

D-1273**Sub. Code****13013**

DISTANCE EDUCATION

B.Sc. DEGREE EXAMINATION, MAY 2019.

First Semester

Computer Science

PROGRAMMING IN C

(CBCS 2018 – 19 Academic year onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are uses of conditional operator?
2. Convert the following equations into corresponding c expression:
$$X = b^2 - 4ac / 2a$$
3. Write down the syntax of else if ladder.
4. Differentiate break and continue statement.
5. Write the syntax for function declaration.
6. What is structure?
7. Define pointer. How will you declare it?
8. What is a pointer to pointer?
9. Compare fseek() and ftell() function
10. How to read and write the file?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Explain the relational operator with example.

Or

- (b) Explain the main features of C language.

12. (a) Explain the functionality of for statement with example.

Or

- (b) What is array? Explain the procedure to declare and initialize one dimensional array.

13. (a) What are functions? What is the advantage of using function in a program?

Or

- (b) Illustrate the need of structures in C.

14. (a) How do you use a pointer to a function? Explain.

Or

- (b) What is an array of pointers ? Explain in detail with example.

15. (a) Briefly explain the error handling methods.

Or

- (b) Compare sequential access and Random access file.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the structure of a C program with an example.
 17. Elaborately explain the decision making statement
 18. Write a program in C to find out the value of factorials from 1 to 10 using recursion.
 19. Write a C program for the addition of a 2*2 matrix.
 20. Describe the various functions used in a file with example.
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D-1274**Sub. Code****13023**

DISTANCE EDUCATION

B.Sc. (Computer Science) DEGREE EXAMINATION,
MAY 2019.

First Year — Second Semester

OBJECT ORIENTED PROGRAMMING AND C++

(CBCS 2018-19 Academic year onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Encapsulation
2. Give the comparison of C and C++.
3. Define class and object with an example.
4. What are constructors?
5. What are types of inheritance?
6. What is an abstract class?
7. What is the need for template function in C ++?
8. What is the need for streams?
9. What are the advantages of the exception handling?
10. What is Uncaught Exception?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) What is the use of Scope resolution operator? State the use of void in C++.

Or

- (b) Compare and contrast the structured and object oriented programming paradigms.

12. (a) Explain the structure of class with an example.

Or

- (b) With suitable example explain the inline function.

13. (a) Explain different types of inheritance with block diagram and an example for each.

Or

- (b) Explain Pure Virtual Functions.

14. (a) Explain the Function template.

Or

- (b) Explain the process of open, read, write and close files.

15. (a) With suitable example explain the multiple catch exception mechanism.

Or

- (b) Explain the different types of exceptions.

SECTION C — ($3 \times 10 = 30$ marks)

Answer ALL questions.

16. Explain the basic concepts of Object oriented programming.
 17. Elaborately explain the different types of constructors.
 18. With suitable example explain (a) Function Overloading
(b) Operator Overloading.
 19. Describe the stream classes in detail.
 20. How exception handling is done in C++? Explain with an example.
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