GCE

ICT

Mark Scheme for January 2011

There are 100 marks available for this test. They are allocated as follows:

- Tasks 2 and 3   30
- Section A of the test paper   50
- Section B of the test paper   20

Task 2

1 mark each for boxes labelled
- Sales & Marketing Director
- Admin(istration) <u>staff/department</u>
- (Garden) centre manager
- Stock maintenance <u>staff</u>
- Stock maintenance <u>manager</u>
- Centre admin(istration) assistant*.

plus labelled arrows to show the following information flows (1 mark each) and methods (1 mark each)
Max 15 marks.

Note:
- Arrows should only be awarded points if they are drawn to and from the correct boxes.
- Marks may be awarded for unconventional diagrams provided they isolate the senders and receivers of information.
- Do not award marks for flow diagrams or series of text boxes linked by arrows.
- Marks cannot be awarded for 'How' if the information is not identified/is incorrect but can be awarded if information is essentially correct but vague or incomplete.
- Labels should not be awarded marks if they are contained within the description of a process.
- If lines cross, mark labels as long as it is clear where each arrow goes
- Marks should only be awarded for labels that can be unambiguously linked to a single arrow.

| Sales & Marketing Director | --- details of what to sell --- LAN ---> | Admin(istration) staff/department |

(set of) stock sheets – post

order – email

| (Garden) centre manager | --- final stock sheet --- hand ---> | Centre admin(istration) assistant * |

stock sheets – hand

stock sheets with number required – hand

| Stock maintenance staff | --- completed stock sheets --- hand ---> | Stock maintenance manager |
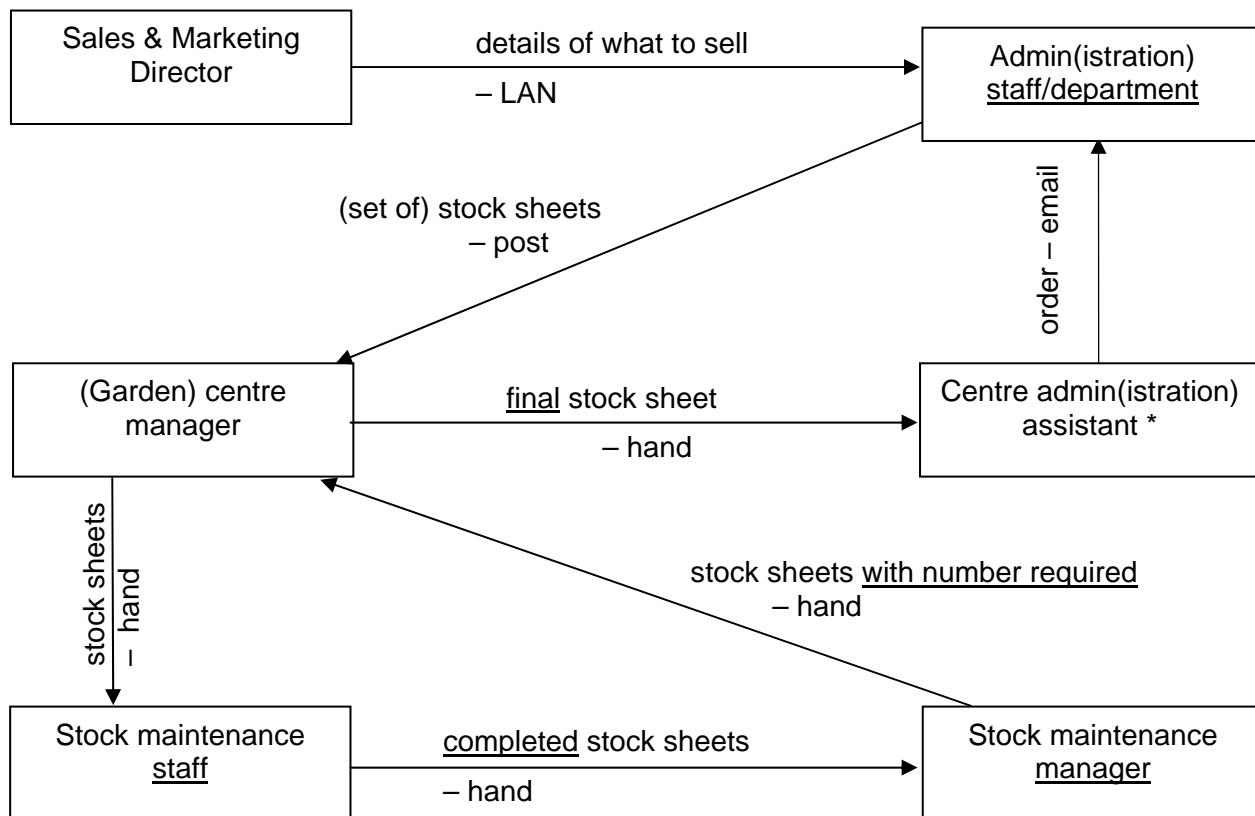
[15]

