	Nagarjuna Degree College 38/36, Ramagondanahalli, Yelahanka Hobli, Reg. No. Bengaluru - 560 064.	15524			
V Semester B.C.A. Degree Examination, March/April - 2022					
COMPUTER SCIENCE					
Java Programming					
Paper : BCA 503T (CBCS-Scheme)					
(obes selicine)					
Time : 3 Hours Maximum Marks					
Instruction to Candidates:					
	Answer all sections.				
SECTION-A					
	Answer any ten questions.	(10×2=20)			
1.	Java is platform independent. Justify.				
2.	Write any two characteristics of Java.				
3.	What do you mean by command line arguments?				
4.	Differentiate between vector and array.				
5.	What is instance variable? Give an example.				
6.	Why do we need sychronization in Java?				
7.	Define Wrapper classes. Give an example.				
8.	What are the different access modifiers in Java.				
9.	What is Java API?				
10.	What is meant by unchecked and checked exception in Java?				
11.	How Java applets differ from Java applications?				
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12. What is an alestrait class?

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## SECTION - B

	Ans	wer any <b>five</b> question.	(5×10=50)
13.	a)	Explain with exampls the different data types in Java.	(5)
	b)	Write a note on type casting.	(5)
14.	a)	Discuss the different access specifiers used in Java.	(5)
	b)	Explain final variables, final method and classes with an example,	(5)
15.	a)	What is constructor overloading? Illustrate with a program.	(6)
	b)	Define inheritance. Explain any 2 types of inheritance with an example.	(4)
16.	a)	Illustrate and explain the differences between method overloading and method overriding. (6)	
	b)	Explain the methods of string class with examples.	(4)
17.	a)	Explain the implementation of interface with suitable example.	(5)
	b)	Write a note on exception handling.	(5)
18.	a)	What is thread? Explain the various ways of creating threads in Java with example.(5)	
	b)	What is a package? Mention the steps to create and use Java packages with an example. (5)	
19.	a)	Write a note on input stream and output stream.	(4)
	b)	Write a program that displays the number of characters, lines and words in a text file. (6)	
20.	a)	Write a program to calculate the areas of different geometrical figures using abstract class. (5)	
	b)	Explain the life cycle of an Applet.	(5)