

General Knowledge Assignment 3



Total Marks: 63

1. Describe the purpose for the following application categories.

6 marks

{Word-processing, spreadsheet, database, desktop publishing, graphics, and communications}

Word-processing. The purpose of wp applications is to simplify and enhance the ability to create and maintain documents which uses words. Word-processors include features to manipulate the look of letters, such as create **bold**, *italic*, and **bold-italic** letters as well as formatting paragraph indents, line-spacing.

Spreadsheet. The purpose of spreadsheet applications is to simplify the manipulation of numerical, data. Spreadsheets provide tools to simplify mathematical manipulation (adding, subtracting, multiplication, division) and algebraic manipulation (using statistical, financial and other formulas) of numbers. Where normally you would punch in different numbers on a calculator to add them up, and then manually calculate the mean, median, a spreadsheet can have all the numbers entered and a formula can quickly tell you the value of any formula using these numbers.

Changing numbers in a spreadsheet allows formulas to automatically recalculate values, whereas if using a calculator changing a number requires redoing the full calculation.

Database. Database programs are used for storing and manipulation large volumes of related data. For example, the telephone book is a large store of data related to contact telephone numbers. Storing data in a database allows the database programs to quickly search, organise, and create reports on the data. A database can quickly sort a telephone directory by names (as most telephone books are organised) or it can organise by village, or by telephone number.

Desktop Publishing. Desktop Publishing (DTP) applications are used for manipulating documents which combines text and graphics. DTP applications are used for organising, "laying-out" the flow of the text and where graphics are placed on the paper output. DTP is used for creating newsletters, magazines, and newspapers.

Graphics. Graphics applications are used for the manipulation, editing, creation of images on a computer. This allows a person to draw their own pictures, or to take some existing picture and make changes to it.

Communications. Communications applications are developed to allow computers to communicate with each other. Communications systems include software that ties many computers together (as in networks) or just connecting two computers together.

2. Provide at least one example of an application for each of the following application categories.

6 marks

{Word-processing, spreadsheet, database, desktop publishing, graphics, and communications}

Word-processing. Corel Word-Perfect, IBM Lotus Word, Microsoft Word

Spreadsheet. Corel, IBM Lotus 123, Microsoft Excel

Database. Corel Paradox, IBM Lotus Approach, Microsoft Access,

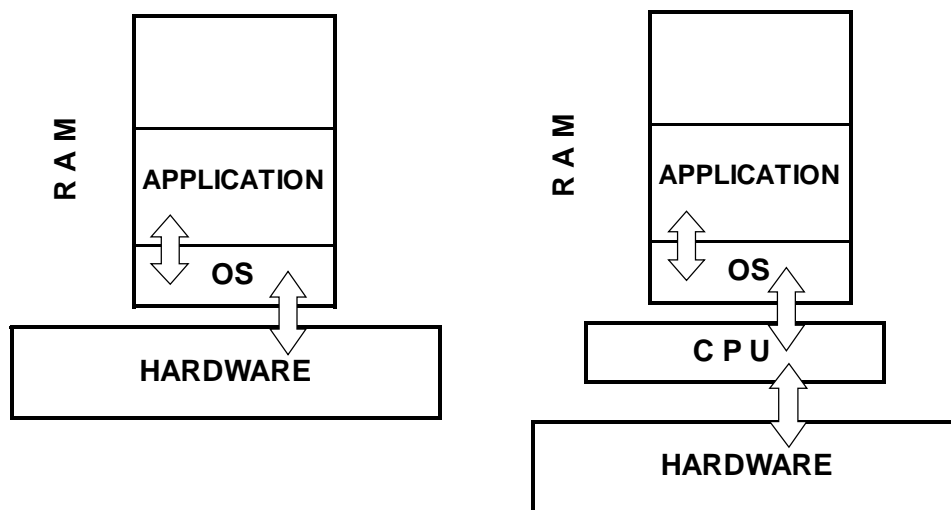
Desktop Publishing. Adobe PageMaker, Microsoft Publisher, Quark Xpress

Graphics. Adobe Photoshop, CorelDraw, Microsoft Photo Editor, Windows Paint

Communications. LapLink, Microsoft Network

- 3 Draw a diagram that describes the relationship between an Operating System and Applications Software

6 marks



4. Describe, in words, the relationship between an Operating System and Applications Software 6 marks
The operating system communicates directly with the CPU, Hardware. Whenever the application program wants a device or computer hardware to perform some action, the application talks to the OS and the OS talks with the hardware.

All responses from the hardware that is sent to the application first goes through to the OS which it then passes to the appropriate application.

5. A computer program is a sequence of coded instructions. Which number system is the only language a computer understands ? 2 marks

Answer: Binary Number System.

Computers, as electronic devices, technically only comprehend (or understand) two states (things), electricity on, and electricity off. This 2 state event can be represented by the Binary number system as either 0 or 1.

