

Total No. of Printed Pages—4

4 SEM TDC COSK1 (II A)

2 0 1 3

(May)

COMPUTER SKILLS—II (A)

(For B.Sc. General Programme)

Course : 401

(C and Shell Programming Basics)

Full Marks : 48

Pass Marks : 19

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. Choose the correct option : 1×6=6

(a) A/An — is a data name that may
be used to store a data value.

(i) identifier

(ii) variable

(iii) keyword

(iv) token

P13—2500/1250

(Turn Over)

(2)

- (b) If $x = 5$, $y = 2$ and x and y are integers, what will be the output of the following statement?

```
printf ("%d", x/y);
```

- (c) Which of the following is not a parameter in the FOR loop?

- (d) If x is a float data type, what is the output of the following statement?

```
sizeof(x);
```

- (i) 2
 - (ii) 2.5
 - (iii) 3
 - (iv) Compiler error
- (i) Initialization
 - (ii) Test condition
 - (iii) Increment
 - (iv) Instantiation
- (i) 2
 - (ii) 4
 - (iii) 8
 - (iv) Compiler error

3-2500/1250

(Continued)

(3)

- (e) Which of the following operations cannot be done on a pointer variable?

- (i) An integer can be added to a pointer
 - (ii) A pointer variable can be initialized with NULL
 - (iii) An integer can be subtracted from a pointer
 - (iv) Two pointer variables can be added
- (f) Which process is the first process to be loaded and have a PID 0?

- (i) Init
- (ii) Init tab
- (iii) Kernel
- (iv) Shell

2. Answer the following questions : 2×6=12

- (a) What are constants and literals?
- (b) Write a program to read a string and print out the length of the string using an appropriate string function.
- (c) Distinguish between global and local variables.
- (d) What is a structure? What is its advantage?

P13-2500/1250

(Turn Over)

- (e) What is a shell? Name two shells.
 (f) Write two characteristics of an array.

3. Answer any six from the following : $5 \times 6 = 30$

- (a) What is the use of 'continue'? Write a program to evaluate the expression $y = x^n$, where n is a non-negative integer. $1+4=5$
- (b) What is the use of `gets()`? Write a program to find the greatest number among 100 numbers. $1+4=5$
- (c) Write a program using function to find the factorial of a number. 5
- (d) Define a structure to read in the marks of three subjects for ten students and print the same with their total. 5
- (e) Write a program to create a file containing the text, 'We love computers'. 5
- (f) Write a shell program to copy a file from directory c: to directory d: if the file exists, else generate an error message. 5
- (g) Write a program to read the total marks of 100 students and count the number of students in the following range and print the grades : 5

100—70—A grade
50—69—B grade
30—49—C grade

★★★