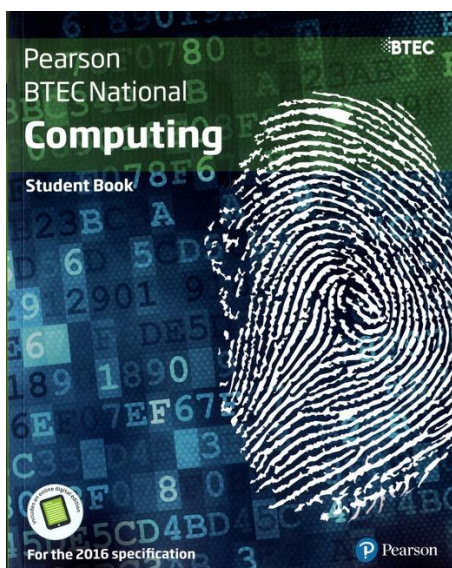


BTEC Level 3 Nationals in Computing: Unit 3

Your free sample of the student
book: preparation for
assessment

(BTEC National Computing: Student Book 1 (with
ActiveBook),
ISBN: 9781292166926)



Getting ready for assessment

This section has been written to help you to do your best when you take the external examination. Read through it carefully and ask your tutor if there is anything you are not sure about.

About the test

The set task should be carried out under supervised conditions.

- You must not bring anything into the supervised environment or take anything out without your teacher's knowledge and approval. You will need to use a black ink or ball-point pen, so make sure you bring one with you and it might be sensible to have a spare black pen as well.
- You should make sure that you back up your work regularly. You should save your work to your folder using the naming instructions that will be indicated in each activity.
- Don't forget anything else you might need, for example glasses for reading the assessment paper.

Sitting the test

This unit is assessed under supervised conditions and the number of marks for the unit is 66. Pearson sets and marks the task.

The assessment will be carried out in two parts, Part A and Part B. Part A will need to have been completed in preparation for Part B, and Part A and Part B will be submitted together upon completion of Part B.

Part A should be undertaken in 3 hours during the assessment period of one week, which will be timetabled by Pearson. Part A contains material for the completion of the set task under supervised conditions.

Electronic templates for use in the assessment will be provided for centres to download for your use.

The marks for each question will be shown in grey boxes next to each question. Use this as a guide as to how much time to spend on each question.

Practise the project planning as often as you can in preparation for the assessment.

Make sure that you arrive in good time for the assessment and check that you have everything you need for the test ahead of time. Plan out your time during the test to ensure that you allow yourself enough time to complete all the questions and to check through your work at the end. Try to answer every question. Proofread and correct any mistakes before handing in your work. Ensure that you've checked all sides of the assessment paper before starting. Listen to, and read carefully, any instructions you are given. Lots of marks are often lost through not reading instructions properly and misunderstanding what you are being asked to do.

Key terms typically used in assessment

The following table shows the key terms that will be used consistently in assessments to ensure that you are rewarded for demonstrating the necessary skills.

Please note: the list below will not necessarily be used in every paper/session and is provided for guidance only.

Command or term	Definition
Function point	A way of measuring the amount of work taken to implement part of a software system, for example it might take 10 developer hours to implement a search function.
Gantt chart	A bar chart which provides a graphical illustration of a schedule that helps to plan, coordinate and track all the tasks in a project against a baseline.
Lessons learned	A summary report which brings together any insights gained during a project that can be usefully applied on future projects. This includes factors and actions that supported success and learning from what did not go well.
Modules	Part of a large software system that carries out a specific business role: for example, different departments will use different modules within a full system, e.g. Human Resources will use a payroll module to calculate staff wages. During development, each module is likely to be built and tested independently, often by different groups of developers and testers.
Operating system	The operating system is software that manages computer hardware and software resources and also provides common services for computer programs.
Project kick-off	The official launch of the project; the point at which details of the project are promoted. The kick-off will only happen after some initial investigation to establish that the project is viable, such as: Can the client afford it? Can it be done within the timescale? Is it technically possible?
Regression testing	Regression testing is a type of software testing that seeks to uncover new software bugs, or regressions, in existing functional and non-functional areas of a system after changes such as enhancements, patches or configuration changes have been made to them.
Resource list	A list of all the staff, equipment and raw materials required for a project, along with their associated costs. Staff will usually have an hourly rate or annual salary, while equipment and materials will usually be fixed costs.
Server	Hardware and software that provide centrally managed services on a computer network, such as a database or email system.
Stakeholder	Anyone with an interest in the project. Can include those who have an interest in or can affect or are affected by the computing project. They can be internal or external and at senior or junior level.

Writing long answers

If you are writing a longer answer, try to plan before you start writing. Have a clear idea of the point your answer is making, and make sure that this comes across in everything you write, so that it is focused on answering the question.

- Always make a plan for your answer before you start writing. Sketch this out so that you can refer to it throughout – remember to include an introduction and a conclusion and think about the key points you want to mention in your answer. On this plan, think about setting yourself some timeframes so that you make sure that you have time to cover everything you want to and, importantly (where the question asks for an evaluation), have time to write the conclusion!
- Try to keep your answer as focused on your key points as possible. If you find your answer drifting away from that main point, refer back to your plan.
- Make sure that you understand everything being asked of you in the activity instructions. It might help if you underline or highlight the key terms in the instructions so that you can be sure your answer is clear and focused on exactly what you have been asked to do.

