



EXAMINATION PAPER

FACULTY : COMPUTER SCIENCE AND MULTIMEDIA
COURSE : BACHELOR OF INFORMATION TECHNOLOGY (HONS)
YEAR/ SEMESTER : FIRST YEAR / SEMESTER ONE
MODULE TITLE : C-PROGRAMMING
CODE : BIT 115
DATE : 29- APRIL, 2019, MONDAY
TIME ALLOWED : 3 HOURS
START : 1:00 PM FINISH : 4:00 PM

Instruction to candidates

1. This question paper has THREE (3) Sections.
2. Answer **ALL** questions in Section A, MCQ.
3. Answer **5** questions in Section B, MSAQ.
4. Answer **2** questions in Section C, MEQ.
5. No scripts or answer sheets are to be taken out of the Examination Hall.
6. For Section A, answer in the OMR form provided.

Do not open this question paper until instructed

(Candidates are required to give their answers in their own words as far as practicable)

Section A

Multiple Choice Questions

(30*1=30)

1. Which keyword is used to come out of a loop only for that iteration?
 - a. break
 - b. continue
 - c. return
 - d. None of above

2. Which of the following are unary operators?
 - a. - -
 - b. -
 - c. ++
 - d. all of above

3. Comment on the following pointer declaration.
int *ptr, p;
 - a. ptr is a pointer to integer, p is not
 - b. ptr and p, both are pointers to integer
 - c. ptr is a pointer to integer, p may or may not be
 - d. ptr and p both are not pointers to integer

4. Which for loop has range of similar indexes of 'i' used in for (i = 0; i < n; i++)?
 - a. for (i = n; i > 0; i--)
 - b. for (i = n; i >= 0; i--)
 - c. for (i = n-1; i > 0; i--)
 - d. for (i = n-1; i > -1; i--)

5. The keyword 'break' cannot be simply used within:
 - a. do-while
 - b. if-else
 - c. for
 - d. while

6. What is the type of the following assignment expression if x is of type float and y is of type int?

y = x + y;

- a. int
 - b. float
 - c. there is no type for an assignment expression
 - d. double
7. Comment on the following 2 arrays with respect to P and Q.

int *a1[8];

int *(a2[8]);

P. Array of pointers

Q. Pointer to an array

- a. a1 is P, a2 is Q
 - b. a1 is P, a2 is P
 - c. a1 is Q, a2 is P
 - d. a1 is Q, a2 is Q.
8. What will be the output of the following C code?

```
#include <stdio.h>
void main()
{
    int a[3] = { 1, 2, 3 };
    int *p = a;
    printf("%p\t%p", p, a);
}
```

- a. Same address is printed
- b. Different address is printed
- c. Compile time error
- d. Nothing

9. Which of the following are themselves a collection of different data types?

- a. string
- b. structures
- c. char
- d. all of above

10. What is the correct syntax to declare a function foo() which receives an array of structure in function?

- a. void foo(struct *var);
- b. void foo(struct *var[]);
- c. void foo(struct var);
- d. none of above

**11. Which of the following is an incorrect syntax for pointer to structure?
(Assuming struct temp{int b;}*my_struct;)**

- a. (*my_struct).b = 10;
- b. *my_struct.b = 10;
- c. my_struct->b = 10;
- d. Both *my_struct.b = 10; and (*my_struct).b = 10;

12. What is the default return-type of getchar()?

- a. char
- b. int
- c. char *
- d. reading character doesn't require a return-type

13. Functions whose names begin with “strn”.

- a. manipulates sequences of arbitrary characters
- b. manipulates null-terminated sequences of characters
- c. manipulates sequence of non – null characters.
- d. returns a pointer to the token

14. What is the result of a logical or relational expression in C?

- a. True or False
- b. 0 or 1
- c. 0 if an expression is false and any positive number if an expression is true
- d. None of above

15. What is the return value ofgetc()?

- a. The next character from the stream is not referred by file pointer
- b. EOF for end of file or error
- c. Nothing
- d. None of above

16. In C language, FILE is of which data type?

- a. int
- b. char *
- c. struct
- d. None of above

17. Which of the following mode argument is used to truncate?

- a. a
- b. f
- c. w
- d. t

18. Which among the following is NOT a logical or relational operator?

- a. !=
- b. ==
- c. ||
- d. =

19. Relational operators cannot be used on _____ .

- a. structure
- b. long
- c. strings
- d. float

20. C preprocessors can have compiler specific features.

- a. True
- b. False
- c. Depends on the standard
- d. Depends on the platform

21. Which of the following declaration is not supported by C?

- a. char *str;
- b. String str;
- c. float str = 3e2;
- d. Both String str; & float str = 3e2;

22. What will be the output of the following statement ?

```
int a=10; printf("%d &i",a,10);
```

- a. 12
- b. 10
- c. 10 10
- d. none of above

23. Pointer actually stores _____ of another variable.

- a. Value
- b. Address
- c. data size
- d. none of the mentioned

24. Pointer variable is declared using preceding _____ sign.

- a. %
- b. &
- c. (c)*
- d. ^

25. Address stored in the pointer variable is of type _____.

- a. Integer
- b. Floating
- c. Array
- d. Character

26. "&" is called as _____ in pointer concept.

- a. Logical Operator
- b. Address Operator
- c. Conditional Operator
- d. None of the mentioned

27. Which of the given is not a correct c expression ?

- a. r=a+b;
- b. r=2*{1+b};
- c. r=1*b;
- d. All

28. Which of the following is not a loop statement ?

- a. for
- b. while
- c. do while
- d. switch

29. Which of the following format specifiers is used with string ?

- a. %d
- b. %s
- c. %f
- d. %ld

30. Which of the following data type is also used to define string ?

- a. char
- b. int
- c. float
- d. double

SECTION B
Short question Answers

Attempt all five (5) questions out of eight (8) questions (5*6=30)

1. Write the concept of C programming with its features.(1+5)
2. Define If else statement. Write a program to check whether a year is leap year or not.(1+5)
3. Why we need Array in C Programming? How array can be passed to a function. Explain with appropriate example.(1+5)
4. Write a program that accepts two 3×3 matrix and display their product using pointer.
5. Write a program to generate the following program
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
6. Write a program to test whether the given string is Palindrome or not.
7. Write the difference between structure and union with syntax.
8. Write a short note on any TWO:
 - a. Call by refrence
 - b. Continue statement and break statement
 - c. Dynamic memory allocation

SECTION C

Long Questions Answers

Attempt two (2) questions out of three (3) questions (2*20=40)

- 1.**
 - a.** Write programs to input any characters in a file and read the characters from the file using unformatted I/O functions.(8)
 - b.** Write a program to input 10 employee records (Emp_id,Emp_name and Emp_Salary) and store them in a data file named “Emp.dat”.Display the employee information who gets highest salary. (12)
- 2.** Define typecasting and explain its types. Explain the types of looping used in c with example. (10+10)
- 3.**
 - a.** Write the advantage of using function. Differentiate between user define and library function. (4+6)
 - b.** Illustrate I/O operation with example. write a program to read and write a line of text and convert it to uppercase.(4+6)