



SANATAN DHARMA COLLEGE, AMBALA CANTT

College with Potential for Excellence, UGC, New Delhi

NAAC Accredited Grade “A+” with CGPA 3.51 in 3rd cycle

ISO 9001:2015 & ISO 14001:2015 Certified

Department of Computer Science

Lesson Plan (Session 2022-2023)

Class: BC (Voc) Sem: IV

Course Code: BC (Voc)-405

Nomenclature: PROGRAMMING IN JAVA

Duration: 13 Weeks

Dates: (Feb 2023-April 2023)

SYLLABUS

PROGRAMMING IN JAVA BC (Voc)-405

Maximum Marks: 100

External: 80

Minimum Pass Marks: 35

Internal: 20

Time: 3 hours

BC (Voc)-405

PROGRAMMING IN JAVA

Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 15 marks each.

Introduction to Java- features of Java- object oriented concepts- data types – variables- arrays- operators- control statements- input and output- scanner and system - class print(), println(), printf() methods; Class- objects- constructors- overloading method- access control- static and fixed methods- inner classes- string class- inheritance.

GUI components- common GUI event types and listener interfaces - Joptionpane – Jlabel – JtextField – Jbutton – Jcheckbox – JTextarea – JcomboBox – Jlist – Jpanel - Mouse Event Handling – Adapter Classes - Key Event Handling.

LayoutManagers–Flow layout, BorderLayout, GridLayout- Graphics and Java2D- Graphics contexts and Graphics objects - Color control - Font Control – Drawing Lines, Rectangles and ovals - JSlider- Using menus with frames

Practical: The candidates should be able to write programmes for the simple business applications using Java Programming.

REFERENCES

- Deitel and Deitel, Java: How to Program, PHI Publication.
- C. Muthu, programming with Java, McGraw Hill Education (India) Private Ltd.

Course title	BC (Voc)-405 PROGRAMMING IN JAVA
CO No.	Course Outcome
1.	To impart knowledge on Java Programming
2.	The student will be able to write programmes for the simple business applications using Java Programming.
3.	Student will be able to use and create Packages and Interfaces in a Java programming
4.	Student will be able to manage Layout Managers – Flow layout, Border layout, Grid layout - Graphics and Java 2D - Graphics contexts

S.No	Instructional Technique	Assessment Methods (AM)
1	Chalk & Talk	Assignments
2	ICT tools	Quiz
3	Group discussions	Group Discussions
4	Industrial visit	Oral Tests
5	Case studies	Sessional
6	Small Projects	Presentations
7	Workshop	Seminar
8	Spoken Tutorials	University Exams
9	Flipped Class	
10.	E-Resources	

Detailed Lesson Plan

Week	Date	BC(Voc) (4 th Sem) BC (Voc)-405	Instructional technique	Assessment method
1	01.02.2023	-		
	02.02.2023	Introduction to Java, Features of Java	1	1
	03.02.2023	Object oriented concepts	1	1
	04.02.2023	Data types – variables	1	1,2,3,4
	05.02.2023	Sunday		
2	06.02.2023	-		
	07.02.2023	-		
	08.02.2023	-		
	09.02.2023	Arrays- operators- control statements	2-PPT/Projector	1,2,3,4
	10.02.2023	Input and output- scanner and system	2-PPT/Projector	---
	11.02.2023	class print(), println(), printf() methods	2-PPT/Projector	1,2,3,4
	12.02.2023	Sunday		
3	13.02.2023	-		
	14.02.2023	-		
	15.02.2023	-		
	16.02.2023	Revision		
	17.02.2023	Classes and Objects	1	1,2,3,4,6
	18.02.2023	Holiday		
	19.02.2023	Sunday		
4	20.02.2023	-		
	21.02.2023	-		
	22.02.2023	-		
	23.02.2023	Constructors- overloading method	8,10	1,2,3,4
	24.02.2023	Access control- static and fixed methods	8,10	1,2
	25.02.2023	Class Test		4
	26.02.2023	Sunday		
5	27.02.2023	-		
	28.02.2023	-		
	01.03.2023	-		

	02.03.2023	Inner classes- string class-inheritance.		1,2,3,4
	03.03.2023	GUI components	2-PPT/Projector	1,2,3,4
	04.03.2023	Common GUI event types	6	5
	05.03.2023	Sunday		
6	06.03.2023 07.03.2023 08.03.2023 09.03.2023 10.03.2023 11.03.2023	Holi Holidays	--	
	12.03.2023	Sunday		
7	13.03.2023	-		
	14.03.2023	-		
	15.03.2023	-		
	16.03.2023	Assignment-1	6	1
	17.03.2023	listener interfaces – Joptionpane	2-PPT/Projector	1,2,3,4
	18.03.2023	Jlabel – JtextField – Jbutton	8,10	1,2,3,4
	19.03.2023	Sunday		
8	20.03.2023	-		
	21.03.2023	-		
	22.03.2023	-		
	23.03.2023	Holiday		
	24.03.2023	JcheckBox- JTextarea – JcomboBox	2-PPT/Projector	5
	25.03.2023	Jlist – Jpanel - Mouse Event Handling	6	1,2,3,4
9	26.03.2023	Sunday		
	27.03.2023	-		
	28.03.2023	-		
	29.03.2023			
	30.03.2023	Holiday		
	31.03.2023	Sessional	2-PPT/Projector	1,2,3,4
	01.04.2023	Adapter Classes - Key Event Handling.	2-PPT/Projector	1,2,3,4
	02.04.2023	Sunday		
10	03.04.2023	-		

	04.04.2023	Holiday		
	05.04.2023	-		
	06.04.2023	Layout Managers–Flow layout	2-PPT/Projector	1,2
	07.04.2023	Border layout, Grid layout	1	
	08.04.2023	Graphics and Java2D	2-PPT/Projector	1
11	09.04.2023	Sunday		
	10.04.2023	-		
	11.04.2023	-	---	
	12.04.2023	-		
	13.04.2023	Graphics contexts and Graphics objects	8,10,2	1,2
	14.04.2023	Holiday		
	15.04.2023	Assignment-2		1
	16.04.2023	Sunday		
12	17.04.2023	-		
	18.04.2023	-		
	19.04.2023	-		
	20.04.2023	Color control	1	1,2,3,4
	21.04.2023	Font Control – Drawing Lines	2-PPT/Projector	1,2,3,4
	22.04.2023	Holiday		
	23.04.2023	Sunday		
13	24.04.2023	-		
	25.04.2023	-		
	26.04.2023	-		
	27.04.2023	Rectangles and ovals	1	1,2
	28.04.2023	Class Test	2-PPT/Projector	5
	29.04.2023	JSlider- Using menus with frames	2-PPT/Projector	1,2,3,4
	30.04.2023	Sunday		

	Teacher Incharge	Head of the Department
Name	Harjinder Kaur	Dr. Girdhar Gopal
Sign with Date		