Sample answers

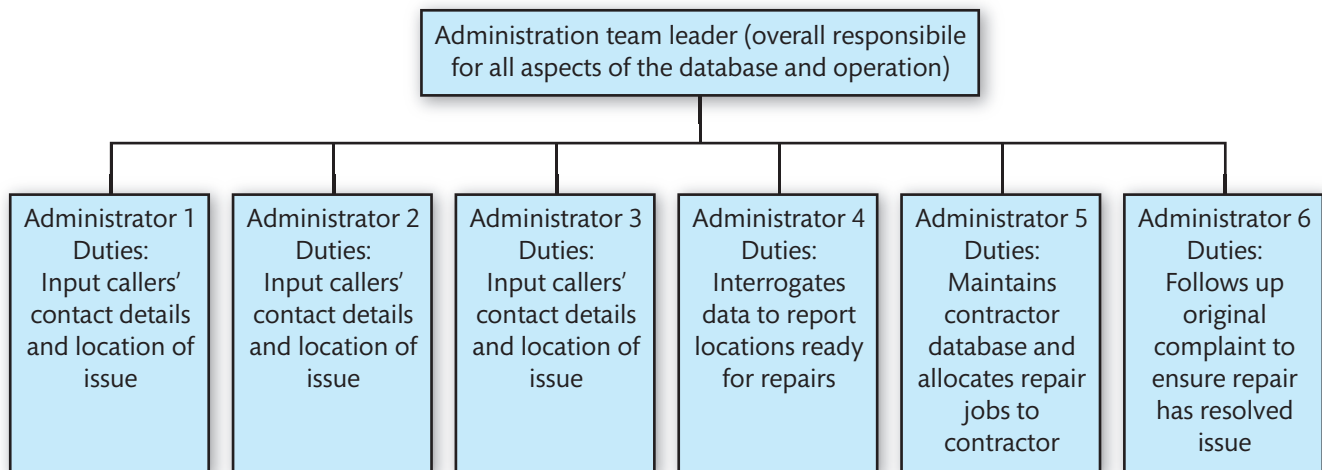
For some of the questions, you will be given some background information on which the questions are based.

Look at the sample questions which follow and our tips on how to answer these well.

Worked example

Set task brief

You are PM of an IT systems project for your local council office that will log all the calls received from members of public who report problems with the roads and pavements in the local area. The information gathered will then be used to organise repairs by maximising the quantity of repairs that can be undertaken in one go by the same contractor. The new database system is ready to be tested using an administrative team of six people.



The team leader is now on holiday for two weeks and there have been delays in getting the system ready for the testing stage. The next stage of the project needs to get underway as soon as possible.

- Produce a risk management strategy using the template provided (see Table 3.12: Example of a risk management strategy, in the section 'Risk management strategy'). Identify the assumptions and constraints using the templates provided (see Table 3.10: Example of assumptions, in the section 'Assumptions' and Table 3.11: Example of constraints, in the section 'Constraints').
- Prepare a schedule for each of the administrators to test the system based around modules.
- Prepare an issues log in preparation for the administrative team to log any issues as they test the system.

For each question you will need to provide a product that relates to the scenario by making reasonable assumptions where the information is not available. You should be able to justify these assumptions and consider alternatives to demonstrate your ability to problem solve.

Write to each of the seven personnel who are affected by the schedule for testing, describing the reasons and what they will need to do. They will also require copies of any logs or recording methods and an explanation of how they are to be used and what to do with this documentation.

With this type of question you will need to consider the audience and their role in the project. This may require you to use different methods of communication and, if you decide that a telephone call was the most appropriate option, you will need to provide a script for the message you are going to give and some form of method for recording the phone call and its contents.

You might find it helpful to put yourself in the shoes of the individual to imagine the types of questions they might have and any confusion they may be encountering about the process. This can help you to consider all angles and to produce a thorough and systematic response. You might need to consider how each person may be affected by the change to their current work practices.

Following the testing, the issues are resolved and the administrative department for highways is operating more smoothly thanks to the new, central recording system. Contractors are able to consolidate their repairs in a more productive and cost effective way and therefore the team are more efficient.

You will need to prepare to close the project and want to gather feedback from the administrative team. To do this you will need to decide on the following:

- 1** The methods for gathering feedback.
- 2** The questions you will be asking.
- 3** How the feedback will be analysed.
- 4** Justification of the methods chosen.
- 5** How you will organise these feedback events.

For this type of task, you will need to provide examples of the types of questions you will ask and produce an outline of the template. If, for example, you select observation, the method will still need to demonstrate that you have applied critical thinking to rationalise why you chose this method over others and have considered its shortcomings.

Exam sample answer

The method for gathering feedback from the team leader of the administration team will be by interview. Due to their more senior role, this person will have a holistic view about the overall success of the project. The interview will involve qualitative questions.

As the administrative team comprises six individuals who are communicating with contractors and members of the community, it will be less efficient to involve them in individual interviews and to hold a group interview would mean taking them away from their positions. For those reasons it would be more efficient and cost effective to provide a questionnaire for them to complete.

You and your technical team of three people have analysed and evaluated the project from a technical perspective and, in preparation for receiving all the feedback for analysis, have identified some recommendations for future actions. List those recommendations in a brief report giving reasons for the recommendations and the benefits should they be implemented.

Finally, you will need to arrange the communication and presentation for final closure. Produce an agenda and means of communication to the known stakeholders in this project for presenting the final review.