

F.E-All Br. (CBSGS)

Dt: 5.6.17

Q.P. Code :18550

(Time: 3 hours )

[Total Marks : 80]

Please check whether you have got the right question paper.

**N.B.** (1) Question no. 1 is compulsory.(2) Attempt any **three** questions from remaining **five** questions.(3) Assume **suitable data** wherever necessary.(4) Figures in **right** indicate **full** marks.

1. (a) State any two functions in string.h along with its syntax and purpose. 04
- (b) What do you mean by an algorithm and flowchart? Write an algorithm to find whether entered number is prime or not? 04
- (c) What is type-casting? Explain with an example. 04
- (d) Explain difference between call by value and call by reference. 04
- (e) Explain the difference between while and do-while statement. 04
2. (a) What do you mean by recursion? Write a program to reverse a number using recursive function. 10
- (b) Write a program to find largest and second largest element of an array. 10
3. (a) Write a program to calculate multiplication of two M x N matrices. 10
- (b) Write a program to generate following patterns. 10
- |      |       |
|------|-------|
| i> 1 | ii> A |
| 101  | CB    |
| 0101 | FED   |
4. (a) Explain various storage classes used in c with example. 10
- (b) (i) Write a program to find reverse of a given string without using library function. 05
- (ii) Explain nested structure with example. 05
5. (a) Explain bitwise operators in c with proper example. 05
- (b) Write a program to check whether entered no. is Palindrome or not. 05

(c) Write a program to create an array of structure to store the details of 50 students 10  
and sort and display the information of students in descending order of their  
percentage. Student details include i> Roll-no.

ii> Student name

iii> Percentage

6. (a) Explain syntax of switch case. What is the need of break statement in switch case? 05

(b) Write a program to find GCD and LCM of two numbers. 05

(c) What is a file? Explain different modes with syntax in which file can be opened.  
Explain various functions to read and write to a file. 10

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