

IMIS HIGHER DIPLOMA QUALIFICATIONS

Information Systems Strategy (H2)

Tuesday 3rd December 2013 10:00hrs – 13:00hrs

DURATION: 3 HOURS

MARKING SCHEME

Candidates should answer ALL the questions in Part A and THREE of the five questions in Part B. Part A carries 40% of the marks available and Part B carries 60%. Candidates should allocate their time accordingly.

No reference material of any kind may be taken into the examination.

[Turn over]

Section A. Answer **ALL** questions in this section. Each question is worth **5 marks**.

A1

a) Draw the Information Systems Strategy Triangle

(1 mark)

b) Describe the relationship between the three strategies

(4 marks)

a) *Fully correct triangle 1 mark*

b) *Business strategy drives organisational and information strategies. The three strategies should be balanced. IS strategy can affect and be affected by changes in both business and organisational strategy. All three strategies need constant adjustment. 1 mark per issue*

LO1 , AC1.6

T1 Ch 1

A2

Briefly describe **FIVE** reasons for managing knowledge in the workplace for competitive advantage.

(5 marks)

1 mark for each, up to five.

Sustainable competitive advantage

Sharing best practice
Downsizing and loss/retention
Embedded knowledge – smart products
Rapid change
Globalisation
Managing overload

LO2, AC2.2
T1 Ch 12

A3

Describe briefly **THREE** of the characteristics of data required by management

(5 marks)

Data scope – departmental to enterprise-wide
Time span – short to long-term
Detail – specific to summarised
Source – internal to external
Structure – structured to unstructured
Purpose – daily operations to decision making
Up to two marks for each characteristic, maximum five

LO3
AC3.2

T2, Ch9

A4

Show the **SEVEN** steps in information systems planning and how they are related.

(5 marks)

Corporate Mission
IS Mission
IS vision
IS strategic plan
IS tactical plans
Plan for Operations
Budget

5 marks for all seven, 4 for six, 3 for five, 2 for four, 1 for three

LO4
AC4.3

T2, Ch11

A5

Briefly describe **THREE of** aspects of the potential business benefits of improving the IS system.

(5 marks)

Return on investment
Cost/benefit analysis
Intangible benefits – improved customer service, better decision making, enjoyable workplace
Support for new business initiative

Up to 2 marks for each issue up to 5

LO5, AC5.2

T1 , Ch10, Ch 11, T2 Ch 11

A6

Briefly describe the relationship between data, information and knowledge.

(5 marks)

Data – simple observation, easy capture, structure, transferable. Compact, quantifiable
Information – data endowed with relevance and purpose – requires unit of analysis, consensus on meaning, human mediation, often garbled in transmission
Knowledge – valuable information from human mind – reflection, synthesis, content. Hard to capture electronically, hard to structure, often tacit, hard to transfer, highly personal to source

Up to two marks for each term, with a maximum of 5

*LO2, AC 2.1
T1, Ch12*

A7

Briefly describe **FIVE** ways to gain competitive advantage.

(5 marks)

Reduce costs
Raise barriers to market entrants
Establish high switching costs
Create new products/services
Differentiate products/services
Enhance products/services
Establish alliances
Lock in suppliers/buyers

1 mark for each method, up to five

LO3, AC3.3

T2, Ch 2

A8

Briefly describe the **FIVE** major goals of information security.

(5 marks)

Reduce risk of systems and organisations ceasing operations

Maintain information confidentiality

Ensure the integrity and reliability of data resources

Ensure the uninterrupted availability of data resources and online operations

Ensure compliance with policies and laws regarding security and privacy

1 mark each

LO2, AC2.4

T2 Ch 13

Section B

Answer **any THREE** of the five questions in this section

B9

Explain how supply chain management can benefit a manufacturing business. Your answer can refer to any manufacturer, such as a car or food producer, and should consider the general value chain and other strategic models.

(20 marks)

Value chain can be used for internal chain, with specific mention of inbound, outbound logistics and purchasing.

Resource analysis, 5 forces, PESTLE, SWOT, JIT may also be mentioned.

Link of customers and suppliers with single network for optimising low costs and opportunities for all. Minimising guesswork. Collaboration of firms. Limiting collaboration vs trust. Reengineering of operations to collaborate.

Up to three marks for each point made or extra model reference (besides value chain),

LO1, AC1.2, AC1.3

W3, T1 Intro, Ch2,

B10

How can implementing Total Quality Management help manage the Project Triangle?

(20 marks)

Aspects for TQM help:

- *leadership - leaders establish unity of purpose, direction and the internal environment of the organisation. They create the environment in which people can become fully involved in achieving the organisation's objectives*
- *involvement of people - people at all levels are the essence of an organisation and their full involvement enables their abilities to be used for the organisation's benefit*
- *process approach - a desired result is achieved more efficiently when related resources and activities are managed as a process*
- *system approach to management - identifying, understanding and managing a system of interrelated processes for a given objective contributes to the effectiveness and efficiency of the organisation*
- *continual improvement - continual improvement is a permanent objective of an organisation*
- *factual approach to decision making - effective decisions are based on the logical and intuitive analysis of data and information*
- *mutually beneficial supplier relationships - mutually beneficial relationships between the organisation and its suppliers enhance the ability of both organisations to create value*

Plus any other relevant points in balancing the triangle. Up to four marks for each point made, for up to 5 points

LO2, AC2.5

W6

B11

- a) Managers plan and control. Describe how the mission statement relates to tactical operations.

(8 marks)

b) Describe the three main ingredients of planning, and how control is achieved here.

(12 marks)

a) *Mission = corporate vision, long term plans (2 marks). Corporate strategy = strategic goals and mid term plans (2 marks). Tactical operations on short term planning with tactical objectives (2 marks). Cascade down and build up (2 marks).*

b) *Budgeting, scheduling and resource allocation. Up to 4 marks each*

LO3, AC3.1

T2, Ch 9

B12

The IS department supports the organisation. Describe **SEVEN** of the core activities which the IS department delivers.

(20 marks)

Up to three marks for each activity – there are 13 listed:

Anticipating new technologies

Participating in setting strategic direction

Innovating current processes

Developing and maintaining systems

Managing supplier relationships

Establishing architecture platforms and standards

Promoting enterprise security

Planning for business continuity

Managing data, information and knowledge

Managing internet and network services

Managing human resources

Operating data centre

Providing general support

LO4, AC4.1

T1, Ch 8

B13

a) Using a work design framework, show how IT can link organisational strategy with IS decisions.

(6 marks)

b) Discuss **SEVEN** IT methods which can be used to facilitate communication and collaboration in the workplace.

(14 marks)

a) *Diagram for preference:*

what work to be done

what is best way to do the work

who will be doing the work

where will it be done

how can IT enhance the effectiveness of the people doing this work

1 mark for each question and one for attempt at a diagram

b) *up to 2 marks for each of 7 short descriptions (more than just the title). Consider others not on list where relevant.*

Email

Intranet

Instant messaging

VoIP

Video teleconference

Unified Communications (UC)

RSS (Web feeds)

VPN

File transfer

Social networking

Virtual world

Blogs

Wiki

groupware

LO5, AC5.1

T1, Ch 4

End of Paper