

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT) (2016 Onwards) (Sem.-3)

JAVA PROGRAMMING

Subject Code : MSIT-303

M.Code : 74068

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. Explain the command line arguments with the help of an example.
2. Write a Java program to explain the concept of abstract classes and explain how they help make inheritance better?

SECTION-B

3. Explain the Java thread model and thread communication constructs in multithreading environment.
4. What is the exception handling construct in java? Explain the keywords Throws and Throw with the help of example.

SECTION-C

- Write a program to apply 2-D transformation to a rectangle.
- Write a note on the concept Java's database connectivity (JDBC).

SECTION-D

7. What is a Servlet and how is it different from CGI? What are the core interfaces used by java servlets?
8. What is JSP and how it is used to extend the functionality of a program?

SECTION-E

9. Write briefly :

- a) What are the overheads associated with recursions?
- b) Explain Generics.
- c) Explain Socket programming.
- d) What is a string tokenizer ?
- e) Define trim() and reverse() functions.
- f) What do you mean by a utility class?
- g) What are short circuit logical operators?
- h) Which data structure is used for recursion in java?
- i) How can we prevent a method from being overridden?
- j) What are indexed properties in Java Beans?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.