

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA – SEMESTER-II EXAMINATION –SUMMER-2020****Subject Code: 3620001****Date:04-11-2020****Subject Name: Fundamental of Programming – II****Time:10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Answer the following question. **07**
- i. How can we declare Pointer?
 - ii. What is Memory Leak?
 - iii. What do you mean by Bit Field?
 - iv. Which function is used to Rename a file?
 - v. What is Node?
 - vi. What is the use Bitwise Shift Operator?
 - vii. What is Void Pointer?
- (b) How the Structure is differs from Array? Discuss structure within structure in detail with example. **07**
- Q.2** (a) Discuss the concept of Pointer to Function with example. **07**
- (b) Explain various file handling function used in C. **07**
- OR**
- (b) What is Dynamic Memory Allocation? Explain various functions used in Dynamic Memory Allocation. **07**
- Q.3** (a) Explain Call By Value and Call By Reference in detail. **07**
- (b) Differentiate: Pointer to Array & Array of Pointer with example. **07**
- OR**
- Q.3** (a) Discuss the concept of Pointer Arithmetic in detail with example. **07**
- (b) Discuss Array of Structure & Array within the Structure. **07**
- Q.4** (a) What is Union? How it differ from Structure? **07**
- (b) Write a C program for deleting the spaces from the contents of file. **07**
- OR**
- Q.4** (a) Explain different functions used for Random Access to File with example. **07**
- (b) What is Doubly Linked List? Explain different advantages and disadvantages of Doubly Linked List. **07**
- Q.5** (a) Write an algorithm to delete a node from Circular Link List. **07**
- (b) What do you mean by Command Line Argument? Explain argc and argv in command line arguments with example. **07**
- OR**
- Q.5** (a) Write an algorithm for Sorting a Singly Link List. **07**
- (b) Explain Type Qualifier in detail with example. **07**
