NOTE:
These are sample questions, with marking guidelines, for each of the BCS Diploma certificate modules. Each sample question has been written to help candidates prepare for the module examination by providing an example of the general approach adopted by these questions. Therefore, the total marks assigned to the sample questions will vary depending upon the certificate module.

The BCS Examination Providers are accredited to set the examinations for the certificate modules and part of the accreditation process requires Providers to demonstrate their ability to set rigorous examination papers. The sample questions are not intended for use by Examination Providers as a basis for setting their own examination papers and should not be viewed as a template for these examinations.
MODELLING BUSINESS PROCESSES

Organisational process map question

Scenario 1

Clarity Print Ltd. is a printing organisation providing high quality documentation to PR organisations and internal marketing functions across the UK. The organisation works with major companies to produce the brochures, leaflets and associated marketing material required for their promotion campaigns.

The Clarity website is the key tactic adopted for advertising the company’s services. The website is continuously updated and maintained to a very high standard. Clarity feel that they can use the website to host examples of their work and commendations from satisfied customers. They also promote new innovations in document production via the website.

Each customer is managed by a Clarity account manager who will arrange for the contracts to be set up and, following this, will help define the document requirements. This includes features such as obtaining the designs, and deciding structure, quality standards and formats.

The Clarity administration support team organise the logistical side of the organisation, recording the delivery requirements, including timing and volumes needed. They organise deliveries by using their preferred courier organisation. The administration team also deals with any queries, including changes to the requirements, delivery delays or complaints.

The Clarity management team are all experienced in the promotional documentation business and recognise that it is vital they provide an extensive range of documentation products. This requires them to purchase and work with an array of print materials, including paper types and inks, so that they are able to meet all levels of quality required by their customers.

Question

Develop an organisational-level process map for Clarity Print Ltd.  

(7 marks)
Specimen answer and marking scheme

½ mark for each process correctly named (verb-noun) 3½ marks
½ mark for each correct process flow 3½ marks

(Total 7 marks)
‘As is’ business process model question

Scenario 2

Introduction

Raglan Pharmaceuticals plc is a wholesaler who supplies independent pharmacies located throughout the United Kingdom with drugs.

The company operates through a sales force, with each salesman being allocated a number of pharmacies, some of whom are existing clients. During the weekly visit the salesman takes orders for the goods that the pharmacy wishes to receive in the next delivery.

Fulfil Order Process

At the end of each day the salesman faxes the orders through to the sales administration team, who check the orders for completeness (name, delivery address, etc). Any orders that are incomplete are returned to the salesman, who is responsible for returning the order to the client.

Complete orders are recorded, and the sales administration team then check to see if the client is an existing client.

For existing clients the sales administration team then send the order to the warehouse for the despatch of the goods.

For new clients, the order is passed to the credit control clerk who checks the client's credit worthiness. If the credit status of a potential client is unsatisfactory the salesmen is notified and it is his responsibility to notify the potential client that they have been rejected. If the credit status of a potential client is satisfactory the credit control clerk passes the order to the sales ledger clerk who then prepares a client file. Once the client file is prepared the order is passed to the warehouse so that the goods can be despatched.

Once the warehouse receives the order, a member of the warehouse team picks, or selects, the goods for despatch. Once the goods are picked they are checked against the order by the warehouse supervisor. If the order is incomplete, the complete order is returned to the warehouse team member to re-pick the goods. The order is then re-checked by the warehouse supervisor. When the order is complete the warehouse despatches the goods to the client.

Once the goods are despatched the sales ledger clerk prepares and despatches and invoice to the client.
Question

Develop a business process model for the Fulfil Order business process described in the scenario. The actors should be shown using swim lanes.

(21 marks)

Specimen answer and marking scheme

‘As is’ business process model
½ mark for each swim lane

Up to 1 mark for each process step, correctly named (verb-noun), with appropriate logic flows and in the correct swim lane

Up to 1 mark for each decision point with appropriate guard conditions

½ mark for the start point

½ mark for each end point

(Total 21 marks)
Business process improvement question

Scenario 3

See the Raglan Pharmaceuticals scenario for the 'as-is' business process model question.

Question

Describe FOUR areas where Raglan Pharmaceuticals **COULD** improve their Fulfil Order process and explain the impact of each improvement suggestion.  

*(8 marks)*

Specimen answer and marking scheme

Some example proposals are listed below.

Proposal 1

- Replace the use of Fax with a mobile device that collects and validates orders.
- Only valid orders in terms of completeness will be received eliminates the Check Order step undertaken by Sales Admin. It also eliminates the Return Order step and the Return Order to Client step.
- This proposal could have any number of variations as to how far automation is used for example to record the order, check warehouse stock for availability and provide a delivery date.

Proposal 2

- Check Credit Status step before Record Order step. If Credit Status not OK then no orders will be placed.
- Assumptions here are that there is some form of basic record maintenance for the particular pharmacy to support the original allocation to a Salesman.
- Either included here or as separate proposal is that the Salesman should be alerted to the failed credit check at the same time as the client.

