I B.Tech Examinations, May/June 2012 COMPUTER PROGRAMMING

Common to Mechanical Engineering, Mechatronics, Production Engineering, Automobile Engineering

Time: 3 hours Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

**** 1. Explain call by value and call by reference and nesting of function with suitable example. [16] (a) Write a 'C' program to generate Fibonacci series. (b) Distinguish between if - else and switch case with an example. [8+8](a) What are the advantages of using pointers? (b) Explain static memory allocation. [8+8]Write a program for indexed sequential file for the employee database for the following operation. (a) Add a Record (b) Modify a Record. Assume any other data required suitably. [16] 5. What is a self - referential structure? What kind of applications is it used? Give examples. [16] 6. (a) Define tree and binary tree. Explain in detail. (b) Define graph and its terms. Explain in detail. [8+8]

7. Write a program to evaluate the following expression

A * B + (C - D) / A to prefix using stack.

[16]

8. Write algorithm, flowchart and program to find greatest of three numbers. |16|
