लक्ष्यं विद्यावम्

WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 2nd Semester Examination, 2019

CMSACOR03T- COMPUTER SCIENCE (CC3)

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

Answer any *four* questions from this group

2×4 = 8

1. Differentiate between object and reference object.

2. What is the significance of Method area?

3. Differentiate between Byte stream and Character stream I/O.

4. What is implicit and explicit casting?

5. Write four characteristics of OOP.

6. Write the difference between the error and exception.

7. How JAVA has benefited by the use of interface?

GROUP-B

Answer any *four* questions from this group

8×4 = 32

8. (a) What is a token? List the various types of tokens supported by Java with brief description. 2+4

 (b) What are byte codes? How are they different from machine codes? 1+1

9. (a) What is type casting? What is implicit and explicit typecasting in Java? Explain with the help of an example. 1+2+2

 (b) Write down difference between arrays in C and array in Java. 3

1

10.(a) What is meant by constructor overloading? Explain with an example. 2+4

(b) What is the use of 'this' keyword? 2

11.(a) What are the benefits of organizing classes into packages? 2+2+4

(b) How does the multi-threading improve the performance of JAVA?

(c) "Static members cannot invoke non-static members"— Explain with suitable code.

12.(a) "More than one Thread can run concurrently" — Explain with suitable piece of code. 2+4+2

(b) Draw applet life cycle and explain the major methods.

(c) Define "join()" function of Thread class with suitable example.

13.(a) State the differences between interface and abstract class. 4

(b) Create a Package called "myCustompack". Under this package include a class called Cube and add necessary instance variables and methods within the class. 4

14.(a) Write a Java program to change lower case to upper case and vice versa. 5

Example:- HellO WoRlD   OUTPUT:- hELLo wOrLd

(b) State the use of the following methods: 3

(i) trim( )   (ii) concat( )   (iii) valueOf( )

——×——