (a) Explain what the EOQ model aims to do and its main assumptions. 4
- (b) Calculate the EOQ for ordering wheelchairs for next year at JES and total associated ordering and holding costs. 6
- (c) Describe any limitations of using the EOQ model in this instance. 3
- (d) If the re-order level model is going to be used next year, calculate at what level of stock new wheelchairs would need to be ordered (assume no safety stock). 1
- (e) An alternative stock model is the Just-In-Time (JIT) management system. Briefly explain what is meant by JIT. 2
- (f) For any public sector organisation, identify one item of stock that would be suitable for the JIT method with a reason and; 2
- (g) One item of stock that would not be suitable for the JIT method, with a reason. 2

(20)

SECTION B (Answer four from five questions)

3

A central government target is for 12.5% of household waste to be recycled. A survey has been carried out of 100 local authorities nationally to determine the progress towards achieving this target.

Of particular interest is whether there are any geographical differences in the % of household waste that is recycled. The results of the survey are shown below.

	North	South	East	West	Central
No. of local authorities that achieved target	8	20	5	8	15
No. of local authorities below target	10	11	7	4	12

• **Requirement for question 3**

- (a) Calculate whether there is a significant relationship between geographical area and achievement of the recycling target using a Chi-squared test (at a 5% level of significance). 13
- (b) Explain the difference between a Type I and a Type II error in hypothesis testing. 2

(15)

4

A central government defence department is embarking on a project for the procurement of a number of submarines. A similar exercise several years ago resulted in a number of problems being experienced, including overspends and missed deadlines.

It is hoped that the Government Gateway project review process might help in the effective management and control of the project. You have been asked to provide a briefing note to the Management Team on the Government Gateway project review process.

- **Requirement for question 4**

(a) Prepare a briefing note which includes the following:

- An explanation of the Gateway review process
- Who would carry out the reviews
- The aims of the reviews
- What the reviewers do
- The length of the reviews
- What assurances are provided by the process.

10

(b) Once the submarines have been procured, explain why it is necessary to be proactive in the management of these assets.

5

(15)

5

Hill District Council is compiling a corporate risk register. An extract of the risk register is shown below.

Extract from corporate risk register for Hill District Council.

Risk ref	Description of risk	Planned treatment of risk
A	Risk of fire within library buildings	
B	Risk of theft of data projectors & computer equipment in schools	
C	Risk of public tripping accidents on pavements	
D	Risk of budget overspends due to increasing numbers of older people	

• **Requirement for question 5**

- (a) For each risk shown on the risk register, state one appropriate method of treatment for that risk. 4
- (b) Identify **six** other headings (apart from the ones above) that should be included on a risk register. 3
- (c) The risk culture of an organisation is based on its attitude to risk. Identify and explain the four main organisational attitudes to risk. 8

(15)

6

You are a trainee accountant at Bushshire County Council. You have received two emails from your manager.

1. *"The Capital Accountant has just phoned in sick and is due to do a presentation tomorrow to elected members on the Prudential Code. Please could you put together some notes on: what the Prudential Code is, the key objectives, and examples of three prudential indicators that could be used? Thanks".*

2. *"I have to do a briefing for management team which recaps on e-government and its main aims and explains what is meant by transformational government. Please could you draft some notes for me? Thanks".*

• **Requirement for question 6**

(a) In preparation for a response to your manager's first email:

- (i) State what is the Prudential Code. 2
- (ii) State the key objectives of the Prudential Code. 3
- (iii) Describe three examples of prudential indicators that could be used. 3

(b) In preparation for a response to your manager's second email:

- (i) Define the term e-government. 1
- (ii) Describe the three main aims of e-government (as set out in the 1999 Modernising Government White Paper). 3
- (iii) Describe the three main transformations required by transformational government. 3

(15)

7

Brookingham NHS Trust has signed a deal with an investment consortium that will design, build and operate a new private-finance hospital in the city. This is the first Public Private Partnership (PPP) that the NHS Trust has embarked on.

- **Requirement for question 7**

- (a) Describe what is meant by a Public Private Partnership (PPP) and the three categories of PPPs. 4
- (b) Identify the main reasons for entering into PPPs. 4
- (c) Identify the responsibilities of Government and the public sector within a PPP. 4
- (d) Identify the benefits that the public sector brings to a PPP. 3

(15)
