



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examination 2023

(Under CBCS Pattern)

Semester — II

Subject : COMPUTER SCIENCE

Paper : C-3T

(Programming in JAVA)

Full Marks : 40

Time : 2 hours

*Candidates are required to give their answers
in their own words as far as practicable.*

The figures in the margin indicate full marks.

*Answer from **all** the Groups as directed.*

GROUP—A

1. Answer *any five* questions from the following :
2×5=10

(a) Why is Java called machine independent
and architecture neutral language?

(2)

- (b) What is the role of JVM (Java Virtual Machine)?
- (c) What is thread priority?
- (d) What do you mean by JDBC?
- (e) What is an abstract class?
- (f) Differentiate between 'throw' and 'throws'.
- (g) Define nested class.
- (h) Why do we use package in Java?

GROUP—B

Answer *any four* questions from the following :

5×4=20

- 2. Explain each component of the statement 'public static void main (string args[])'. 5
- 3. What is Java applet? How is it different from Java application program? 2+3=5
- 4. What is inheritance? Explain, how multiple inheritance can be implemented using interface in Java. Give suitable example. 2+3=5

(3)

5. Differentiate between method-overloading and ✓ method-overriding with the help of a suitable example. 5
6. Write a Java program to add two times objects using operator overloading. 5
7. What are threads? Explain how threads are created by implementing runnable interface. 2+3=5

GROUP—C

Answer *any one* question from the following :

10×1=10

8. (a) ✓ What is an exception? Describe how multiple exceptions are caught in Java with the help of a suitable program code.
- (b) ✓ Briefly discuss the methods used by applet during their life cycle. (2+4)+4=10
9. (a) What is the difference between a process and a thread? Mention any three methods of thread class and describe them briefly.
- (b) What are the uses of final keyword in Java? Explain with an example. (3+4)+3=10

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