



UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 1, Examination, May 2022

Module No: EE1101    Module Name: Computer Programming I  
Part I

**Instructions for candidates**

- Write your index number on top of every page.
- Question paper contains 50 multiple choice questions.
- Each question carries 0.4 marks.
- Answer all questions. Each question has only one answer.
- Read the question and all answers before making the choice.
- For each question, put an X mark on the letter: (a), (b), (c), or (d) which corresponds to the correct answer, by using a black or blue pen.
- Time allowed is 1 hour and 30 minutes.

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1. Founder of the C language is
    - (a) Dennis Ritchie
    - (b) Richard Stallman
    - (c) Linus Torvalds
    - (d) Bill Gates
  2. A program with a *compile error*
    - (a) can not be executed.
    - (b) can be linked with other library files.
    - (c) can be executed, but an error message will be displayed.
    - (d) will produce wrong results during execution.
  3. Which of the symbols is used for terminating statements?
    - (a) ,
    - (b) ;
    - (c) "
    - (d) \n
  4. A program with a *runtime error*
    - (a) can not also be compiled, because compile errors occur.
    - (b) can not be executed.
    - (c) will produce wrong results during execution.
    - (d) can be executed, but an error message will be displayed.
  5. Which of the given words is *not* a keyword in C?
    - (a) switch
    - (b) case
    - (c) float
    - (d) method
  6. The code

```
int x, y;
printf(" %d", x = 3 );
```

contains *f*
    - (a) a syntax error.
    - (b) a run-time error.
    - (c) no errors.
    - (d) error or not depends on y value.

7. The program with a syntax error is
- (a) `int main(void){}`
  - (b) `main(void){;}`
  - (c) `int main(void;){}`
  - (d) `int main(void){printf("x"); return 0;}`
8. The program
- ```
#include <stdio.h>
int main(void){ printf("/XYZ"); */.
return 0;}
```
- (a) prints XYZ
  - (b) prints nothing
  - (c) has syntax errors
  - (d) creates run time *memory segment* fault
9. Codeblock is a
- (a) Compiler for computer programming languages
  - (b) NOSQL type Database Management System (DBSM)
  - (c) Integrated Development Environment (IDE)
  - (d) Framework
10. Visual Code is a
- (a) Scripting Language
  - (b) SQL supported Database Management System (DBSM)
  - (c) Operating System
  - (d) Source-Code Editor
11. The type of a variable defines
- (a) the size of the memory required to hold data.
  - (b) possible operations on variables of considered type.
  - (c) the kind of data to be stored.
  - (d) all given by above answers.
12. Which of the given set of keywords contains only variable types?
- (a) long, int, double
  - (b) double, unsigned, break
  - (c) continue, unsigned long, short
  - (d) float, long, case
13. Which of the following declarations of x best fits to store a name of a person?
- (a) `char x;`
  - (b) `char x[100];`. **Answer**
  - (c) `int *x;`
  - (d) `float x[499].`
14. C variable type that does not define any particular type is
- (a) float
  - (b) int
  - (c) void
  - (d) char
15. Which of the variable types is the most suitable for storing the area of a circle?
- (a) int
  - (b) short
  - (c) float
  - (d) unsigned char
16. Which of the given statements makes the pointer `int *ptr;` points to the variable `int x;`?
- (a) `ptr = &x;`
  - (b) `*ptr = x;`
  - (c) `*ptr !=x;`
  - (d) `ptr[x]=*x;`
17. Which of the format specifiers is used to print the values of double type variable?
- (a) `%lf`
  - (b) `%d`
  - (c) `%s`
  - (d) `%c`
18. Which of the given operators is an unary operator? *if*
- (a) -
  - (b) -
  - (c) =
  - (d) -=

19. Which of the operators has the lowest priority?
- (a) =
  - (b) ++
  - (c) /
  - (d) +
20. The preprocessor directive `#include <stdlib.h>` includes a
- (a) variable
  - (b) symbolic constant
  - (c) library file
  - (d) class
21. What is given by the following statement?  
`int fun[22];`
- (a) Definition of the operator [ ].
  - (b) Declaration of array `fun` with 21 elements
  - (c) Definition of 22 functions under the name `fun`
  - (d) Declaration of array `fun` with 22 elements
22. Which of the given characters is at the end of a C-String?
- (a) `'\n'`
  - (b) `'\r'`
  - (c) `'\t'`
  - (d) `'\0'`
23. What is the meaning of `x = y; ?`
- (a) Assign the value of `y` to `x`
  - (b) `x` is equal to `y`.
  - (c) Is `x` equal to `y`?
  - (d) Is `x` is not equal to `y`?
24. What is the meaning of `x == y; ?`
- (a) Value of `y` is assigned to `x`.
  - (b) `x` is equal to `y`
  - (c) Is `x` equal to `y`?
  - (d) Is `x` is not equal to `y`?
25. what is the meaning of `x != y; ?`
- (a) Value of `y` is assigned to `x`.
  - (b) `x` is equal to `y`
  - (c) Is `x` equal to `y`?
  - (d) Is `x` is not equal to `y`?
26. What does the operation `23%4` produce?
- (a) 3
  - (b) 2
  - (c) 1
  - (d) 0
27. The expression `25 != 24` evaluates to
- (a) 1
  - (b) 0
  - (c) 10
  - (d) 26
28. The expression `1232 == 123` evaluates to
- (a) 1
  - (b) 0
  - (c) 6
  - (d) 8
29. After execution of  
`x=2; ++x; ++x;`  
the value of `x` is
- (a) 2
  - (b) 3
  - (c) 4
  - (d) 5
30. After execution of  
`x=5; x += x;`  
the value of `x` is
- (a) 55
  - (b) 5
  - (c) 10
  - (d) 25

