

[Aug-11]

[SPDCA-203]  
**MCA DEGREE EXAMINATION**

**II YEAR**

**OBJECT ORIENTED TECHNOLOGIES AND  
JAVA PROGRAMMING**

(Effective from the admitted batch 2009-10)

**Time: 3 Hours**

**Max.Marks: 70**

**Instructions:** All parts of the unit must be answered in one place only.  
Figures in the right hand margin indicate marks allotted.

**SECTION-A**

1. Answer any **Four** of the following: (4x5=20)
- List at least ten major differences between C and Java
  - Describe the purpose of comments. Name the types of comments available. Can you include comments inside a comment?
  - What is an array? Why arrays are easier to use compared to a bunch of related variables?
  - What is multithreading? What are its advantages?
  - Explain about Hybrid inheritance with the help of an example
  - Explain the different steps in the life cycle of an applet
  - Write a program, which will read a text and count all occurrences of a particular word
  - Describe the role of layout managers

**SECTION-B**

Answer all questions (5x10=50)

2. a) How do you pass actual parameters to a method? Can actual parameter has the same name as its formal parameters  
Illustrate with an example
- b) List few areas of application of OOP technology

**OR**

- c) Create a base class with two methods. In the first method, call the second method. Inherit a class and override the second method. Create an object of the derived class, up-cast it to the base type, and call the first method. Explain what happens

3. a) Explain the concept of casting objects with an example  
b) Write down the syntax and execution procedure of different kinds of if statements in Java

**OR**

- c) What is method overloading? Can you define two methods that have same name but different parameter types? Can you define two methods in a class that have identical method names and parameter profile with different return value types or different modifier?
4. a) Suppose that statement2 causes an exception in the following try-catch block:

```
try{  
    statement1;  
    statement2;  
    statement3;  
}  
catch(Exception1 e1) { }  
catch(Exception2 e2) { }  
statement4;
```

Answer the following and justify your answer

- Will the statement3 be executed?
  - If the exception is not caught, will statement4 be executed?
  - If the exception is caught in the catch clause, will statement4 be executed?
  - If the exception is passed to the caller, will statement4 be executed?
- b) Implementing Runnable interface and extending thread, which method do you prefer for multithreading and why?

**OR**

- How do you set up a multilevel package?
- What is the drawback of importing entire contents of a package?
- When using package in Java, explain how compilation and execution of programs in a package are done
- How do you couple three files called file.java, file2.java, file3.java contained in a sample package called magazine?

5. a) Write a java program that enables to copy a text file to the destination file using buffered streams

**OR**

b) Write short notes on java.io package and java.lang package

6. a) Design an applet to create a menu bar and pull down menus

File	Edit	View
Open	Undo	Normal
New	Cut	Tool Bar

**OR**

b) Write short notes on:

i) URL connection class    ii) Datagram packet

[28/II Y/211]