* Accept either Centre admin(istration) or Admin(istration) assistant – must differentiate from Head office Admin(istration) staff/department

Task 3

AO4 is assessed through this task.

AO4 Marks	Guidance
3	A strength and a weakness in the method(s) used identified or suggestions for improving own performance.
2	A strength <u>or</u> a weakness in the method(s) used identified.
1	Some comment made on the method(s) used.

The quality of written communication is assessed through this task.
Tiered response based on:

Coded	Marks	Guidance
H	9-12	Candidates will show a clear understanding of the task and include **detailed** explanations of both positive and negative impacts of computerised control and management systems on both the company and staff. Examples are clearly applied to Progress Plants and its staff. The information will be presented in a structured and coherent form. There will be few if any errors in spelling, grammar and punctuation. Any technical terms will be used appropriately and correctly.
M	5-8	Candidates will show some understanding of the task and may include **some** explanations of positive and negative impacts of computerised control and management systems on the company and staff. Their evaluation may be one-sided Some examples are applied to Progress Plants and its staff. The information will be presented in a structured format. There may be occasional errors in spelling, grammar and punctuation. Any technical terms will be mainly correct.
L	0-4	Candidates will demonstrate a limited understanding of the task. Information may be a list of points, with little or no explanations or application to Progress Plants. Information will be poorly expressed and there will be limited, if any, use of technical terms. Errors of grammar, punctuation and spelling may be intrusive.

To include consideration of:

- positive impacts on Progress Plants
  - higher yield due to better growing conditions
  - more consistent quality due to more controlled environment
  - reduced wage bill as fewer nursery staff needed
  - not affected by variations in the British weather

- negative impacts on Progress Plants
  - high initial cost of greenhouses and equipment
  - will need to train nursery staff to use the system, which will cost money
  - dependence on system, if it fails, may not have enough staff to use traditional methods
  - will need staff to maintain the system or buy in maintenance both of which cost money
  - will need good quality control procedures or errors may occur which would be costly

- positive impact on staff
  - better working environment, rather than outdoors in all weathers
  - opportunity to learn new skills – some may be trained to maintain the system

- negative impact on staff.
  - nursery staff may lose their job, as fewer staff needed to tend plants
  - may feel de-skilled as there will be no decisions to make that require their expertise.

Annotation:

- CS – response has been applied to case study
- P – identifies points
- E – identifies expansions/explanations
- + – identifies positive impact
- – identifies negative impact.

[15]

Section A

1   Any **one** of
- administration (1) plus **four** of
    − producing and sending correspondence
    − dealing with correspondence received
    − check delivery notes against invoices
    − pass received invoices to accounts staff
    − keep track of general office supplies
    − place orders for office supplies
    − arranges visit from ICT technician
    − send stock sheets to garden centre managers <u>weekly</u>
    − create purchase order
    − post purchase order to supplier/wholesaler

- accounts (1) plus **four** of
    − <u>keep</u> records of all financial transactions OR **one** of
        o <u>keep</u> records of income from sales for each garden centre
        o <u>keep</u> records of income from mail order
        o <u>keep</u> records of payments made
        o <u>keep</u> records of staff wages
    − <u>make</u> payments using online banking facility – accept specific example, e.g. staff wages
    − <u>produce</u> monthly and annual accounts
    − <u>generate</u> VAT returns
    − <u>arrange</u> for VAT to be paid.

