Department of Mathematics

QUESTION BANK

Class: III B.Sc Mathematics

Sub Name: Programming in C language

Sub Code: EMT615S

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Unit-1

2-Marks

1. Define variable.
2. Define C Tokens?
3. Write any four ANSI C keywords?
4. Write down the types of data.
5. Define constants.
6. What is initialization? give example
7. What is the need for declaring variable?
8. What are the Trigraph character?
9. Write the basic types of 'C' constant
10. Describe the purpose of the qualifiers constant and volatile.

5-Marks

1. Define keywords. List out some of the keywords.
2. Draw the structure of C program?
3. Draw the structure of six types of C tokens?

4. Explain the types of floating point.
5. Explain primary type declaration.
6. How to initialize the character varieties? Give an example.
7. Define variable. Write the rule for defining the variable.
8. Describe assignment statement.
9. What are the qualifiers that an int can have at a time? Give example
10. Describe three classes of data types.

10-Marks

1. Explain the type modifiers in C language.
2. Discuss the types of constants.
3. Explain keywords and identifiers?
4. Explain a programming style of ANSI C?
5. Explain the structure of 'C' program?
6. Explain primary type declaration?
7. Explain variable with an example.
8. Write down a program to show typical declarations, assignments and values stored in various types of variables.
9. Explain assigning values to variables.
10. Explain the three classes of date types.
11. Explain the terms with an example i) External variable ii) Static variable
12. Describe declaration of variable
13. Write a program to illustrate the interactive investment program
14. Illustrate the various type of constant with example.
15. I) List out the various integer and floating point data types with their size in byter . ii) Explain used defined type declarations. give example
16. Describe the different data types in 'c''.
17. I) Write about the backlash character constant. ii) Explain about user defined type declaration. Give example
18. Describe declaration of storage class.
19. Write a program for calculation of average of numbers.

Unit-2

2-Marks

1. Write the general forms of input and output function.
2. Give an example of valid names in 'C' program?

3. Write types of constants in 'C' program?
4. Define real arithmetic.
5. What is mean by mixed-mode arithmetic expression?
6. What is an arithmetic expression?
7. Write down the general format of the conditional operator.
8. Write the various relation operators available in C.
9. Define Arithmetic expression.
10. Write the various categaries of operators.

5-Marks

1. Write a Program to illustrate the use of arithmetic operator.
2. Illustrates a representation of integer constants on a 16-bit computer?
3. Write a program for declaration of storage class?
4. Describe increment and decrement operators.
5. Write a program to show the use of integer arithmetic to convert a given number of days into months and days.
6. Define relational operators and list out its types.
7. Write a program to illustrate the use of integer arithmetic to convert a given number of days into months and days,
8. Explain the process of evaluating of expression with example
9. Explain about the significance of formatted input.
10. Write a simple program for the illustration of evaluation of expression.

10-Marks

1. Explain the four different types of instruction based on their purpose.
2. Briefly explain increment and decrement operators with an example.
3. Explain all data types of C program?
4. Explain User-Defined type declaration?
5. Explain assignment operators and construct to print a sequence of number with the help of short hand operator *=.
6. Describe evaluation of expressions.
7. Describe relational operators.
8. Write down the explanation for evaluation of expressions.
9. Discuss any three types of operators.
10. Show the evaluation of arithmetic expression in 'C' program.
11. Discuss about scan f () and print f () function.
12. Explain about the following operates with example i) Assignment operators ii) Relational operators iii) Increment and decrement operation.
13. Explain the various formatted input-and output statement of c.
14. Write a simple program for reading of real number.

15. Explain the various arithmetic operators and write 'c' program to evaluate the following expression when a=10,b=15,c=5x=a-b *(3+c*)/(2-1)
16. Explain about the following operators with example i) Logical operators. ii) Relational operators iii) Conditional operators.
17. Write a program for the solution of an equation $ax^2 + bx + c = 0$.

Unit-3

2-Marks

1. Write types of operators?
2. What is the use of Relational operators?
3. Write down the structure of if … else statement.
4. Write the general format of conditional statement.
5. Write down the general form of simple if statement.
6. What is an array?
7. Write the four decision –making statements.
8. What is the use of break statement?
9. What is the use of the go to statement.

