Evning 0:2410512014.

Seat No.

**ITOTAL MARKS: 70** 

GANPAT UNIVERSITY B. Tech. Semester VI (EC) CBCS Regular Examination May/June 2014 2EC606 OBJECT ORIENTED PROGRAMMING

### TIME: 3 HOURS]

#### **INSTRUCTIONS:**

- 1. Attempt all questions.
- 2. Answers to the two sections must be written in separate answer books.
- 3. Figures to the right indicate full marks.
- 4. Assume suitable data, if necessary.

# SECTION-I

- Q:1 (A) Which technique has made java a platform independent language? Demonstrate with the help of diagram.
  - (B) What is the use of Command line argument in Java? Explain with an example.

#### OR

- Q:1 (A) What is the use of constructor? Explain constructor overloading with 6 example.
  - (B) How can we supply run time argument to the Java application? Explain 6 with suitable example.
- Q:2 (A) Provide a brief note on Abstract classes in java.
  - (B) Write a program to receive 10 names from user during runtime. Display 5 only those names which begin with Vowel. Vowels are : A,E,I,O and U.

OR

- Q:2 (A) Why some methods in java are declared as *static methods*? Support your 6 answer with example code.
  - (B) Write a program that keeps track of how many objects have already been 5 created. Class has a method *TellMeTotal()* which prints total number of objects already created. This method is common among all the objects.

0:3

0

Ue -

- (A) Explain the use of *super and this* keywords in java.
  (B) Provide a brief note on Enhanced for loop. What is the limitation of this 4 loop?
- (C) Explain the typical declaration of main method in Java.

6

6

6

## SECTION-II

- Draw only the diagrams for following : 0:4 (A)
  - 1. Any 3 forms of inheritance
  - 2. Any 3 forms for implementing interface
  - Write a brief note on commonly used API packages in java. (B)

### OR

- Enlist four steps involved in Exception Handling mechanism. Give a brief Q:4 (A) idea about any six Exceptions in Java.
  - Which are the salient features of Vector? Enlist the important Vector (B) methods.
- Draw and explain the State transition diagram of a thread. Q:5 (A) With the help of program, explain how parameter can be passed to an **(B)** Applet from HTML file.

### OR

- What are the steps involved in implementing the 'Runnable' interface for Q:5 (A) creating thread? Write an example code to create such thread.
  - Justify the following statement. **(B)** "Since Applets are designed for the internet, they have certain limitations and restrictions"
- Create an applet that allows user to enter his/her full name in given textbox. On pressing enter key, it shows only the initial letters of full Q:6 (A)
  - m1 and m2 are String objects. Assume they are properly initialized. m1 **(B)** and m2 have length of 20 characters .Provide the correct method syntax for the following.
    - 1. To put letter 'B' everywhere in String m1 in place of letter 'G'.
    - 2. To check whether m1 and m2 Strings are exactly same or not
    - (Case sensitive)
    - 3. To arrange m1 and m2 in alphabetical order
    - 4. To join String m2 after m1.
    - 5. From the String m2, grab the String starting from letter 4 till the end.
    - 6. To find the location of lettter 'K' after 9<sup>th</sup> position in String m1.

# **End of Paper**

5

6

5

6

6