Tushar Kumar Jha (Assignment –1)

1. **Why do computers understand only binary language?**

Ans- Computers use binary to store data. Not only because it's a reliable way of storing the data, but computers only understand 1s and 0s binary. A computer's main memory consists of transistors that switch between high and low voltage levels sometimes 5V, sometimes 0. That reading is done by the computer's processor which reads the transistor state high or low to control the computer's other devices, according to software instructions.

1. **What is the full form of IDE?**

Ans- Integrated Development Environment (IDE).

2. **What is the difference between a text editor and a code editor?**

Ans- A text editor simply allows you to write and edit text and it does not have anything built-in to help you to code whereas a code editor is also a text editor but it also helps you write code.

3. **What are the steps to develop software using the C language**

Ans- Step 1: Download VS Code and MinGW

Step 2: Install VS Code and MinGW

Step 3: Create First Project.

Step 4: Write Program.

Step 5: Save and Compile Code.

Step 6: Run code

5. a. What is the latest version of C Language?

Ans- C 17 (2018)

b. Who developed C Language?

Ans- Dennis Ritchie.

c. What is the difference between System and Application Software?

Ans- The system software is used for operating computer hardware. On the other hand, Application software are installed according to user's requirements.

d. How to convert a number from a decimal number system to a binary number system?

Ans- Decimal to binary conversion is done through various methods. One of the methods to convert decimal to binary is by dividing the given decimal number recursively by 2. Then, the remainders are noted down till we get 0 as the final quotient. After this step, these remainders are written in reverse order to get the binary value of the given decimal number. A number system is a mathematical way of representing numbers using a set of digits or symbols. There are different number systems like the decimal number system, the binary number system, the octal, and the hexadecimal number system. These are identified with the help of the base that they have. Numbers can be easily converted from one base to another using some defined rules.