

--	--	--	--	--	--	--	--	--	--

Sub Code: 19KBPPS13/23

KHAJA BANDANAWAZ UNIVERSITY
FACULTY OF ENGINEERING AND TECHNOLOGY

Second Semester B.E. Degree Examination - 2020

Sub: C Programming for Problem Solving

Time: 3 Hours

Max. Marks: 100

Model Question Paper-1

Section-A

I. Answer any TEN questions from the following:

(02 Marks Each)

- Q1. Define Algorithm? Write the algorithm to find Area of Circle.
- Q2. Define Variables? What are the different data types in C.?
- Q3. Mention the Components of C Language with an example for each?
- Q4. What are the conditional and unconditional Statements in C?
- Q5. Explain pre test looping statement with its general syntax.
- Q6. Define Arrays? What are the different types of arrays.
- Q7. Define Strings? Write the general syntax for declaring a string.
- Q8. Define Functions? What are the different types of functions are there in C.
- Q9. Briefly explain any two in built functions used in C.
- Q10. What are structures in C? Give the general syntax of structures.
- Q11. Define File? Mention any four file handling functions in C.
- Q12. Define Flowchart? Draw a flowchart to find the greatest among two numbers.
- Q13. Briefly explain the assignment operator in C.
- Q14. What do you mean by function prototype?
- Q15. Define the following:
 - a. Primary Memory
 - b. Secondary Memory

Section-B

II. Answer any FIVE Full questions from the following: (08 Marks Each)

- Q1. What are the primitive data types in C? Explain them with the help of example.
- Q2. Write a C program to compute simple interest. Write an Algorithm and draw the flow chart for the same
- Q3. Write a C program to check whether the entered character is a vowel or a consonant using switch statement.
- Q4. Write a c program to perform the addition of two matrices.
- Q5. With the help of an example program explain call by reference parameter passing mechanism in C.
- Q6. What do you mean by dynamic memory allocation? With the help of general syntax explain the DMA functions.
- Q7. Write a C program using pointers to compute the sum, mean and standard deviation of all elements stored in an array of n integer numbers.
- Q8. a. What is an operator? Explain relational operators in C.
b. Write a C program to check the given number is even or odd.

Section-C

III. Answer any FOUR Full questions from the following: (10 Marks Each)

- Q1. With the help of an example program explain the basic structure of a C program.
- Q2. Write a C program and draw the flowchart to find the roots of quadratic equation.
- Q3. With the help of general syntax and example program differentiate pre test and post test looping statements in C.
- Q4. Create a Book structure containing book_id, title, author name and price. Write a C program to pass a structure as a function argument and print the book details.
- Q5. With the help of example program explain malloc and calloc functions.
- Q6. a. What are the rules to declare a Variable in C?
b. With the help of general syntax explain nested if else.
- Q7. a. Briefly explain Goto and Continue statements.
b. Briefly explain any six String Handling functions.