Reg. No. : | | | | | | | | | | |

Question Paper Code: 31423

B.E. / B.Tech. DEGREE EXAMINATION, NOVEMBER 2015

Fourth Semester

Computer Science and Engineering

01UCS403 – JAVA PROGRAMMING

(Common to Information Technology)

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define an object. Give an example.
2. List any four important features of JAVA.
3. Define polymorphism.
4. Can abstract class in Java can be instantiated? Give the reason.
5. State the difference between an exception and an error.
6. Can we have finally block without catch block. Justify.
7. Mention the subclasses of AWT event class.
8. Write some of the methods in the Graphics class to draw shapes.
9. Define I/O packages.
10. How to connect to the database in java?

PART - B (5 x 16 = 80 Marks)

11. (a) Brief describe the object oriented concept with the necessary illustrations. (16)

Or

(b) Develop a program to perform the following functions using classes, objects, constructors and destructors where essential. (16)

(i) Get 5 students mark as input

(ii) Calculate total and average

(iii) Print the formatted result on the screen

12. (a) Write a Java program using classes to sort an array of '*N*' numbers in ascending order. Give and explain the comments for your program. (16)

Or

(b) (i) Write a Java program that collects the decimal number as input and produces its binary equivalent as output. (8)

(ii) Define static class and explain with a suitable example. (8)

13. (a) With the illustration explain multi threading, thread life cycle and thread properties. (16)

Or

(b) How are exception handled in Java. Develop a Java program to implement a simple bank class that allows balance enquiry, deposit, withdrawal for the account. If withdrawal amount is greater than balance amount throw 'Insufficient Fund Exception'. (16)

14. (a) Construct a Java program to create a calculator with the four basic arithmetic operations(/, *, -, +). (16)

Or

(b) Brief about different types of layout managers. (16)

15. (a) Describe about the different input and output streams and their classes. (16)

Or

(b) Explain the architecture of JDBC with diagram. (16)

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