2022

COMPUTER SCIENCE — GENERAL

Paper: DSE-B-2

(Object Oriented Programming)

Full Marks: 50

The figures in the margin indicate full marks.

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

Answer question no. 1 and any four from the rest.

| 1. | Answer any five questions: | | 2×5 |
|----|----------------------------|---|---------|
| | (a) | What is the use of JDBC? | |
| | (b) | What do you understand by JVM? | |
| | (c) | What do you mean by data abstraction? | |
| | (d) | What is the function of static variable in Java? | |
| | (e) | Write the function of super keyword. | |
| | (f) | What is an applet? | |
| | (g) | What is method overriding? | |
| | (h) | What is the utility of final class in Java? | |
| 2. | (a) | What are the advantages of package in Java? | |
| | (b) | Why is the main method always static in Java? | |
| | (c) | What is the utility of interface? | |
| | (d) | Why string is immutable? | 3+2+3+2 |
| 3. | (a) | Discuss multilevel inheritance in brief with example. | |
| | (b) | What is thread in Java? Write the benefits of using multithreading in Java. | 5+5 |
| 4. | (a) | Write a program in Java to find number of words starting with 'S' and 'P' in a string | |
| | (b) | With an example, show the use of relational and assignment operators in Java. | 5+5 |
| 5. | (a) | Explain exception handling mechanism in Java. | |
| | (b) | What is the function of wrapper class in Java? | |
| | (c) | What is the use of finally in Java? | 5+3+2 |
| | | | |

Please Turn Over

- 6. (a) Write a Java program to check whether a number is palindrome or not.
 - (b) What are the types of polymorphism in Java? Explain each of them with an example.

5+5

- 7. (a) What is copy constructor? Explain with example.
 - (b) What are the rules of defining a constructor?
 - (c) What is the purpose of default constructor? Explain with an example.
 - (d) What is the function of destructor in Java?

3+2+3+2

- 8. (a) Discuss the features of object oriented programming.
 - (b) What are the advantages of using object oriented programming over procedural programming language?
 - (c) What is byte code?

4+4+2