5-Marks

1. Write a note on while statement with an example.
2. Explain Bitwise operator?
3. Explain Logical operator?
4. Describe the switch statement.
5. Explain if … else statement with its flow chart.
6. Write a c program to illustrate if-else statement.
7. Explain the while loop and do while loop with example
8. Explain 'For' loop with example.

10- marks

1. Write a 'C' program to print the largest of three numbers using nesting of if-else statement.
2. Explain snitch statement with an example.
3. Explain Arithmetic operators with an example?
4. Explain evaluation of expressions with an example?
5. Explain increment and decrement operators?
6. Explain evaluation of expressions with an example?

7. Explain the else if ladder.
8. Give a short note about the while statement with its structure.
9. Explain Nesting of if … else statements.
10. Describe the for statement.
11. Explain two dimensional array with an example.
12. Write a C program to print the roots of quadratic equations using nested statements

Unit-4

2-Marks

1. Define function.
2. Write a general form of if-else statement?
3. Define Forward jump and backward jump?
4. Define an array.
5. Define structure.
6. How a structure is declared?
7. Define definition of function
8. Write down the general form of c function
9. What is function
10. Write general format of a function definition

5-Marks

1. Write a note on getchae with an example
2. Explain simple if statement?
3. Draw a flow chart of Nesting of if-else statement?
4. Explain a multi-function program.
5. Explain arrays within structures.
6. Write a note on function declaration with example.
7. Write the flow chart-for the Flow of control in a multi-function program.
8. Write the general form of c function. give example
9. Explain the concept of arrays of stuctures.
10. Describe declaring structure variables.

11. Explain about comparison of structure variable with example.

10-MARKS

1. Discuss the four parts of function declaration
2. Write a C program to find maximum of three numbers using function.
3. Draw a flow chart of if-else ladder and explain?
4. Write a program to prints the largest of the three numbers using nested if-else statement?
5. Explain formatted input with an example?
6. Write a program to counts the number of boys whose weight is less than 50 kg and height is greater than 170 cm.
7. Describe about the definition of function.
8. Explain structure within structures.
9. Explain function implementation and its elements.
10. Explain arrays of structures.
11. Explain in detail about structures and unions.
12. Discuss in detail about function definition
13. Discuss about arrays of structure.
14. Explain in detail about pointers and structures with example.
15. Explain the structure initialization.
16. Write a program calculate the subjects wise and student wise totals and store them as a part of the structure.
17. What is structure? How structure are initialized and declared?
18. Explain the concept of arrays with structures.

Unit-5

2-Marks

1. Give a multi dimension array and its general form?
2. Write a structure for Do statement?
3. Write the general format for declaring and opening a file.
4. Define byte.
5. Write any two benefits of using pointers.
6. What are the pointer variable.
7. What is pointer?
8. Write the syntax for the declaring pointer

5-Marks

1. How to declare and initialize the pointer variable? Give an example
2. Explain one dimensional array?
3. Explain while statement?

4. Explain pointer expressions.
5. Describe declaring pointer variable.
6. How to define and open a file? Give an example.
7. Write about declaring and initializing of pointer.
8. Write a program to illustrate the use of indirection operation 'A' to access the value pointed the by a printer.
9. Describe the accessing the address of variable.

10-MARKS

1. Explain the benefits of using pointers.
2. Write a 'C' program to demonstrate pointers to structure.
3. Given below is the list of marks obtained by a class of 50 students in an annual examination.

43 65 51 27 79 11 56 61 82 09 25 36 07 49 55 63 74 81 49 37
40 49 16 75 87 91 33 24 58 78 65 56 76 67 45 54 36 63 12 21
73 49 51 19 39 49 68 93 85 59
Write a program to count the number of students belonging to each of following group of marks :
0-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80-89, 90-99, 100.

4. Explain jumps in loops with an example?
5. Explain Two dimensional array with example?
6. Express the views of pointers and arrays.
7. Discuss about the definition, open and close a file.
8. Explain accessing a variable through its pointer with a program.
9. Describe about the defining and opening a file.
10. Write a C program to find factorial of a given number using pointers.
11. Explain some of the basic file operations.
12. Explain in detail about pointer and arrays with example
13. Explain file and file operations. How a file can be opened and closed.
14. Explain indetail about pointers with example.
15. Write a program to print the address of variable along with its value.
16. Explain the concept of defining and opening file and closing file.
17. Explain indetail about pointers and structure with example.