B.Tech. 5th (CBCS)

Time: 3 Hours

Max. Marks: 60

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

**Note:** Attempt five questions in all, selecting one question from each Unit. Question no. 9 is compulsory.

### UNIT - I

- What is an operator? Explain the different types of operators used in Java. (10)
- (a) Describe the different types of data types used in Java.
   (5)
  - (b) What are the differences between the for, while and dowhile loops? (5)

## UNIT - II

- 3. What are constructors used for? Can constructors be overloaded? Write a program in support of your answer. (10)
- 4. (a) What is inheritance? Write a program to access the super class method and instance variable by using super keyword from sub class. (5)
  - (b) What is the static method? Explain it by taking suitable example. (5)

#### UNIT - III

Write a program to trap a key which presses on the keyboard and display its name in the test area. (10)

CS-502

(a) Write a program to create some check boxes. When the user clicks on a check box, the selected option text will be displayed in a text area. (5)

(b) Write short note on following:

(i) J text filed

(ii) J potion pane.

(5)

## UNIT - IV

 What is Package? Discuss the different type of packages. Write a program which depicts how to use the addition class of package pack. (10)

- 8. (a) What is multithreading? How multithreading is implemented in Java? Explain it by giving a suitable example. (5)
  - (b) What is a Layout Manager? Explain the different types of layout manager. (5)

# (Compulsory)

- (a) Is Java a purely objected oriented language or not? Justify your answer.
  - (b) What is meant by the adapter class in Java?
  - (c) What is a listener interface?
  - (d) What is the difference between a class and object?
  - (e) What are default layout in a frame?
  - (f) What is the difference between throws and throw?
  - (g) What is an interface?
  - (h) Why do we declare a method or class final?
  - (i) What is an applet?
  - ) What is method overriding? (10×2=20)

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