

QP Code :1060

(REVISED COURSE)

(3 Hours)

[Total Marks : 80

N. B. : (1) Question No. 1 is compulsory.

(2) Solve any three out of five questions.

1. (a) Explain following bitwise operator with example :- 4
 (i) Bitwise Right shift operator
 (ii) Bitwise X-OR operator
- (b) Find output of the following statenal 4

```
int x=20, y, *ip;
ip= & x;
y=(*ip)++;
printf("%d \n", y);
printf("%d \n", *ip);
```

```
y=++0 (*ip);
printf("%d \n", y);
printf("%d \n", ip);
```
- (c) Explain nested structure with example. 4
- (d) Explain need of flowchart and draw a flowchart to check enter no is prime or not. 4
- (e) Explain following statement with example. 4
 (i) goto (ii) continue
2. (a) Explain syntax of switch case? Discuss what is need of break statement in switch case? Write a program to count vowel using switch case. 10
- (b) Write a program to display following pattern 10

```
(i) A B C D      (ii) 1
    A B C          1 2 A
    A B            1 2 3 A B
    A              1 2 3 4 A B C
```

3. (a) (i) Explain difference between while and do-while loop. 10
 (ii) Write a program to find out binary equivalent of given decimal no.
- (b) Define a function to check wheather enter square matrix is symmetric or not. Pass square matrix as a argument from main program to function. 10

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4. (a) Write a program to evaluate the value of the standard deviation and display the result. 10

$$sd = \sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 / n}$$

\bar{x} = Average of all no is array.

- (b) (i) Explain string function for following operation with example. 5
 (1) Copy n char from source string to destination.
 (2) Joining of two string.
- (ii) Write a program to find reverse of given string without using string library function. 5
5. (a) Define a structure cricket which consist following members 10
 (i) player name
 (ii) country name
 (iii) batting average
- Input 20 player information of test playing country. Write a program which will display detail information of player with given player name.
- (b) What do you mean by recursion? Write a program to find out summation of n no using recursion. 10
6. (a) (i) Explain call by value and call by reference with necessary example. 8
 (ii) Explain following storage class with example. 4
 (1) static (2) external
- (b) Write an algorithm and program to generate a factor of given no. 8