Code: 9F00305

MCA III Semester Regular & Supplementary Examinations November/December 2017
JAVA PROGRAMMING
(For 2012, 2013, 2014, 2015 & 2016 admitted batches only)

Time: 3 hours   Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks
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1 (a) Define abstraction. Differentiate it from information hiding.
   (b) Give the operator hierarchy.
   (c) Is Java a robust language? Justify your answer.
   (d) Why Java do not have destructor for classes?

2 (a) Demonstrate the concept of dynamic method dispatch.
   (b) How to implement multilevel inheritance among interfaces?

3 (a) Describe the scope of variables in nested classes and inner classes.
   (b) With an example, explain static inner class.
   (c) What is a package? How is it created?

4 (a) Write a Java program to read a sentence from user and display number of words present in this sentence.
   (b) Differentiate between HashMap and HashSet.

5 (a) Describe random access file operations.
   (b) Make a comparison of sockets and datagrams.
   (c) Explain the significance of InetAddress class.

6 (a) Write a program to demonstrate the use of 'throw' keyword in exception handling.
   (b) How to achieve synchronization among threads?

7 (a) Why swing components are recommended over AWT components? Explain.
   (b) Give an overview of JButton class.
   (c) Discuss various types of layout managers.

8 (a) How does a listener registers with one or more event sources? Explain with necessary code.
   (b) What is an applet? How does it differ from application program? Write / construct an applet to draw a 'smiley' face.

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