

Computer Science**Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essay**(2x20=40)**

1. What are the different security mechanisms used with internet to protect computers from various cyber-attacks. Explain with the help of an example difference between structure and union in C programming language.
2. Explain with neat diagrams compare and contrast different types of computer networks. Explain various relational, arithmetic, logical and bitwise operators in C with suitable examples.

Short notes:**(8x5=40)**

3. Different parts of digital computers with neat diagram.
4. Use of DBMS storage and retrieval of data from a relational database.
5. Looping control structures used in C.
6. Difference between intranet and extranet.
7. Mechanisms of dynamic memory allocations in C.
8. Single and multidimensional arrays in C.
9. Algorithms and write an algorithm for finding maximum of 3 numbers.
10. Advantages of networking.

Answer briefly:**(10x2=20)**

11. Micro and mini computers.
12. Network card.
13. List 4 DOS commands for folder operations.
14. Use of power point and impress.
15. Multiprogramming operating system.
16. Use of 'Enum' data type in C.
17. Proxy server
18. 'Extern' storage class in C.
19. World wide web
20. E-Publishing
