

**2024/FYUG/ODD/SEM/
CASEC-101T/304**

FYUG Odd Semester Exam., 2024

COMPUTER APPLICATION

(1st Semester)

Course No. : CASEC-101T

(Programming with C)

Full Marks : 50

Pass Marks : 20

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—I

1. Answer any *three* from the following : $1 \times 3 = 3$
 - (a) What are variables?
 - (b) Who developed C language?
 - (c) Why do you need to use comments in program?
 - (d) What is a conditional operator?

2. Answer any *one* from the following : 2
 - (a) Differentiate between `int main ()` and `void main ()`.
 - (b) What is a switch statement? Write its syntax.

(2)

3. Answer any *one* from the following : 5

- (a) Why and when do we use the define directive? Give example.
- (b) Write a C program to calculate the sum of the numbers.

UNIT—II

4. Answer any *three* from the following : 1×3=3

- (a) What is a function?
- (b) What is function prototype?
- (c) What are header files?
- (d) What is recursion?

5. Answer any *one* from the following : 2

- (a) What is prototype? When is it used?
- (b) How do we define a function?

6. Answer any *one* from the following : 5

- (a) Explain the difference between passing a value in function by value and by reference.
- (b) Write a C program to calculate Fibonacci numbers.

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(3)

UNIT—III

7. Answer any *three* from the following : 1×3=3

- (a) What is a two-dimensional array?
- (b) What is a pointer?
- (c) Define an array.
- (d) How can a pointer be initialized?

8. Answer any *one* from the following : 2

- (a) Distinguish between (*m)[5] and *m [5].
- (b) How do we declare a two-dimensional array?

9. Answer any *one* from the following : 5

- (a) Write a C program to illustrate multidimensional array.
- (b) Why is an array called a data structure? Write a program segment to illustrate the use of data structure.

UNIT—IV

10. Answer any *two* from the following : 1×3=3

- (a) Define a structure.
- (b) What is array of structure?
- (c) What is a union?
- (d) What is the need of structure?

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(Turn Over)



(4)

11. Answer any *one* from the following : 2

- (a) What is the difference between structure and union?
- (b) Write the general form of defining a structure.

12. Answer any *one* from the following : 5

- (a) What is the use of union in C? Write a C program to show the use of union. $1+4=5$
- (b) What is the purpose of typedef feature? How is this feature used in conjunction with structure? What is self-referential structure? $1+2+2=5$

UNIT—V

13. Answer any *three* from the following : $1 \times 3 = 3$

- (a) What is the use of scanf and printf function?
- (b) What is macro?
- (c) What is C preprocessor?
- (d) Define closing and opening a file.

14. Answer any *one* from the following : 2

- (a) What do you mean by a library function? Give example.
- (b) What do you mean by enumeration?

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(5)

15. Answer any *one* from the following : 5

- (a) Explain different library functions used in C programming.
- (b) Explain how we create a data file. How do we process a data file and access a data file?

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