PES
UNIVERSITY

PES University, Bengaluru
(Established under Karnataka Act 16 of 2013)

UC15MC553

DECEMBER 2017: END SEMESTER ASSESSMENT (ESA) MCA. IV SEMESTER

UC15MC553 - OOPs using JAVA

Time: 3 Hrs		Answer All Questions	Max Marks: 100
1.	a)	Give the details of all the features that make Java as a powerful language	10
	b)	Write the syntax and example for various control structures in Java.	10
2.	a)	Define following: a) Object (b) Constructor (c) Encapsulation (d) Instance Block (e) Command line arguments	5
	b)	Write a Java program to check if the given number is prime or not.	5
	c)	What are variable arguments? Give the syntax.	3
	d)	Write a program to accept a number less than 100 and display its last digit in words using Switch statement. (Eg: 23 – Last digit is THREE)	7
3	a)	Differentiate between abstract class and Interface.	5
	b)	Write a Java program to demonstrate polymorphism to implement sum(int,int), sum(int,int,int) and sum(int,float).	5
	c)	Explain the types of Inheritance with diagrams.	5
	d)	Define : i) Overriding (ii) Static method (iii) try & catch (iv) finally (v) 2D array	5
4.	a)	Illustrate multiple inheritance example and write a program to implement the same.	10
	b)	Explain in detail the life cycle of thread with neat diagram.	5
	c)	What is a package? How is a package created in java.	5
5.	a)	List out 5 commonly used String methods with example for each.	5
	b)	Write a note on 5 different types of Annotations with syntax and usage.	10
	c)	Brief about 1) Enumerations (2) Wrapper Class (3) Internationalisation	5