

1.5.1 Operating System

May/June 2007

4. One purpose of most operating systems is to provide a set of utility programs designed to perform common tasks.
(b) Describe two other purposes of an operating system apart from providing utility programs. [4]

May/June 2009

5. One purpose of most operating systems is to provide a human computer interface (HCI).
(b) State three other purposes of an operating system. [3]

Oct/NOV 2009. P12

2. (a) Define the following types of software:
(i) operating system software, [1]

Oct/NOV 2010. P11/ P12

1. Describe four functions of an operating system. [8]

Oct/NOV 2012. P13

4 A student has a home computer. She buys a new external hard disk to act as a back-up device for her system.
Describe the following examples of utility software and state how they would be used by the student.

- (i) Hardware driver [2]
Description [1]
Use [1]
- (ii) Disk formatter [2]
Description [2]
Use [1]

May/June 2013. P13

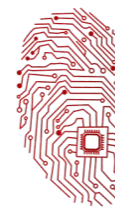
- 1 (a) What is an operating system? [1]

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Oct/Nov 2016. P11/P13

- 2 (b) (i) Explain why a computer needs an operating system. [2]
(ii) Give **two** key management tasks carried out by an operating system. [2]





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Oct/Nov 2016. P12

3 When an application program requests a file stored on a hard disk, the computer system reads the file. Use the statement labels A to H to complete the sequence of steps that describe how this happens.

Label	Statement
A	When the hard disk drive has read the file, it generates an interrupt.
B	While the file continues, the head reads successive clusters of sectors from the disk and writes data into the disk buffer.
C	The head reads the first cluster of sectors from disk and writes data into the disk buffer.
D	The head moves to the correct track.
E	The operating system transfers the contents of the disk buffer to the application program's data memory.
F	In the relevant directory file, the operating system looks up the track and sector where the file begins.
G	Application program passes file read request to the operating system.
H	The hard disk drive waits for the correct sector to arrive under the head.

1. The application program executes a statement to read a file.
2.
3. The operating system begins to spin the hard disk, if it is not currently spinning.
4.
5.
6.
7.
8.
9.
10.

[8]

7 One management task carried out by an operating system is to provide a user interface. Describe **two** more of these management tasks.

[4]

May/June 2018. P11

3 An operating system (OS) is usually pre-installed on a new computer.

(a) The OS performs a number of different tasks such as memory management and security management.

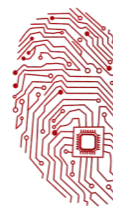
(i) State **three** memory management tasks the OS performs.

[3]

(ii) State **three** security management tasks the OS performs.

[3]





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(iii) State **two** tasks, other than memory management and security management that are carried out by an OS. [2]

