**GUJARAT UNIVERSITY**

**BE ATKT EXAM 2013**

**Branch: Computer Engineering**                                    **Semester: III**

**Subject: OOCP**

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| 1 | Which type of associations provide compelling rationale for association classes? Give example of attributes for one to many associations. |
| 2 | What is a qualified association? |
| 3 | What is a constraint? Explain constraints on objects, constraints on generalization sets and constraints on links. |
| 4 | Write steps for constructing application interaction model. |
| 5 | Prepare a use case description for issue a book from the library. |
| 6 | What is a layered system? Layered architectures come in which two forms? |
| 7 | What does one shot diagram represent? |
| 8 | Explain the following steps while constructing an application interaction model.   a. Find use cases   b. Find initial and final events. |
| 9 | Why reuse is considered an advantage of object oriented technology? One of the reusable thing, is library. Describe qualities of "good" class libraries. |
| 10 | What kind of data is suitable for files? What kind of data is suitable for databases? Does ATM (Automatic Teller Machine) use relational or object oriented database? |
| 11 | What steps should be performed while designing algorithms? |
| 12 | Give the list of common architectural styles. Explain batch transformation in detail. |
| 13 | Explain waterfall development and Iterative Development life cycle styles for Object Oriented approach to software development. |
| 14 | Write in detail the different criteria for discarding unnecessary and incorrect classes while constructing domain class model. |
| 15 | Prepare a class model to describe geographical map. Map contains roads, rivers and mountains. All components are described by points representing longitude and latitude. |
| 16 | Differentiate the followings: Applet and Application |
| 17 | Differentiate the followings: String class and StringBuffer class |
| 18 | Differentiate the followings: Constructor and Method |
| 19 | Define polymorphism with its need. Define and explain static and dynamic binding using program. |
| 20 | Differentiate between constructor and method of class. Define method overloading and its purpose. Write a program to demonstrate the constructor overloading. |
| 21 | What is the use following java keywords super, transient, finally, final, static, throw, throws |
| 22 | Explain exception handling in JAVA. Write a program that generates custom exception if any integer value given from its command line arguments is negative. |
| 23 | Write a program to check that whether the name given from command line is file or not? If it is a file then print the size of file and if it is directory then it should display the name of all files in it. |

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| 24 | Explain the importance of exception handling in java. Which key words are used to handle excetions? Write a program to explain the use of these keywords. |
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| 25 | What do you mean by Event Delegation model in Java? |
| 26 | How the concept of inner classes is used for event handling? |
| 27 | Write a complete program to create a frame for providing GUI to implement a stack for storing integer numbers. There are two buttons called PUSH & POP and a text field. Clicking of button PUSH pushes the number entered in the text field onto the stack. The click of button POP pops an element from the stack and displays that in the text field. |
| 28 | Explain the life cycle of an applet |
| 29 | How the concept of adapter classes is used in event handling? |
| 30 | Write an applet that draws four horizontal bars of equal size & of different colors such that they cover up the whole applet area. The applet should operate correctly even if it is resized. |
| 31 | What is multithreading? Why it is required? Write a program that creates three threads. Make sure that the main thread executes last. |
| 32 | What is collection in Java? Differentiate between Vector and ArrayList |
| 33 | Explain the unique features of Map interface. |
| 34 | What are generics and how are they used? |
| 35 | Differentiate between Enumeration and Iterator. |
| 36 | Why synchronization is required in multithreaded programming. Write a program that uses thread synchronization to guarantee data integrity in a multithreaded application. |
| 37 | Explain features of JAVA. |
| 38 | Explain interface in JAVA. How do interfaces support polymorphism? |
| 39 | Explain Thread Life Cycle in detail. Write a code to create Thread in JAVA. |
| 40 | Differentiate String class and StringBuffer class with explanation of its methods. |
| 41 | Explain package in java. List out all packages with short description. |
| 42 | Differentiate Method Overloading and Method Overriding with example. |
| 43 | Explain Applet life cycle with demo program. |