QP CODE: 18103823

18103823

Reg No : .....

Name : .....

B.Sc.DEGREE(CBCS)EXAMINATION, DECEMBER 2018

First Semester

Core Course - CS1CRT02 - METHODOLOGY OF PROGRAMMING AND C LANGUAGE

(Common to B.Sc Computer Applications Model III Triple Main, B.Sc Computer Science Model III, B.Sc Information Technology Model III, Bachelor of Computer Application)

2018 Admission only

AD9C1513

Maximum Marks: 80 **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. What is a low level language?
2. List out the characteristics of a good programming language.
3. Explain (i) Runtime error (ii) Logical error
4. What is a variable ? What are the rules for naming a variable ?
5. What are conditional operators?
6. Explain the use of puts() statement
7. What is the use of exit() ?
8. What are the differences between arrays and structures?
9. Explain * operator and & operator with example.
10. What are actual parameters and formal parameters?
11. What is array of structure? Give example.
12. What is the advantage of using enumerated data type?

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain Linker.
14. Draw a flowchart to find factorial of a number.

15. Why do you mean by type modifier? What are the different type conversions possible in C? Explain with example

16. How switch statement is executed in C program? Give example.

17. Write a C program to perform the functions of arithmetic operations of a calculator using switch statement.

18. Write C program to sort a one dimensional array of integers in ascending or descending order based on users choice.

19. Explain the concept of pointer to array.

20. What is recursion? What are the advantages and disadvantages of recursion?

21. Explain the different dynamic memory allocation functions

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain the following a) Factors for selecting a language. b) Control structures used in programming languages.

23. Explain different tokens in C language

24. Explain strings and its memory representation. Write a C program to count the number of vowels in a string

25. a) What are the different Storage classes in C? B) Write down the arithmetic operations with Pointers.

(2×15=30)

E 8438 (Pages : 2) Reg. No.....

Name.....

B.Sc./B.C.A. DEGREE (CBCS) EXAMINATION, JANUARY/FEBRUARY 2018

First Semester

Core—METHODOLOGY OF PROGRAMMING AND C LANGUAGE

(Common to B.C.A., B.Sc. (CS), B.Sc. (IT), B.Sc. [Computer Application Triple Main])

(2017 Admissions)

Time : Three Hours Maximum Marks : 80

Part A

Answer any **ten** *questions.*
Each question carries 2 *marks.*

1. What is algorithm ?
2. What is a pointer ?
3. What are key words ?
4. What is pseudo code ?
5. Define linker.
6. What is meant by testing and debugging ?
7. Briefly explain the characteristics of a good program.
8. Discuss the purpose of program planning.
9. What are enumerated datatypes ?
10. What is a variable ? What are variable naming rules ?
11. List any three unconditional branching statements.
12. What are header files ? Give examples.

(10 × 2 = 20)

Part B

Answer any **six** *questions.*
Each question carries 5 *marks.*

13. Discuss various bitwise operations in C.
14. What are strings ? Explain any 5 standard string functions.
15. What are structures in C ? How is it different from union ? Give example.
16. Discuss various arithmetic operations with pointers.

Turn over

17. Explain the difference between entry controlled and exit controlled loops. Explain with the help of suitable example.

18. What are language translators ?

19. What is meant by dynamic memory allocation ? Explain.

20. What is recursion ? Explain direct and indirect recursion.

21. With the help of flowchart, explain any two decision statements in C. Give examples.

(6 × 5 = 30)

Part C

Answer any **two** *questions.*
Each question carries 15 *marks.*

22. Write a C program to add two square matrices.

23. Write notes on various operators in C.

24. What is a function ? Discuss different types of functions. Give examples.

25. Explain in detail the various data types in C.

(2 × 15 = 30)