

Roll No.

E-829

**M. Sc. (IT) (Third Semester) (ATKT)
EXAMINATION, May-June, 2021**

Paper First

JAVA PROGRAMMING LANGUAGE

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt all Sections as directed.**Section—A**

1 each

(Objective/Multiple Choice Questions)**Note :** Attempt all questions.

Choose the correct answer :

1. Which of the following is not Java features ?

- (a) Dynamic
- (b) Architecture Neutral
- (c) Use of pointer
- (d) Object oriented

2. is used to find and fix bugs in the java program.

- (a) JVM

(b) JRE

(c) JDK

(d) JDB

3. Which of the following is a valid declaration of a char ?

(a) char ch = \ utea ';

(b) char ch = 'tea ';

(c) char ch = \u 0223;

(d) char ch = \ itea ';

4. What is the return type of the hashCode() method in the object class ?

(a) Object

(b) Int

(c) Long

(d) Void

5. Which of the following is a valid long literals ?

(a) ABH 8097

(b) L990023

(c) 904423

(d) OXnF029L

6. What does the expression float a = 35/0 return ?

(a) 0

P. T. O.

- (b) Not a number
 - (c) Infinity
 - (d) Run time exception
7. Which method of the class is used to determine the name of a class represented by the class object as a string ?
- (a) getClass()
 - (b) Intern()
 - (c) getName()
 - (d) toString ()
8. In which process, local variable has the same name as one of the instance variable ?
- (a) Serialization
 - (b) Variable shadowing
 - (c) Abstraction
 - (d) Multi-threading
9. Which of the following is true about the anonymous inner class ?
- (a) It has only methods.
 - (b) Objects can't be created.
 - (c) It has a fixed class name.
 - (d) It has no class name.

P. T. O.

10. Which package contains the Random class ?
- (a) java. util package
 - (b) java. lang package
 - (c) java. awt package
 - (d) java 10 package
11. An interface with no fields or methods is known as a/an
- (a) Runnable Interface
 - (b) Marker Interface
 - (c) Abstract Interface
 - (d) Char Sequence Interface
12. Which of the following is an immediate subclass of the panel class ?
- (a) Applet class
 - (b) Window class
 - (c) Frame class
 - (d) Dialog class
13. Which of these classes are the direct subclasses of the Throwable class ?
- (a) Runtime Exception and Error class
 - (b) Exception and Virtual Machine Error class
 - (c) Error and Exception class
 - (d) IO Exception and Virtual Machine Error class

14. In which memory a string is stored when we create a string using new operator ?
- (a) Stack
 - (b) String memory
 - (c) Heap memory
 - (d) Random storage space
15. Which of the following is a reserved keyword in Java ?
- (a) Object
 - (b) Strictfp
 - (c) Main
 - (d) System
16. Which keyword is used for accessing the features of a package ?
- (a) Package
 - (b) Import
 - (c) Extends
 - (d) Exports
17. In java jar stands for
- (a) Java Archive Runner
 - (b) Java Application Resource
 - (c) Java Application Runner
 - (d) None of the above

P. T. O.

18. Given :

```
ArrayList list = new ArrayList( )
```

What is the initial capacity of the ArrayList() ?

- (a) 5
 - (b) 10
 - (c) 0
 - (d) 100
19. Which of the following is a mutable class in java ?
- (a) java.lang.String
 - (b) java.lang.Byte
 - (c) java.lang.String
 - (d) java.lang.String Builder
20. What is meant by the class and object that are dependent on each other ?
- (a) Light coupling
 - (b) Cohesion
 - (c) Loose coupling
 - (d) None of the above

Section—B

2 each

(Very Short Answer Type Questions)

Note : Attempt all questions.

1. Define Byte code.

2. Full form of JRE.
3. What is JDBC ?
4. What is Classpath ?
5. Define Stream.
6. What is callable statement ?
7. Define object.
8. Explain Java Development tool kit.
9. Define Array.
10. Explain this keyword.

Section—C

3 each

(Short Answer Type Questions)**Note :** Attempt all questions.

1. Explain Java standard library.
2. Explain the use of Jump statement with example.
3. Differentiate Public, Private, Protected access specifier.
4. What do you understand by Anonymous classes with example ?
5. Explain the concept of thread priority.
6. What do you understand by Array List class ? Explain with example.
7. Differentiate between throws and finally statement.
8. Explain the concept of vectors with example.
9. What is use of Driver Manager Class ?
10. Explain the use of Callable statement with example.

P. T. O.**Section—D**

6 each

(Long Answer Type Questions)**Note :** Attempt all questions.

1. What do you mean by Operators ? Explain different types of Operators used in Java language with example.
2. What do you mean by Inheritances ? Explain different types of Inheritances. Also explain the advantage of using Interfaces over inheritances in Java.
3. What is Exceptions ? Explain how you will perform Exception Handling in Java ? Write a program to justify your answer.
4. Differentiate between string class and string Buffer class with example.
5. What is Event ? Explain the Delegation Event Model. Write a program to justify your answer.

E-829