

(Comp & IT) CBCS
Sem III OOPM

11/6/2015

Q.P. Code : 4842

(3 Hours)

[Total Marks : 80

N.B. : (1) Question No. 1 is compulsory.
(2) Attempt any three from remaining.

1. (a) Write a program to calculate GCD of two numbers in JAVA. 5
(b) Explain any three features of JAVA. 5
(c) Draw and explain applet life cycle. 5
(d) Explain wrapper class and its applications. 5
2. (a) Write a program in JAVA to display following pattern. (Take input for number of rows from command line) 5
1
1 2
1 2 3
1 2 3 4
(b) Write a note on System.arraycopy (). 5
(c) Identify classes and their attributes and draw the relationships specified by following problem. 10
(i) Bank maintains two kinds of accounts for customer, Saving account & current account. Saving account provides compound interest and withdrawal facility. Current account provides cheque book facility but no interest.
(ii) Library maintains books and magazines. A student can issue a book or return a book. A fine is charged if book is returned after 8 days. The magazines are not issued, but student can read it in library.
3. (a) What is a package ? Explain with example the steps to create package and add a class or an interface. 10
(b) Write a program to create vector objects with student names. Program should perform following operations based on choice : 10
(i) Add student name - To add new student name in the vector.
(ii) Remove student name -Removes student name if already exists else display appropriate message.
(iii) Display-Display contents of vector.
4. (a) What is Exception ? Explain how JAVA handles an Exception using following keywords : 10
try, catch, throw, throws & finally

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- (b) Write a program to read and display details of ten Employees with following specifications : 10
Data Members : Emp_ID, Emp_name, Emp_Salary
Parameterized constructor to initialize data members of Employees and Member functions :
Display () - to display information of all employees
5. (a) With the help of suitable example explain how threads are created in JAVA. 5
(b) Explain multiple inheritance in JAVA with example 5
(c) Write a program to count the number of alphabets, digits and special symbols from string. 10
6. Write short notes on (any **four**) 20
(a) Method overloading & overriding
(b) Static data members & methods
(c) Abstract class & methods
(d) Constructor & its type
(e) JVM.
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