IMIS DIPLOMA QUALIFICATIONS

Information Systems in Organisations (D5)

Friday 6th June 2014 14:00hrs – 17:00hrs

DURATION: 3 HOURS

<mark>**SOLUTIONS & MARKING SCHEME**</mark>

Question A1
Business Performance Management Cycle consists of **FOUR** stages. Using an **example** define the **FOUR** stages. LO1 AC1.3 P 14   (5 marks)

The Four stages are:
- Decide upon desired performance levels.
- Determine how to attain the performance levels.
- Periodically assess where the organisation stands with respect to its goals, objectives, and measures.
- Adjust performance and/or goals.

1 mark per stage + 1 mark for an example

Question A2
Describe briefly **TWO** reasons why people need IT support.
LO1 AC1.4 P55   (5 marks)

A simple response would be along the lines of IT is helping to:
- Find and analyse information.
- Evaluate decisions alternatives.
- Communicate and collaborate with employees and business partners.
- Work is done rapidly.
- Relatively inexpensive.
- Cheaper in the long run.
- Helps understanding growing system complexity.

3 marks per reason to a max of 5 marks

Question A3
Describe **THREE** reasons why Human Resources would use the Web for recruitment. LO2 AC2.2 P 353   (5 marks)

A simple response would be along the lines of:
- There is a wider audience of prospective employees.
- Easier for prospective employees to access information
- Cheaper as companies to not have to prepare and post applications.
- Faster as companies do not have to prepare and post applications.

- Cheaper as prospective employees do not have to post applications.
- Storage of applications does not take up any 'hard' storage space.
- Easier to find the application "form"
- Prospective employees can be forwarded to appropriate members of the company.
- Etc.

2 marks per pointer to a max of 5 marks

Question A4
Using an **example** describe why Management Support System tools (MSS) are so important to aid managers in decision making. LO3 AC3.2 P 468   (5 marks)

MSS tools enable managers to:
Find, filter, and interpret information to identify potential problems or opportunities and then decide what to do with them.
3 marks for a constructive response + 2 marks for an example.

Question A5
Describe the **TWO** common types of portals available to Internet users: Mobile Portals, and Voice Portals. LO4 AC4.1 P 255   (5 marks)

Mobile Portals are where a user can access the Internet for whatever reason and receive a response. For example a sport results, weather report, etc.
Voice Portals are frequently used where a user wishes to receive a reminder of an event. For example a doctor's appointment.
3 marks for a constructive response + 1 mark for an example to a max of 5 marks

Question A6
Your company is considering connecting the IT system to the Internet. Describe **THREE** costs that need to be taken into considerations. LO4 AC4.2 P 641 (on-line contents – www.wiley.com.go/global/turban)   (5 marks)

Any of the following are acceptable:
- Purchasing of the hardware.
- Purchasing of the software.
- Installation costs
- Additional staff costs & training
- Running costs
- Maintenance and servicing costs.
- Etc.

2 marks for a cost to a max of 5 marks

Question A7
Network security measures involve three layers: Perimeter Security, Authentication, and Authorisation.
Describe **EACH** of these terms. LO 5 AC 5.3 P 174   (5 marks)

Perimeter Security is the network level of security, such as virus scanning, firewalls, etc.

Authentication is the proof of identity, such as username, password, to
biometric, etc.
Authorisation is the permission based on identity such as user group permissions,
enterprise directories, etc.
2 marks for a description to a max of 5 marks

Question A8
Define Inter-Organisational Systems (IOS) and describe **TWO** reasons why they are
used. LO6 AC6.4 P48   (5 marks)

The main obvious reason is to for efficient process of data between different
organisations.
The second reason is the support for to collaborate and communications between
different organisations.
1 mark for the definition
2*2 marks for a description

SECTION B
Case information:
Travelwithus is a traditional travel company with many branch offices that have direct computer links with various hotel and airlines. They propose to close the majority of the agencies and restart their business as an online business. The company will open a call centre for any queries.

Question B9
As the Financial Director of Travelwithus you have asked to produce a report identifying the resources that Travelwithus will need to purchase/employ to set up the online business. LO1 AC6.2 P352

Produce a list of the resources you think Travelwithus will need, explaining why they are required. The resources are to be classified under the following headings:
- Hardware   (7 marks)
- Software   (7 marks)
- Technical staff/support   (6 marks)

Answer
Hardware - Computers etc, modems etc, printers, routers, cables, firewall, etc
4 marks for the list contents and 3 marks for the explanation

Software - OS, appropriate office software, network system, virus checkers, etc
4 marks for the list contents and 3 marks for the explanation

Technical staff/support - IT technician, trainers, mangers, etc
3 marks for the list contents and 3 marks for the explanation
In all cases pro rata for a brief/short/incomplete response.

