B.Sc. (With Credits)-Regular-Semester 2012 Sem II

2SCS-T2 Computer Science -II (Structured Programming with 'C' Paper - II)

P. Pages : 4

Time : Three Hours Max. Marks : 50

Notes : 1. Draw neat and labelled diagram wherever necessary.
2. All questions are compulsory and carry equal marks.

1. Either :

a) Explain the output statement printf( ) with suitable example. **5**

b) Write a algorithm to calculate the hcf (highest common factor) of 2 integer nos. **5**

OR

c) Explain the Arithmatic operations performed by Arithmatic operators. **5**

d) Write the steps of conceptual development of solution of a problem. **5**

2. Either :

a) Write a program to calculate factorial value of a integer no. **5**

b) Explain the Ternary operator with example. **5**

OR

c) Give syntax and example of switch statement in 'C'. **5**

d) Write a program to test a integer no is odd or even and display appropriate message. **5**

3. Either :

a) Explain the initialization of two dimensional array with example. **5**

b) Write a program to check the given string is a palindrome or not. **5**

OR

c) Define a structure than can describe a hotel with information customer name, address, grade, room charge. Write a program to assign customer information using structure. **5**

d) Explain the string handling functions. **5**

i) strlen( )
ii) strcmp( )

4. Either :

a) Write a function prime that returns 1 if its argument is a prime number and returns zero otherwise. **5**

b) Explain the file error handling functions **5**

i) fe of( )
ii) ferror( )

OR

c) Explain a user defined function with no arguments and no return values. **5**

d) Write the output of the program. **5**

```
/*program*/
void main( )
{
int a=12, b=4, *p1, *p2, x, y, z
p1=8a ; p2 =8b;
x = *p1 * *p2 – 6;
y=4*-*p2 /* p1+10;
*p2=*p2+3 ; *p1=*p2-5 ;
z=*p1 * *p2-6;
printf ("ln a=%d\n  b=%d\n  x=%d\n
y=%d\n  z=%d", a, b, x, y, z);
```

5. Solve all the questions.

a) Write a note on interpreter. **2½**

b) Explain break statement with suitable example. **2½**

c) Differentiate between structure and array. **2½**

d) What is pointer? How is a pointer initialized. **2½**

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