Objective: To understand the fundamental concepts of computer and number systems.

Instructions:

Please read the following instructions carefully before solving & submitting assignment:
Assignment should be in your own wordings not copied from internet, handouts or books.
It should be clear that your assignment will not get any credit (zero marks) if:

- o **The assignment is submitted after due date.**
- o **The submitted assignment does not open or file is corrupt.**
- o **The assignment is copied (from other student or copied from handouts or internet).**
- o **Student ID is not mentioned in the assignment file or name of file is other than student ID.**

For any query about the assignment, contact at cs101@vu.edu.pk

GOOD LUCK

Q.1. There are multiple ways to enhance the performance of a computer system. Discuss what role a cache can play in boosting up the performance of a computer system? (5 Marks)

Q.2. Generally there is a concept that "Memory" and "Storage" are same terms. Do you agree? Justify your opinion with a real life example. (5 Marks)

Q.3. Convert the following Octal Number to Hexadecimal Number by writing each and every step of conversion process: (5 Marks)

$(53324)_8 => (?)_{16}$

Note:

- o Assignment should be in your own wordings not copied from net, handouts or books.

- o Your answer should be "to the point".