

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to JNTUA, Anantapur)

M.C.A. I Semester (SVEC16) Regular/Supplementary Examinations January - 2019**PROGRAMMING IN C****[MASTER OF COMPUTER APPLICATIONS]**

Time: 3 hours

Max. Marks: 60

Answer One Question from each Unit
All questions carry equal marks

UNIT-I

1. a) Predict the output of **c, d, e** and **f** in the below code. 4 Marks

```
float c=15/10.0;  
int d=15/10;  
float e=15/10;  
float f=15.0/10.0;
```


b) Tell the type conversions with a suitable example. 8 Marks
(OR)
2. a) Write the size and range of the basic data types. 6 Marks
b) Consider $x = 0$, $y = 0$ and $z = 1$. 3 Marks
Find the value of **x, y** and **z** after executing the following code.

```
if(x)  
    if(y)  
        z=3;  
else  
    z=2;
```


c) Solve the following expression and find output of the following code. 3 Marks

```
void main( )  
{  
    int x=!5-4+2*5;  
    printf("%d",x)  
}
```

UNIT-II

3. a) State the differences between entry controlled and exit controlled loop with an example. 7 Marks
b) Write the usage of break and continue statement with example. 5 Marks
(OR)
4. a) What is two-dimensional array? How they are stored in memory? 6 Marks
b) Explain memory allocation functions with suitable example. 6 Marks

UNIT-III

5. a) Is it possible to pass an entire array to a function as an argument? State with an example. 6 Marks
b) Illuminate Recursive function with an example. 6 Marks
(OR)
6. a) Distinguish the advantages and disadvantages of Pointers. 6 Marks
b) State the arithmetic operations which are allowed in pointers. Write the use of NULL pointer to avoid dangling state. 6 Marks

UNIT-IV

7. How to declare structure and its variables? Specify accessing operators for structures. 12 Marks

(OR)

8. Construct a structure that can describe a hotel. It should have members that include the name, address, grade, average, room charge and number of rooms. 12 Marks
Write the functions to perform the following operations:
i) To print out hotels of a given grade in order of charges.
ii) To print out hotels with room charges less than a given value.

UNIT-V

9. Write a C program to demonstrate sequential file access. 12 Marks

(OR)

10. a) Relate conditional preprocess directives with suitable example. 7 Marks
b) Specify various access modes for text files. 5 Marks

