

2206/A12

OCTOBER 2011

PROGRAMMING IN C

Time : Three hours

Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any **SIX** questions.

1. What is initialization? Why is it important?
2. What are the different types of storage classes and for what purpose it is used?
3. Explain how a function is designed and what is the need for using function.
4. Write a simple C program using numeric function.
5. Write about the classification of pointers.
6. Write a simple C program to read a line of text.
7. Explain union give an example.
8. Write a simple C program to illustrate a structure.
9. How does an append mode differ from a write mode?
10. What is the significance of EOF?

PART B — (4 × 10 = 40 marks)

Answer any **FOUR** questions.

11. Write a program to read three values using scanf statement and print the following results :
 - (a) Sum of the values
 - (b) Average of the three values
 - (c) Largest and smallest of the three.
12. Write a C program using function to find the length of the string.
13. Explain how the string variables is declared and initialized?
14. Write a program to read a matrix of size $m \times n$ and print its transpose.
15. Explain referencial structure with example.
16. Explain input/output operations on files.

PART C — (2 × 15 = 30 marks)

Answer any **TWO** questions.

17. Explain the various looping statements.
18. (a) Explain the parameter passing (i.e) call by value and call by reference.
(b) Write a C program to merge two arrays.

19. (a) Explain arrays within structures and give suitable example.

- (b) Write a C program that uses Fputc to send a character to a file.