



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 1st Semester Examination, 2019

**CCI-COMPUTER SCIENCE**  
**PROGRAMMING FUNDAMENTALS USING C**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks  
Candidates should answer in their own words and adhere to the word limit as practicable  
All symbols are of usual significance*

**GROUP-A**

1. Answer any **five** questions from the following:

1 × 5 = 5

- (a) What is the use of break statement?
- (b) What is the significance of & symbol?
- (c) What is formal parameter?
- (d) What is the significance of # symbol?
- (e) What is ternary operator?
- (f) What is the meaning of "==" operator?
- (g) Name one logical operator.
- (h) What is recursion?

**GROUP-B**

2. Answer any **three** questions from the following:

5 × 3 = 15

- (a) Write a short note on "C Header files".
- (b) Discuss the significance of main() function. Write down the steps to compile a source file in C.
- (c) Discuss casting of data types by giving examples.
- (d) Differentiate between call by value and call by reference.
- (e) Discuss array of structures in C by giving an example.

**GROUP-C**

3. Answer any **two** questions from the following:

10 × 2 = 20

- (a) What is file? How do you open and close a file? Discuss random access in files.
- (b) Write a program in C to multiply two polynomials.
- (c) Write a program in C to check if a string is palindrome or not.
- (d) Differentiate between static and dynamic memory allocation. What is the use of malloc(), calloc() and free() functions?
- (e) What are references? Discuss the use of references as function arguments and function return values.

— x —