

U.G. 4th Semester Examination - 2022**PHYSICS
[HONOURS]****Course Code : BPHSSEHT405****Course Title : Computational Physics Skills**

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer **all** the following questions by choosing the correct alternative out of four options: $2 \times 25 = 50$

1. The name of a variable can be composed of
 - a) Letters
 - b) Digits
 - c) Underscore
 - d) All of the above
2. What is the storage size of the standard floating-point "long double"?
 - a) 2 byte
 - b) 4 byte
 - c) 8 byte
 - d) 10 byte

3. What is an operator?
 - a) An entity whose value can change during the course of execution of the programme
 - b) Similar to a constant
 - c) A symbol that tells the compiler to perform specific mathematical or logical functions
 - d) None of the above
4. What is the output of the program?

```
int main ()
{
    /*for loop execution*/
    for (int a=10; a<20; a=a+1)
    {
        printf("value of a : %d\n", a);
    }
    return 0;
}
```

- a) 11 to 19
- b) 10 to 19
- c) 11
- d) 19

5. Each statement in a C program should end with
- Semicolon (;)
 - Colon (:)
 - Period (.) (dot symbol)
 - None of the above
6. What is # include<stdio.h>?
- Preprocessor directive
 - Inclusion directive
 - File inclusion directive
 - None of the mentioned
7. Which keyword is used to prevent any changes in the variable within a C program?
- Immutable
 - Mutable
 - Const
 - Volatile
8. Which of the following declaration is not supported by C language?
- String str;
 - Char *str;
 - float str=3e2;
 - Both String str; & float str=3e2;
9. Which of the following is not valid C variable name?
- int number;
 - float rate;
 - int variable_count;
 - int \$main;
10. Linux is a/an
- Monitor making company
 - Photo ending software
 - Operating System
 - Name of a university
11. Latex is used for
- photo editing
 - video call
 - online class
 - writing a document
12. To plot a graph one use
- Acrobat reader
 - Adobe photoshop

- c) Projector
 - d) GNU Plot
13. We use scanf command in C to
- a) print something
 - b) read something
 - c) highlight something
 - d) printing date and time
14. File prepared using Latex has extension
- a) .tex
 - b) .doc
 - c) .jpg
 - d) .xlsx
15. All keyword in C are in _____.
- a) Lower Case letters
 - b) Upper Case letters
 - c) Camel Case letters
 - d) None of the mentioned
16. Which is valid C expression?
- a) int my_num=100,000;
 - b) int my_num=100000;

- c) int mynum=1000;
 - d) int \$my_num=10000;
17. What is an example of iteration in C?
- a) for
 - b) while
 - c) do-while
 - d) All of the mentioned
18. What will be the output of the following C code?
- ```
#include<stdio.h>
int main()
{
 int y = 10000;
 int y = 34;
 printf ("Hello World!%d\n",y);
 return 0;
}
```
- a) Compile time error
  - b) Hello World! 34
  - c) Hello World! 1000
  - d) Hello World followed by a junk value

19. What will be the final value of x in the following C code?

```
#include<stdio.h>

void main()
{
 int x=5*9/3+9;
}
```

- a) 3.75
- b) Depends on compiler
- c) 24
- d) 3

Study the following layout and answer the questions number 20 to 22.

```
\documentclass{article}
\begin{document}
Hello World!
\end{document}
```

20. The above layout is an example of
- a) LATEX file
  - b) GNU Plot file
  - c) C program
  - d) Linux basic command

21. The output of the above layout is

- a) Hello World
- b) HELLO World
- c) "Hello World"
- d) Hello World!

22. One uses the following document class to make a presentation in LATEX

- a) Article
- b) Letter
- c) Beamer
- d) Question

23. \_\_\_\_\_ command is used to define the document's title in Latex.

- a) \title
- b) \author
- c) \date
- d) \document

24. \_\_\_\_\_ command is used to specify the author(s) of the document in Latex.

- a) \title
- b) \author
- c) \date
- d) \document

25. Operator % in C Language is called

- a) Percentage operator
- b) Quotient operator
- c) Modulus
- d) Division

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