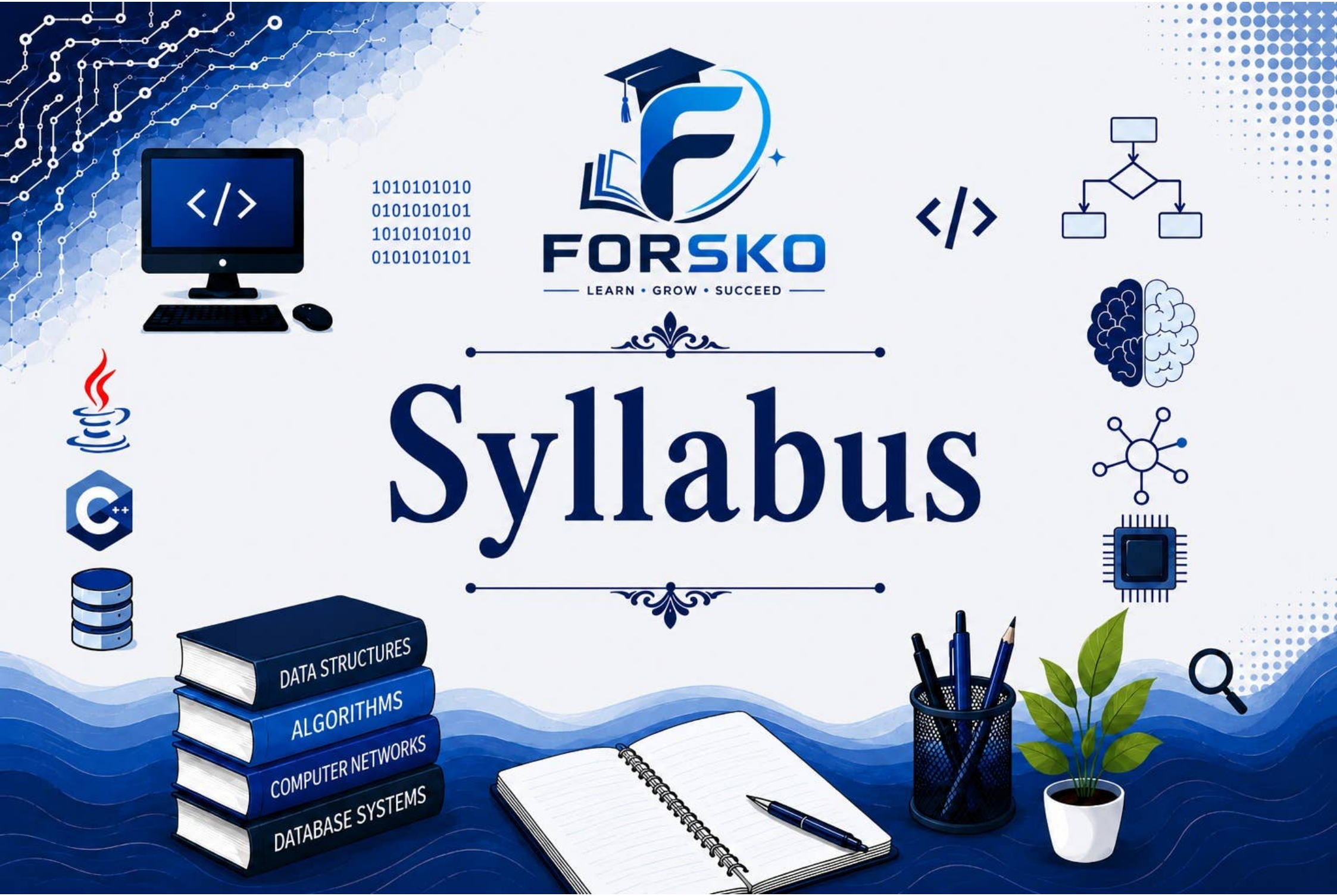
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FORSKO
LEARN • GROW • SUCCEED
Syllabus
DATA STRUCTURES
ALGORITHMS
COMPUTER NETWORKS
DATABASE SYSTEMS

