



17515

14115

3 Hours/100 Marks

Seat No.

--	--	--	--	--	--	--	--	--	--

- Instructions :**
- (1) **All** questions are **compulsory**.
  - (2) Answer **each next** main question on a **new** page.
  - (3) Illustrate your answers with **neat** sketches **wherever** necessary.
  - (4) Figures to the **right** indicate **full** marks.
  - (5) Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.

- |                                                                                                                              | <b>MARKS</b>    |
|------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1. a) Attempt <b>any three</b> of following :                                                                                | <b>(3×4=12)</b> |
| a) Explain :                                                                                                                 |                 |
| 1) Platform independence                                                                                                     |                 |
| 2) Compiled and interpreted features of Java.                                                                                |                 |
| b) Explain serialization in relation with stream class.                                                                      |                 |
| c) Write any four mathematical functions used in Java.                                                                       |                 |
| d) Explain following methods related to threads :                                                                            |                 |
| 1) suspend ( )          2) resume ( )                                                                                        |                 |
| 3) yield ( )          4) wait ( )                                                                                            |                 |
| b) Attempt <b>any one</b> of following :                                                                                     | <b>(1×6=6)</b>  |
| a) What is difference between arrays and vectors ? Explain any 2 methods of vector with example.                             |                 |
| b) What is constructor ? Demonstrate the use of parameterised constructor with suitable example.                             |                 |
| 2. Attempt <b>any two</b> of following :                                                                                     | <b>(2×8=16)</b> |
| a) Explain abstract class with suitable example.                                                                             |                 |
| b) What is interface ? How it is different from class ? With suitable program explain the use of interface.                  |                 |
| c) Design an applet which displays three circles one below the other and fill them red, green and yellow color respectively. |                 |
| 3. Attempt <b>any four</b> of following :                                                                                    | <b>(4×4=16)</b> |
| a) Explain use of following methods :                                                                                        |                 |
| 1) indexOf ( )          2) charAt ( )                                                                                        |                 |
| 3) subString ( )          4) replace ( )                                                                                     |                 |

P.T.O.



- b) Write a program to find sum of digits of number.
- c) What is use of stream classes ? Write any two methods FileReader class.
- d) Describe applet life cycle with suitable diagram.
- e) What is final variable and method ? How it is different from abstract method ?
4. a) Attempt **any three** of following : **(3×4=12)**
- a) What do mean by typecasting ? When it is needed ?
- b) Describe life cycle of thread.
- c) Write a program to generate Fibonacci series : 1 1 2 3 5 8 13 21 34 55 89.
- d) Write syntax and function of following methods of date class :
- 1) sethme ( )      2) getDay ( )
- b) Attempt **any one** of the following : **(1×6=6)**
- a) Write the syntax and example for each of following graphics methods :
- 1) drawPoly ( )      2) drawRect ( )
- 3) drawOval ( )      4) fillOval ( )
- b) What is garbage collection and finalize method in Java ?
5. Attempt **any two** of following : **(2×8=16)**
- a) Write a program to create two threads ; one to print numbers in original order and other to reverse order from 1 to 50.
- b) What are different types of error ? What is use of throw, throws and finally statement ?
- c) State the use of Font class. Write syntax to create an object of Font class. Describe any 3 methods of Font class with their syntax and example of each.
6. Attempt **any four** of following : **(4×4=16)**
- a)
- Interface : Gross  
ta, da, gross\_sal ( )

Class : Employee  
name, basic\_sal ( )
- 
- Class : Salary  
disp\_sal ( ), hra
- b) What is use of setclass ? Write a program using setclass.
- c) Differentiate between applet and application (any 4 points).
- d) What is package ? How do we create it ?
- e) Write a program to print reverse of a number.
-