

PROGRAMMING IN JAVA

2K5-ES-3

Time : 3 Hrs.

M.M. : 100

Note :—

1. Part 'A' may be attempted in first 5 pages of Answer Sheet.
भाग 'क' के सभी उत्तर, उत्तर-पुस्तिका के प्रथम पांच पृष्ठों में ही करने हैं।
2. Part 'B' in rest of the Sheets of Answer Sheet.
भाग 'ख' के उत्तर, उत्तर-पुस्तिका के अगले शेष पृष्ठों में लिखिये।
3. Answers may be given in English or Hindi.
प्रश्नों के उत्तर अंग्रेजी अथवा हिन्दी में दीजिये।

PART - A**1. Attempt any ten questions:-**

(10 × 2 = 20)

- (i) What is the importance of Unicode in Java programming ? Explain.
- (ii) Explain the 'int' declaration and can a 'int' variable be negative.
- (iii) What is a modulus operator ?
- (iv) What do you mean by logical expression ?
- (v) What is the concept of 'character' in Java.
- (vi) Write about the precedence of arithmetic operators.
- (vii) Write difference between the 'for' statement and 'while' statement.
- (viii) Define JAVA Applet.
- (ix) Write the use of threading in Java.
- (x) How execution of Java program is carried out.
- (xi) How string are represented in Java language ?
- (xii) Write difference between 'vector' and 'wrapper' class.
- (xiii) Define constructor.
- (xiv) What is method overriding ?
- (xv) What do you understand by scope of variables ?

(5 × 4 = 20)

2. Attempt any Five questions:

- (i) Explain with example about the 'this' keyword.
- (ii) Differentiate class, abstract class and interface.

- (iii) Write the significance of Java's byte code with suitable example.
- (iv) Write four differences between 'applet' and application programs ?
- (v) List the various ways of 'static' keyword usage.
- (vi) How does Java support inter-thread communication ?
- (vii) Enumerate the differences between inheritance and polymorphism.
- (viii) What are the different types of controls available in AWT.

PART-B

Attempt any 3 questions:

(3 x 20 = 60)

- 3. (a) How to pass the parameters to an applet ? Explain with example.
(b) Explain in detail about Applet life cycle.
- 4. (a) How packages differ from Interfaces ? Explain with a suitable program.
(b) Write about Polymorphism. Explain run time polymorphism with a program.
- 5. (a) Explain the synchronization of multiple threads in Java with an example.
(b) What is the role of 'finally' in exception handling ? Explain with an example.
- 6. (a) Explain copy constructor. Write a program using copy constructor that reads complex numbers and copies that into another.
(b) Write a sample Java program to find the GCD of two numbers.
- 7. (a) Write a Java program which illustrates the try, catch, throw and throws and finally blocks.
(b) What is the importance of CLASS PATH ? Discuss also write an applet program to enter personal details.