

II Semester B.C.A. Examination, July/August 2024 (NEP Scheme) COMPUTER SCIENCE

Paper - 2.2 : Object Oriented Programming using Java

Time: 21/2 Hours

Max. Marks: 60

Instruction: Answer any four questions from each Part.

PART - A

I. Answer any four questions. Each question carries 2 marks.

 $(4 \times 2 = 8)$

- 1) What is Java API?
- 2) What are the difference between string and string buffer ?
- 3) What are the difference between this and super keywords?
- 4) Define abstract class.
- 5) Write any four methods of inputstream and outputstream.
- 6) Write short notes on typecasting in Java.

PART - B

II. Answer any four questions. Each question carries five marks.

 $(4 \times 5 = 20)$

- 7) Explain the features of Java.
- 8) What is constructor? What are the rules of defining constructor?
- 9) What are the differences between method overloading and overriding?
- 10) Explain the life cycle of an applet.
- 11) Write the steps involved in creating thread by extending thread class.
- 12) How to create user defined exception ?



PART - C

11.	Ansv	ver	any four questions. Each question carries 8 marks. (4×8=3	32)
	13)	a)	Explain any four object oriented programming concepts.	4
		b)	Mention important mathematical functions of math class with examples.	4
	14)	a)	Explain concat(), substr(), instanceof() and equals() methods of string class.	4
		b)	What is inheritance? Discuss various types of inheritance.	4
	15)	a)	Explain the process of creating user defined package with an example.	4
		b)	Discuss the access specifiers with example.	4
	16)	a)	Write the differences between AWT and Swing.	4
		b)	Explain mouse and keyboard events.	4
	17)	a)	What is an array ? How to create an array in Java ? Explain with an example.	4
		b)	What are the differences between array list and linked list in Java collections?	4
	18)	a)	Explain the life cycle of thread class.	4
		b)	Explain JavaBeans.	4