Seat No:_____

GANPAT UNIVERSITY

B. TECH SEM.VI ELECTRONICS & COMMUNICATION ENGINEERING EXAMINATION MAY/JUNE-2012

EC 606(C) OBJECT ORIENTED PROGRAMMING

TIME: 3 HOURS **TOTAL MARKS: 70**

INSTRUCTIONS:

1. Attempt all questions.
2. Answers to the two sections must be written in separate answer books.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.

SECTION-I

Que.-1	**(A)**	Explain three OOP principles with proper example.	4
	(B)	Describe with a flowchart, how various java tools are used in the application development?	4
	(C)	Explain the following terms and why used in java programs? 1. Documentation section 2. Main method class	2
	(D)	Write java assignment statements to evaluate the following equation. Area = $\Pi r^2 + 2\Pi rh$.	2

OR

Que.-1	**(A)**	Define object and class with example.	3
	(B)	Distinguish between following term. Dynamic binding and message passing.	2
	(C)	Elaborate how java differs from C and C++.	4
	(D)	What is type casting? Why is it required in programming?	3
Que.-2	**(A)**	How to declare one, two dimensional and variable size array? Give example.	3
	(B)	List out steps for create, access and use packages.	4
	(C)	Write applets to draw the Circle inside a square	4

OR

Que.-2	**(A)**	What is a vector and how it differs from an array?	2
	(B)	List out and explain types of error.	4
	(C)	How can we hide a class? Explain with example.	2
	(D)	Explain auto boxing and unboxing with suitable program.	3
Que.-3	**(A)**	List a few areas of application of OOP approach.	3
	(B)	How java is more secured than other languages?	3
	(C)	Why java compiler and interpreter are needed?	2
	(D)	Explain the following with example. 1. Arithmetic operator 2. Assignment operator	4

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SECTION-II

4 (A) What is a constructor? What are its properties? 4
(B) Compare and contrast overloading and overriding methods. 4
(C) How can we extend the class which has been created before? Explain the various ways of doing so. 4

OR

4 (A) When do we declare method or class as abstract? 4
(B) What is the major difference between a class and interface? 4
(C) How can we supply run time argument to the Java application? Explain with suitable example. 4

5 (A) Describe the various forms of implementing the interface. Give examples of Java code for each case. 4
(B) Discuss the different levels of access protection in Java. 4
(C) What is the difference between multiprocessing and multithreading? 3

OR

5 (A) How does thread differ from normal method of any class? 4
(B) Elaborate complete life cycle of a thread. 4
(C) What is thread synchronization? When it is useful? 3

6 (A) Develop an applet that receives three numeric values as input from user and then displays the largest of them on the screen. 5
(B) Write a program to get 10 numbers as input from user and sort them in descending order. 5
(C) True or False. 2

1. By default, all methods and variables can be overridden.
2. Protected members are also visible to subclasses in other packages.

End of Paper