



C14-CM-106/C14-IT-106

4032

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2016

DCM—FIRST YEAR EXAMINATION

PROGRAMMING IN C

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

1. List the steps involved in executing the C program. 3
2. What is a constant? How do you declare a constant in C? 1+2
3. Write a C program to read and display a character in C using getchar() and putchar(). 3
4. Write the syntax and flow chart of if-else statement. 1½+1½
5. Distinguish between while and do-while loops. 3
6. How to initialize an array s[5] with the values 10, 35, 60, 55, 12? 3
7. What is string? Write any two string handling functions. 1+2
8. Write a function to add three numbers. 3
9. Define a pointer with a suitable example. 2+1
10. What are the various file opening modes? 3

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PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

- 11.** (a) List and explain arithmetic operators used in C with examples. 5
(b) Briefly explain advantages of the functions. 5
- 12.** (a) Explain about else-if ladder with an example. 5
(b) Write a C program to find the maximum of the given three numbers. 5
- 13.** (a) Explain various looping statements in C. 2+2+2
(b) Write a C program to check whether the given number is palindrome or not. 4
- 14.** (a) Explain how to declare and initialize a single-dimensional array. 4
(b) Write a C program to add the given two matrices. 6
- 15.** What is a function? What are the various categories of functions based on arguments and return type? 2+8
- 16.** (a) Distinguish between address operator(&) and de-referencing operator(). 3+3
(b) Write a C program to swap two numbers using pointers. 4
- 17.** (a) Write the differences between structure and union in C. 5
(b) What is a self-referential structure? Explain with an example. 3+2
- 18.** (a) What is C preprocessor? Give the purpose of #define, #include directives. 2+4
(b) Write a C program to create and display a text file. 4
