

17212

16117

3 Hours / 100 Marks

Seat No.

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- 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**
- Give the syntax of switch case statements.
 - State four arithmetic and four logical operators.
 - Define array. How array is declared write its syntax?
 - Define token and identifier.
 - Define function.
 - State any four control statements.
 - Define recursive function.
 - State the use of break and continue statement.
 - State the use and syntax of strcmp () function.
 - Define pointer. How pointer is declared?
 - State difference between array and string.

P.T.O.

1) Write 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]);
}
}
```

2. Attempt any FOUR of the following: 16

- a) Explain formatted input and formatted output statements.
- b) Write a program to find whether the character entered through keyboard is a vowel or consonant.
- c) Write a program in ‘C’ to find maximum of three nos.
- d) Explain with syntax and example strlen () and strcpy () functions.
- e) Explain ‘*’ and ‘&’ operators used in pointers.
- f) Write a program to calculate factorial of number using function.

3. Attempt any FOUR of the following: 16

- a) Explain while loop with syntax and example.
- b) Explain with example array of pointer.
- c) State the use of increment and decrement operator. Also write the difference between i++ and ++i.
- d) Explain in brief auto and extern storage class.
- e) With suitable example, explain how else if ladder can be used.
- f) Write a program to declare structure book having data member as book_name, bookid, book_price. Accept this data for 3 books and display it.

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

- a) With suitable example, explain how a structure can be initialized.
- b) Explain meaning of following statement with reference to pointers.

```
int *a, b;  
    b = 20;  
    *a = b;  
    a = &b;
```

- c) Write difference between call by value and call by reference.
- d) Explain use of if else statements. Also draw the flow chart for the same.
- e) Explain conditional operator with example.
- f) With suitable example, explain how two dimensional arrays can be created.

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

- a) Write a 'C' program to accept two integer Nos from user and print the result.
- b) Write a program to find whether a entered number is even or odd.
- c) What is function prototype? Explain with example.
- d) What is array? How elements of single dimensional array can be accessed.
- e) Explain special operators in 'C' with example.
- f) Write a program using loop to print following:

```
1  
2 3  
4 5 6
```

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

- a) Write a program to print even numbers between 1 to 100.
 - b) List different categories of function and explain any one in detail.
 - c) Explain concept of array of character with example.
 - d) Write a program to determine whether the entered string is palindrome or not.
 - e) Explain with the proper syntax:
 - (i) Function definition
 - (ii) Function body
 - (iii) Function call
 - (iv) Function prototype
 - f) Write the difference between while and do while loop, and also explain the syntax of it.
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