

**GUJARAT TECHNOLOGICAL UNIVERSITY****MCA – SEMESTER – II • EXAMINATION – SUMMER 2018****Subject Code: 3620001****Date: 18-May-2018****Subject Name: Fundamental of Programming – II****Time: 10.30 am to 1.00 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) Explain malloc() and calloc() functions. Compare both. **07**  
(b) Explain call by value and call by reference with example. **07**
- Q.2** (a) What is File? Explain fopen() and fclose() functions. **07**  
(b) Explain with example detecting the end of file using feof() function. **07**
- OR**
- (b) Write a program to illustrate copying and comparing structure members. **07**
- Q.3** (a) Compare volatile and restrict type qualifier. **07**  
(b) Write short note on bit fields. **07**
- OR**
- Q.3** (a) How you can return pointer from a function? Explain with an example. **07**  
(b) Explain array of pointers. Write a program to explain the concept. **07**
- Q.4** (a) What is meant by command line arguments? What useful purpose can be served by command line arguments? **07**  
(b) Explain enumerated data type with example. **07**
- OR**
- Q.4** (a) Explain sorting of a singly linked list. **07**  
(b) Discuss Null pointer and Void pointer. **07**
- Q.5** (a) Write short note on circular linked list. **07**  
(b) Write down the advantages and disadvantages of linked list compared to arrays. **07**
- OR**
- Q.5** (a) Explain bitwise operators. **07**  
(b) Discuss memory leak and memory corruption. **07**

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