6. Name at least three 'languages' used by humans for coding instructions for computers to following. 6 marks

COBOL – Common Business Oriented Language was developed by the US Defence Department to create a standard programming language for the different computers available at the time. The programming language has been used a great deal by large organisations such as Banks. The committee that created the COBOL language was headed by Commodore Grace Hopper, one of many pioneering women in computer history.

BASIC – Beginners All-purpose Symbolic Instruction Code was developed at Dartmouth University as an instructional tool for beginning computer students on how to create instructions for computers.

C++ - grew from enhancement to an existing programming language called "C". C++ is a popular language among scientists and University Computer Science departments.

7. Describe the procedures for installing the ThunderBYTE anti-virus program onto your machine. (it must contain at least information on: (i) where on to get the program, (ii) how to start the installation, (iii) what answers you must give to installation questions, (iv) how to initiate anti-virus security checks.) 8 marks
- Step 1. Find the program on the Server ([\\servername\applications\thunderBYTE](#))
Step 2. Start the installation program (setup.exe)
Step 3. Accept
8. Describe the procedure for checking a floppy diskette for potential virus infection. {Assume the anti-virus program has not been started} 3 marks
- Step 1. Insert the floppy diskette to be checked
Step 2. Start ThunderBYTE by selecting Start | TBAV for Windows 95 | TBAV for Windows 95 –or– by double-clicking on the ThunderBYTE icon on the Task Bar.
Step 3. Double-click on the "First Floppy Disk Drive"
9. Provide a definition of what is "Individual Privacy" and provide an example. 2 marks
Individual Privacy is the legal, and moral right of an individual to the protection (security) of private and personal information. The individual's right to the release of this information to people.
10. Provide a definition of what is "Corporate Confidentiality" and provide an example. 2 marks
Corporate Confidentiality is the right within an organisation for the limited distribution of information the corporate believes should be restricted.
11. Provide a definition of what is "Piracy" and provide an example. 2 marks
Piracy is the theft of materials of information. The taking, whether by copying or by the physical removal of an item, without the prior consent of the owner.
12. Provide a definition of what is "Copyright" and provide an example. 2 marks
Copyright is the legal right to the use and reproduction of a work.
13. What are the five software "Licensing Methods" discussed in the course notes found in Systems | Basic Overview 5 marks
There are many different methods used for distributing (selling, moving) software products (programs) from the creator to the public and licensing the program. Software programs are usually made available through retail stores or made available on online networks for users to 'grab.' Below is the description of licensing methods used to clarify the rights between the software writer and software user.
- Commercial
 - Freeware
 - GNU License
 - Public Domain
 - Shareware
- Note: These definitions are generalisations, some software package licenses may have additional restrictions not described below.
14. Describe at least three of the above distribution methods. 3 marks
- Commercial**
Commercial Software licenses allow the user restricted rights to the use of the software. Users are generally given the right to use the software on as many machines as the user has paid the right for. Users are not allowed to copy or sell the software product without express permission from the software supplier.
- The purpose of this license is to protect the software developer's rights for compensation for the use of the software.
- GNU License**
The GNU License allows the user to make changes to the software so long as these changes are also

made available to others requesting the source code. Users of the software are allowed to make copies and give it away to friends. Sale of the software is restricted to fair cost of the manufacture and distribution of the medium where the software is stored.

The purpose of this license is to protect the free use, modification of the software and to encourage enhancements to the software through programmers around the world having access to the source code. Other, similar, licensing methods are the GPL and CopyLeft licensing.

Public Domain

Public Domain software are generally supplied with no restrictions on the use or copying of the program.

The purpose of Public Domain software was to supply free programs for general use, and in some cases provide examples of programming algorithms. Public Domain software has given way to GNU license style programs.

Shareware

Shareware programs are supplied in two manners. The registered and unregistered copy of the software. The registered copy of the program is the complete program while the unregistered program will generally provide most of the features of the registered program for limited trial use by the user.

For example, Quake, is a first-person shoot-em up game available as shareware. Users can get a trial copy of Quake which does not have as many features as the 'registered' version of Quake. The trial version of Quake has fewer weapons, fewer levels, and no access to online Quake worlds. The full 'registered' version of quake allows the game player to participate in Internet Quake wars, use Quake worlds created by other programmers, has more weapons, has many more levels fo playing games.

15. Describe at least one valid procedure to search for a folder named "Lost in Space" on your hard-disk. 2 marks

Method 1. Select the **Start | Find | Files or Folders** menu and type in named text box **Lost in Space**, making sure that Lookin Drop-Down List Box (combo box) is set for "My Computer"

Method 2. Open Windows Explorer and manually check through each folder to look for the folder.

16. Describe at least one valid procedure to search for a file named "Disk Jockeys Rule.doc" on your hard-disk. 2 marks

Method 1. Select the **Start | Find | Files or Folders** menu and type in named text box **Disk Jockeys Rule.doc**, making sure that Lookin Drop-Down List Box (combo box) is set for "My Computer"

Method 2. Open Windows Explorer and manually check through each folder to look for the folder.