(Object Oriented Programming Through Java)

Question Bank

Unit 1

MCQ

1 Java is developed by _____
a)Sun Microsystems of USA   b) Microsoft
c)Adobe   d) None

2 _____ is one of the inventors of Java.
a) Dannis Ritchie   b) James Gosling
c) Bjarne Straustrup   d) Balagurusamy

3 _____ is one of the java features that enables java program to run anywhere anytime.
a)Object-Oriented   b) Multithreaded
c)Platform-Independent   d) Dynamic & Extensible

4 _____ is one of the java features that can handle multiple tasks simultaneously.
a)Object-Oriented   b) Dynamic & Extensible
c)Platform-Independent   d) Multithreaded

5 Java compiler translates source code into _____
a) Bytecode (Virtual Machine Code)   b) Bitcode
c) Machine Code   d) User code

6 Java interpreter translates _____ into machine code.
a) Bitcode   b) Bytecode(Virtual Machine Code)
c) Machine Code   d) User code

7 Java compiler produces an intermediate code known as _____
a)Bitcode   b) Machine Code
c)Bytecodes   d) User code

8 _____ tool helps us to find errors in our programs.
a)jhelp   b) javah
c)javap   d) jdb

9 The _____ includes hundred of classes and methods grouped into several function packages.
a)API   b) JVM
c)JAVAC   d) JRE

10 The java interpreter uses _____ method before any objects are created.
a)Class   b) Main
c)Constructor   d) All of above

11 _____ is use for naming classes, methods, variables etc in a program.
a)Operator   b) Separator
b)Identifier   d) Constructor

12 _____ is reserved keyword in java.
a)Abstract   b) Extends
b)Package   d) All of above

13 Java provides extensive set of classes, arranged in _____.
a)Package   b) Library file
c)Template class   d) None

14 The process of converting one date type to another is called_____
a)Translating   b) Casting
c)Compiling   d) Declaring

15 Java does not support _____.
a)Operator overloading   b) Global variable
c)Multiple inheritance   d) All of above

16 Casting from byte to _____ data type, the result is no loss information.
a)short   b) int
c)long   d) all of above

17 Casting from shot to _____ data type, the result is no loss information.
a)byte   b) int
c)long   d) double

18 _____ refer to fix value that does not change during the execution of a program.
a)variables   b) constants
c)identifiers   d) integer

19 _____ operators are used to construct mathematical expression as in algebra.
a)Relational   b) Mathematical
c)Arithmetic   d) Logical

20 Which constraint must be considered at the time of variable declaration?
a)It should not be keyword b) It must not begin with digit
c)White space not allowed d) All of above

21 The comparisons can be done with help of _____ operator.

a)Relational   b) Mathematical
c)Arithmetic   d) Assignment

22 Which of the following is not assignment operator?
a)+=   b) = =
c)%=   d) =

23 _____ operator is used to construct conditional expression.
a)Dot(.)   b) instanceof
c)Ternary(?:)   d) None

24 Which statement is use to terminate loop early?
a)terminate   b) continue
c)skip   d) break

25 Which statement is use to skip the loop and continue with the next iteration?
a)continue   b) terminate
c)skip   d) break

26 _____ is a group of contiguous or related data items that share a common name.
a)Variable   b) Array
c)Constant   d) none

27 Which of the following is the correct declaration statement in java program?
a) int num=new int[5] b) int num=new num[5]
c) int[] num=new int[5] d) None

28 Java _____.
a)Only compiles   b) Only interprets
c)Compiles and then interprets d) Interprets & then compiles

29 JVM stands for _____
a)Java Virtual Method   b) Java Virtual Machine
c)Java Variable & Methods d) Java Versatile Machine

Answers of MCQ:
1. (a), 2. (b), 3. (c), 4. (d), 5. (a), 6. (b), 7. (c), 8. (d), 9. (a), 10. (b), 11. (c), 12. (d),
13. (a), 14. (b), 15. (d), 16. (d), 17. (a), 18. (b), 19. (c), 20. (d), 21. (a), 22. (b), 23. (c),
24. (d), 25. (a), 26. (b), 27. (c), 28. (c), 29. (b)

Short Questions
1 Java is platform-independent and portable. - Justify.
2 Java is distributed language – Justify.

3   Java is dynamic and extensible language - Justify.
4   What is JVM (Java Virtual Machine)?
5   List out Java development tools and explain any one from it.
6   List out Java API and define any one of it.
7   Draw the Java program structure.
8   Write down the rules for variable naming.
9   What is meaning of automatic type conversion?
10   List out the types of operators used in Java.
11   How can you use ternary operator?
12   Define the break and continue statements.
13   List out the features of Java.
14   List the primitive and non-primitive data types used in Java.
15   Write the syntax of any one of the following loops – while, do...while, for loop.

