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FIRST SEMESTER

END SEMESTER EXAMINATION

Roll No. 28

B. TECH. (GROUP A)

MAY-2011

COE-116 PROGRAMMING FUNDAMENTAL

Time: 3 Hours

Max. Marks : 70

Note : Answer any **FIVE** questions.
Assume suitable missing data, if any.

- 1[a] W.A.P. to swap two numbers using pointers. 7
[b] What is the difference between structure and union? Create a structure for storing Roll No., name, Ph.No. of 60 students in a class. 7

2[a] Find error

```
main ()  
{  
    int 12A;  
    int I = 5, j  
    int a I;};  
    for(j=0, j<I; j+)  
    {  
        a[i] = j;  
    }  
    cout < 12A << a[i]  
    cout < a[1] << a[2] << a[3];  
    continue;  
};
```

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- [b] W.A.P. to pass an array of 5 elements to function sum () and declare formal arguments as pointer in sum(). return the sum of numbers and print using pointer. 9
[c] Explain logical operations. 3

- 3[a] Identify the following tokens
- | | | | |
|-----------|------------|-------------|----------|
| (i) A_12 | (ii) -12A | (iii) _12_A | |
| (iv) 12U | (v) 2.1 | (vi) 'A12' | |
| (vii) "A" | (viii) 015 | (ix) 0x21 | (x) 12AB |
- 5
- [b] Explain the difference between call by value and call by reference. Give examples, advantages of both. 7
- [c] What is the difference between C and C++. 2
- 4[a] Define the following terms:
- | | | |
|----------------|------------------|---|
| (i) expression | (ii) identifier | |
| (iii) keywords | (iv) tokens in C | 4 |
- [b] Explain different loop structures in C with the help of examples. 5
- [c] W.A.P. to find the sum of a fibonacci series. 5
- 5[a] What is recursion, recursive function, depth of recursion. Compare it with iterative process. 6
- [b] W.A.P. to find the x^y using recursion. 5
- [c] Explain switch statement. 3
- 6[a] W.A.P. to search an element in an array, mentioning the technique used. 7
- [b] What is the purpose of function prototype? Give example of function call, function prototype, function definition for a function search () using arguments –
- | | |
|--------------------------|---|
| (i) array | |
| (ii) number of elements. | 7 |
- Write short notes on any FOUR
- | | |
|-----------------------------|----|
| [a] Features of OOP | |
| [b] Unary Operators | |
| [c] Multi dimensional Array | |
| [d] Relational Operators | |
| [e] Escape Sequence | |
| [f] Constants. | 14 |