



**NBQ-003-027803**      Seat No. \_\_\_\_\_

**M. Sc. (ECI) (Sem. VIII) (CBCS) Examination**

**April / May - 2017**

**Paper - 31 : Java Fundamentals & Practice**

*(New Syllabus)*

**Faculty Code : 003**

**Subject Code : 027803**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions :** (1) All questions carry equal marks.  
(2) Figures on right hand side indicate marks.

- 1** Answer the following : (Answer any **Seven** out of ten)      **14**
- (1) What is the full form of JVM?
  - (2) What is the command to convert Java file to class file?
  - (3) What is the syntax of main ( ) method of java program?
  - (4) What is Java?
  - (5) What is class?
  - (6) What is Applet?
  - (7) What is thread?
  - (8) What is the full form of OOP?
  - (9) Write syntax of enhanced for loop.
  - (10) Write any two graphics functions with syntax.
- 2** Attempt any **two** out of three :      **14**
- (1) Explain features of java in brief      **7**
  - (2) Explain operators in java.      **7**
  - (3) What is class and object? Explain structure of class      **7**  
with suitable example.

- 3 Answer the following : 14
- (1) What is inheritance? Explain types of inheritance 5
  - (2) What is looping? List out looping facility provided by java and explain for loop with suitable example. 5
  - (3) What is array? Explain 2D array with suitable example. 4

**OR**

- 3 Answer the following : 14
- (1) Write a note on Data types in java. 5
  - (2) Which type of conditional statements provided by java? Explain nested if.. With suitable example 5
  - (3) What is abstract class? Explain with suitable example. 4  
(hint. Use inheritance)
- 4 Attempt the following : 14
- (1) Explain exception handling with example. 5
  - (2) What is package? Explain with example. 5
  - (3) Explain thread life cycle. 4
- 5 Answer the following : (Any **two** out of four) 14
- (1) Explain multiple inheritances with suitable example. 7
  - (2) Write a Java program that take 3 numbers from user and print the smallest number from it. 7
  - (3) Write a java program to make a class STUDENT having following properties and methods Properties: studRoll, studName, marks of 4 subjects, Methods : constructor (), calculate (), display () result for the same 7
  - (4) Applet for the following output on 300\*300 pixel canvas. 7

