BACSE102 Problem Solving Using Java– Winter 25

Assessment Design Overview

Assessments will be distributed across:

- 4 Programming Assessment Tests (PATs)
- 1 Practice Progress Component

PAT Distribution

PAT No.	Topics Covered	Marks	Tentative Duration
PAT 1	Java Basics, Variables, Data Types, Operators, Looping Constructs and Arrays	30	75 Minutes
PAT 2	Classes and Objects, Inheritance and Polymorphism	30	75 Minutes
PAT 3	Packages, Exception Handling, Serialization and Deserialization	30	75 Minutes
PAT 4	Collection Framework	15	45 Minutes

Detailed PAT Composition

PATs 1 to 3 (Exam Time - 75 Minutes | 30 Marks | Weightage: 15 Marks Each)

Component	Questions	Marks	Approx. Time
Coding	1 Easy / Medium (5) + 1 Hard (10)	15	60 minutes
MCQs	6 × 1 mark	6	6 minutes
Debugging	6 × 1.5 marks	9	9 minutes
Total		30	75 minutes

Note: Final score out of 30 will be scaled to 15 marks per PAT.

PAT 4 (Exam Time - 45 Minutes | 15 Marks | Weightage: 8 Marks)

Component	Questions	Marks	Approx. Time
Coding	1 Medium	7.5	37.5 minutes
MCQs	3 × 1 mark	3	3 minutes
Debugging	3 × 1.5 marks	4.5	4.5 minutes
Total		15	45 minutes

Note: Final score out of 15 will be scaled to 8 marks.

Component	Marks
IamNeo Practice Progress (measured via platform)	7

PAT Evaluation Ratio Summary

Component	Approximate Weight (%)
Coding	50%
MCQs	20%
Debugging	30%

FAT (Final Assessment Test) Structure – 50 Marks

Component	Marks	Mode	Description
Part A: Theory Section	10	**Paper-based**	To be written manually and submitted
- Algorithm/Pseudocode	5*2		Step-by-step logic before implementation
Part B: Practical Section (IamNeo)	40	**Platform-based**	Conducted online via IamNeo in secure exam mode
- Coding Section	25	IamNeo	1 Medium (10 marks), 1 Hard (15 marks) — logic + output + edge cases
- Debugging Section	10	IamNeo	10 questions × 1 mark each (critical thinking + syntax/logic correction)
- MCQs	5	IamNeo	10 questions × 0.5 marks (concept understanding)

Total = 50 Marks

Schedule

Week Start Day	Week End Day	Assessment
19.01.26	23.01.26	PAT 1
23.02.26	27.02.26	PAT 2
09.03.26	13.03.26	PAT 3
23.03.26	27.03.26	PAT 4
11.04.26	17.04.26	FAT