Long Questions
1   What is Java? Explain the features of Java.
2   Describe the Java environment.
3   Explain the structure of Java program.
4   Explain the data types available in Java.
5   Explain type casting with example.
6   Explain the scope of variable.
7   List out the decision making statements available in Java. Explain with example.
8   List out the looping statements available in Java. Explain with example.
9   Explain break and continue statements with example.
10   List out the operators. Explain anyone in detail.

Unit -2

MCQ

1   Range of short variable is _____
       a) -128 to 128   b) -128 to 127
       c) -32768 to 32767   d) -32768 to 32768

2   _____ is default access specifier in JAVA.
       a)friendly   b) private
       c) protected   d) public

3   _____ variables and methods can be called without using the objects.
       a)static   b) final
       c)abstract   d) none of the above

4   Which of the following statements is true?
       a)Java supports operator overloading   b) Java supports interfaces

c) Java supports pointers   d) Java supports multiple inheritance

5   What keyword is used in Java to define a constant?
a) static   b) final
c) abstract   d) private

6   If two methods have same name but different parameter list then it is called_____
a) Method overriding   b) Method overloading
c)Operator overloading   d) None of these

7   _____ constructor is created when object of particular class is created.
a)Default   b) Parameterized
c)Copy   d) None of these

8   _____ inheritance is not supported by JAVA.
a)Multiple   b) Multi level
c)Hierarchical   d) Hybrid

9   The mechanism of deriving a new class from an old one is called _____.
a)Method overriding   b) Method overloading
c)Operator overloading   d) Inheritance

10   _____ keyword does not allow a method to be override in the subclass.
a)public   b) abstract
c)final   d) static

11   _____ methods must be override in the subclass.
a)public   b) final
c)abstract   d) static

12   The subclass constructor uses the _____ keyword to invoke the constructor of the superclass.
a)super   b) Final
c)static   d) public

13   _____ is a special method in java that enables an object to initialize itself when it is created.
a)constructor   b) destructor
c)static   d) final

14   _____ defines only abstract methods and final fields.
a)Interface   b) Final class
c)Abstract class   d) Class

15 _____ keyword is used to inherit a class.
a)extend   b) extends
c)implement   d) implements

16 We cannot create a subclass of _____ class.
a)Abstract   b) public
c)static   d) final

Answers of MCQ:
1. (c), 2. (a), 3. (a), 4. (b), 5. (b), 6. (a), 7. (a), 8. (a), 9. (d), 10. (c), 11. (c), 12. (a), 13. (a), 14. (a), 15. (b), 16. (d)

Short Questions
1 Write various types of inheritance.
2 Define method overloading.
3 Define fields and methods of a class in JAVA.
4 Define constructor. How do we invoke constructor in JAVA?
5 Define method overriding.
6 Define Inheritance. How it is created in Java?
7 Define interface. Write the syntax for implementing an interface in a class.
8 What is the meaning of the *static* keyword?
9 What are the restrictions with static methods?
10 Differentiate between Classes and Interface.
11 Define the final variable and final methods.
12 Define class. How does it accomplish data hiding?
13 What is the meaning of the *abstract* keyword?
14 What are the conditions for using super() method.

Long Questions
1 Define class. How do classes help us to organize our programs? What are the three parts of a simple, empty class?
2 What is a constructor? What are its special properties?
3 Define inheritance. Describe different forms of inheritance.
4 Explain super and final keyword with example.
5 Describe the various forms of implementing interface. Give an example of JAVA code for each case.
6 When do we declare a method or class abstract? Discuss with one Example.
7 Write short note on method overloading and method overriding.

Unit – 3

Unit – 3

MCQ

1   All syntax errors are known as _____ errors.

a) Run-time   b) Exception
c) Logical   d) Compile-time

2   "Use of undeclared variables" is the _____ type of error.

a)Logical   b) Exception
c)Run-time   d) Compile-time

3   "Divided an integer by zero" is the example of _____ type of error.
a)Compile-time   b) Run-time
c)Logical   d) Exception

4   "Converting invalid string to a number" is the _____ type of error.
a)Run-time   b) Exception
c)Logical   d) Compile-time

5   If we want the program to continue with the execution of the remaining code, then we should try to catch the exception object thrown by the error condition and then display an appropriate message for taking corrective action is known as _____.
a)Exception handling   b) BufferedReader
c)Try   d) Catch

