

Computer



Complete the following:

1. Understand the difference between hardware and software in computer system.
2. Understand the function of hardware, e.g. input / output device and main / secondary storage.
3. Understand the function of operation software and application software, and the relation between hardware, operation software, application software and user.
4. Understand the connection method of the Internet, including wireless and broadband, and how data is transferred through the Internet.
5. Understand the social implications of the Internet development. Compare the pros and cons between Internet and traditional information transfer method and know the pros and cons of freedom of information on the Internet
6. Know how to install and use different kind of filtering software, and filter out websites not suitable for children and young people to far away from objectionable materials transmitted on the Internet.
7. Complete the practical training either (A) or (B):
 - (A) Website Construction
 - Recognise the essential factors to be considered in web design;
 - Be able to connect to the Internet and be aware of the technologies underlying the operation of the Internet, including the roles of the service providers, the types of connection and access, the use of domain names and domain name servers;
 - Understand the needs and general requirements of setting the computer network in home, school or troop; and
 - Design and construct a website with a particular theme, including dynamic web pages with interactive and special effects, and upload onto the World Wide Web. (Web page design should consider the organization of information including ease of navigation, appropriate placement of links, tables, fames and multimedia elements, colour combinations, background design, font size and style, for intended audience.)
 - (B) Software Development
 - Understand the importance of good programming habits, such as use of meaningful variables, comments, annotations, space and indentation;
 - Know the Boolean logic (AND, OR, NOT) and truth tables;
 - Understand the procedures of problem solving (Problem identification, problem analysis, designing an algorithm, developing a solution, debugging and testing and documentation); and
 - Use one of the computer language, with variable, operator and flow control, etc, to develop a specified programme (including input and output function).