Proposal 3

- Eliminate the bottleneck and dependency on the sole Warehouse Supervisor.
- Various warehouse options to verify what has been picked against original order. To include not just the type of goods but the quantities as well such as the use of bar coding or RFID tags.
- Assumptions could be included as to what is meant by incomplete. Is this an error on the part of the warehouse team member in omitting an order item? Or something more subtle such as substitute goods.

Proposal 4

- Eliminate the manual Prepare and Despatch Invoice step by automating Invoice production(e-Invoicing) based on updates to the order status throughout its lifecycle
- Among the potential impacts could be reduced costs in terms of paperwork and people; improved supplier/client relationships and reduced errors at reconciliation.
Proposal 5
- Introduce a workflow system so that orders could be scanned in and the same information copied and routed to related actors.
- Allows for efficient monitoring and control throughout the lifecycle of the order.
- Reduces manual effort and potential bottlenecks.
- Again this proposal could be part of a complete automated sales and warehousing system where the only real manual process is the physical picking and despatch of goods.

Proposal 6
- Ultimate proposal would be the elimination of all manual processes by the use of an integrated software solution selected from one of the many packages available in the marketplace.
- Specific impacts would be the elimination of the existing Salesman role and the pharmacies dependencies on their weekly visits by allowing for online ordering.
- Placing of the initial order would collect client details and institute a credit check.
- Placing of repeat orders could also allow checks on payment history, outstanding invoices.
- Clients would be able to track the status of orders.
- Redefined roles relating to Sales Admin, Sales Ledger and Credit Control to the extent of merging all three into a Client Relationship Management role.

Up to 1 mark for each suggested improvement Up to 4 marks
Up to 1 mark for each impact description Up to 4 marks
(Total 8 marks)
Task Analysis question

Scenario 4

Beauty Is Us is a small business offering beauty treatments in the Warwickshire area. They have a salon located in the town centre with three treatment rooms and they also have a mobile beauty therapist who will provide treatments at the customer’s home if it is within a 10 mile radius of the salon. This is established by checking a town map.

Customers can make appointments by telephone or by visiting the salon. They employ a receptionist to answer the telephone and make appointments. The receptionist takes a lunch break between 12 and 1 when reception is closed. A message is put on the phone asking customers to call back after 1pm.

Appointments are recorded on an ‘in-house’ system which triggers a text message to the customer’s mobile phone confirming the treatment, date and time. In addition, home appointments trigger a text message to the mobile therapist and insert the appointment in their calendar.

Appointment requests vary from ‘known treatments’ where the customer has identified the treatment they want to requests for recommendation of a treatment.

The salon also has a customer database where information, such as name and address, and treatment history is maintained. Customers must exist on this database before an appointment can be made and new customers have to pay a booking fee of £10. This is deducted from the treatment price and payment for the treatment is taken by the therapist.

The task of booking an appointment for new customers takes up to 10 minutes and there is concern that the salon may be missing appointment opportunities as the telephone is engaged or customers do not want to wait in reception. The manager also knows that new customers ‘drop in’ to make an appointment when they take their lunch break and often find reception closed.

The Business Manager has employed a Business Analyst for 5 days to review the task and identify opportunities for improvement.

Question

Complete a task analysis for the task of Booking an Appointment using the locally-designed worksheet below. Identify one opportunity for improvement.  

(13 marks)
### Worksheet

**Beauty Is Us - Task Analysis Worksheet**

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Book Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>Receptionist</td>
</tr>
<tr>
<td>Business Trigger</td>
<td>Customer requests appointment (by telephone or by visit)</td>
</tr>
<tr>
<td>Input</td>
<td>Customer details, treatment required, map, therapist availability</td>
</tr>
<tr>
<td>Output</td>
<td>Appointment recorded on customer database; text message sent to customer Text message sent to mobile therapist (for home appointments)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steps in the task</th>
<th>Decision / rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Answer telephone or respond to query at reception</td>
<td>If request is for a home appointment, check location</td>
</tr>
<tr>
<td>2. Discuss treatment required and price</td>
<td>If customer is new, collect and enter their details on customer database</td>
</tr>
<tr>
<td>3. Check availability</td>
<td>If customer is new, take payment card details</td>
</tr>
<tr>
<td>4. Confirm treatment date and time with customer</td>
<td></td>
</tr>
<tr>
<td>5. Locate customer in database</td>
<td></td>
</tr>
<tr>
<td>6. Book appointment</td>
<td></td>
</tr>
<tr>
<td>7. Thank customer for their booking</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time to perform the task</th>
<th>Up to 10 minutes for a new customer</th>
</tr>
</thead>
</table>

**Opportunities for Improvement:**
- Provide reception cover for lunch time
- Employ two part time receptionists to cover all opening hours
- Install answer machine so that customers can leave details for a return call
½ mark for correctly identifying the Task Name ½ mark
1 mark for correctly identifying each of the following:
• Responsible Person
• Trigger
• Input
• Output
• Time 5 marks
½ mark for each step identified Up to 3½ marks
1 mark for each decision/rule identified Up to 3 marks
1 mark for the improvement opportunity identified Up to 1 mark

(Total 13 marks)