Question B10
A primary mission of Travelwithus accounting/finance functional area is to manage money flows into, within, and out of Travelwithus. To enable this, Travelwithus is considering using a Transaction Processing System. LO2 AC2.1, AC2.2 P332

a) Describe the term Transaction Processing Systems.   (3 marks)
b) There are **THREE** processes with a Transaction Processing Systems. Describe **EACH** of them.
                                                                              (6 marks)
c) Describe **FOUR** advantages Travelwithus will gain when using a Transaction Processing System.   (11 marks)

Answer
a) Transaction processing systems is an IS that processes an organisation's basic transactions such as purchasing, billing, and payroll.
3 marks for a description

b) The THREE processes are:
- Input – where the data is inputted
- Process – where the inputted data is processed and results are produced, and

- Output – where the results are outputted, either hard or soft copies.

3*2 marks for a description

c) Any of the following FOUR are acceptable:
- Large amounts of data are processed so there should be no overloading of the system
- Processing is performed on a regular basis depending upon the importance of the work, and the availability of spare processing capacity
- Input and output are data structured enabling the data being inputted is always available on data input forms
- There is low level computation complexity as the data will be 'unsophisticated'
- A high level of accuracy, data integrity, and security is needed guaranteeing correct output
- Inquiry processing capacity is essential ensuring that 'anybody' authorised can access the relevant data

4*3 marks for a description to a max of 11 marks

Question B11

The Financial Director of Travelwithus was frustrated in the past, when the information she required was not readily available to make the relevant decisions. At times wrong decisions were made. When the new IT system is installed it is hoped that the Financial Director will not make wrong decision. LO3 AC3.2 P449

Describe **FOUR** reasons why the Financial Director was making wrong decision, and how the new IT system will overcome this.   (20 marks)

Answer

Any of the FOUR are acceptable:

Receiving information too late – as the processing is done faster the information will be more timely

The information was at the wrong level of detail – the FD can create his own queries

The information received was incoherent – by being produced by the IT system it will be in a format that the FD requires

Not being able to co-ordinate information from across the company – by all data being centralised the information will be co-ordinated and relevant

By the time the FD received the information it was out of date and any responses could be too late – any actions to be taken can be done in real-time

4*(2 marks for a reason and 3 marks for how the IT system will overcome this)

Question B12

The Personnel Manager of Travelwithus is worried about possible complaints from their staff that will be using the new IT system. He has asked to you to produce a report on the possible negative impact on the staff and how this can be overcome, so as not to have staff off due to sickness and other reasons. LO4 AC4.2 P576

Describe **FOUR** possible negative impacts on the staff and how the Personnel Manager can overcome them.   (20 marks)

Answer

Any of the FOUR are acceptable:

Dehumanising of the job to the point that they become 'robots' – they are just entering data into the system without any thought – try to reduce the amount of boring and repetitious actions (tea breaks every 15 minutes, scanning of documents, bar code readers)

Job stress – so many key strokes per minute scenario – when there is work to be done do it, but in slack periods 'rest' and do other tasks

Repetitious Strain Injury (RSI) – where repetitious tasks cause pain in arms, legs eyes, etc – try to reduce the amount of boring and repetitious actions (tea breaks every 15 minutes, scanning of documents, bar code readers)

Ergonomics – where the work posture etc is detrimental to the worker – 'brighten' up the office environment, music playing, comfortable chairs etc, antiglare screen, etc

Etc

4*(2 marks for a negative impact and 3 marks for how it is overcome)

Question B13

The Financial Director of Travelwithus is also concerned about the unintentio—
threats that may affect the new IT system. He is aware of the need for virus checker,
fire walls, etc. but would like you as the Personnel Manager to look into the question
of unintentional threats and propose ways of overcoming them. LO 5 AC5.1 AC5.2
P163

Describe **FOUR** possible unintentional threats and how the Financial Director can
overcome them. (20 marks)

Answer
The most common are:
Human errors – this can vary from not testing programs to incorrectly inputting data
to leaving passwords lying around – they can be overcome by testing the programs
completely, by various people, etc, validating data when entering onto the data input
forms and inputting into the system, and ensuring that passwords are kept
private/changed frequently
Environmental hazards – earthquakes, storms, defective air conditioning, etc –
ensuring that copies of backups are kept off-site, mainframes are kept off ground
floor (flooding) are on ground floor (earthquakes), etc
Computer system failures – poor quality hardware (cheapest), poor maintenance, out
of date software, not re-registering software such as virus checkers, etc – buying
cost effective hardware, servicing of machines, re-registering software such as virus
checkers, etc
Poor training – lack of training creating lack of knowledge on how to use the
machine, etc – proper, planned and up to date training
Etc
4*(2 marks for an unintentional threat and 3 marks for how it is overcome)