

GANPAT UNIVERSITY
U.V. PATEL COLLEGE OF ENGINEERING, KHERVA
B. Tech Semester – III Computer Engineering/Information Technology
Regular Examination November/ December - 2011
CE/IT:304 -:Object Oriented Programming

Time: 3 Hours]

[Total Marks: 70

Instructions:

1. Attempt all questions.
2. Figures to the right indicate full marks
3. Each section should be written in a separate answer book

SECTION-I

1. (A) What is Portability? Why JAVA is Platform independent? [6]
- (B) What is Variable ? Explain Local Variable with different data type like **int** , **float** [6]
double , **Boolean** with example.

OR

1. (A) WAP to find maximum number and search element entered from user in array of [6]
size 10.
- (B) (1) Explain '&' and '&&' logical operator with example. [3]
(2) Explain Conditional Operator with example. [3]

2. (A) What is Instance variable? What is Static variable? Which way they are different from [6]
each other? Explain with one example which include both type of variable.
- (B) Explain Instance Method and Static Method with example. [5]

OR

2. (A) Create a Class Car having parameters like Car_Company ,Car_color, Car_price, [6]
Car_type, Car_speed and method like showConfig() which show configuration of
Car basis on Car_type. Use Constructor() or setParamater() to assign value to Instance
parameter. Create three objects

HINT: BMW,Black,2000000,Sports,180kph

- (B) What is Constructor ? How Constructor Called? Explain Constructor Overloading [5]
with example.
3. (A) (1) What is Instance variable Hiding? Explain 'this' keyword to prevent instance [3]
variable hiding with example.
- (2) Explain Static block with example. [3]
- (B) Create class Computer having parameters like Comp_type,Comp_price ,Comp_OS, [6]
Comp_Harddisk and method like SetComputer () to set values to instance parameters
and display() to display records. Create Five objects of Computer and Display a
computer which has high storage capacity(Compare objects).
HINT: LAPTOP,30000,LINUX,120GB

SECTION-II

4. (A) (1) Explain Method Overloading with example. [3]
 (2) Explain Method which takes Objects as argument. [3]
 (B) Write output of following code. Justify your answer. [4]
- ```
public class Test {
 public static void main(String a[])
 {
 int x[]=new int[5];
 int p=0;
 int q=90;
 int ans;
 try
 {
 System.out.println("I m in try");
 x[7]=p;
 ans=q/p;
 System.out.println("Exit from try");
 }
 catch(ArrayIndexOutOfBoundsException e)
 {
 System.out.println("ArrayIndex");
 }
 catch(ArithmeticException e)
 {
 System.out.println("Arithmetic");
 }
 System.out.println("Exit from main");
 }
}
```
- (C) Explain 'final' variable with example. [2]
- OR**
4. (A) Justify the following statement. [5]  
 "Java supports multiple interfaces but not multiple inheritance"  
 (B) Differentiate between **final**, **finally** and **finalize**. [4]  
 (C) Explain 'final' method and 'final' class with example. [2]
5. (A) Create a class Bank\_Master(Base class) which contains records like Branch\_no , Branch\_name, balance and method like SetValue() to assign value to instance parameter. [8]  
 Create a class Employee(Derived class) Which contains variable like Emp\_id, Emp\_name , and Method like Transaction() (which deducts some specified money from balance).and display() to display status of balance before and after Transaction and all info about Employee.  
 (HINT: SBI101,"GANPAT",230000,E101).  
 (B) What is Exception? Explain Arithmetic Exception with Example. [3]
- OR**
5. (A) What is abstract class? Describe its different characteristics. [6]  
 (B) Explain ArrayIndexOutOfBoundsException with example [6]
- 6 (A) How does Abstract class differ from interface? Explain it. [6]  
 (B) How Exception class overrides its subclasses? Justify it. [6]

----- END OF PAPER -----