

AS-1503

B.C.A. (Part—I) Semester—II Examination

ADVANCED C

Paper—2-ST-2

Time : Three Hours]

[Maximum Marks : 60

Note :—(1) Figures to right indicate full marks.

(2) Illustrate your answers with the help of suitable examples.

1. (a) What is a string ? Explain how strings can be declared and initialized in C using a suitable example. 6
- (b) Write a program in C that reads a string from user using gets(). Declare another string and copy the first string to newly declared string using strcpy(). Also use the strcmp(), strlen() and strchr() on these strings. 6

OR

2. (a) Explain the following C functions :
 - (i) strlen()
 - (ii) strcat()
 - (iii) strcpy(). 6
- (b) What are arrays of pointers to strings ? Explain with suitable example. 6
3. (a) What are functions ? Explain using proper example. 6
- (b) How can functions be used with arrays ? Explain using proper example. 6

OR

4. (a) Differentiate between calling function by value and calling function with pointers. State proper example. 6
- (b) What is Recursion ? Write a program to calculate factorial of a number using a Recursive function. 6
5. (a) How can we nest the structures ? Explain using suitable example. 6
- (b) What is Union ? Explain declaration and initialization of structure with proper example. 6

OR

6. (a) Explain the concept of pointer to structures. Write a suitable example. 6
- (b) Write a program in C to accept data of three commodities—Keyboard, Mouse and Monitor. Prompt user to enter the model name, quantity and price of each piece. Calculate the bill amount. Make use of structure. 6
7. (a) How are files opened and closed in C ? Explain using suitable example. 6
- (b) Explain the following functions :
- (i) fscanf()
 - (ii) fprintf()
 - (iii) fputs(). 6

OR

8. (a) Explain the following functions :
- (i) feof()
 - (ii) fwrite()
 - (iii) fgets(). 6
- (b) Explain fprintf() and fscanf() using suitable example. 6

9. (a) Explain fseek() and ferror() using suitable examples. 6
- (b) Explain the memory allocation using alloc(). Give a suitable example. 6

OR

10. (a) Explain the function line() in C graphics. Write a program to draw a square using four line functions. 6
- (b) Explain the function circle() in C graphics. Write a program in C which draws a circle at user defined centre with specified radius. 6

