



**DHARMSINH DESAI UNIVERSITY, NADIAD**  
**FACULTY OF TECHNOLOGY**  
**THIRD SESSIONAL**  
**SUBJECT: (IT 616) CORE JAVA TECHNOLOGY**

Examination	: B.TECH - Semester - VI	Seat No.	:
Date	: 03/04/2013	Day	: Wednesday
Time	: 12:00 to 1:15	Max. Marks	: 36

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**INSTRUCTIONS:**

1. Figures to the right indicate maximum marks for that question.
  2. The symbols used carry their usual meanings.
  3. Assume suitable data, if required & mention them clearly.
  4. Draw neat sketches wherever necessary.
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**Q.1 Do as directed.**

- (a) What are checked exceptions? List name of checked exceptions. [2]
- (b) What is the purpose of calling yield() and sleep() methods of thread. [2]
- (c) Explain purpose of using Generics in java. [2]
- (d) Write a code to display Map elements using iterable interface. [2]
- (e) i. UnknownHostException SocketException is a subclass of \_\_\_\_\_Exception. [2]  
ii. Which type of exception does a join() method throw?
- (f) Differentiate throw and throws keywords. [2]

**Q.2 Attempt *ANY TWO* from the following.** [12]

- (a) Explain Different ways of creating Thread also draw the life cycle of a thread. [6]
- (b) Write a program that copies contents of File1.dat to File2.dat. Handle proper exceptions. [6]
- (c) Create a generic class MyStack having push and pop functionality. Creates threads for pushing and popping the elements. Make this threads synchronized so at a time only one operation can be done. [6]

- Q.3**
- (a) Explain the importance of Exception handling in java. Write a program to handle NoSuchElementException, ArrayIndexOutOfBoundsException using try-catch-finally and throw. [6]
  - (b) Write a program that count number of lines, words, and characters from a file. [6]

**OR**

- Q.3**
- (a) Write a program that takes input for filename and search word from command line arguments and checks whether that file exists or not. If exists, the program will display those lines from a file that contains given search word. [6]
  - (b) Create sample TCP chat application where client and server can chat with each other. [6]