

GLS UNIVERSITY
Faculty Of Computer Applications & Information Technology
Integrated MSc(IT)
1601102 – PROBLEM SOLVING WITH PROGRAMMING
ASSIGNMENT 2 – UNIT 2

Q-1 Fill in the blanks.

- 1) Keywords are also called _____ words.
- 2) _____ is the only symbol which can be used in variable naming.
- 3) _____ escape sequence is used for the new line in C.
- 4) _____ is used for multiple line comment.
- 5) Array and Pointer are _____ data types.
- 6) Character constants are always enclosed in _____.
- 7) Signed, Unsigned, Long and Short in data types are called _____.
- 8) The conditional operator can also be used as _____ statements.
- 9) The _____ operator returns the size of its operands in bytes.
- 10) The _____ operator operates on individual bits of integer value.
- 11) Every C program should have _____ function
- 12) Compiler translates your C program into _____
- 13) For printf() and scanf() _____ header file is used.
- 14) Each instruction/statements in C program is terminated by _____
- 15) _____ are non executable line in a C program
- 16) Header files are included in C program using _____
- 17) _____ bits = 1 byte
- 18) The size of char is _____ bytes
- 19) The size of integer is _____ bytes.
- 20) The size of float is _____ bytes.
- 21) What will be the output of following code: a=9,b=10;(a>b?printf("a is greater");("b is greater"));
- 22) _____ means splitting single programs into multiple programs
- 23) _____ means Program developed on one OS can be reused on other OS with little or no modification.
- 24) _____ defines the scope of the functions
- 25) Decimal point values can be stored in _____ datatype
- 26) == is _____ operator
- 27) + is _____ operator
- 28) The result of linking stage is _____
- 29) In _____ stage, the code is rearranged and the missing details if any are filled in.

Q-2 State whether following statements are True/False

- 1) A—Z, a—z, 0—9 and special symbols all are character sets in C .
- 2) The smallest unit of a program is called token.
- 3) Keywords are always written in lower case.
- 4) Keywords can be used as name of a variable.
- 5) // is used for single line comment.
- 6) All variables must be declare before they can appear in executable statement.
- 7) Expression is a sequence of operators and operands that specifies computation of a value.
- 8) a=a+10 can be written as a+=10 in C.
- 9) Conditional opertaor is not a ternory operator.
- 10)_name is valid variable name.
- 11)We can you modify value of constant variable.
- 12)AND is relational operator.
- 13)“?:” is binary operator.
- 14)“%g” is format string.
- 15)“,” is a special operator.
- 16)Format string for integer data type is “%i”.
- 17)Keywords cannot be used as variable name
- 18)A float is 4 bytes wide, whereas a double is 8 bytes wide

Q-3 Answer the following:

- 1) Explain compilation process in detail
- 2) Write a short note on I/O functions.
- 3) Explain type conversion with example.
- 4) What are Relational operators?explain with the help of example.
- 5) What are Logical operators?explain with the help of example.
- 6) Write a short note on precedence and associativity of opertors.
- 7) Explain C tokens in detail.
- 8) What are Bitwise operators?explain with the help of example.
- 9) What are Assignment operators?explain with the help of example.
- 10)What is a token? Which type of tokens are available?
- 11)What is a keyword? Explain it in detail.
- 12) What is an identifier? Explain it in detail.
- 13) What are Unary operators?explain with the help of example.

- 14) How a variable can be declared? How a variable can be initialized?
- 15) What are binary operators? explain with the help of example.
- 16) What do you mean by a constant? List the type of constant.
- 17) What is a variable? Write down the rules for defining a variable.
- 18) What is Program?
- 19) Explain types of comments.
- 20) Explain Symbolic Constants.
- 21) How do you compile and run a C program.
- 22) Differentiate: Compiler and Interpreter
- 23) Explain precedence and associativity with example.
- 24) Explain printf() and scanf() in detail.
- 25) Explain header file in detail

Q-4 MCQ

1. What is C language?

- A. C language is a structure/procedure oriented
- B. C language is a middle level programming language
- C. C language was invented for implementing UNIX operating system
- D. All of the above

2. C programming language is

- A. Procedural language
- B. Object Oriented language
- C. Scripting languages
- D. None of these

3. How many keywords are there in C ?

- A. 31
- B. 32
- C. 64
- D. 63

4. Which of the following is true for variable names in C?

- A. Variable names cannot start with a digit
- B. Variable can be of any length
- C. They can contain alphanumeric characters as well as special characters
- D. Reserved Word can be used as variable name

5. What is the output of this program?

```
void main()
{
    int x = 10;
    float x = 10;
    printf("%d", x)
}
```

- A. Compilations Error
- B. 10
- C. 10
- D. 10.1

6. What is the output of this program?

```
#include <stdio.h>
void main()
{
    int a=1, b=2, c=3, d;
    d = (a=c, b+=a, c=a+b+c);
    printf("%d %d %d %d", d, a, b, c);
}
```

- A. 11 3 5 11
- B. 11 1 5 11
- C. 11 3 2 11
- D. 11 3 3 11

7. Which of the following operator has the lowest priority?

- 1. &&
- 2. +
- 3. *
- 4. !==

8. Which among the following operator has the highest priority?

- 1. Comma operator
- 2. Conditional operator
- 3. Relational operator
- 4. Unary plus operator

9. Which of the following statement is true?

- 1. All arithmetic operators have the same level of precedence.
- 2. The modulus operator % can be used only with integers.
- 3. A unary expression consists of only one operand with no operators.
- 4. The operators <=, >=, and != all enjoy the same level of priority.

10. What will be the output for the following C code?

- 1. 2
- 2. 1
- 3. 3
- 4. Compile-time error

```
#include <stdio.h>
int main()
{
    int n = 8;
    n = n / 3;
    printf("%d", n);
    return 0;
}
```