FD-2656

B.Sc. (Part-I) Examination, 2022

COMPUTER SCIENCE

Paper - II

Programming in C Language

Time : Three Hours]　　　　[*Maximum Marks* : 50

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (*a*) Explain the logical operator with example.

 (*b*) Explain the formatted I/O functions with example.

 (*c*) Write short notes on the following :

 (*i*) getch ( )

 (*ii*) putchar ( )

 (*iii*) getc ( )

 (iv) putc ( )

DRG_408_(3)　　　　　　　　　　*(Turn Over)*

Unit-II

2. (*a*) What is the difference between while and do-while loop ? Explain with example.

(*b*) Write a program to print the factorial of given number using recursive function.

(*c*) Write short notes on the following :

    (*i*) Scope and lifetime of variable

    (*ii*) Formal argument

    (*iii*) Command line argument

Unit-III

3. (*a*) Write a program to calculate multiplication of two matrix.

(*b*) What is structure ? How to create and initialize a structure variable ? Explain with suitable example.

(*c*) Write short notes on the following :

    (*i*) Array of structure

    (*ii*) Array within structure

    (*iii*) Nested structure

Unit-IV

4. (*a*) Write a program to enter any 10 numbers in an array variable and calculate its sum using pointer.

DRG_408_(3)   *(Continued)*

(*b*) Differentiate between malloc ( ) and calloc ( ) with suitable example.

(*c*) Write short notes on the following :

    (*i*) & and * operator

    (*ii*) Void pointer

    (*iii*) Pointer to pointer

Unit-V

5. (*a*) Write short notes on the following :

    (*i*) fread ( )

    (*ii*) fwrite ( )

    (*iii*) fscanf ( )

    (*iv*) fprintf ( )

(*b*) What is conditional compilation directive ? Explain with example.

(*c*) Write short notes on the following :

    (*i*) #define

    (*ii*) #include

    (*iii*) fflush ( )

    (*iv*) ferror ( )

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