

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA - SEMESTER- IV EXAMINATION – WINTER - 2018**

**Subject Code: 3640013****Date: 29/11/ 2018****Subject Name: Function Programming with Java****Time: 10.30 am to 1.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** State whether the following statements are True or False. Give justification for your answers: **07**
1. Color.Green is a valid color in Java.
  2. BorderLayout.NORTH is a valid option in Java.
  3. The package 'javax' indicates obsolete version of Java.
  4. updateUI( ) method can be called using JMenu object.
  5. sing( ) method of AudioClip object can be used to play a song.
  6. All listener interfaces have corresponding adapter classes.
  7. For an applet to work properly, it is necessary to use codetype attribute of the object HTML tag.
- (b)** List and explain any seven setter methods of JFrame. **07**
- Q.2 (a)** What is use of setLayout(null) method? With suitable example of code snippets, describe the use of any three layouts. **07**
- (b)** Including constructors, list and explain with syntax any seven methods of JTextArea class. **07**
- OR**
- (b)** With suitable example from swing package, explain MVC design pattern. **07**
- Q.3 (a)** What is difference between Semantic events and Low-level events? Give an example of each of these types. Explain the Java Event Delegation Model. **07**
- (b)** Explain the component hierarchy relationship among Container, Frame, Panel, Applet, Window, JPanel and JFrame. **07**
- OR**
- Q.3 (a)** With suitable code snippets for an example of button click, explain the entire process of handling an event in java. **07**
- (b)** Name any three 'Look and Feel' types of Java. Give any two differences between AWT and Swing. **07**
- Q.4 (a)** List and explain any seven attributes of applet HTML tag. **07**
- (b)** List and explain the four JDBC driver types. Explain the terms: LOB, CLOB and BLOB. **07**
- OR**
- Q.4 (a)** Explain the stages of applet life cycle with corresponding methods. **07**
- (b)** What is full form of JDBC? What is use of executeQuery( ), executeUpdate( ) and execute( ) methods? **07**
- Q.5 (a)** What is the default port number of RMI? What is difference between Parameter Marshalling and Parameter Un-marshalling? With suitable diagram for RMI, explain the role of client, server, registry and stub. **07**
- (b)** What is the main use of Java Beans? With a suitable of each, explain the use of JAR file, Manifest file and PropertyEditor interface. **07**

**OR**

- Q.5** (a) List and explain any seven RMI loggers. **07**  
(b) Which main package is required for working with Beans in Java? What is difference between Introspection and Reflection? With a suitable example of each, explain Simple, Indexed, Bound and Constrained Properties. **07**

\*\*\*\*\*