1 mark for job function plus 1 mark per point to max 4 for matching tasks   **[5]**

2   Any **five** of
- reports to centre manager
- carries out all office procedures
- keeps records of staff hours
- keeps account of money taken through the tills
- emails details (of staff hours and money taken) to (appropriate staff) in head office <u>at the end of each week</u>
- uses templates to produce standard letters, orders and financial summaries
- counts money taken from tills <u>at intervals during day</u>
- <u>at end of day</u>, checks (total) takings against money counted <u>and</u> card payments
- records totals <u>and</u> discrepancies on spreadsheet
- enters details of goods required into an order template
- emails order to administration staff at head office.

1 mark per point to max of 5   **[5]**

3 Any **two** of
- Sales and Marketing Director is responsible for garden centres
- Centre managers report to Sales and Marketing Director
- Sales and Marketing Director reports to Managing Director.

1 mark per point to max of 2 **[2]**

4 **(a)** **(i)**
- product code
- quantity

1 mark each **[2]**

(ii) keyboard/keyed in **[1]**

(b) A description that includes any **two** of
- (mail order clerk) enters customer number
- software searches customer database
- customer details inserted automatically.

1 mark per point to max of 2 **[2]**

(c) A description that includes any **four** of
- <u>look up</u> description/availability/unit price (using product code)
- unit price <u>multiplied</u> by quantity (to give line total)
- (line) totals <u>added</u> to give goods total (as each item entered)
- delivery charge added to goods total
- cheque value compared with receipt total
- receipt total <u>subtracted</u> from cheque value.

1 mark per point to max of 4 **[4]**

(d) (mail order/detailed) receipt (1) plus a description that includes:
printed on multipart stationery (1) that includes company/contact details of Progress Plants (1), order details (1), payment details (1) and a note explaining how goods are despatched (1).

1 mark per point to max of 3
Do **not** credit answers that simply list individual items shown in Appendix 3 of G041/IC. **[4]**

6

5   **(i)**   workstation/computer (NB: must be singular) (1st) linked to head office LAN (1) with barcode reader attached (1)

Max 2   **[2]**

(ii)   Any **one** of
- stock control software (1st) stored on warehouse computer (1) separate screens for incoming and outgoing goods (1)
- access to word processing/spreadsheet/database/SOP (1st) stored on server (1)

Up to 2 marks per point to max of 2.   **[2]**

(iii)   Any **one** of
- product code (1st) read from barcode (1)
- quantity (1st) entered via keyboard (1).

Up to 2 marks per point to max of 2   **[2]**

(iv)   Any **one** of
- quantity added to number_in_stock field (1st) when goods arrive (1)
- quantity deducted from number_in_stock field (1st) when goods removed (1)
- value of number_in_stock field compared (1st) with pre-set reorder level (1)
- item added to reorder log (1st) if number in stock < reorder level (1)
- item record located in stock database (1st) using product number (1).

Up to 2 marks per point to max of 2   **[2]**

(v)   Any **one** of
- low stock warning (1st) displayed <u>on screen</u> (1)
- reorder log (1st) printed twice a week / by warehouse manager (1).

Up to 2 marks per point to max of 2   **[2]**

6 **(a)** Any **one** possible strength identified and explained eg
- customer number pre-printed on existing customer order form (1) so customer does not need to remember/find it when completing an order (1) less chance of incorrect customer numbers (1)
- only customer number needs to be entered for existing customers (1) as customer details stored in database (1)
- wastage of catalogues reduced (1) because only sent to existing customers and those who respond to advertisements(1).

Up to 2 marks each to max of 2 **[2]**

(b) Any **one** possible weakness identified and explained eg
- postal charges may be expensive (1) if catalogues are heavy (1)
- may cause delays in processing orders (1) because orders may be lost in post (1)
- order forms are handwritten and entered by mail order clerk (1) may cause input errors if handwriting difficult to read (1)
- customers may overpay if goods not available (1) because they cannot check availability before placing an order (1).

Up to 2 marks each to max of 2 **[2]**

(c) **(i)** Any **one** possible improvement suggested and explained eg
- set up a website with an online catalogue (1) so that customers can order and pay for goods online (1).