Major Course: Laboratory on core Java Programming and Advanced Python Programming

Level	Semester	Course Code	Course Name	Credits	Teaching Hours	Exam Duration	Max Marks
5.5	V	**112216**	**Laboratory on core Java Programming and Advanced Python Programming**	2	60	4Hrs.	50

Course Objectives:	1. To understand the basic concepts of Java programming language. 2. To develop problem-solving skills using Java programs. 3. To understand the advance concepts of python programming language. 4. To understands database connectivity and GUI in python programming
Course Outcomes:	On competition of the following syllabus the students will be able to - 1. Understand and apply the fundamentals of Java programming language. 2. Write, compile, debug, and execute Java programs successfully. 3. Understand the advance python programming concept 4. TO understand the SQL, GUI and other advance concept in Python programming

Contents	Workload Allotted	Weightage of Marks Allotted	Incorporation of Pedagogies
List of Practical: 1. Write a program in Java to Swap Two Numbers using third Variables. 2. Write a program in Java to determine whether an input number is an even number. 3. Write a program in Java to Find Greatest of Three Number 4. Write a program in Java to Switch Case Statement 5. Write a program in Java to Print Factorial of number 6. Write a program in Java to Print Prime Number 7. Write a program in Java to Generate Fibonacci Series 8. Write a Java Program for Printing Multiplication table using do-while statement. 9. Write a Program in java by using while loop to reverse the inputted number 10. Write a program in Java to Print following pattern * * * * * * * * * *			Use any pedagogical technique suitable for the topic

	11. Write a program in Java to print the following pattern: 1 12 123 1234 12345 12. Write a program in Java code to print the following pattern: 1 22 333 4444 55555 13. Write a program in Java code to print the following pattern: 1 2 3 4 5 6 7 8 9 10 14. Write a program in Java to demonstrate classes and objects. 15. Write a program in Java to demonstrate method overloading 16. Write a program in Java to demonstrate constructor. 17. Write a program in Java to demonstrate constructor overloading. 18. Write a program in Java to demonstrate single inheritance 19. Write a program in Java to demonstrate method overriding. 20. Write a program in Java to demonstrate Interface. 21. Write a Python program to create, append and remove lists. 22. Python program to check if a substring is present in a given string. 23. Write a program to demonstrate working with tuples in Python. 24. Write a program to demonstrate working with dictionaries in Python. 25. Write a Python program to find largest of three numbers. 26. Write a Python program to construct the following pattern using nested for loop. * * * * * * * * * * 27. Write a Python program to print prim numbers less than 20. 28. Write a Python program to find factorial of a number using recursion.			

	29. Write a Python program to map two lists into a dictionary. 30. Write a Python program to count the frequency of words appearing in a string using a dictionary. 31. Write a Python program to create a dictionary with key as first character and value as words starting with that character. 32. Write a Python program to read the contents of a file in reverse order. 33. Write a Python program to map two lists into a dictionary. 34. Write a Python Program to demonstrate the class and object. 35. Write a Python Program to demonstrate constructor method..			

Assessment Rubric: External Practical Course

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI PRACTICAL EXAMINATION B.Sc. III, SEMESTER – V (NEP)				
Practical	**Course Code:** 112216	**Laboratory on core Java Programming and Advanced Python Programming**	**Max Marks: 25**	**Time: 4 Hrs.**

Sr. No.	**Exercise**	**Marks**
1.	Single Program Writing, Algorithm, Flowchart, Execution, with Sample inputs and Outputs, and Printout	**10**
2.	Submitted Record book (Preferably handwritten)	**05**
3.	External Viva Voce	**10**

Assessment Rubric: Internal Practical Course

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI PRACTICAL EXAMINATION B.Sc. III, SEMESTER – V (NEP)			
Practical	**Course Code:** 112216	**Laboratory on core Java Programming and Advanced Python Programming**	**Max Marks: 25**

Sr. No.	Assessment Criteria	Marks
1.	Attendance/Regularity in practical's / Students' overall performance	**05**
2.	Record book Preparation (Preferably handwritten)	**10**
3.	Internal Viva Voce	**10**