

Advanced Computing- Answers

1. Write True or False

- a) It is easier to update the information of patients when we make use of a computerized hospital management system. **True**
- b) We can only withdraw money from an ATM .**False**
- c) Computers are only used in offices. **False**
- d) A supermarket can make use of an automatic stock control system to detect the price of products. **True**
- e) Complex surgeries cannot be monitored by computers. **False**
- f) CT stands for computer Terminal. **False**
- g) Electronic Funds Transfer is a term that refers to the transfer of electronic money to take place. **True**
- h) Architects often make use of CAD software to design the model of a house or building. **True**
- i) Expert Systems can be used to track boo loans in a library. **True**

2. Match the following

Social networking website :	It is used to communicate with other people
Electronic learning :	It allows students to study at home
Payroll system :	It is used to calculate the salary of employees
MRI scanner :	It is used to examine inside the human body
Booking System :	It should be reliable by preventing the same seat from being booked more than once

3. What do the following acronyms stand for:

- a) **CAD**: Computer Aided Design
- b) **EFT**: Electronic Funds Transfer
- c) **CAM**: Computer Aided Manufacturing
- d) **EFTPOS**: Electronic Funds Transfer Point Of Sale
- e) **CT**: Computer Tomography
- f) **ATM**: Automated Teller Machine
- g) **RFID**: Radio Frequency Identification
- h) **AI**: Artificial Intelligence
- i) **MRI**: Magnetic Resonance Imaging
- j) **MICR**: Magnetic Ink Character Recognition

4.

a) A list of file extensions for common files standards used on the internet is shown below.

JPG , PDF, MP3, MPEG, ZIP

The rock band allows some files to be downloaded by fans.

Complete the table below to show which file format from the list given below may be used for each of the following files

File	File Format
A high resolution image of band to use as a desktop background	JPG
Sheet music of their songs ready to be printed in the correct format for guitar players	PDF
A short video extract from their latest concert tour	MPEG
A compressed collection of 200 plain text files containing the lyrics of all their songs	ZIP
An audio recording of a song from their album	MP3

b) **Some of the file formats use compression**

- i. File compression reduces the amount of space needed to store data. Using compressed files can free up valuable space on a hard drive, or a web server.
- ii. **The difference between lossy and lossless compression.**
 - Lossy compression reduces the size of data. But Lossless Compression does not reduce the size of data.
 - Lossy compression, Data's quality is compromised. But Lossless Compression does not compromise the data's quality.
 - In Lossy compression, A file does not restore or rebuilt in its original form. While in Lossless Compression, A file can be restored in its original form.

5.

- a) **UPS** stand for uninterruptible Power Supply
- b) **An uninterruptible power supply (UPS)** is an electrical apparatus that provides emergency power to a load when the input power source or mains power fails

6. **State which form of backing storage medium is suitable for:**

- a) Backing up small files for personal use. **Floppy Disk**
- b) Storing the operating system on a personal computer. **Hard disk**
- c) Performing a network backup. **External hard drives**
- d) Archiving account details which are no longer regularly used. **CD-ROM**

7. A company stores details of all its stock on a computer system. Explain why the data is held on a hard disk instead of a CD-ROM.

Answer : The data is stored on a hard disk instead of a CD-ROM because hard disk gives fast access , it is rewritable and it also has a higher storage capacity than a CD-ROM.

8.

- a) **A barcode** is an image consisting of a series of parallel black and white lines that, when scanned, relays information about a product. These black and white images are read by optical scanners
- b) **A Barcode reader** is used to read the bar code.