1st Class Test (Introduction to Computing – CS 1101)

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| Section : F | Branch : Electrical Engineering | Time: 1 Hour | Full Mark: 20 |

1. Compare and contrast(with example) between High level and Low level language? (1+1=2)

2. What is Flowchart? Draw a flowchart for determining whether a number is prime or not? (1+3=4)

3. Describe the four characteristics of C? (4)

4. Write four rules for constructing a variable name. (4\*0.5=2)

5. What do you mean by sizeof operator? Give a suitable example.(1+1=2)

6. Find out any error in the following programs. If there is no error, write the output. (1+1=2)

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| |  |  | | --- | --- | | **Program 1** | **Program 2** | | int main()  { char a=A;  printf(“%c”, a);  } | int main()  { int a=65;  printf(“%c”, 1+a--);  } | |

7. If the marks obtained by a student in four subjects are input through the keyboard, find out the aggregate marks and percentage marks obtained by the student. Assign Grade according to (4)

a) A, if the percentage of marks obtained is >=90

b) B, if the percentage of marks obtained is >=80 and <90

c) C, if the percentage of marks obtained is >=70 and <80 otherwise F.

Answer:1)

High-level Language

1. Learning High-level languages are easy to learn.

2 Understanding: Highlevel languages are near to human languages.

3. Execution: Programs in high-level languages are slow in execution.

4. Modification: Programs in high-level languages are easy to modify.

5. Facility at hardware: level High-level languages do not provide much facility at hardware level.

6. Knowledge of hardware: Deep Knowledge of hardware is not required to write programs.

7. Uses: These languages are normally used to write application programs.

Low-level languages

1. Learning:Low-level languages are difficult to learn.

2 Understanding:Low-level languages are far from human languages.

3. Execution:Programs in low-level languages are fast in execution.

4. Modification:Programs in low-level languages are difficult to modify.

5. Facility at hardware level:Low-level languages provide facility to write programs at hardware level.

6. Knowledge of hardware Deep :Deep knowledge of hardware is required to write programs.

7. Uses: These languages are normally used to write hardware programs.

2) A flowchart is a formalized graphic representation of a logic sequence, work or manufacturing process, organization chart, or similar formalized structure.

3) Small size, Extensive use of function calls, less number of keywords, Loose typing - unlike PASCAL

Structured language, Low level (BitWise) programming readily available,Pointer implementation - extensive use of pointers for memory, array, structures and functions.

4) Characters Allowed :a) Underscore(\_), Capital Letters ( A – Z ), Small Letters ( a – z ),Digits ( 0 – 9 )

b) Blanks & Commas are not allowed, c) No Special Symbols other than underscore(\_) are allowed

d) First Character should be alphabet or Underscore, e) Variable name Should not be Reserved Word

5) Returns the size of a variable. sizeof(a), where a is interger, will return 4.

6) a) Error. A is not decleared. B) B

7)