Total No. of Questions : 12]

**P1794**

SEAT No. :

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**[4761] - 201**

**F.Y.M.C.A. (Engineering)**

**JAVA PROGRAMMING**

**( 2013 Course) (Semester - II) (310909)**

*Time : 3 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

*1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12.*

*2) Neat diagrams must be drawn wherever necessary.*

*3) Figures to the right side indicate full marks.*

*4) Assuem Suitable data if necessary.*

*Q1)* a) Explain the structure of a Java Program with suitable diagram. **[4]**

b) What are command-line arguments and how are they used in Java? **[4]**

**OR**

*Q2)* a) What are shift operators? How many shift operators are available in Java? **[4]**

b) Discuss any two tools available in JDK. **[4]**

*Q3)* a) What is a Constructor? Explain parameterized constructor with the help of example. **[4]**

b) Explain static keyword. **[4]**

**OR**

*Q4)* What are Interfaces? Write a program to demonstrate Extending Interfaces.**[8]**

*Q5)* a) What is a package? How are they created and used? **[4]**

b) What is Single Inheritance? Explain with the help of example. **[5]**

**OR**

*Q6)* a) Explain the use of final keyword with the help of example. **[4]**

b) Explain the invocation of default constructor in Multiple Inheritance. **[5]**

*P.T.O.*

*Q7)* a) Explain the life cycle of a thread with diagram. **[5]**

b) What is an Predefined Exception? Name any three predefined exceptions? **[4]**

OR

*Q8)* a) What is a Thread? Explain any two thread methods with example. **[5]**

b) What is thread priority? How can it be set for a thread? **[4]**

*Q9)* a) What is Java Applet? Describe the complete life cycle of an Applet. **[5]**

b) Name any three Listeners used in java. **[3]**

OR

*Q10)* Create an Applet to draw a rectangle. Draw a filled circle inside the rectangle. **[8]**

*Q11)* a) Why are swing components termed as lightweight? **[4]**

b) Write Short notes on **[4]**

    i) JScrollPane

    ii) JList

OR

*Q12)* Create an GUI using Swing to input five numbers in five textboxes from user and when user will click the add button, display the addition of five numbers in a label. **[8]**

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