

17212

13141

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

Instructions – (1) All Questions are *Compulsory*.

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any TEN of the following:

20

- What is operator precedence?
- State four arithmetic and four logical operators with their uses.
- Give the syntax of switch case statement.
- With suitable example, explain the use of continue statement.
- Give the syntax and use of strcat () string function.
- Write the output of the following program

```
void main ( )  
{  
  int sub [10]; i;  
  for (i=0; i<=8; i++)  
  {  
    sub[i] = i;  
    printf (“\n%d”, sub [i]);  
  }  
}
```

P.T.O.

- g) With suitable example, explain what is meant by scope of a variable.
- h) With suitable example, explain what is meant by recursive function.
- i) Write the output of the following program

```
Void main ( )  
{  
int ***r, **q, *p, i = 7;  
p = & i;  
q = & p;  
r = & q  
printf ("%d%d%d", *p, **q, ***r);  
}
```
- j) Write a program to check whether given number is positive or negative & display message accordingly.
- k) List any four keywords used in C with their use.
- l) Distinguish between while and do in while loop (Any two points).

2. Attempt any **FOUR** of the following:

16

- a) With suitable example and syntax, explain how formatted input can be obtained.
- b) State various data types along with their memory sizes.
- c) What are C tokens? Give suitable example.
- d) Write & explain the structure of a C program.
- e) Give the syntax of if ... else statement with suitable example.
- f) Write a program to find whether the character entered through keyboard is a vowel or not.

3. Attempt any FOUR of the following:**16**

- a) Write a program to set the sum of digits of a four digit number (for eg. input = 1234, sum = 10)
- b) Find out the errors in the following program component and state how it can be rectified.

```
main ( )  
{  
  int a = 5, b = 5;  
  printf ("%d", a, b)  
}
```
- c) State the use of increment & decrement operators. Also also the difference between i++ and ++i.
- d) With suitable example, explain how else ... if ladder can be used.
- e) Write a program to convert given number of days into months and days.
- f) Write a program to accept the year from the keyboard & print whether it is a leap year or not.

4. Attempt any FOUR of the following:**16**

- a) Write a program to search a particular number in an array. If the number is present print "Number found" else print "Number not found".
- b) With suitable example, explain how two dimensional arrays can be created.
- c) Write a program to read two string & print the longer string.
- d) With suitable example & syntax, explain function declaration.
- e) With suitable example, explain how a structure can be initialized.
- f) List the categories of functions and explain any one with suitable example.

5. Attempt any FOUR of the following: 16

- a) Write a program to read two matrices and print their addition.
- b) State the difference between array and structure. (Any four points)
- c) Distinguish between call by value & call by reference.
- d) Write a function to calculate area of a circle.
- e) Write a program to declare the structure student, having data members as rollno, name & percentage. Accept data for five students & display the same.
- f) Write a program to accept two numbers as command line arguments & print the largest of the two.

6. Attempt any FOUR of the following: 16

- a) With suitable example, explain how array of structures can be created.
 - b) What is a pointer? How is it declared? How is it used? Explain with suitable example.
 - c) With suitable example, list different pointer arithmetic operations.
 - d) Write a program to find the length of a string using pointers.
 - e) Write the value of d in the following component of program
int a = 20;
int * b = & a
int * c = b
int d = * b + * c;
 - f) Write a program to print first ten terms of Fibonacci series using pointers.
-

17212

13141

3 Hours / 100 Marks
