

## DHARMSINH DESAI UNIVERSITY, NADIAD FACULTY OF TECHNOLOGY B.TECH. SEMESTER – II [CE/EC/IT] SUBJECT:(CT-215) C PROGRAMMING-II

SUBJECT:(C1-215) C FROGRAMMING-II

Examination : Block Exam Seat No : \_\_\_\_\_\_\_

Date : Day :
Time : Max Marks : 36

## **INSTRUCTIONS:**

- 1. Figures to the right indicate maximum marks for that question.
- 2. The symbols used carry their usual meanings.
- 3. Assume suitable data, if required & mention them clearly.
- 4. Draw neat sketches wherever necessary.

Q.1	Do as Directed	
(a)	Explain following terms: 1) bit field 2) slack byte	[2]
(b)	With example explain use of ferror() and feof() functions.	[2]
(c)	Demonstrate how Compiler controller directives can be used in debugging	[2]
	1 66 6	
(d)	Explain working of following string handling functions	[2]
	1) strstr 2) strncat	
(e)	Differentiate the following:	[4]
	1) Structure with union. 2) Static and Dynamic array.	
Q.2	Answer the following questions (Any TWO)	
(a)	Define a structure <b>Date_format</b> containing three members integer month, integer date and integer year. Develop a program that would assign values to the individual members and utilize the following functions.	[6]
	1) Create a display_dt() function to show the date in following format: 10/08/2018	
	2) Create a display_mnt() function to show the date in following format: 10-AUG-18	
(b)	Write an algorithm to delete all nodes with data(character) 'A' from singly linked list.	[6]
(c)	Given are two one-dimensional arrays A and B which are sorted in ascending order.  Write a program to merge them into single sorted array C that contains every item from array A and B, in ascending order.	[6]
Q.3	Answer the following questions.	
(a)	Write a program to overwrite all occurrences of particular character by new character from the given string.	[6]
(b)	Explain with Example(s): Functions used in random access of files	[6]
	OR	
Q.3	Answer the following questions	
(a)	Implement following string library functions:	[6]
	1)stralt(s); // Alter position of every even and odd characters of string.	
	2)strnset(char str[],char ch,int n); // Set last $n$ character of string $str$ to character $ch$ .	
(b)	Design a structure Student_data to contain name, cpi and rno. Develop a program to read data for 10 students in a class. Sort structure's variable based on cpi and display sorted output.	[6]