

DHARMSINH DESAI UNIVERSITY, NADIAD FACULTY OF TECHNOLOGY B.TECH. SEMESTER VI [IT]

SUBJECT: (616) CORE JAVA TECHNOLOGY

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.

Q.1 Do as directed.

- (a) What is Class Initializer block?
 (b) What is the difference between "==" operator and equals() method of Object class?
 (c) What is Streams? Explain RandomAccessFile constructor of IO package.
 (d) What is the purpose of calling yield() and sleep() methods of thread.
 (e) Explain Java reference counting mechanism.
 (f) Explain <pppparam> Applet tag?

 [2]
 [3]
 [4]
 [5]
 [6]
- **Q.2** Attempt *Any Two* from the following questions.

[12]

- (a) Explain String, StringBuffer and StringTokenizer classes. Give an appropriate example of StringTokenizer.
- (b) Implement Echo Server-Client chat application using Socket programming. Server is capable of servicing multiple clients.
- (c) What is Layout Manager? Explain any three Layout Managers available in java.awt package.
- **Q-3** Attempt *ALL* from the following questions.
 - (a) Write an applet that tracks the position of the mouse when it is dragged or moved. At the current mouse position, it displays message (x, y) showing current position of the mouse. The message should disappear as soon as the user releases the mouse.
 - (b) Write a program that copies source file to target file and displays number of bytes in the file. The user provides source file and target file as command line arguments..

OF

- **Q-3** Attempt *ALL* from the following questions.
 - (a) Create sample TCP chat application where client and server can chat with each other.
 - (b) What are differences between Exception and Error? Explain custom Exception with **[6]** an example.