

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2023  
(Third Semester)

Branch – SOFTWARE SYSTEM (Five Years Integrate Course)

**PROGRAMMING IN JAVA**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which one is a collection of tools that are used for developing and running java programs?  
i) API                      ii) JDK                      iii) JSL                      iv) AWT
- 2 A special type of method called \_\_\_\_\_ that enables an object to initialize itself when it is created.  
i) Constructor                      ii) Method declaration  
iii) Methods overloading                      iv) Interface
- 3 A thread is said to be \_\_\_\_\_ state when it is prevented from entering into the runnable state.  
i) Dead                      ii) Running                      iii) Newborn                      iv) Blocked
- 4 The component class is the super class in \_\_\_\_\_.  
i) java.lang                      ii) java.io                      iii) java.awt                      iv) java.net
- 5 A \_\_\_\_\_ type is a type whose fields consist of a fixed set of constants.  
i) enum                      ii) vector                      iii) set                      iv) map

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a) Explain about the abstract class in java.  
OR  
b) Write a JAVA program to sorting a list of numbers using an array.
- 7 a) State the difference between class and Interface.  
OR  
b) Develop a java program to illustrate the nested try catch statements.
- 8 a) How to define thread? Give its syntax.  
OR  
b) Write a java program to implement thread class with runnable interface.
- 9 a) State the different ways to read input from console in Java.  
OR  
b) Show the native method in java.
- 10 a) What is generic class? How to create and use generic class?  
OR  
b) Describe the need of wrapper class.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a) Explain in detail the basic concepts of object oriented programming.  
OR  
b) With neat syntax express the switch..case statement with example program.
- 12 a) Enumerate how to create and access the packages.  
OR  
b) Elucidate the various kinds of common java exceptions.
- 13 a) Outline the importance of Inter-thread communication in java.  
OR  
b) Enumerate the synchronization with its methods with suitable thread program.
- 14 a) Give detailed notes on I/O stream classes in java.  
OR  
b) Write a program to create student registration form using Applet with following fields.  
Name of the student, Address, Sex, Class, Mobile number, Mail-id.
- 15 a) Differentiate between for loop with enhanced for loop in java.  
OR  
b) Explain Varargs with neat syntax and example.

Z-Z-Z

END