STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2004 – 05)

SUBJECT CODE: CA/MO/AC64

B. C. A. DEGREE EXAMINATION, APRIL 2007 SIXTH SEMESTER COURSE : MAJOR OPTIONAL PAPER : ADVANCED C PROGRAMMING TIME : 90 mts MAX. MARKS: 50

SECTION – A

I FILL IN THE BLANKS

(10x1=10)

- 1. The number of subscripts determines the of the array
- 2. Function declaration is also called as
- 3. Pointer is a that represents the of the data item.
- 4. The individual structure elements are referred as
- 5. If file is not accessible through programmer it is called

CHOOSE THE BEST ANSWER

6. All individual array elements that are not assigned explicit initial values will automatically be set to a. One b. Zero c. Memory address d. Unknown random Values 7. Return statement used for a. End of Function Specification b. Return is an expression d. All the above c. Return variable values 8. pointer can accept b. Variable a. Value c. Address d. all the above 9. Structure used for a. Create Template b. Reusability c. data representation d. for all 10. file pointer indicates a. Memory address b. file beginning c. Buffer location d. none of the above

SECTION – B

II. ANSWER ALL QUESTIONS

 $(5 \times 2 = 10)$

- 11. What advantages are there in defining an array size in terms of a symbolic constant rather then a fixed integer quantity?
- 12. What are the three principal components of a function definition?
- 13. Why ragged array in pointers?
- 14. List any two difference between structure and union in c?
- 15. What is the limitation of unformatted data file?

III. ANSWER ANY 6 OUT OF 8 QUESTIONS $(6 \times 5 = 30)$

- 16. How is an array name interpreted when it is passed to the function?
- 17. Explain the difference between function declaration and a function definition?
- 18. What is recursion? What advantages are there in its use?
- 19. A C program contains the following statements

```
char u, v, = 'A'
char *pu, *pv = &v;
...
*pv = v+1;
u = *pv +1;
pu = & u;
```

Suppose each character occupies one byte of memory, if the value assigned to u is stored in (hexadecimal) address F^*C and the value assigned to v is stored in address F8D then.

- i. What value represented by & v?
- ii. What value is assigned to pv?
- iii. What value is represented by *pv?
- iv. What value is assigned to u?
- v. What value is assigned to pu?
- 20. Define a structure and process the same with an example.
- 21. How to declare user defined data type? Explain with an example.
- 22. Describe the following file type specificationa. "r" b. "w" c. "a" d. "r+" e) "w+"
- 23. How to integrate Oracle application using C –explain.
