

**GOVT. D.B. GIRLS' P.G. (AUTONOMOUS) COLLEGE
RAIPUR CHHATTISGARH**

**SYLLABUS
OF
ADD-ON ADVANCE DIPLOMA
2020-21**

Signature of Chairman

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Signature of Member(Subject)

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Theory

Part A

No.	Title	Marks		Total
		Max.	Min.	
Paper-I	301- Programming in JAVA	50	17	50

Practical

Part B

	Name of The Practical	Marks	
		Max.	Min.
Practical-I	302- Project	50	17
Practical-I	303- Practical (Practical based on 301 Programming in JAVA)	50	17

APPROVED BY THE BOARD OF STUDIES ON

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DEPARTMENT OF COMPUTER SCIENCE
ADD-ON ADVANCE DIPLOMA
SESSION :2020-21
PAPER - I

301- Programming in JAVA

Maximum Marks: 50

Number of Units : V

Minimum Marks: 17

UNIT - I

Introduction :

Genesis of java, importance to the Internet, overview of features.

OOP :

OOP features, data types, control structures, arrays, methods and classes, nested & inner classes, string and String Buffer class, Wrapper Class, vectors,

UNIT-II

Inheritance :

Basics type, method Override, using abstract and final classes, using super.

Packages and Interfaces :

Defined CLASSPATH, importing packages, implementing interface.

UNIT - III

Exception Handling :

Fundamental: exception types, using try and catch, throwing exceptions, defined exceptions.

Multithreaded Programming :

Java spread model, creating threads, thread priorities, synchronization. Suspending resuming and stopping threads.

UNIT -IV

Input/Output:

Basic Streams, Byte and Character Stream, predefined streams, reading and writing from console and files. Using standard Java Packages (lang, util, io)

JDBC:

Setting the JDBC connectivity with backend database.

UNIT-V

Applets :

Fundamentals, life cycle, overriding update, HTML APPLET tag, passing parameters. Developing single applets.

Introduction to AWT :

Window fundamentals, creating windowed, programs waking with graphics, using AWT controls, menus. Delegation event model, handling mouse and keyboard events.

BOOKS RECOMMENDED:

1. Java complete reference - by Patrick naughten & Mesut Scpddt. [TMH]
2. Java Primer - by E.Balaguruswami
3. Java Programming - Khalid Mughal

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DEPARTMENT OF COMPUTER SCIENCE
ADD-ON ADVANCE DIPLOMA
SESSION : 2020-21
PAPER - II
302- Project

Maximum Marks: 50

Minimum Marks: 17

Distribution of Marks

Sessional	-	10
Project	-	30
Viva	-	10

DEPARTMENT OF COMPUTER SCIENCE
ADD-ON ADVANCE DIPLOMA
SESSION : 2020-21
PAPER - II

303- Practical (Practical based on 301)

Maximum Marks: 50

Minimum Marks: 17

Distribution of Marks

Sessional	-	10
Practical	-	30
Viva	-	10

List of Practicals: Java

- Q1. Write a Program to add two numbers.
- Q2. Write a Program to find maximum of two numbers using if.
- Q3. Write a Program to check even and odd numbers.
- Q4. Write a Program to print table of a number using for loop.
- Q5. Write a Program to demo switch case.
- Q6. Write a Program to calculate factorial of a number using recursion.
- Q7. Write a Program to print and copy a string.
- Q8. Write a Program to print

```
*  
* *  
* * *
```

Where no of rows is passed as an argument.

- Q9. Write a Program to print

```
* * *  
* *  
*
```

Where no of rows is passed as an argument.

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Q10. Write a Program to print

```
*  
* * *  
* * * * *
```

Where no of rows is passed as an argument.

- Q11. Write a Program of sorting list of numbers stored in array.
- Q12. Write a Program of method overloading.
- Q13. Write a Program of constructor overloading.
- Q14. Write a Program of add method inside class.
- Q15. Write a Program of returning value to the caller.
- Q16. Write a Program where function with argument.
- Q17. Write a Program a program of inheritance.
- Q18. Write a Program of static variables.
- Q19. Write a Program of object as parameter.
- Q20. Write a Program of Alphabetically ordering of string.
- Q21. Write a Program of using SUPER keyword.
- Q22. Write a Program of calling variables of super class.
- Q23. Write a Program of method overriding.
- Q24. Write a Program of Abstract class.
- Q25. Write a Program of implementing interface.
- Q26. Write a Program of implementing multiple inheritance.
- Q27. Write a Program of uncaught Exception.
- Q28. Write a Program of using try and catch statement.
- Q29. Write a Program of multiple catch.
- Q30. Write a Program of nested try catch.
- Q31. Write a Program of Nested try catch.
- Q32. Write a Program of throw statement.
- Q33. Write a Program finally statement.
- Q34. Write a Program of multithreading.
- Q35. Write a Program of thread priority.
- Q36. Write an Example Program of Applet.
- Q37. Write a Program of sum using Applet.
- Q38. Write a Program to draw polygon in Applet.
- Q39. Write a Program to draw face using various method of Applet.
- Q40. Write a Program to create three labels.
- Q42. Write a Program to create three buttons and add them to applet.
- Q43. Write a Program of check box display a check bar.
- Q44. Write a Program of choice list.
- Q45. Write a Program to read the contents of file using Byte Stream.
- Q46. Write a Program to write the contents to a file using Byte Stream.
- Q47. Write a Program to copy the contents of one file to another using Byte Stream.