UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 1st Semester Examination, 2022

CC1-COMPUTER SCIENCE (12)

PROGRAMMING FUNDAMENTALS USING C

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.

1.   Answer any *five* questions: 1×5 = 5
   (a) What are the four storage classes used in C language?
   (b) What is the scope of a variable?
   (c) Write the minimum value of **int** data type for a 16-bit compiler.
   (d) Who is known as the father of C language?
   (e) Let a C-program has only one function. Write the name of the function.
   (f) The break is used for: (i) Quit the program, (ii) Quit the current iteration, (iii) None.
   (g) The C preprocessors are specified with a symbol: (i) #, (ii) &, (iii) @, (iv) None.
   (h) Which is not a valid C variable? (i) avg, (ii) fact, (iii) #num, (iv) variable_num.

2.   Answer any *three* questions: 5×3 = 15
   (a) For function calling write notes on Call by reference.
   (b) Explain Nested loop with suitable example.
   (c) Explain with example Function Definition and Function Declaration.
   (d) Discuss Pointer of Pointer with suitable example.
   (e) Point out the errors, if any, in the following program and also write the output of
       the following program if errors are removed.
       ```
       void main()
       {
               int m = 1000;
               if(m<1234 && m! = 999);
                       printf("\n m = %d : It is a Millennium number",m);
               else
                       printf("\n Wrong entry");
       }
       ```

3.   Answer any *two* questions: 10×2 = 20
   (a) Explain the switch statement used in C programming with suitable example.
   (b) Discuss different types of operators used in C programming language.
   (c) Write a C program to add two 3×4 matrices.
   (d) Write a C program to copy the contents a file source.txt to a new file target.txt
       and explain your program-code in brief.

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