WEST BENGAL STATE UNIVERSITY

B.A./B.Sc. Honours 1st Semester Examination, 2020, held in 2021

CMAACOR01T-COMPUTER APPLICATION (CC1)

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.

Answer Question No. 1 and any *four* questions from the rest

1.   Answer any *four* questions from the following: 2×4 = 8

   (a) What do you mean by Dangling Pointer Variable in C Programming?

   (b) Differentiate between Actual Parameters and Formal Parameters.

   (c) What is Preprocessor Directive?

   (d) Differentiate between getch() and getche().

   (e) What do you mean by Memory Leak?

   (f) What is spaghetti programming?

   (g) What are enumerated types?

   (h) What is gets() function?

2. (a) Explain Local Static Variables, mentioning their use.   4

   (b) What is the difference between declaring a header file with $< >$ and " " ?   4

3. (a) Which statement is efficient and why? $x = x + 1$; or $x++$; ?   4

   (b) Consider the following segment of code: 4

   i = 5;

   printf("%d   %d   %d", ++i, i, i++);

   Properly explain what will be the output.

4. (a) Write a program to swap two numbers without using the third variable.   5

   (b) How can you print a string with the symbol % in it? For example, to print   3
       "Shyam has secured 90% in mathematics".

5. (a) What are the limitations of scanf() and how can it be avoided?   4

    (b) Differentiate between the macros and the functions.   4

6. (a) Differentiate Source Codes from Object Codes.   4

    (b) What are logical errors and how does it differ from syntax errors?   4

7. (a) Write a C Program to print Pascal's triangle.   6

$$1$$
$$1 \qquad 1$$
$$1 \qquad 2 \qquad 1$$
$$1 \qquad 3 \qquad 3 \qquad 1$$

    (Number of lines n is fed by the user)

    (b) What does the format %10.2 mean when included in a printf statement?   2

8. (a) What is output redirection?   4

    (b) With an example differentiate between functions abs() and fabs().   4

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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