Up to 2 marks each to max of 2 **[2]**

(ii) Any **one** possible benefit suggested and explained. Must be linked to the improvement in 6 (c) (i) eg
- customers do not have to wait for a catalogue to arrive by post (1) so they can place orders immediately (1)
- no reliance on post to send orders to Progress Plants (1) so orders can be processed more quickly (1)
- no handwritten order forms to input (1) less chance of errors in orders (1)
- increased audience for catalogue and number of potential customers (1) as anyone with internet access can view it (1) (Do not accept answers that suggest possibility of worldwide sales.)
- catalogue can be updated at any time (1) no need to wait for next season's catalogue to be printed (1)
- stock availability is known at time of order (1) reduces problems with over payment/customer disappointment (1).

Up to 2 marks each to max of 2 **[2]**

(iii) Any **one** possible disadvantage for Progress Plants suggested and explained. Must be linked to the improvement in 6 (c) (i) eg
- cost of setting up and maintaining a website (1) because will need to pay someone to design it (1) will need to employ someone to maintain it/need to pay for training of existing staff to maintain it (1)
- a secure server will be needed (1st) to prevent hacking /viruses (1)
- may lose some existing customers (1st) because they don't have internet access/don't have credit/debit card/are concerned about online fraud (1)

Up to 2 marks each to max of 2 **[2]**

7 **(a)** Data Protection Act/DPA (1998) **[1]**

(b) A description that includes any **four** of
- the name and address of the person(s) within Progress Plants identified as the data controller (1)
- a description of the data to be processed (1)
- a description of the purpose of processing the data (1)
- details of anyone the data may be disclosed to (1)
- details of any countries outside the EU that the data may be transferred to (1)
- details of the security measures they will take to protect the data (1).

Mark per point to max of 4 **[4]**

Section B

8   **(a)**   an organisation that is funded/managed/controlled (1) by the government (1)
             through taxes (1)   **[2]**

        (b)   Any **two** recognisable and distinctive public services organisation such as:
             • hospitals / NHS
             • libraries
             • emergency services (police/fire brigade/ambulance).

             Do not accept dentists/physiotherapists or similar
             1 mark each to max 2   **[2]**

        (c)   Any **one** type of commercial organisation identified and services described **eg**
             • Banks/building societies (1st)
                − provide financial services (1)
                − hold accounts (1)
                − lend money (1)
                − provide mortgages (1)
             • Shops (1st)
                − provide retail services (1)
                − sell goods to general public (1)
                − display goods for sale (1)
                − provide delivery services (1)
             • Gas/electricity/water company (1st)
                − provide utility service (1)
                − buy from suppliers (1)
                − maintain supplies (1)
                − monitor use (1)
                − charge for amount used (1)
             • Employment agencies (1st)
                − provide business services (1)
                − to recruit staff (1)
                − provide temporary staff (1).

             Up to 3 marks each to max of 3   **[3]**

9   **(a)**   database software   **[1]**

        (b)   Employee/ID number (assigned on joining)   **[1]**

        (c)   Any **four** relevant items pertaining to HR such as
                  - position/job role/department
                  - tax ref/NI number
                  - hourly rate
                  - pension scheme status
                  - emergency/contact details
                  - date of birth (do not accept age)
                  - sex/gender
                  - nationality/ethnicity
                  - CRB check
                  - joining date (do not accept how long worked)
                  - disciplinary action
                  - attendance figures/days absent
                  - reason for absence
                  - courses attended/qualifications.

                  1 mark per point to max of 4   **[4]**

        (d)   eg application form/cv/CRB check/P45 (**not** P60)   **[1]**

        (e)   Any relevant example (1) plus explanation (2)
                  eg
                  - incorrect joining date (1) may lead to incorrect calculation of length of service
                    (1) which could result in employee losing out on bonuses/pay rises (1)
                  - incorrect attendance figure (1) may be reflected in a reference for another
                    job/promotion (1) which could result in employee not getting the job/promotion
                    (1).
                                                                                                 [3]

10 Any **three** of
        - responsible for the movement of goods from factory to warehouse / wholesaler /
          retailer
        - booking services of road hauliers / rail freight
        - providing details of pick up and delivery points
        - providing details of when delivery required or frequency of regular deliveries
        - providing details of type of goods being transported
        - organisation of companies own lorry fleet
        - scheduling drivers and lorries to make best use of them
        - ensuring right goods get to the right place at the right time.

        1 marks each to max of 3   **[3]**