	10-170				The state of		Marie Land	
Reg. No.:						7		

Question Paper Code: 51213

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Fifth Semester

Electrical and Electronics Engineering

080280041 — OBJECT ORIENTED PROGRAMMING

(Common to 080230004 A — Object Oriented Programming for B.E. (Part-Time) Third Semester Electrical and Electronic Engineering)

(Regulation 2008)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. List a few areas of application of OOP technology.
- 2. Why is an array called derived data type?
- 3. When do we use overloading of a function?
- 4. How is a member function of a class defined?
- 5. When do we use the protected visibility specifier to a class member?
- 6. Why do we need virtual function?
- 7. List four major differences between C and Java.
- 8. What is token in Java?
- 9. What is an interface?
- 10. How does string class differ from the string buffer class?

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) (i) Discuss the fundamentals of C++. (8)
(ii) Describe the various data types of C++. (8)

Or
(b) (i) Discuss the development of object oriented programs. (8)
(ii) Discuss the array of pointers in C++. (8)

12.	(a)	(i) What are the merits and demerits of using friend function? Explain. (8)
		(ii) Describe parameterized constructor. (8)
		Or Or
	(b)	Define a class to represent a bank account. Include the following members:
		Data members:
		(i) Name of depositor
		(ii) Account number
		(iii) Balancing the account.
		Member functions:
		(i) To assign initial deposit
		(ii) To deposit an amount
		(iii) To display name and balance. (16)
13.	(a)	(i) Define a class string. Use over loaded == operator to compare two strings. (8)
		(ii) Discuss the implications of making a function a pure virtual function. (8)
		Or
	(b)	Describe the different forms of inheritance. Give an example for each. (16)
14.	(a)	(i) Explain final variables and methods in Java with suitable examples. (8)
		(ii) Discuss overloading in Java. (8)
		Or
	(b)	Discuss the three types of visibility modifiers used in Java. (16)
15.	(a)	Describe the various forms of implementing interfaces. Give examples of Java code for each case. (16)
		Or
	(b)	Discuss various levels of access protection available for packages and their implications. (16)