



0403

First Year B. C. A. (Sem. II) Examination

October - 2005

0610 : Programming Language - I

Time : 3 Hours

[Total Marks : 100

Instructions :

(1)

എല്ലാ ചിഹ്നങ്ങളും കൃത്യമായി നിറയ്ക്കേണ്ടതാണ്. Fillup strictly the details of signs on your answer book.

Name of the Examination :

Name of the Subject :

Subject Code No. : Section No. (1, 2, ...) :

Seat No :

Student's Signature

- (1) The question paper consists of 5 questions.
- (2) Q 1 is compulsory.
- (3) Figures to the right indicate full marks to the question.
- (4) Mention choices clearly. Do not intermix options.

1 Answer the following briefly :

10

- (1) What is assignment statement ? Explain with example.
- (2) What is the significance of main () in C program ?
- (3) Why and where are the braces i.e. { } used in a C program ?
- (4) How can comments be included in a C program ?
- (5) What are static variables ?
- (6) How can you assign decimal, octal and hexadecimal values to integer variable ?
- (7) Explain any two mathematical functions.
- (8) What do you mean by preprocessor statements ?
- (9) What is type casting in C ?
- (10) What is subscript in array ? What is the use of it ?

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[Contd...

[1000]

- 2 (a) Explain 'for' loop with proper example. How can ',' (comma) be included in it ?

OR

- (a) What is nested if statement ? How does it differ from switch...case ?
- (b) Explain bitwise operator, logical operator and conditional operator with example.
- (c) Write a C program to print fibonacci series of a user inputted number.

OR

- (c) Write a program to generate for a user inputted number :

e.g. for 5 :

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

- 3 (a) What are data types ? Explain them with examples. 5

OR

- (a) Compare the following :

(i) scanf ("%s") and gets ()

(ii) printf ("%s") and puts ()

- (b) Explain break and continue in a do...while loop. 4

- (c) Write a C program to read a sentence (containing blank spaces) and display it in toggle case (lower to upper and vice-versa) 6

OR

- (c) Write a program to read a statement and count the number of lines, words and characters.

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4 (a) What is multi-dimensional array ? How does it differ from array of structures ? 4

OR

- (a) Explain the difference between two-dimensional array of integer and character with example.
- (b) Write the syntax of the following functions :
 - (i) islower
 - (ii) sqrt
 - (iii) strcpy
 - (iv) getch
 - (v) pow

(c) Write a C program to sort an array of 10 integer elements in ascending order. 5

OR

(c) Write a C program to input a string and extract a portion of it from m character starting from nth position.

5 (a) Write the difference between structure and union with proper syntax and examples. 4

(b) How is '.' (dot) operator used in nested structure ? 5

OR

(b) How can a '.' (dot) operator be used in a union inside a structure ?

(c) Create a structure Item with fields itemcode, price, qty. Take array of structures and input the value of member variables and display output in proper format. 5

OR

(c) Write a 'C' program to create a structure Cricket with following fields :
Playername, teamname, batting avg.

Use proper data types. Take input from use and display the values stored in it for 5 players and also print overall average.