

BTEC ICT

Contents

1. Introduction
2. Instructions
3. Independent Tasks
4. Scenario-Based Tasks
5. Research Task
6. Revision Helpful Tips

1. Introduction

BTEC IT is an exciting course that blends theory and practical skills, preparing you for a digital future. Unit 1: “Information Technology Systems” explores how IT is used in organisations and society. This summer pack will introduce core ideas to help you transition smoothly into Year 12 and hit the ground running.

2. Instructions

- You are to complete all tasks
- Spend around 9-10 hours over the summer on this work.
- Work should be typed.
- Your work should be organised in a folder and brought to your first IT lesson in September.

3. Tasks

Task 1: Types of IT Systems

Define the following and give examples.

- Hardware
- Software
- Networks
- Input and Output Devices
- Cloud Storage
- System Software
- Application



Task 2: Exploring Connections

Jacky is a student living in shared accommodation with other students. The student accommodation has access to a shared network with internet access. The students use both wired and wireless connections to the network.

(a) Identify two benefits of using a wired connection rather than a wireless connection to a shared network.

Task 3: Data vs Information

Define and differentiate between data and information. Provide two examples to show how raw data can be turned into meaningful information.

Task 4: Digital Devices and Their Use

Create a table showing at least five digital devices (e.g., smartphones, barcode scanners). For each, describe:

- Its primary function
- Where it's commonly used
- Benefits and limitations

4. Scenario-Based Tasks

Miguel owns a company that produces software for primary school children. He works in an office with other programmers to do this. They use PCs in the office and Miguel uses a laptop when visiting schools to demonstrate the software to the children.

Each device has:

- *a graphical user interface (GUI)*
- *an optional command line interface (CLI)*
- *a single-user multi-tasking operating system (OS)*
- *a hard disk drive (HDD).*





- (a) Explain the purpose of a user interface.
- (b) Explain two benefits of using a GUI rather than a CLI.
- (c) Explain two reasons why a single-user multi-tasking OS would be installed on each office PC.
- (d) Each programmer stores designs on the internal hard disc drive (HDD) on their PC. The data stored on their PCs can be at risk even when not connected to the internet. (i) Explain two threats to data that can arise when a PC is not connected to the internet.

5. Research Task

Digital Solution Design: Outline an app or IT solution that could solve a problem (e.g., organising homework, tracking fitness, booking appointments).

6. Revision Helpful Tips

Specification Link— <https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Information-Technology/2016/specification-and-sample-assessments/specification-pearson-btec-level-3-national-extended-diploma-in-information-technology.pdf>

Useful Revision Sites

Pearson— <https://www.pearsonschoolsandfecolleges.co.uk/asset-library/pdf/FE-Vocational/btec-nationals-it/form-samples/revise-btec-national-information-technology-units-1-and-2-rev-guide.pdf>

Studocu— <https://www.studocu.com/en-gb/document/leeds-sixth-form-college/information-technology/btec-level-3-it-unit-1-revision-guide/63611581>

Quizlet— <https://quizlet.com/gb/83710451/btec-ict-unit-1-revision-flash-cards/>

