Code No: R05410808 | **R05** | **Set No. 2**
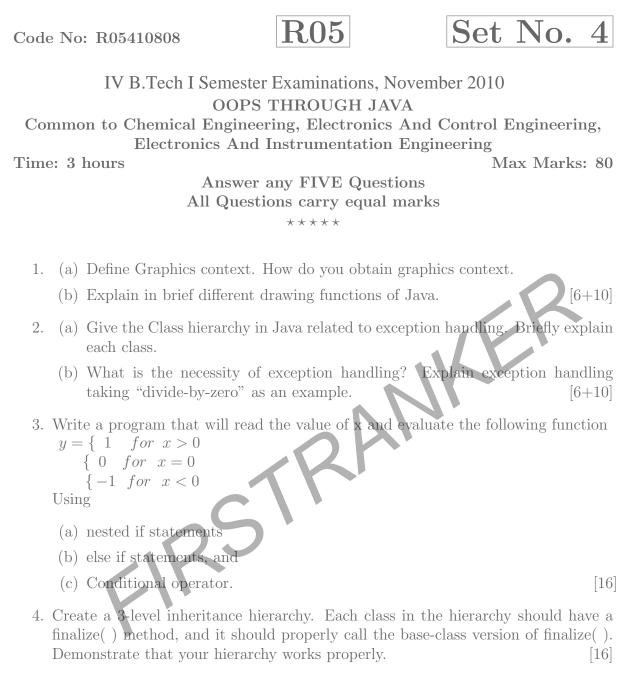
IV B.Tech I Semester Examinations, November 2010
OOPS THROUGH JAVA
Common to Chemical Engineering, Electronics And Control Engineering,
Electronics And Instrumentation Engineering

Time: 3 hours | Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. Write a program that will read the value of x and evaluate the following function
$y = \{$ 1 for $x > 0$
$\{$ 0 for $x = 0$
$\{$ -1 for $x < 0$
Using

   (a) nested if statements

   (b) else if statements, and

   (c) Conditional operator. [16]

2. Briefly explain the classes in java.net package. [16]

3. (a) Give the Class hierarchy in Java related to exception handling. Briefly explain each class.

   (b) What is the necessity of exception handling? Explain exception handling taking "divide-by-zero" as an example. [6+10]

4. Write a program to create an interface containing a static inner class. Implement this interface and create an instance of the inner class. [16]

5. (a) What is the difference between the vector Object and array Object?

   (b) What is the difference between a String Object and array of char values?

   (c) Write a program for multiplication of matrices (Test the validity of matrix sizes before performing multiplication). [4+4+8]

6. (a) Define Graphics context. How do you obtain graphics context.

   (b) Explain in brief different drawing functions of Java. [6+10]

7. Create a 3-level inheritance hierarchy. Each class in the hierarchy should have a finalize( ) method, and it should properly call the base-class version of finalize( ). Demonstrate that your hierarchy works properly. [16]

8. Differentiate choice lists and scrolling lists? How will you add them to an applet? Explain with suitable examples. [4+12]

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Code No: **R05410808** | **R05** | **Set No. 4**

IV B.Tech I Semester Examinations, November 2010
OOPS THROUGH JAVA
Common to Chemical Engineering, Electronics And Control Engineering, Electronics And Instrumentation Engineering

Time: 3 hours | Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Define Graphics context. How do you obtain graphics context.
   (b) Explain in brief different drawing functions of Java. [6+10]

2. (a) Give the Class hierarchy in Java related to exception handling. Briefly explain each class.
   (b) What is the necessity of exception handling? Explain exception handling taking "divide-by-zero" as an example. [6+10]

3. Write a program that will read the value of x and evaluate the following function
   $y = \{ \; 1 \quad for \; \; x > 0$
   $\quad\quad \{ \; 0 \quad for \; \; x = 0$
   $\quad\quad \{ -1 \quad for \; \; x < 0$
   Using

   (a) nested if statements
   (b) else if statements, and
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4. Create a 3-level inheritance hierarchy. Each class in the hierarchy should have a finalize( ) method, and it should properly call the base-class version of finalize( ). Demonstrate that your hierarchy works properly. [16]

5. Differentiate choice lists and scrolling lists? How will you add them to an applet? Explain with suitable examples. [4+12]

6. Write a program to create an interface containing a static inner class. Implement this interface and create an instance of the inner class. [16]

7. (a) What is the difference between the vector Object and array Object?
   (b) What is the difference between a String Object and array of char values?
   (c) Write a program for multiplication of matrices (Test the validity of matrix sizes before performing multiplication). [4+4+8]

8. Briefly explain the classes in java.net package. [16]

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Code No: R05410808 ⬛R05⬛ ⬛Set No. 1⬛

IV B.Tech I Semester Examinations, November 2010
OOPS THROUGH JAVA
Common to Chemical Engineering, Electronics And Control Engineering,
Electronics And Instrumentation Engineering

Time: 3 hours Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

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4. Write a program that will read the value of x and evaluate the following function
$$y = \begin{cases} 1 & for \ x > 0 \\ 0 & for \ x = 0 \\ -1 & for \ x < 0 \end{cases}$$
Using

   (a) nested if statements

   (b) else if statements, and

   (c) Conditional operator. [16]

5. Write a program to create an interface containing a static inner class. Implement this interface and create an instance of the inner class. [16]

6. (a) Define Graphics context. How do you obtain graphics context.

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7. Differentiate choice lists and scrolling lists? How will you add them to an applet? Explain with suitable examples. [4+12]

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Code No: R05410808 | **R05** | **Set No. 3**

IV B.Tech I Semester Examinations, November 2010
OOPS THROUGH JAVA
Common to Chemical Engineering, Electronics And Control Engineering, Electronics And Instrumentation Engineering

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. Create a 3-level inheritance hierarchy. Each class in the hierarchy should have a finalize( ) method, and it should properly call the base-class version of finalize( ). Demonstrate that your hierarchy works properly. [16]

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3. Write a program to create an interface containing a static inner class. Implement this interface and create an instance of the inner class. [16]

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   $$y = \begin{cases} 1 & for \ x > 0 \\ 0 & for \ x = 0 \\ -1 & for \ x < 0 \end{cases}$$
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   (a) nested if statements

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