31. The expression  $(x + y * 5) > 25$  evaluates to 1 if
- (a)  $x = 3$  and  $y = 4$
  - (b)  $x = 0$  and  $y = 5$
  - (c)  $x = 11$  and  $y = 3$
  - (d)  $x = 14$  and  $y = 2$
32. The expression  $(3 == 33 || 3 != 3)$  evaluates to
- (a) 33
  - (b) 42
  - (c) 1
  - (d) 0
33. The expression  $(10 == 4 \&\& 5 < 3)$  evaluates to
- (a) 1
  - (b) 0
  - (c) -1
  - (d) Non of the above choices
34. `if(!x) printf("Yes");`  
This displays Yes only if x is
- (a) 0.
  - (b) greater than 0 or less than 0.
  - (c) is less than 0.
  - (d) greater than 0.
35. `if( x+10 > 10) printf("Yes");`  
This displays Yes if x is
- (a) greater than 10.
  - (b) less than 10.
  - (c) greater than or equal to 0.
  - (d) greater than 0.
36. `if( x-25 < 25) printf("Yes");`  
This displays Yes if x is
- (a) greater than 50.
  - (b) greater than 10.
  - (c) less than 40.
  - (d) less than 55.
37. `if( x > 100 \&\& x <=205) printf("Yes");`  
`else printf("No");`  
This displays No if x is
- (a) 100
  - (b) 110
  - (c) 125
  - (d) 205
38. `if(x<=150 || x>175) printf("Yes");`  
`else printf("No");`  
This displays No if x is
- (a) 150
  - (b) 160
  - (c) 180
  - (d) 148
39. `if((x<10 || x>25) \&\& (x<-10 || x>-25))`  
`printf("Yes");`  
This displays Yes if x is
- (a) -15
  - (b) 0
  - (c) -30
  - (d) any of the above.
40.  $(12==5 \&\& 3!=3) || (4+5 || 3-4+1)$   
This expression evaluates to
- (a) -1
  - (b) 0
  - (c) 1
  - (d) non of the above values.
41. `for(i=0;i<610;++i) printf("X");`  
How many times the character X is displayed?
- (a) 69
  - (b) 610
  - (c) 161
  - (d) 0
42. `for(i=0;i<=10; i += 2) printf("X");`  
How many times the character X is displayed?
- (a) 2
  - (b) 3
  - (c) 4
  - (d) 5

43. `i=0;while(i<5){ printf("%d",i);++i;}`  
This code prints`
- (a) 0 1 2 3 4
  - (b) 0 1 2 3 4 5
  - (c) 1 2 3 4
  - (d) 1 2 3 4 5
44. `i=0;while(i<4)++i;printf("%d",i);`  
The value of i displayed is
- (a) 0 1 2 3
  - (b) 4
  - (c) 3 2 1 0
  - (d) Non of the above
45. `Sum=4;i=2;while(i<=5){Sum+=i;++i;}`  
This code sets Sum to
- (a) 17
  - (b) 16
  - (c) 15
  - (d) 18
46. In switch statement
- (a) goto can be used to direct to another case.
  - (b) default is not optional.
  - (c) break prevents execution of next case.
  - (d) continue makes execution of previous case.
47. `for(i=-5, j=11;i<34; i+=j,--j)`  
`{ printf(" %d ", j); }`  
Above code displays
- (a) 11 10 9 8 7
  - (b) 11 9 7 5 3
  - (c) 10 8 8 6 -5
  - (d) 10 9 5 -3 2
48. `i=1000;`  
`while(i)`  
`{ i-=2;`  
`printf("\n%d", i);`  
`}`  
Above code displays
- (a) odd numbers.
  - (b) even numbers.
  - (c) fractional numbers.
  - (d) prime numbers.
49. `void tow(float *x);`  
is a function
- (a) definition
  - (b) call
  - (c) name
  - (d) prototype
50. According to  
`double xy(int x, float y);`  
the return value is
- (a) of type float.
  - (b) of type int.
  - (c) of type doublet.
  - (d) of non of the types given above.