



C-16S/-C-14 EC-406

5653

BOARD DIPLOMA SUPPLEMENTARY EXAMINATION, (C-16S)

JUNE / JULY - 2020

DECE - IV SEMESTER EXAMINATION
PROGRAMMING IN C

Time : 2 Hours]

[Total Marks : 80

PART - A

5×6=30

- Instructions :*
- (1) Answer any **SIX** questions.
 - (2) Each question carries **FIVE** marks.
 - (3) Each answer should not exceed more than **ONE** page.

- 1 ✓ Mention various data types in C.
- 2 ✓ List the logical operators in C.
- 3 ✓ Give differences between break and continue statements.
- 4 ✓ List various iterative statements available in C.
- 5 ✓ Explain getchar() and putchar() functions.
- 6 Describe the operation of strcpy() and strlen() functions.
- 7 Give the differences between local and external variables.
- 8 ✓ Differentiate address and dereferencing operators.
- 9 List any three unconditional pre-processor directives.
- 10 Explain how to access members of a structure.

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[Contd...

PART - B

10×5=50

- Instructions :**
- (1) Answer any **FIVE** questions.
 - (2) Each question carries **TEN** marks.
 - (3) Each answer should not exceed more than **TWO** pages.

- 11 ✓ (a) Describe printf () and scanf () functions. 4+6
 (b) Define an expression and explain how it is evaluated.
- 12 ✓ Explain if, if-else and if-else-if statements with examples.
- 13 (a) Explain any one loop structure available in C. 4+6
 (b) Write a program in C to find the sum of a series of five numbers stored in an array.
- 14 ✓ Write a program in C to add two 3x3 matrices. Store result in another 3x3 matrix.
- 15 (a) List any three functions for writing strings. 3+7
 (b) Explain string manipulation functions strcat (), strcmp () and strlen ().
- 16 ✓ What is recursion. Write a program to find the factorial of a given number using recursion.
- 17 (a) What is a function ? Explain with an example. 7+3
 (b) List the storage classes supported in C.
- 18 (a) What is a structure ? Explain how structures are declared and initialised with examples. 7+3
 (b) Give the differences between structure and union.