Future Tech - 1

1. Computer Language

Check Your Learning

1. 01000001(binary code) 2. ADD A B (mnemonics) 3. Visual Basic

EXERCISES

A. Fill in the blanks with the help of words given in the box.

1. Program 2. Machine 3. High Level 4. Assembly 5. Off, On

B. Write 'T' for true and 'F' for false statements.

1. T 2. T 3. F 4. T 5. F

C. Tick (✓) the correct option.

1. b 2. c 3. b 4. a 5. c

D. Answer the following questions.

1. A computer language is a language using which you can communicate with the computer. It is a programming language which is a set of codes used to give instructions to the system. There are various types of computer languages like Machine language, Assembly Language, High Level language and Fourth generation language.
2. Machine Language: A machine language is a binary language which consists of 0 and 1. This language is easily understood by computer because computer can recognize electric signals. So, 0 represents Off electric pulse and 1 represents On electric pulse.
3. A high level computer language is a human friendly language because it uses simple English words and operators for coding. It is a machine independent language and needs a translator to convert the code to machine code so that a computer can understand it. There are two types of translators available for this: Compiler and Interpreter.
4. The difference between Interpreter and Compiler are given below:

Interpreter	Compiler
1. Interpreter converts the high level programming code to machine code by taking one line at a time.	Compiler converts the high level programming code to machine code by taking whole program at once.
2. It requires less memory.	It requires more memory.
3. If error occurs, the interpreter stops until the error is corrected.	The errors are displayed at the end of the compiling process. After correcting errors, you need to compile the whole program again.
4. It is a slow process.	It is a fast process.

5. Assembly language is the second generation programming language which uses mnemonic codes instead of binary numbers. A computer

understands only binary code, therefore an assembler is required to convert an assembly language code into machine code. A program witten in assembly language is called Source code and the converted code is called object code.

E. Application-based questions.

1. In the third generation, the high-level programming language was used.
2. Java is a high-level programming language.
3. Binary language is a machine language which consists of 0 and 1. It is difficult to learn.

Fun Zone

Game Activity

1. COMPUTER - 01000011 01001111 01001101 01010000 01010101 01010100 01000101 01010010
2. PROGRAM – 01010000 01010010 01001111 01000111 01010010 01000001 01001101
3. LANGUAGE – 01001100 01000001 01001110 01000111 01010101 01000001 01000111 01000101
4. MACHINE – 01001101 01000001 01000011 01001000 01001001 01001110 01000101

Lab Session

Decimal	Binary
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001

Higher Order Thinking Skills

Assembly Language

Project Work

Do it yourself

2. Algorithm, Flowcharts and Programs

Check Your Learning

Match the following columns.

1. c 2. a 3. b

EXERCISES

A. Fill in the blanks with the help of words given in the box.

1. Diagram 2. Start/ Stop 3. Processing 4. Connector 5. Loop

B. Write 'T' for true and 'F' for false statements.

1. F 2. T 3. T 4. F 5. T