6   _____ is caused when a conversion between string and number fails.
a)NullPointerException   b) NumberFormatException
c)IOException   d) SecurityException

7   _____ is caused by bad array indexes.
a)ArrayStoreException   b) ArithmeticException
c)IOException   d) ArrayIndexOutOfBoundsException

8   _____ presents a uniform, easy-to-use, object-oriented interface between the program and the input/output devices.
a)Stream   b) Output
c)Input   d) Reader

9   Character streams can be used to read and write _____Unicode characters.
a)4 - bit   b) 16 – bit
c)2 - bit   d) 8 – bit

10   _____provide a way to "hide" classes thus preventing other programs or packages from accessing classes that are meant for internal use only.
a)Package   b) Thread
c)Constructor   d) Interface

11   Which package is used for creating and implementing applets.
a)java.lang   b) java.util
c)java.applet   d) java.awt

12   _____method is used to find the nth no. of character of given string s1.
a)s1.index(n)   b) s1.substring(n)
c)s1.length()   d) s1.charAt(n)

Answers of MCQ:
1.(d), 2. (d), 3. (b), 4. (a), 5. (a), 6. (b), 7. (d),   8. (a), 9. (b), 11. (c), 12. (d)

Short Questions
1   Give examples of the Run-time error.
2   List out the different types of exception.
3   Define the terms: try, catch.
4   Define the term - stream, reader stream classes, writer stream classes.
5   Explain any two string methods.
6   List the java API packages.
7   List the methods of Reader or Writer class.
8   Define the term – Exception and Exception Handling.

Long Questions
1   Explain Arithmetic Exception with an example.
2   What is exception? Explain the syntax of try block and catch block with an example.
3   Describe concept of stream.
4   Explain Reader stream classes and Writer stream classes.
5   Write a short note on Character Stream classes.
6   List out any five methods of String class by giving an example.
7   What is package? What are the benefits of package? Explain Java API packages.
8   Describe the try and catch statements in detail.

Unit 4

MCQ
1   The _____ parameter is used to specify the applet class name.
a)classname   b) code
c) name   d) codebase

2   _____ is valid parameter to set the background color as red.

a)setColor(RED)   b) Color = RED
c) Color.RED   d) new Color(RED)

3   Through the applet life cycle _____ state occur only once.
a) Running   b) Idle
c) Born   d) None of these

4   _____ is a passive control.
a) TextField   b) Label
c) Button   d) None of these

5   _____ is a single line edit control.
a) TextField   b) Label
c) Button   d) TextArea

6   In _____ component we can select multiple items.
a) Option Button   b) Choice
c) List   d) None of these

7   In List, if no item is selected then the method getSelectedIndex() returns

_____.
a) 0   b) 1
c) -1   d) NULL

8   To implement pop up style single content selection, _____ component is used.
a) TextArea   b) Button
c) List   d) Choice

9   _____ is a multi-line edit control.
a) TextField   b) TextArea
c) label   d) Button

10   If we implements ActionListener in our program, then we must override
_____ method.
a) actionPerform()   b) ActionPerformed( )
c) actionPerfromed( )   d) actionPerformed( )

11   In itemStateChanged( ) method, we must pass object of _____ class.
a) ItemEvent   b) EventAction
c) EventItem   d) ActionEvent

12   JDBC has been developed under _____.
a) JCP   b) JPC

c) JDC   d) OBDC

13 JDBC application must import _____ package.
a) io   b) sql
c) event   d) util

14 The paint method accepts _____ type of argument.
a) Graphics   b) Graphic
c) Drawing   d) None of these

Answers of MCQ:
1. (b), 2. (c), 3. (c), 4. (b), 5. (a), 6. (c), 7. (c), 8. (d), 9. (b), 10. (d), 11. (a), 12 .(a), 13. (b), 14. (a)

Short Questions
1 What is event delegation?
2 List out methods of MouseListener.
3 Define (1) Event (2) Event Source (3) Event Class (4) Event Listener
4 Explain methods (1) setBackground( ) (2) setForeground( )
5 Explain types of drivers used in JDBC.
6 Write difference between java applet program and java application program.
7 List down methods for KeyEvent class and ItemEvent class.

Long Questions
1 Explain Applet life cycle in detail.
2 What is JDBC? List out JDBC components and types of drivers.
3 Write short note on following components.
      (1) Label
      (2) TextField
      (3) TextArea
      (4) List
      (5) Choice
      (6) Button
      (7) Checkbox