## **CS401**



Question 1: What is Alpaktonuria?

Question 2: What is meant by user interface and class interface in C++ And what role a class interfaces can play in user interface?

Question 3: What is memory leak?

## Answer:

There is a requirement that if the constructor of a class allocates the memory, it is necessary to write a destructor of that class. We have to provide a destructor for that class, so that when that object ceases to exist, the memory allocated by the constructor, is returned to the free store. It is critically important. Otherwise, when the object is destroyed, there will be an unreferenced block of memory. It cannot be used by our program or by any other program. It?s a memory leak that should be avoided.

Question 4: Explain the following terms regarding project characteristics and project dimensions.

- 1. Temporary,
- 2. Unique,
- 3. Aims,
- 4. People,
- 5. Process

Question 5: Give the name of configuration control tools?

Question 6: List names of major design styles.

Question 7: Software requirements analysis a bridge between system engineering and software design, show it by diagram.

Question 8: Suppose you are working as a project manager in a software company. You are going to develop a software Examination system of VU. Mention methods for requirement elicitation you will use for software.

Question 9: The context free questions are mostly not related to requirements of the software project and may be used for understanding purposes. How do context free questions in requirement elicitation help in basic understanding of the problem. Give complete procedure of it.

Question 10: What is meant by SMARTER. Explain in detail.

Question 11: Write down the software process player's names and their roles in projects.

Question 12: All positive real number has a one-to-one correspondence with real numbers

Question 13: Can every set provable in function Turing-recognizable

Question 14: Can Turing Machines can perform 2 successive steps with moving it's headIf yes explain. Also provide formal definition of Turing Machine.

Question 15: Can we write blank symbol to input tape prove ur reasoning under formal description of TM

Question 16: Check that X and Y are one-to-one or not.

Question 17: Every problem compute in Turing machine, if yes describe with reason if no then