**Multiple Choice [5 Marks]**

1. Which of the following topics is NOT part of a “Terms of Service” contract?
   1. Proper or expected usage
   2. Accountability for online actions,
   3. Use personal data
   4. Payment details such as membership or subscription fees
   5. [Opt-out](https://en.wikipedia.org/wiki/Opt-out) policy describing procedure for account termination
2. Which of the following topics is part of a “Privacy Policy” contract?
   1. Potential misuse
   2. Use personal data
   3. Behavior, and conduct
   4. Payment details such as membership or subscription fees
   5. [Opt-out](https://en.wikipedia.org/wiki/Opt-out) policy describing procedure for account termination
   6. Dispute resolution process and limited rights to take a claim to court
3. Which of the following features is NOT a part of a Version Control System?
   1. Version tracking and control
   2. Backup and restore
   3. Build automation tools
   4. File sharing
   5. Access from multiple computers
4. Which of the following is NOT an internal part of a desktop computer?
   1. Power supply
   2. USB memory stick
   3. Motherboard
   4. Video card
   5. Ethernet Controller
5. Which of the following is NOT part of the motherboard on a desktop computer?
6. Main CPU
7. Power Supply
8. Sound card
9. Video card
10. Ethernet Controller

**Short Answer 30 Marks]**

1. Mr. Liang needs to organize a collection of image files from photographs taken for the year book. The photographs are from various clubs, sports teams, and events around the school.
   1. Using your imagination and your knowledge of clubs and sports teams at our school, create a list of 10 sample image file names related to possible clubs, teams, and events. [2]
   2. Create a set of folders that could be used to organize these sample image files. [2]
   3. Sort the sample image files into the appropriate folders. [2]
2. Mr. Liang also wants to make sure his files are securely backed up and can be shared by students working on the year book. What solution do you recommend? How would you solution be organized to help him meet these objectives? [4]
3. Select any **TWO (2)** of the following case study related questions to answer. Support your response with specific examples from the case study. Each question is worth five marks for a maximum total of ten marks.
   1. How could Ontario society be affected by a “Ransomware Attack” and how can we protect ourselves against such attacks?. [5]
   2. In your opinion, should mobile payments / use of electronic currencies such as Bitcoin be allowed in Canada? Explain some of the pros and cons. [5]
   3. Respond to the comment “isn't there more serious issues to focus on in regards to equity than emojis?” Explain some of the issues and some of the concerns around the use of emojis in social media. [5]
   4. Respond to the comment "when an online service is free, you're not the customer. You're the product". Explain the issues and concerns regarding Facebook and other similar apps. [5]

*Program Specification – For Use With The Remaining Questions In This Section*

The sample Python program implements a number guessing game. Some details are as follows:

* The computer randomly selects a number from 1 to 100. It keeps this information hidden from the user.
* The computer asks the user to guess a number and reads the user move from console input.
* The computer checks the user input to make sure it is valid. The computer prints out an appropriate message if the input was not valid and asks the user to try again.
* The computer prints out: “Guess Higher”, “Guess Lower”, or “Correct!” depending on how the user number compares to the computer number.
* The game continues until the number is guessed correctly or the user types “stop”.

1. List the “input objects” mentioned in the program specification above. [2]
2. List the “output objects” mentioned in the program specification above. [2]
3. Create a list of possible user input errors and the appropriate computer message from the program. [3]
4. Create a flowchart for the action sequence described above. [3]