



4. What amongs the following determines the size of a union?  
 (a) Biggest member of the union (b) First member of union  
 (c) Sum of the sizes of all its members (d) Last member of union
5. Which of the following functions is used to release allocated memory which is no longer required?  
 (a) dealloc ( ) (b) dropmem ( )  
 (c) free ( ) (d) release ( )
6. Which of the following functions allocates request size of bytes and returns a pointer to the first byte of allocated space?  
 (a) calloc (b) free  
 (c) realloc (d) malloc
7. Which of the following functions reads an integer from a file?  
 (a) fseek ( ) (b) putw ( )  
 (c) fscanf ( ) (d) getw ( )
- Q.2** (a) Write an algorithm to determine whether the given year is a leap year or not. **03**  
 (b) What is a flow chart? How is it different from an algorithm? **04**  
 (c) What is various types of operator available in C. **07**
- Q.3** (a) State the difference between entry control loop and exit control loop. **03**  
 (b) What is difference between keywords and identifiers? Explain rules for naming an identifier. **04**  
 (c) Write a program that reads a value *n* and generates the following pattern: **07**
- ```

1
1 2 3
1 2 3 4 5
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8 9
    
```
- Q.4** (a) Distinguish between the following pairs: **03**  
 1) *getchar* and *scanf* functions  
 2) %s and %c specifications for reading.  
 3) %s and %[ ] specifications for reading.
- (b) Explain *putchar()* and *puts()* functions with suitable example. **04**  
 (c) Write a program to copy one string into another and count the number of characters copied. **07**
- Q.5** (a) Compare *for* loop and *while* loop with illustrations. **03**  
 (b) Describe following string functions in C – Language. **04**  
 (1) *strcpy()* , (2) *strcat()* , (3) *strlen()* , (4) *strcmp()* **07**  
 (c) What is recursion? Write C program to find factorial (N) using recursive Function?
- Q.6** (a) State difference between call by reference and call by value. **03**  
 (b) What is pointer? Explain Array of pointer with example. **04**  
 (c) Write a function which accepts a string and returns the length of the string. **07**
- Q.7** (a) State difference between Union and Structure. **03**  
 (b) Explain *getw()* and *putw()* function with example. **04**  
 (c) What is file management? List the different file-management functions. **07**  
 Explain the various file modes.

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