**Auto Grade Test**

1. What should the return type of method where there is no return value?
   1. Null
   2. Empty collection
   3. Singleton collection
   4. Empty String
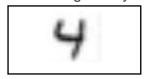
   2

2. What data structure should be used when number of elements is fixed?
   1. Array
   2. Array list
   3. Vector
   4. Set

   1

3. What causes the program to exit abruptly and hence its usage should be minimalistic?
   1. Try
   2. Finally
   3. Exit
   4. Catch

   3

4. Which one of the following causes memory leak?
   1. Release database connection when querying is complete
   2. Use Finally block as much as possible
   3. Release instances stored in static tables
   4. Not using Finally block often
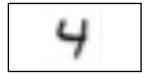
   4

5. Which of the below is true about java class structure?
   1. The class name should start with lowercase
   2. The class should have thousands of lines of code
   3. The class should only contain those attribute and functionality which it should; hence keeping it short
   4. The class attributes and methods should be public

   3

6. Which of the following condition is required for a deadlock to be possible?
   1. mutual exclusion
   2. a process may hold allocated resources while awaiting assignment of other resources
   3. no resource can be forcibly removed from a process holding it
   4. all of the mentioned

   4

7. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
   1. first-come, first-served scheduling
   2. shortest job scheduling
   3. priority scheduling
   4. none of the mentioned

   1

8. What is the ready state of a process?
   1. when process is scheduled to run after some execution
   2. when process is unable to run until some task has been completed
   3. when process is using the CPU
   4. none of the mentioned

   1

9. When will file system fragmentation occur?
   1. unused space or single file are not contiguous
   2. used space is not contiguous
   3. unused space is non-contiguous
   4. multiple files are non-contiguous

   1

10. What are the common security threats?
    1. File Shredding
    2. File sharing and permission
    3. File corrupting
    4. File integrity
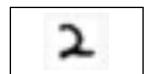
    2

11. Which one of the following is a set of one or more attributes taken collectively to uniquely identify a record?
    1. Candidate key
    2. Sub key
    3. Super key
    4. Foreign key

    3

12. '_ _ _' matches any string of _____ three characters. '_ _ _ %' matches any string of at _____ three characters.
    1. Atleast, Exactly
    2. Exactly, Atleast
    3. Atleast, All
    4. All, Exactly

    2

13. The attribute name could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called
    1. Simple attribute
    2. Composite attribute
    3. Multivalued attribute
    4. Derived attribute

    2

14. Entity is a _____
    1. Object of relation
    2. Present working model
    3. Thing in real world
    4. Model of relation

    3

15. Which is a bottom-up approach to database design that design by examining the relationship between attributes:
    1. Functional dependency
    2. Database modeling
    3. Normalization
    4. Decomposition

    3