

Name:

Class Teacher:

Date:



OCR J276

GCSE Computer Science




REVISION BOOKLET

1.7 SYSTEMS SOFTWARE

Content in J276 GCSE Computer Science:

- 1.1 Systems Architecture
- 1.2 Memory
- 1.3 Storage
- 1.4 Wireless and Wired Networks
- 1.5 Network Topologies, Protocols and Layers
- 1.6 System Security
- 1.7 Systems Software
- 1.8 Ethical, Legal, Cultural and Environmental Concerns
- 2.1 Algorithms
- 2.2 Programming Techniques
- 2.3 Producing Robust Programs
- 2.4 Computational Logic
- 2.5 Translators and Facilities of Languages
- 2.6 Data Representation

1.7 SYSTEMS SOFTWARE

TOPIC			
The purpose and functionality of systems software			
Operating systems:			
User interface			
Memory management/multitasking			
Peripheral management and drivers			
User management			
File management			
Utility system software:			
Encryption software			
Defragmentation			
Data compression			
The role and methods of backup:			
Full			
Incremental			

1.7 SYSTEMS SOFTWARE

THE PURPOSE AND FUNCTIONALITY OF SYSTEMS SOFTWARE

OPERATING SYSTEMS

USER INTERFACE

MEMORY MANAGEMENT/MULTITASKING

PERIPHERAL MANAGEMENT AND DRIVERS

USER MANAGEMENT

FILE MANAGEMENT

UTILITY SYSTEM SOFTWARE

ENCRYPTION SOFTWARE

DEFRAGMENTATION

DATA COMPRESSION

THE ROLE AND METHODS OF BACKUP (FULL AND INCREMENTAL)

EXAM QUESTIONS

QUESTION 1

A restaurant has a computer-based ordering system which is running slowly. A technician has said that the hard disc drive is fragmented. The technician has suggested using utility software to defragment the drive. Explain how the restaurant's hard disc could have become fragmented.

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[4]

Explain how defragmentation software could overcome the issue of the slow computer system.

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[3]

QUESTION 2

Amin buys a new computer with an operating system and some utilities. State **two** functions of the operating system.

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[2]

The table below shows some of the utilities in Amin’s computer. Tick **one** box in each row to show whether the utility is used for security or disk organisation.

Utility	Used for security	Used for disk organisation
Antivirus		
Defragmenter		
File transfer		
Firewall		

[4]

Some of the software in Amin’s computer is open source. Describe what is meant by open source software.

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[2]

QUESTION 3

Julian buys a new laptop with a system information utility and a diagnosis utility. Describe, using examples, the purpose of the system information and diagnosis utilities.

System information utility

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Example

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Diagnosis utility

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Example

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[4]