# 17515

22223					
3 Hours / 100 Marks	Seat No.				

- Instructions (1) All Questions are Compulsory.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.
  - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks** 

### 1. a) Attempt any THREE of the following:

**12** 

- i) Enlist all mathematical functions & write a program based on pow () function.
- ii) List the standard default values of each data type.
- iii) Give difference between buffered reader and buffered writer class.
- iv) Explain thread priority and also explain methods get and set priority.

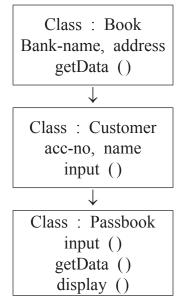
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Marks

#### b) Attempt any ONE of the following:

06

i) Write a program to implement following inheritance.



ii) Write impact of access specifiers public, private & protected on package.

# 2. Attempt any <u>TWO</u> of the following:

16

- a) Write a program to create a vector with 7 elements (10, 30, 50, 20, 40, 10, 20). Remove 3<sup>rd</sup> & 4<sup>th</sup> position. Insert new element of 3<sup>rd</sup> position and display original and current size of vector.
- b) Define package. Write a program to create a package and import in another class.
- c) Write a program that accept string as input using <param> tag and reverse the string and display on status window.

# 3. Attempt any **FOUR** of the following:

16

- a) State any four methods of wrapper class.
- b) Write a program to reverse a 3 digit number accepted from user.
- c) Describe file output stream class with example.
- d) List and explain Applet attributes.
- e) Compare between string and string buffer class.

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1/313	[ 3 ]

			N	Iarks		
4.	a)	Atte	empt any THREE of the following:	12		
		i)	Explain any two logical operators in Java with example.			
		ii)	Define exception. How it can be handled? Explain with example.			
		iii)	Explain typecasting with suitable example.			
		iv)	Define thread. Draw thread life cycle diagram in Java and explain it.			
	b)	Atte	empt any <u>ONE</u> of the following:	06		
		i)	Write syntax and example of following graphics methods.			
			1) Draw Oval()			
			2) Draw Polygon()			
			3) Draw Arc()			
		ii)	What is use of super and final w.r.t. inheritance explain it with example.			
5.		Atte	empt any <u>TWO</u> of the following:	16		
	a)	a) How synchronization is achieved in multithreading? Explain with example.				
	b)	defii	te a program to get input as a string and raise a user ned exception if the string contains less than eight acters.			
	c)	class	e use of font class. Write syntax to create object of font s. Describe any three methods of font class with their ax and write down example of each.			

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## 6. Attempt any FOUR of the following:

**16** 

- a) Demonstrate concept of method overriding with example.
- b) State and explain character stream classes in Java with example.
- c) Define class 'Book' with data members bookid, book-name and price. Accept data for two objects and display it.
- d) Write a program to demonstrate multiple inheritance.
- e) Write a program to find sum of digits of number entered by user.